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August 13, 2019

Mr. Barry Stanton, P.G.
Northwest Regional Office
Pennsylvania Department of Environmental Protection
230 Chestnut Street
Meadville, Pennsylvania 16335

RE: Site Characterization Report
Former Russell City Store
Kane, Pennsylvania
PADEP Facility ID # 24-30431
USTIF Claim #2014170
ER&R Project # 2014.74

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Dear Mr. Stanton:

Enclosed please find two final copies of the Site Characterization Report, prepared for the above listed site.

A remedial action plan (RAP) should be prepared and submitted to PADEP within 45 days following SCR submission. However, the responsible party (Mr. Lutz) has indicated to ER&R that funds are not available at this time in order to authorize additional characterization, testing or preparation of a RAP.

Should you have any additional questions or comments, please feel free to contact the undersigned at (814) 734-6411.

Sincerely,

Environmental Remediation and Recovery, Inc.

David J. Birchard, P.G.
Project Manager

Cc: T. Lutz
M. Corwin
J. Ferro

8/19/2019 11:05:23 AM



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SITE CHARACTERIZATION REPORT
Russell City Store
1536 State Route 66, DeYoung, PA 16728
PADEP Facility ID # 24-30431
USTIF Claim # 2014-0170
ER&R Project # 2014.74

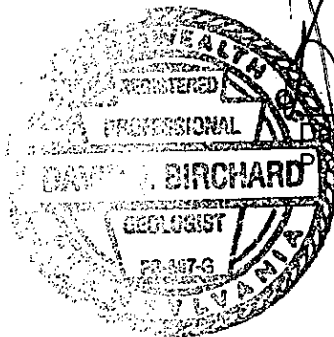
August 13, 2019

Prepared for:
Mr. Theodore Lutz
1518 Routes 66 & 948
Kane, Pennsylvania 16735

Prepared by:
Environmental Remediation & Recovery, Inc.
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Edinboro, Pennsylvania 16412

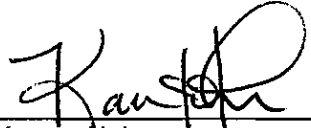
and

Mr. Matt Corwin
27083 Bayus Road
Albion, Pennsylvania 16401





David J. Birchard, P.G.
Project Manager



Karann Holman
Environmental Scientist

TABLE OF CONTENTS

Section	Page
1.0 Introduction and Background	1
2.0 Site Description	2
3.0 Mapped Soils/Site Geology	2
4.0 Potential Contaminants of Concern	2
5.0 Sensitive Receptors/Surface Water	3
6.0 Ecological Survey	4
7.0 ER&R Health and Safety/QA-QC Procedures	4
8.0 ER&R Site Activities	4
8.1 Initial Site characterization – March 2015	4
8.2 Interim Remediation – May 2015	5
8.3 Interim Remediation – March 2017	5
8.4 Site characterization – July 2017	6
8.4.1 Soil Boring and Monitoring Well Installation	6
8.4.2 Hydrogeology	7
8.4.3 Groundwater Sampling	8
8.4.4 Vapor Intrusion	8
9.0 Laboratory Results	8
9.1 Soil	8
9.2 Groundwater	8
9.3 Soil Vapor	9
10.0 Conceptual Site Model	9
11.0 Fate and Transport	10
12.0 Remedial Options	10
13.0 Limitations	10

FIGURES

Figure 1	Geographic Location Map
Figure 2	Site Detail Map
Figure 3	Initial Site characterization & Interim Remediation Sample Locations
Figure 4	Groundwater Elevation Data 07/31/18
Figure 5	Groundwater Elevation Data 08/29/18
Figure 6	Groundwater Elevation Data 10/21/18
Figure 7	Groundwater Elevation Data 05/17/19
Figure 8	Contaminant Concentrations Presented Using the Natural Log in MW-4
Figure 9	Contaminant Concentrations Presented Using the Natural Log in MW-7
Figure 10	Contaminant Concentrations Presented Using the Natural Log in MW-14
Figure 11	Site Conceptual Model Exposure Pathway Diagram (Human Health)

TABLES

Table 1	Initial Site characterization – March 2015 Soil Analytical Data
Table 2	Interim Remediation – May 2015 Soil Analytical Data
Table 3	Interim Remediation – March 2017 Soil Analytical Data
Table 4	Groundwater Elevation Data
Table 5	Soil Boring BH-1 through BH-17 Soil Analytical Data
Table 6	Groundwater Analytical Data
Table 7	Soil Vapor Analytical Data

APPENDICES

Appendix A	Historical Documents
Appendix B	UST Closure Documents
Appendix C	Notice of Reportable Release
Appendix D	Web Soil Survey
Appendix E	Laboratory Certificates of Analysis – Water Supply System
Appendix F	Water Well Survey
Appendix G	Site Specific Health & Safety Plan
Appendix H	ER&R Soil/Groundwater Sampling and Waste Management Plan
Appendix I	Soil Boring Logs
Appendix J	Laboratory Certificates of Analysis - Soil
Appendix K	Soil Disposal Documentation
Appendix L	R/E Agreement
Appendix M	Laboratory Certificates of Analysis - Groundwater
Appendix N	Laboratory Certificates of Analysis – Soil Vapor

**SITE CHARACTERIZATION REPORT
Russell City Store
1536 State Route 66, Kane, PA
PADEP Facility ID # 24-30431
USTIF Claim # 2014-0170
ER&R Project # 2014.74**

1.0 INTRODUCTION & BACKGROUND

Environmental Remediation & Recovery, Inc. (ER&R) has prepared this Site characterization Report (SCR) on behalf of Theodore Lutz, former owner of the property. The current owner of the property is Soggy Bottom, LLC. The Site is operated as a general store by Mr. Darin Frye (tenant).

The Site was developed and has operated as a retail refueling and convenience store since the 1960s, referred to as Russell City Store. Mr. Lutz was the underground storage tank (UST) owner/operator of record at the time of the documented UST release. Four regulated petroleum USTs at the Site were registered under PADEP Facility ID# 24-30431. Two USTs registered as #001 and #002 were removed in 1999 by Harris Enterprises of Clarion, PA. Piping from USTs #003 and #004 was also removed and upgraded.

The confirmatory soil samples from the 1999 closure met standards/action levels for confirmatory samples collected at closure Site assessments although obvious localized contamination was observed surrounding USTs #001 and #002. Groundwater was not encountered during the removal. Approximately 5 tons of contaminated soils were excavated, staged onsite and land farmed. Soil samples analyzed from the land farmed soil were submitted in June 2000 and met the Statewide Health Standard (SHS). Remediated soils were reused onsite. PADEP issued Mr. Lutz a relief of liability (ROL) under Act 2 for the incident. A copy of the ROL and other significant historical documents are attached as Appendix A.

Details for the tank system are provided below:

Tank Reg.#	Const.	Installation Date	Capacity	Substance	Removal Date
001	steel	Oct. 1969	3,000 gal.	gasoline	07/16/99
002	steel	Sept. 1976	2,000 gal.	gasoline	07/16/99
003	steel	05/01/87	2,000 gal.	gasoline	11/25/14
004	steel	05/01/87	1,000 gal	kerosene upgraded to gasoline 07/16/99	11/25/14

USTs #003 and #004 were closed, by removal, on November 25, 2014. The two tanks were located on the northeastern portion of the Site in a burial cavity common to the previously removed USTs #001 and #002. The USTs were configured with the long axis in the north-south direction perpendicular to State Route 66 with UST #004 (unleaded) being the easternmost UST. The dispensers, distribution piping and tanks were removed without incident and obvious soil contamination was not encountered. The excavated soils were reused for backfill. The USTs were in very good condition upon removal. A copy of the UST Closure documents is attached as Appendix B.

Confirmatory soil samples were collected and analyzed as part of the closure Site assessment. The samples collected from beneath the east and west dispenser contained concentrations of 1,3,5 trimethylbenzene and 1,2,4 trimethylbenzene above PADEP SHS. A Notice of Reportable Release was submitted to the PADEP on December 22, 2014 and is attached as Appendix C.

Mr. Barry Stanton is the assigned PADEP project officer. Corrective actions at the Site are being completed under the Underground Storage Tank Indemnification Fund (USTIF). James Ferro of ICF Consulting is the claims investigator for the Site under USTIF Claim # 2014-0170 (S). ER&R was retained by Mr. Lutz to provide site characterization activities for the Site.

This report describes Site activities completed for a site characterization and was prepared in accordance with 25 PA Code 245.309. This SCR includes elements described in 245.309 (b) commensurate with the nature and extent of the release. This report also describes proposed remedial options for the Site.

2.0 SITE DESCRIPTION

The Site is located at the northeastern corner of the intersection formed by State Route 66 and Pine Camp Road in the Village of DeYoung, Highland Twp., Elk County, Pennsylvania. Geographic location (41°34'15.30"N, 78°54'31.71"W) of the Site is depicted on Figure 1- Geographic Location Map. Property boundaries are depicted on Figure 2 – Site Detail Map.

The Site is comprised of two parcels totaling 0.43 acres. According to Elk County records the parcels (04-04-192-9741 and 04-04-192-8937) are owned by Soggy Bottom LLC. The Site is bounded to the east by a former automotive garage, to the west by Pine Camp Road (a private drive), to the north by Route 66 and to the south by undeveloped property. Residential properties are located across Route 66 to the north. The Site is served with water provided by the Spring Water Company of DeYoung. The Site utilizes an on-lot sanitary wastewater treatment.

A two-story wood framed building (approximately 2500 SF) is located near the north central portion of the property. The building consists of a general store and storage area on the first floor with a second floor private residence. An addition was constructed on the eastern side of the original structure. Exact construction dates are unknown and outside the scope of this report. The Site is currently operated by a tenant, Mr. Frye, as DJ's Russell City Store.

The original structure sits atop a full concrete block wall and concrete floor basement. Several cracks and penetrations, along with water infiltration, are evidenced in the basement. The aforementioned addition was constructed on a concrete block footing with a dirt floor crawlspace. Property details are displayed on Figure 2- Site Detail Map.

For purposes of the Site characterization, the "Site" is defined as the entire property (0.43 acres).

3.0 MAPPED SOILS/SITE GEOLOGY

The surface topography of the Site is relatively flat. The elevation of the Site is approximately 980 feet above mean sea level.

According to the USDA NRCS – Soil Survey of Elk County (Web Soil Survey), there is one major soil type at the Site. The soil type is Cookport channery loam, 3 to 8 percent slopes. A copy of the web soil survey map and details on the soil type can be found in Appendix D.

Bedrock is the Allegheny Group of Pennsylvanian age. The Allegheny Group is predominantly cyclic sequences of sandstone, shale, limestone, clay and coal (Commonwealth of Pennsylvania Department of Environmental Resources Geological Map of Pennsylvania; 1980).

4.0 POTENTIAL CONTAMINANTS OF CONCERN

The former UST system at the Site provided storage for unleaded gasoline. The PADEP short list of unleaded gasoline parameters was evaluated. The following gasoline related constituents are of potential concern in both groundwater and subsurface soils: benzene, toluene, ethylbenzene, xylenes, cumene, naphthalene, 1,2,4 trimethylbenzene (1,2,4-TMB), 1,3,5 trimethylbenzene (1,3,5 TMB) and methyl tertiary butyl ether (MTBE).

Gasoline is a light bodied hydrogenated distillate fuel designed for general use in internal combustion engines. Gasoline contains over 500 hydrocarbons that may have between 3 to 12 carbons. Gasoline formerly had a boiling range from 30°C to 220°C at atmospheric pressure. The boiling range is narrowing

as the initial boiling point is increasing, and the final boiling point is decreasing. At ambient pressures and temperatures, the physical state is a liquid. Gasoline is less dense than water and floats on the groundwater surface. Several different classes of hydrocarbons are found in gasoline and include alkanes, alkenes, alkynes, aromatics, polynuclear aromatics and additives called oxygenates.

Alkanes are stable and comprise the major component of gasoline. Alkanes consist of a continuous chain of carbon atoms that are bonded to each other by single bonds and completely saturated by hydrogen. Alkenes have carbon to carbon double bonds, are unstable and are usually limited to a few percent. Alkynes, such as acetylene, have carbon-carbon triple bonds and are even more unstable, are only present in trace amounts and only in some poorly refined gasoline. Polynuclear aromatic compounds (PNAs or PAHs) such as naphthalene are also present.

The majority of compounds in gasoline are volatile, with high vapor pressures which typically respond well to physical removal methods such as air stripping. Many compounds in gasoline also respond well to biodegradation.

5.0 SENSITIVE RECEPTORS/SURFACE WATER

No UST-related fire, explosion or other safety hazards were identified during or following the UST release or subsequent corrective actions. Relocation of occupants or nearby residents was neither required nor recommended as a result of any UST related issue.

The nearest surface water bodies are an unnamed tributary of Coon Creek located greater than 1,000 feet to the northeast and an unnamed tributary of East Branch located greater than 1,000 feet to the southwest.

The Site and immediately surrounding parcels rely on a combination of private wells and a town spring for potable water. The water system is operated as a non-permitted community water supply system. The source for the system is a natural spring located greater than 1000-feet to the north of the Site. A permitted municipal water supply system is not available. As reported to ER&R by Mr. Frye, bottled water has been used for consumption purposes at the Site since 2017.

As recommended by PADEP, a sample of the community water supply system was collected at the Site in October 2018. The sample was submitted to Analytical Services, Inc. (Brockway, Pennsylvania) for analysis of the PADEP short list of unleaded gasoline constituents along with water purity. The analytical report stated VOCs were less than laboratory detection however total coliform and e coli bacteria were present in the raw water sample. A copy of the laboratory report for the water supply sample is attached as Appendix E.

ER&R attempted to conduct a detailed survey of community water supply 'customers' to identify whether properties proximate to the Site were utilizing a private water well or connected to the community supply system. The result of the water well survey was inconclusive. Numerous attempts were made by ER&R (in the form of telephone calls, first class mailings, certified mailings and door-to-door surveys) to obtain accurate information. Many residents were either non-responsive or uncooperative. The water well survey and related correspondence are attached as Appendix F.

The Site and surrounding parcels utilize private septic tank systems.

The area is situated central to a large oil producing water flood operation operated by ARG Resources. Numerous production and injection wells are evident throughout the area. ARG injects a mixture of brine, biocides and anticorrosion materials into the formation in an effort to increase production by forcing the oil out of the formation. Produced fluids come to the surface and flow to one of the ARG injection plants where the oil is separated from the flood water. Recovered water is recycled back into the formation.

6.0 ECOLOGICAL SURVEY

The Site meets the criteria in 25 Pa. §250.311(b)(1),(b)(2) and (b)(3) and therefore, no additional evaluation is required. The Site is exempt based upon the following conditions:

- The only constituents detected on Site are light distillate petroleum products,
- The surface area of impact is less than 2.0 acres
- The Site has features, such as buildings, parking lots or gravel/paved areas which obviously eliminate soils exposure pathways

No exceptional value wetlands appear to be present at or immediately proximate to the Site. An on-line review was conducted of U.S. Fish and Wildlife Service National Wetlands Inventory maps. Based on the on-line review no mapped wetlands are located on the Site or in the vicinity of the Site.

7.0 ER&R HEALTH AND SAFETY/QA-QC PROCEDURES

ER&R personnel are trained in accordance with OSHA requirements established in 29 CFR 1919.120 (Health and Safety). Standard working procedures include personal protective equipment as necessary, health and safety training, medical monitoring and emergency and decontamination contingencies that follow ER&R Standard Operating Procedures. Prior to mobilization(s) to the Site, a Site specific health and safety plan (HASP) was prepared and initiated. A copy of a typical HASP (prepared for the July 2018 drilling event) is attached for review as Appendix G.

Field activities conducted for Site characterization work follow internal quality assurance/quality control procedures. Standard operating procedures for field activities, including quality control/quality assurance program for sample collection, are presented in ER&R's Groundwater/Soil Sampling and Waste Management Plan provided as Appendix H. Sample collection, sample preservation, decontamination of sampling equipment and labeling procedures are followed with appropriate industry protocols. Soil samples collected during Site characterization followed EPA Method 5035 sampling and preservation protocols. Samples were forwarded under chain of custody and at the appropriate temperature, within applicable holding times, to certified laboratories, which perform internal QA/QC for data validation.

8.0 ER&R SITE ACTIVITIES

Initial site characterization activities were initiated at the Site in March 2015. Interim remediation in the form of soil excavation was completed in May 2015. Following soil excavation activities there was a postponement of site characterization. Additional interim remediation activities were completed following USTIF approval in March 2017.

Additional site characterization activities, including the installation and sampling of soil borings/monitoring wells and sampling, have been conducted at the Site from July 2017 to present.

All soil and groundwater samples were field preserved in accordance with EPA method 5035 and submitted for laboratory analysis under chain of custody to Pace Analytical (Greensburg, PA). Samples were analyzed for the PADEP short list of unleaded gasoline parameters (March 2008). Parameters include benzene, toluene, ethylbenzene, xylenes, MTBE, cumene, naphthalene, 1,2,4-TMB and 1,3,5-TMB.

All soil and groundwater results are compared to the selected standard for the Site which is the PADEP Statewide Health Standard for a residential used aquifer (SHS RUA).

8.1 INITIAL SITE CHARACTERIZATION – MARCH 2015

A limited investigation was conducted at the Site on March 17, 2015. Eight soil borings (SB-1 through SB-8) were installed by Chatfield Drilling (Greenville, PA) by direct push tooling. Soil borings SB-1 through SB-4 were installed surrounding the former dispenser island and SB-5 through SB-8 were located proximate to

the former location of USTs #003 and #004. SB-5 and SB-6 were planned to investigate shallow groundwater at the Site, as well as better evaluate residual concentrations of 1,2,4 TMB which were noted in tank closure samples. Soil boring locations are depicted on Figure 3.

Borings were advanced to refusal ranging from 12.0 to 13.75-ft. below ground level. Complete soil boring details are provided on the soil boring logs, attached as Appendix I. Borings were sealed following sample collection.

Soil headspace screening for volatile organic compounds (VOCs) from each split spoon soil interval was performed throughout the drilling procedures. Screening of collected soil samples was conducted using a portable photo-ionization detector (PID) calibrated to a benzene standard. Samples were allowed to reach ambient temperature prior to headspace screening. Upon reaching refusal in SB-6 significant PID readings were observed in the 10-12' interval. Two additional borings, SB-7 and SB-8, were placed proximate to the eastern wall of the building. The boring intervals with elevated PID readings were submitted for analysis.

Soil boring results are provided on Table 1 and the laboratory report is attached as Appendix J. Two areas of petroleum impacted soils were encountered. Impacted soils were encountered directly under the former dispenser island and at depth proximate to the former location of UST #003 and #004.

8.2 INTERIM REMEDIATION – MAY 2015

The March 2015 site characterization work identified impacted soils in exceedance of the SHS RUA. On May 20, 2015, ER&R mobilized to the Site to conduct source removal of impacted soils that were identified above the SHS RUA. Steve Dyne Excavating of Kane, PA excavated soil underlying the dispenser island, as well as soils identified in SB-6.

The dispenser island was excavated to approximately 5' below grade and to a width of 6' and length of 10'. Five confirmatory soil samples were collected and submitted for analysis. The samples were collected from the four walls and the base of the dispenser excavation and were labeled as West Wall 5', South Wall 2', East Wall, Road Wall 3' and Base 5'.

The excavation surrounding SB-6 was excavated to bedrock at approximately 15' feet below ground level. During excavation grossly impacted soils atop shale bedrock were encountered at approximately 14' below grade. Due to the constraints of the excavation both vertically and horizontally (structures and natural gas line nearby), the full nature and extent of subsurface contamination was not delineated. Three confirmatory soil samples, labeled as B-1, B-2 and B-3, were collected and submitted for analysis.

Excavations were backfilled and rough graded. Soil sample locations are depicted on Figure 3.

All generated contaminated soils were transported to McKean County Landfill for disposal. Soil disposal documentation is attached as Appendix K.

The three confirmatory soil samples collected from the SB-6 and one sample in the dispenser area exceeded the SHS RUA. Samples that exceeded the standard are as follows: BS-1 15', BS-2 15', BS-3 15' and South Wall 2'. Soil sample results are provided on Table 2 and the laboratory report is attached as Appendix J.

8.3 INTERIM REMEDIATION – MARCH 2017

The May 2015 excavation work identified impacted soils in exceedance of the SHS RUA. On March 29, 2017, ER&R mobilized to the Site to conduct source removal of impacted soils that were identified above SHS. Steve Dyne Excavating (Kane, PA) excavated soil underlying the area around the South Wall 2' soil sample at the dispenser island.

The area was further excavated to approximately 4.5' feet below grade and to a width of 6' to 8' feet and length of 8'. Given that the source removal volume was less than 10 cubic yards, five sampling points (SS-1, SS-3, SS-8, SS-9 and SS-11) for demonstration of attainment of soils were selected randomly based on PADEP systematic random sampling protocols in 25 PA Code Section 250.703(d)(2). Random numbers were generated in Microsoft Excel using a coordinate grid for the area. Actual sampling locations were determined and delineated in a grid layout pattern in the field. Sampling locations are depicted on the attached Figure 3.

The excavation was backfilled and rough graded. All generated contaminated soils were transported to McKean County Landfill for disposal. Soil disposal documentation is attached as Appendix K. Three of the five confirmatory soil samples collected from the dispenser area exceeded the SHS RUA. Samples that exceeded the standard are as follows: SS-1, SS-8 and SS-9. Soil sample results are provided on Table 3 and the laboratory report is attached as Appendix J.

8.4 SITE CHARACTERIZATION - JULY 2017

Based upon available information, additional off-site characterization was necessary in order to delineate to the full nature and extent of any contaminant plume. ER&R attempted to secure legal access to private properties in order to conduct additional characterization work, particularly to the north (i.e., Yasurek property). Private property access was denied.

ER&R elected to make application to Pennsylvania Department of Transportation (PADOT) to secure a right-of-entry (R/E) agreement. A completed R/E application package was prepared and submitted to PADOT in April 2018. The purpose of the R/E application was to obtain permission to install soil borings and monitoring wells within the SR-66 right-of-way. The R/E agreement was executed and issued in June 2018. All subsequent off-site soil borings and monitoring wells were completed within the SR-66 right-of-way in accordance with the R/E agreement. A copy of the R/E agreement is attached as Appendix L.

8.4.1 Soil Boring and Monitoring Well Installation

To define the vertical and horizontal extent of contamination, ER&R installed additional soil borings and monitoring wells both on and off site. Chatfield Drilling (Greenville, Pennsylvania) conducted the soil boring and well installations. Seventeen soil borings/monitoring wells were installed at the Site between August 2017 and January 2019. Soil boring and monitoring well locations are displayed on the attached Figure 2. Boring/well details are as follows:

Soil Boring	Monitoring Well	Installation Date	Depth
BH-1	MW-1	07/31/17	13.0'
BH-2	MW-2	07/31/17	35.0'
BH-3	MW-3	07/31/17	24.5'
BH-4	MW-4	08/01/17	17.1'
BH-5	MW-5	08/01/17	20.0'
BH-9	MW-6	07/18/18	16.0'
BH-10	MW-7	07/18/18	20.2'
BH-6	MW-8	07/17/18	37.0'
BH-8	MW-9	07/18/18	34.0'
BH-7	MW-10	07/17/18	38.0'
BH-11	MW-11	07/18/18	20.0'
BH-12	MW-12	07/18/18	17.0'
BH-13	MW-13	07/18/18	17.75'
BH-14	MW-14	07/18/18	20.75'
BH-15	MW-15	01/16/19	15.25'
BH-16	MW-16	01/16/19	15.0'
BH-17	MW-17	01/16/19	15.0'

Soil borings were installed by advancing hollow stem augers to depth. Soil borings were advanced sufficient to penetrate the shallow groundwater aquifer (a minimum of five feet) or to sampler refusal. Drilling and sampling equipment was decontaminated before initial use and between borings and soil sample collection to prevent cross contamination.

Soil samples were collected continuously during soil boring completion using a standard split spoon sampler. Subsurface lithologies were documented and logged during soil boring advancement. Representative samples of each two feet interval were collected to the total depth of each boring. Soil headspace screening for volatile organic compounds (VOCs) from each split spoon soil interval was performed throughout the drilling procedures. Screening of collected soil samples was conducted using a portable photo-ionization detector (PID) calibrated to a benzene standard. Samples were allowed to reach ambient temperature prior to headspace screening. Total headspace concentrations for soil samples collected ranged from 0 ppm to 118 ppm. Soil samples were selected for laboratory analysis from each boring based upon either the highest PID values and/or depth to the soil-to-groundwater interface. A total of eighteen soil samples were submitted for laboratory analysis

Soil cuttings accumulated during drilling activities were containerized in bulk and transported to Greentree Landfill (Kersey, Pennsylvania) for disposal. Soil disposal documentation is attached as Appendix K.

General lithologies at the Site included medium grain, silty clay atop gravely sand. Friable dark shale was found at the base of most shallow soil borings. Soil boring logs were prepared for each boring and are provided as Appendix I.

A total of seventeen monitoring wells, MW-1 through MW-17, were completed. Monitoring wells were installed within the annulus created by soil boreholes. Monitoring wells were constructed with two-inch diameter schedule 40 PVC, 0.020-inch slotted screen (bisecting the groundwater), solid riser above a sand pack and bentonite seal. MW-1, MW-3 through MW-7 and MW-11 through MW-17 were installed to total depths ranging from 15.0 to 24.5 feet below grade. MW-2 was installed to a depth of 35'. These monitoring wells were screened from approximately 5-15' below grade to the bottom of the well.

Monitoring wells MW-8, MW-9 and MW-10 were installed as deep wells in order to characterize the deeper aquifer. Hollow stem augers were advanced to bedrock and 4" casing was grouted in place. Wells were completed by advancing air rotary bit to average depth of 35' bgl.

All wells were completed by the installation of steel manholes surrounded by a concrete pad at grade. Well construction details are included on boring logs attached as Appendix I.

8.4.2 Hydrogeology

Cox Surveying (Lewis Run, Pennsylvania) surveyed soil borings, monitoring wells and site features (including locations of several nearby residential structures) to a common datum. Depth to groundwater measurements were collected from monitoring wells using an electronic water level indicator during sampling events. Groundwater elevation measurements are provided in Table 4.

Groundwater surface elevations were calculated based upon field measurements collected during groundwater sampling events. The Kriging method of grid interpolation was utilized to generate groundwater surface elevation contours. Groundwater flow elevation data, as interpreted from well gauging events, are presented on Figures 4 through 7.

Data indicate a western gradient is present at the Site. The hydrogeologic gradient at the Site is moderate. The average groundwater gradient for the Site is approximately 1 ft. per 23 feet (4%). A comprehensive aquifer characterization was not completed during the site characterization phase.

8.4.3 Groundwater Sampling

Monitoring wells were allowed to stabilize following installation for approximately two days prior to well development. Three to five well volumes of groundwater were purged from each well prior to sample collection. Groundwater samples were collected utilizing disposable bailers. Development and purge waters were field filtered and discharged on Site.

Groundwater samples were collected from MW-1 through MW-5 for two consecutive quarters in 2017 (8/28/17 and 11/14/17). Groundwater samples were collected from MW-1 through MW-14 for four consecutive quarters between 2018 and 2019 (08/16/18, 10/12/18, 03/01/19 and 05/17/19). Groundwater samples were collected from MW-15 through MW-17 for two consecutive quarters in 2019 (03/01/19 and 05/17/19). Not all wells were accessible for every sample event given winter weather conditions.

8.4.4 Vapor Intrusion

Cumulative soil and groundwater results were evaluated in accordance with the "Land Recycling Program Technical Guidance Manual for Vapor Intrusion into Buildings from Groundwater and Soil under Act 2" (Document Number 261-0300-101) revised January 18, 2017. This evaluation was preliminary and further evaluation and or sampling will need to be conducted before project closure.

Unsaturated soil sample results from soil borings were screened using the Statewide health standard residential vapor intrusion screening values (SV_{soil}). Soil results were above the residential SV_{soil} screening values for five samples. Samples that exceeded the SV_{soil} are as follows: SB-1 (2-3'), SB-6 (10-12.5'), BH-2 (3-5'), BH-3 (5-7') and BH-9 (11-12').

Groundwater sample results from monitoring wells were screened using the Statewide health standard residential vapor intrusion screening values (SV_{gw}). Groundwater results were above the residential SV_{gw} screening values in four monitoring wells. Monitoring wells with samples that exceeded the SV_{soil} are as follows: MW-3, MW-4, MW-6 and MW-7.

The building was evaluated and a Site walkover was conducted. As previously described, the condition of the concrete block wall/concrete floor beneath the original structure, along with the dirt floor in the addition crawlspace, are considered significant foundation openings. Subslab samples and near source soil vapor samples were not considered. Indoor air sampling was also not considered given the potential for possible cross contamination due to unrelated household chemicals and products.

ER&R installed one sub-slab point (VP-1) on May 10, 2017. The approximate location of the point is shown on Figure 2. A single sub-slab soil vapor sampling event was collected on October 17, 2018. The sample was analyzed for PADEP short list of unleaded gasoline parameters by Method TO-15.

This evaluation was preliminary. Further evaluation and sampling will need to be conducted before project closure.

9.0 LABORATORY RESULTS

9.1 Soil

The benzene concentration in soil sample BH-3 (5-7') and BH-9 (11-12') exceeded the SHS RUA. All other soil sample results meet the SHS RUA. Laboratory results for soil samples are displayed on Table 5. Laboratory reports for soils are attached as Appendix J.

9.2 Groundwater

Groundwater samples collected from MW-1, MW-2, MW-8 through MW-13, MW-15, MW-16 and MW-17 meet SHS RUA for all COC. Groundwater samples collected from MW-5, MW-6 and MW-14 initially

exceeded but now meet the SHS RUA. Groundwater samples collected from MW-3, MW-4 and MW-7 have consistently exceeded the SHS RUA for COC. A summary of groundwater analytical results is provided as Table 6. Laboratory reports for groundwater sampling are included as Appendix M. Trend plots displaying contaminant concentrations presented using the natural log in MW-3, MW-4 and MW-7 are attached as Figures 8 through 10. Only COC which exceed the SHS RUA are presented on the plots.

9.3 Soil Vapor

Results for the single soil vapor sampling event were below the residential sub-slab soil gas SHS Vapor Intrusion Screening Values (SVss) listed in Table 4 of PADEP Document 261-0.00-101 (January 18, 2017). Laboratory results for the soil vapor sample are displayed on Table 7. The laboratory report for the soil vapor sample is attached as Appendix N.

As discussed with PADEP, the intent of the SCR for this Site is not to adhere to the vapor intrusion policy. ER&R recognizes that additional soil vapor testing will be required in the future.

10.0 CONCEPTUAL SITE MODEL (CSM)

A CSM 1 exposure pathway diagram is provided as Figure 11. The diagram identifies potential or suspected sources of contamination, types of contaminants detected at the Site, potentially-contaminated media, transport mechanisms, potential exposure pathways and receptors. The diagram provides a systematic means to identify and summarize this information to ensure that potential exposures at the Site are accounted for accurately.

The USTs removed circa 2014 appeared to be in good condition. Extensive soil contamination was not observed during the closure. Soil assessment samples collected during the closure proximate to the former dispenser island contained concentrations of 1,3,5 TMB and 1,2,4 TMB above the SHS RUA.

As previously stated, the property immediately to the east of the Site formerly operated as an automotive repair facility. Based upon information provided during an ER&R telephone interview with the current property owner (Mr. Michael Niklas), closed-in-place petroleum fuel tanks are present on that parcel. Additional information pertaining to the USTs was not provided and access was not granted from the property owner for any soil/groundwater investigation during site characterization activities. In ER&R's opinion, additional site characterization work is warranted to investigate the possibility of an off-site contaminant plume impacting the Site.

Soil: Contaminated soil can be transported to receptor by direct contact, ingestion or inhalation. Soil sample screening results and laboratory data suggest contamination is present in subsurface soils; therefore, direct contact including ingestion and dermal absorption of soil cannot be eliminated.

Groundwater: The Site is not provided with water (for potable and non-potable uses) from a permitted municipal water supply system. The Site is connected to an unpermitted community water supply system. As reported to ER&R by the current tenant, the source of potable water to Site is currently commercially available bottled water. The depth to unconfined groundwater is sufficient to likely be below any anticipated construction work zone or utility trench. Construction workers involved in any future subsurface projects are not likely to encounter groundwater during excavation activities. Additionally, health and safety practices (i.e., Occupational Safety and Health Administration regulation §1926.651(h)(1)) preclude individuals from operating in trenches that collect water unless the water is removed first.

The possibility does exist that application for an on-site potable water well could be submitted in the future. Based upon the current water supply situation, direct contact (i.e, ingestion, dermal absorption, etc.) with groundwater cannot be eliminated from further evaluation and the groundwater pathway is not eliminated. However, laboratory data from the three deeper, bedrock wells suggests that the shallow, confined aquifer has not been impacted.

Indoor Air: The Site is a parking lot area and an active business operation with adult commercial occupants working in buildings (first floor) and outside in open-air areas. Multiple adult residents live in the second floor of the structure. Potential future on-site use scenarios include continued commercial worker activity (first floor), residential occupants (second floor) and possible future construction/excavation workers conducting development activities. Other residential properties are located proximate to the Site. Potential off-site receptors may include adult and child residents. The volatilization to indoor air for on-site commercial workers and off-site receptors cannot be eliminated as soil and groundwater results do not meet screening values for protection of residential indoor air.

Additional evaluation will be necessary in accordance with the PADEP vapor intrusion policy.

11.0 FATE AND TRANSPORT

Groundwater flow at and immediately proximate to the Site has been consistently documented to the west. Groundwater quality in downgradient, shallow (unconfined) monitoring wells meets the SHS RUA MSCs. Groundwater quality in the shallow, bedrock wells at or near the point of compliance are similarly non-impacted.

Groundwater quality concentrations in shallow wells located near the northeastern corner of the Site reveal petroleum constituents in exceedance of SHS RUA MSCs. Research indicates the property immediately to the east (and hydrogeologically upgradient) of the Site includes closed-in-place USTs that formerly contained petroleum product. Access was denied to ER&R in order to conduct appropriate Site characterization to evaluate potential off-site contamination to the Site from the adjacent parcel.

In the opinion of ER&R, historical petroleum contamination on the adjacent, upgradient property is potentially contributing to the groundwater contamination observed in the northeastern portion of the Site. Site characterization of the potential upgradient plume cannot be completed without private property access, therefore the extent of impact cannot be determined and a complete Site characterization is not possible.

A complete aquifer characterization would be recommended for completion, prior to development of an effective remedial action plan (RAP).

12.0 REMEDIAL OPTIONS

A complete assessment of remedial options has not been completed, particularly since an upgradient groundwater contaminant plume may be impacting the Site. However, some remedial options have been considered, as described in the following paragraphs:

Excavation

Additional excavation is not practical to remove contamination sources due to the depth to the soil impaction and the presence of public utilities which cannot be located. Further, a significant portion of the identified contamination may be located with the PADOT right-of-way of SR 66 and beneath SR 0089, which also makes source removal impractical. Further, source removal would not address an impacted groundwater plume.

Groundwater Withdrawal and Treatment (GW&T)

GW&T is simply "pump-and-treat" (P&T), in which contaminated ground water is recovered, treated to remove its contamination and then usually disposed. Contamination in the unsaturated zone is remediated eventually by naturally occurring infiltration of meteoric water that moves contamination downward to the saturated zone. This approach would be rejected as an option unless the potential upgradient groundwater contaminant plume can be fully characterized. Further, P&T would likely be cost

prohibitive without addressing residual soil contamination.

Air Sparging and Soil Flushing

Air sparging or soil flushing, as a stand-alone technology, are not viable remedial alternatives at this Site. Vapor phase contaminant migration may be promoted by air sparging and the fate of recovered/treated groundwater is problematic.

Dual Phase Extraction

Dual phase extraction technology, consisting of a combination of pump and treat and SVE technologies may be considered as a viable remediation technology for the Site. As previously stated, additional characterization work is necessary in order to address potential groundwater impact of the Site from an upgradient source.

Risk Assessment / Site Specific Standard

Given additional forthcoming data, a risk-based closure, demonstrating attainment of a Site specific cleanup standard may be a viable remedial option for the Site.

Selected Technology

Ideally, remediation would be completed at the Site in order to demonstrate attainment of the Statewide health standard MSCs for soil and groundwater. However, based upon available information, ER&R cannot recommend a specific technology (or combination of technologies) to meet SHS.

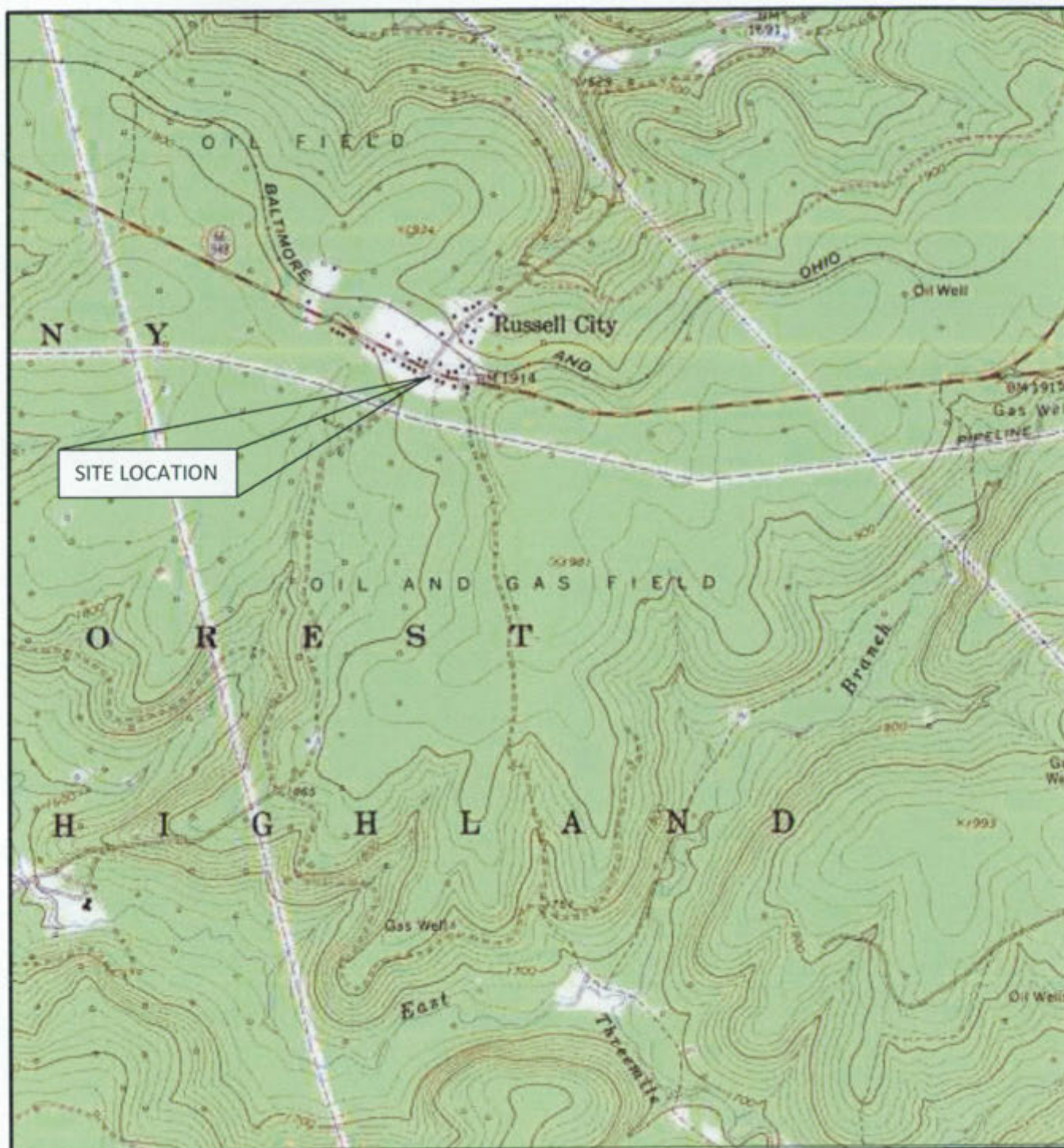
In accordance with 25 PA Code 245.311, a remedial action plan (RAP) should be prepared and submitted to PADEP within 45 days following SCR submission. However, the responsible party (Mr. Lutz) has indicated to ER&R that funds are not available to authorize additional characterization, testing or preparation of a RAP.

13.0 LIMITATIONS

This report presents the findings of the Site conditions as examined during Site characterization activities. Conclusions expressed within are based solely on field observations, research and information gathered by ER&R, Inc. at the time of the Site characterization, conducted according to the standard of care accepted by industry and practices. The observations described in this report were made under conditions stated. The conclusions presented were based solely upon the services described, and not on scientific tasks or procedures beyond the scope of work accepted by the client or the time and budgetary constraints imposed. ER&R, Inc. reserves the right and requests the opportunity to review any information which may become available at a later date which may alter any conclusions provided. The conclusions contained within this report are based in part upon the data obtained from the limited number of soil and/or groundwater samples collected from subsurface explorations.

Groundwater level readings have been made in the borings and other observation wells at the time and under the conditions stated within this report. Fluctuations in the level of groundwater may occur due to variations in the rainfall and/or other factors different from those prevailing at the time the Remedial Investigation was conducted. Chemical analyses have been performed for specific parameters during the course of this study as described in the text. Chemical constituents not searched for during the additional Site assessment activities may be present in soil and/or groundwater at the project Site.

Other warranties are neither expressed nor implied.



1: 24,000 Series Map

0 2,000 ft.
1 inch = 2,000 ft.

SOURCE:
U.S.G.S. RUSSELL CITY
QUADRANGLE
PENNSYLVANIA
7.5 MINUTE SERIES
(TOPOGRAPHIC)
CREATED 1966 / 1983

Figure 1

Geographic Location Map

Russell City Store
1536 State Route 66
Kane, Pennsylvania, 16728

PROJECT:
2014.74

DATE:
August 2019

DRAWN BY: KH
REVIEWED BY: DB

FILE:
SERVER/P001474/fig1.doc



Environmental
Remediation &
Recovery, Inc.



North

David M. Raubenstrouch
Lolenn Raubenstrouch
DB 237 Pg. 667
04192-8455

John M. Juban
DB 405 Pg. 116
04192-8572

Leland B. Wilson
Margaret Wilson
DB 164 Pg. 505
04192-8585

Robert E. Pack/J
Penny Jo Pack
DB 335 Pg. 334
04192-8588

Thelma J. Lutz #
DB 330 Pg. 329
04-04-192-8911

Tennessee Gas
Pipeline Company
Doc: 2007-021032
Parcel 2
04-04-192-8921

Shog Brown LLC
Doc: 2012-021044
04-04-192-8927
Lot 31

Tennessee Gas
Pipeline Company
Doc: 2007-021032
Parcel 2
04-04-192-8294
04-04-011-9291

Lynette Lettice
Doc: 2008-021858
04-04-011-9375

Lynette Lettice
Doc: 2008-021858
04-04-011-9375

Robert E. Althaus
Sally E. Althaus
DB 195 Pg. 201
04-04-192-8958

John C. Hultine Sr.
Amy A. Hultine
Doc: 2013-021470
First
04-04-192-8959

Steven J. Yount
Singer M. Yount
Doc: 2014-021835
Second
04-04-192-9457

Steven J. Yount
Singer M. Yount
Doc: 2014-021835
First
04-04-192-9457

Steven J. Yount
Singer M. Yount
Doc: 2014-021835
Third
04-04-192-9458

Michael J. Mikos
Loretha M. Mikos
DB 425 Pg. 302
First
04-04-192-9704

Michael J. Mikos
Loretha M. Mikos
DB 425 Pg. 302
First
04-04-192-9708

State Route 66

State Route 66

36 Private Roadway
Pine Camp Road

Cotton Run Road

Russell City Store

KEY

Monitoring Well/Soil Boring Location
Vapor Point Location

Scale: 1" = 50'



BASE MAP PREPARED BY COX SURVEYING, LEWIS RUN, PA

Figure 2

Site Detail Map

Russell City Store
1536 S.R. 66
Kane, Pennsylvania

Project #:	2014-34	Date:	August 2019	Drawn By:	KH	CAD File:	20190801.dwg
Revision History							
Revision	By						
7/2019	KH						

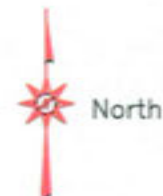


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KEY

-  Soil Boring installed 3/17/15
-  Source Removal Area of Excavation 5/20/15
-  Source Removal Sample 5/20/15
-  Source Removal Area of Excavation 3/29/17
-  Source Removal Sample 3/29/17

MAP NOT TO SCALE



ROUTE 66

BUILDING

Dispenser Island

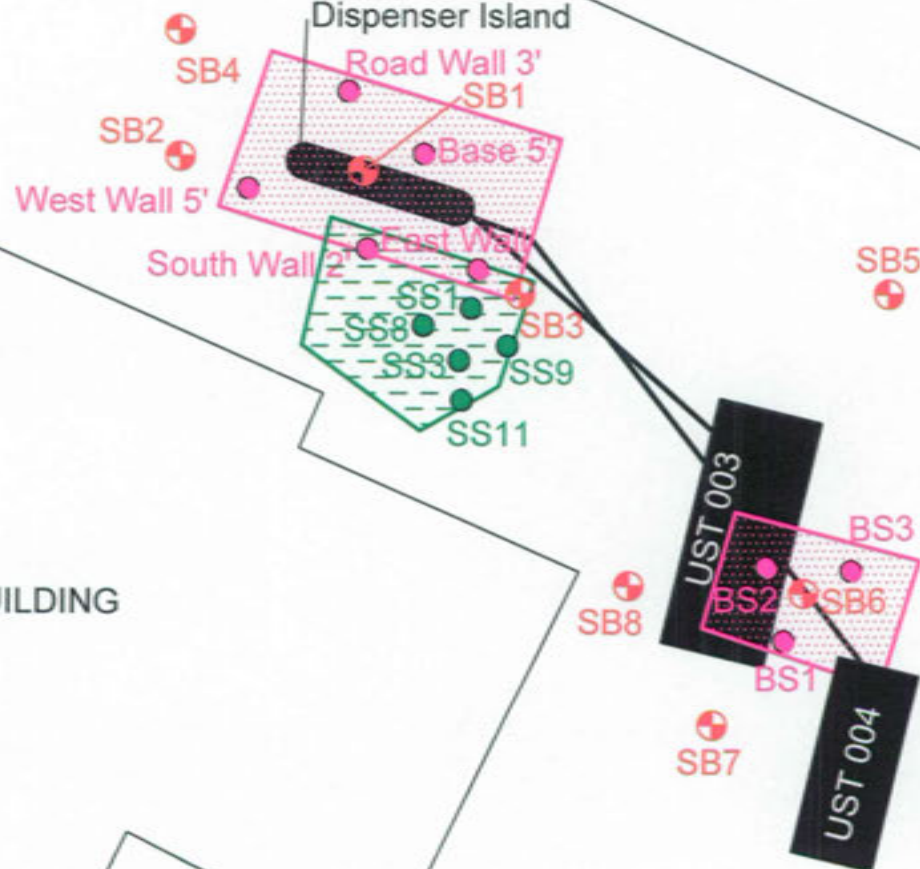


Figure 3

Initial SC & Interim Remediation Sample Locations

Russell City Store
1536 S.R. 66
Kane, Pennsylvania 16728

Project #: 2014.74	Date: August 2019	Drawn By: KH Revised By: DIB	CAD File: 3m212004.dwg
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Revision History

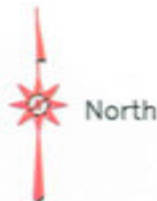
Revision	By
K. Holman	May 2017



ER&R, Inc.

Environmental Remediation & Recovery

4250 ROUTE 6N
EDINBURG, PENNSYLVANIA



North

KEY

Monitoring Well/Soil Boring Location

GW Contour Interval = 1 Ft.

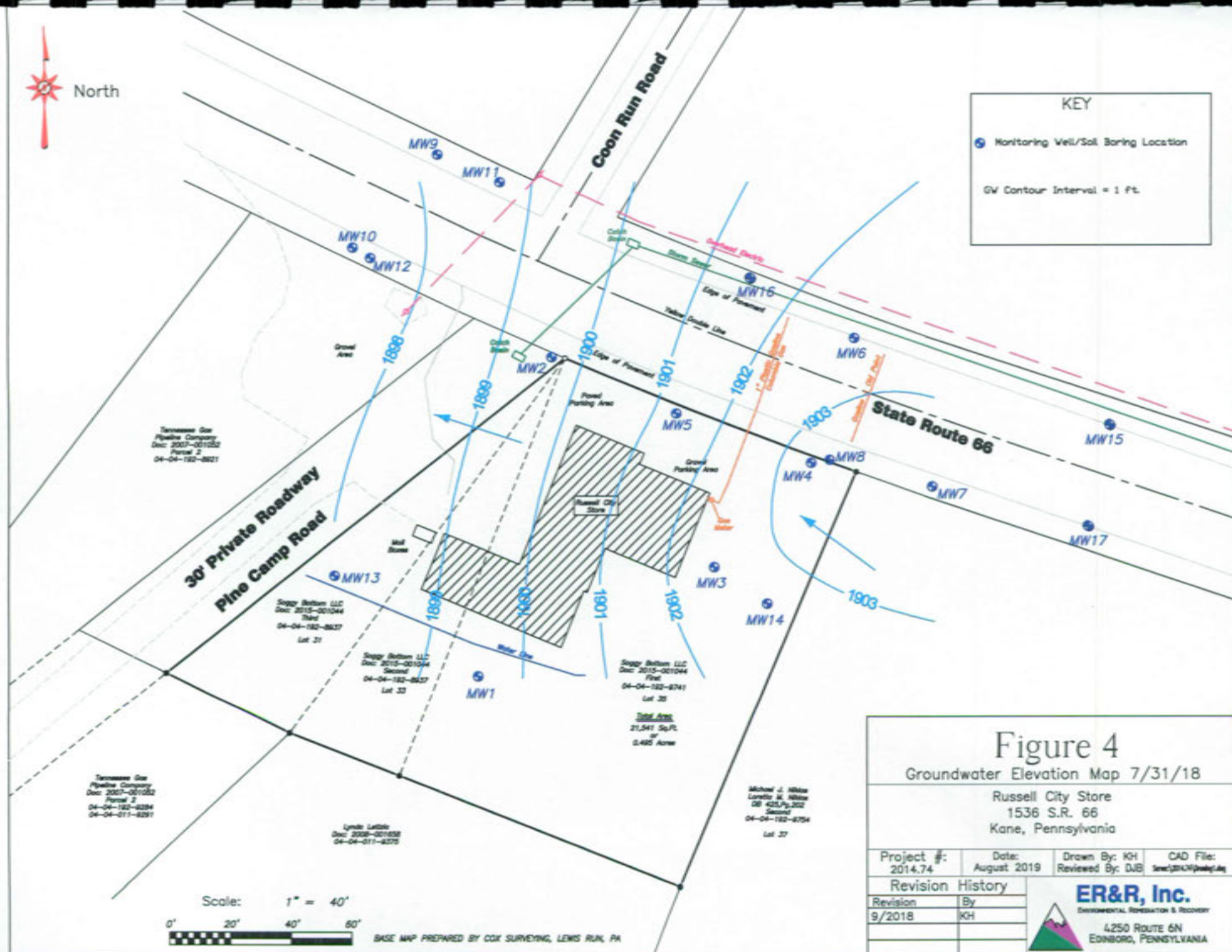


Figure 4
Groundwater Elevation Map 7/31/18

Russell City Store
1536 S.R. 66
Kane, Pennsylvania

Project #:	Date:	Drawn By:	CAD File:
2014.74	August 2019	KH	See: 2014.74.dwg
Revision History		 ER&R, Inc. ENVIRONMENTAL REMEDIATION & RECOVERY 4250 ROUTE 6N EDINBORO, PENNSYLVANIA	
Revision	By		
9/2018	KH		



ER&R, Inc.
ENVIRONMENTAL RESTORATION & RECOVERY
4250 ROUTE 6N
EDINBORO, PENNSYLVANIA

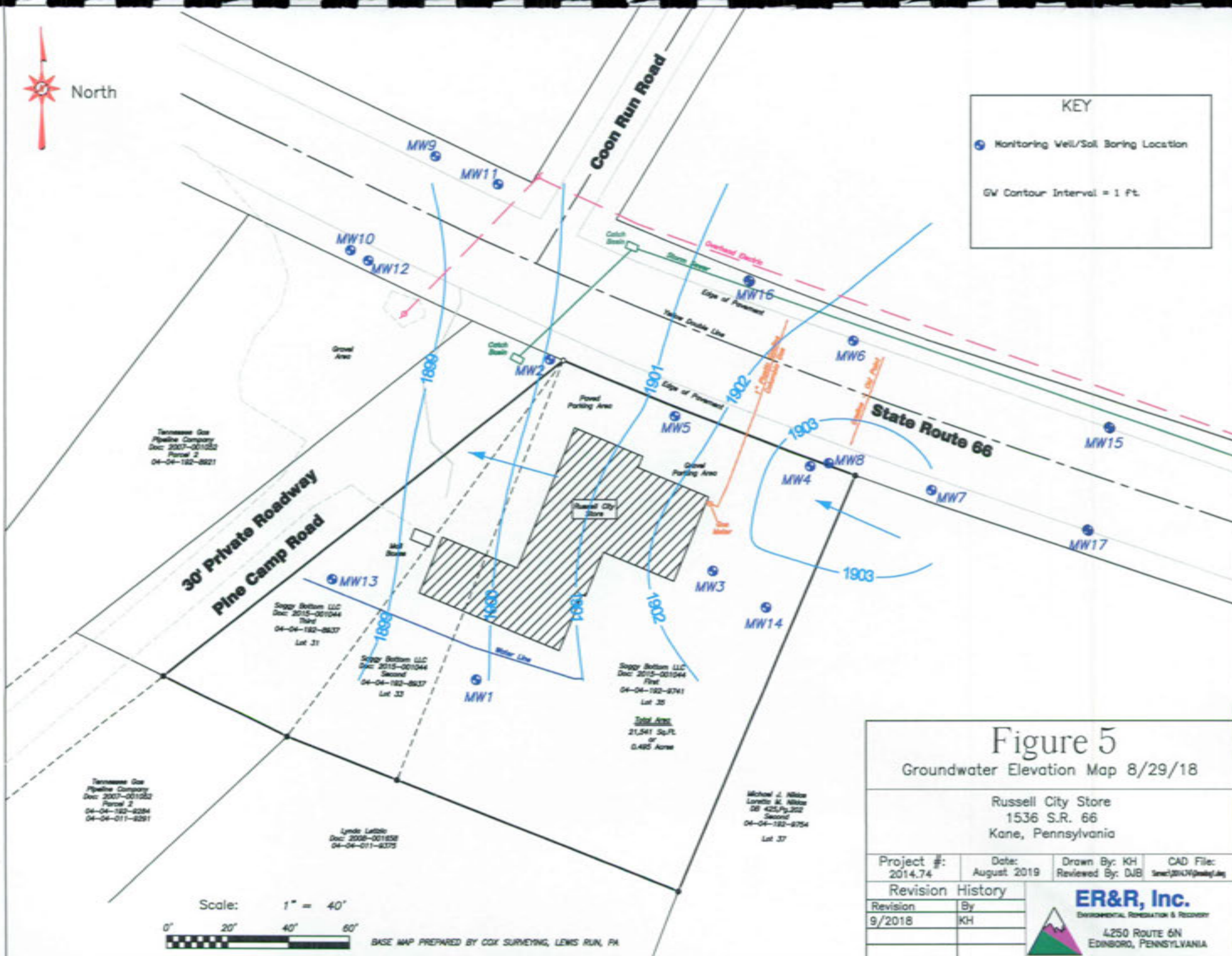


North

KEY

Monitoring Well/Soil Boring Location

GV Contour Interval = 1 Ft.



8/19/2019 2:00:15 PM



North

KEY

 Monitoring Well/Soil Boring Location

GW Contour Interval = 1 ft.

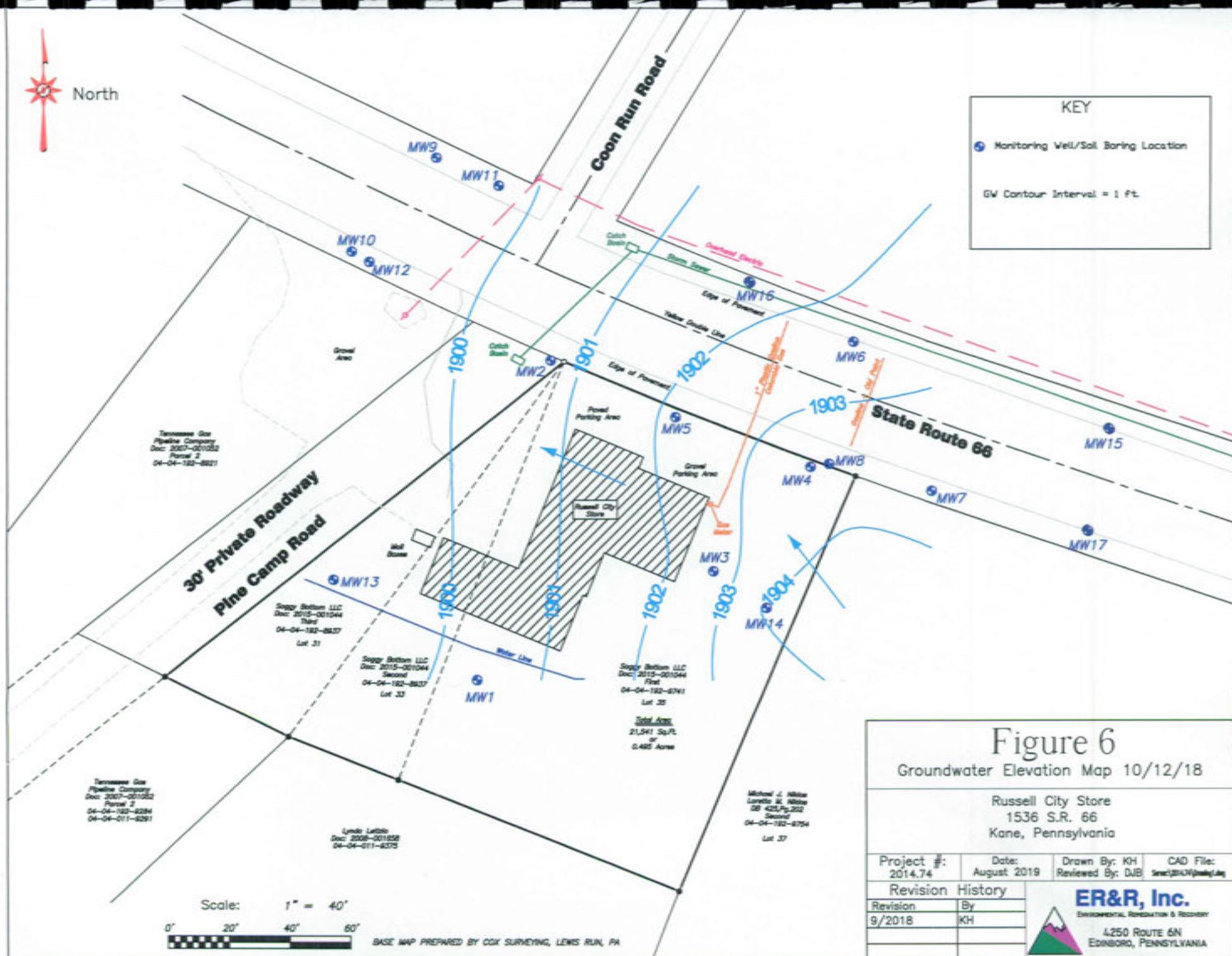


Figure 6
Groundwater Elevation Map 10/12/18

Russell City Store
1536 S.R. 66
Kane, Pennsylvania

Project #: 2014.74	Date: August 2019	Drawn By: KH Reviewed By: DJB	CAD File: Sect1204N000.dwg
Revision History		 ER&R, Inc. ENVIRONMENTAL REMEDIATION & RECOVERY 4250 ROUTE 6N EDINBORO, PENNSYLVANIA	
Revision 9/2018	By KH		



North

KEY

 Monitoring Well/Soil Boring Location

GW Contour Interval = 1 ft.

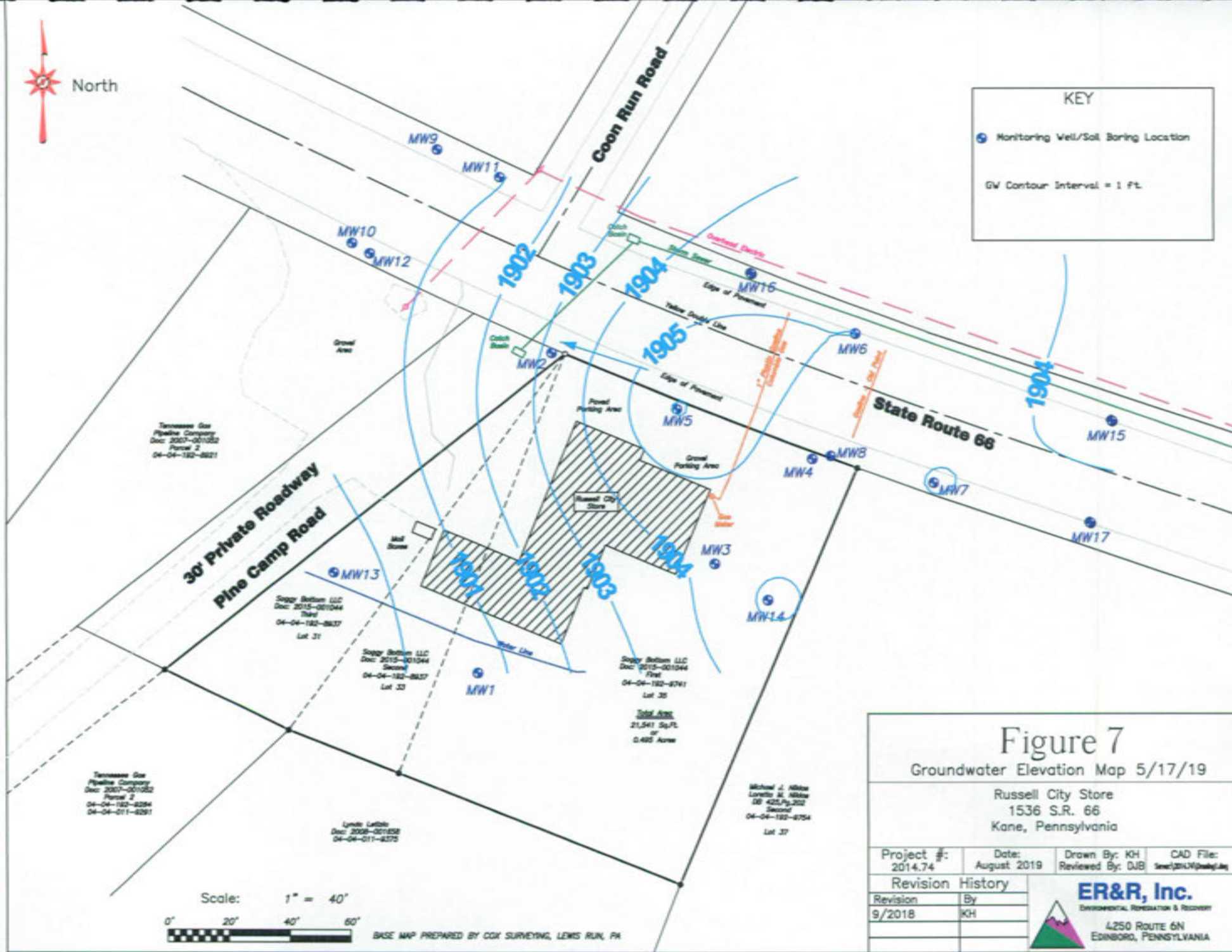


Figure 7
Groundwater Elevation Map 5/17/19

Russell City Store
1536 S.R. 66
Kane, Pennsylvania

Project #: 2014.74	Date: August 2019	Drawn By: KH Reviewed By: DJB	CAD File: Sencr2014.74.dwg
Revision History			
Revision	By		
9/2018	KH		

**ER&R, Inc.**
Environmental Remediation & Recovery
4250 ROUTE 6N
EDINBORO, PENNSYLVANIA

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Figure 8 - Contaminant Concentrations in MW-3 Presented using the Natural Log

Russell City Store
1536 S.R. 66
Kane, Pennsylvania
ER&R Project #2014.74

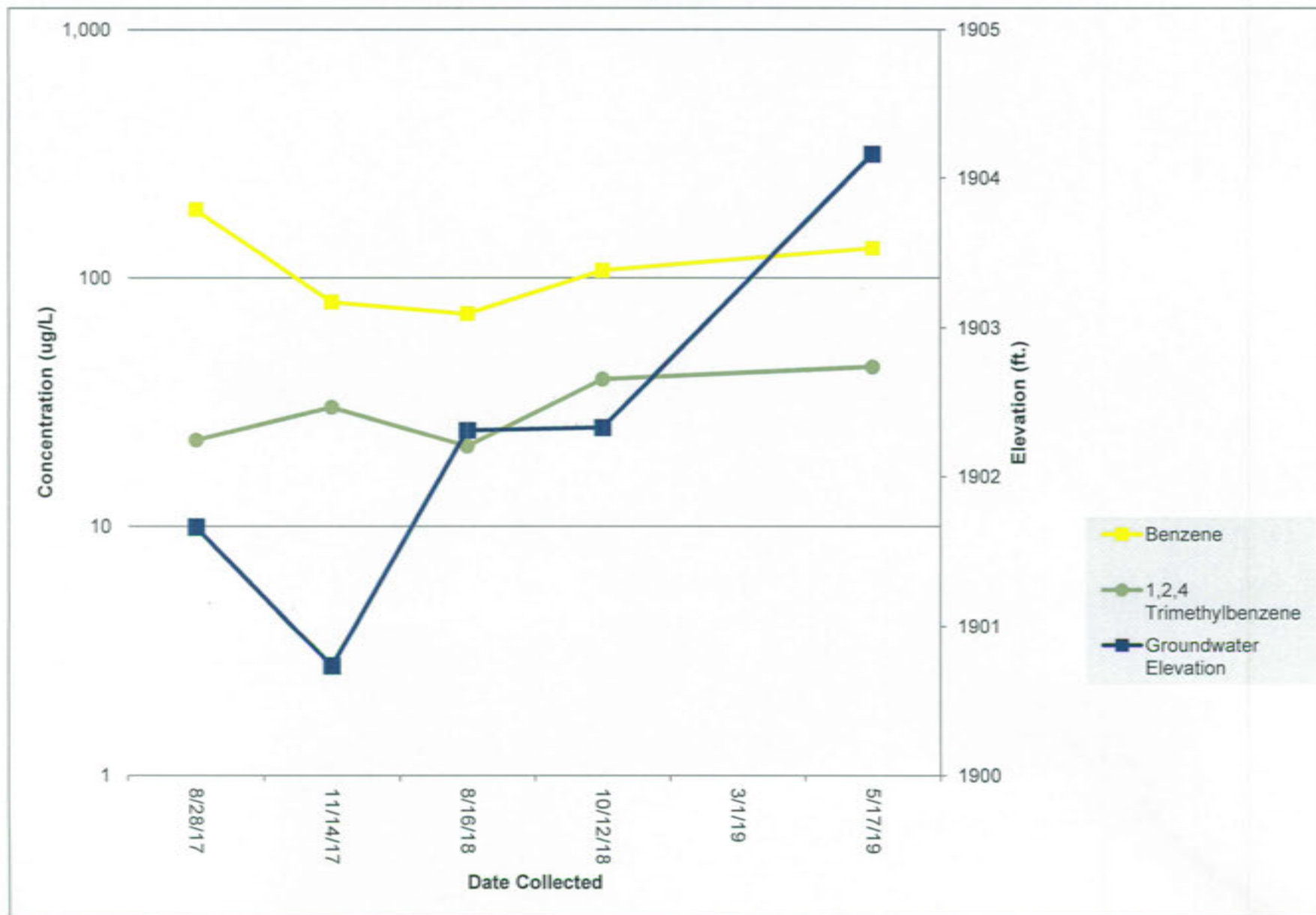


Figure 9 - Contaminant Concentrations in MW-4 Presented using the Natural Log

Russell City Store
1536 S.R. 66
Kane, Pennsylvania
ER&R Project #2014.74

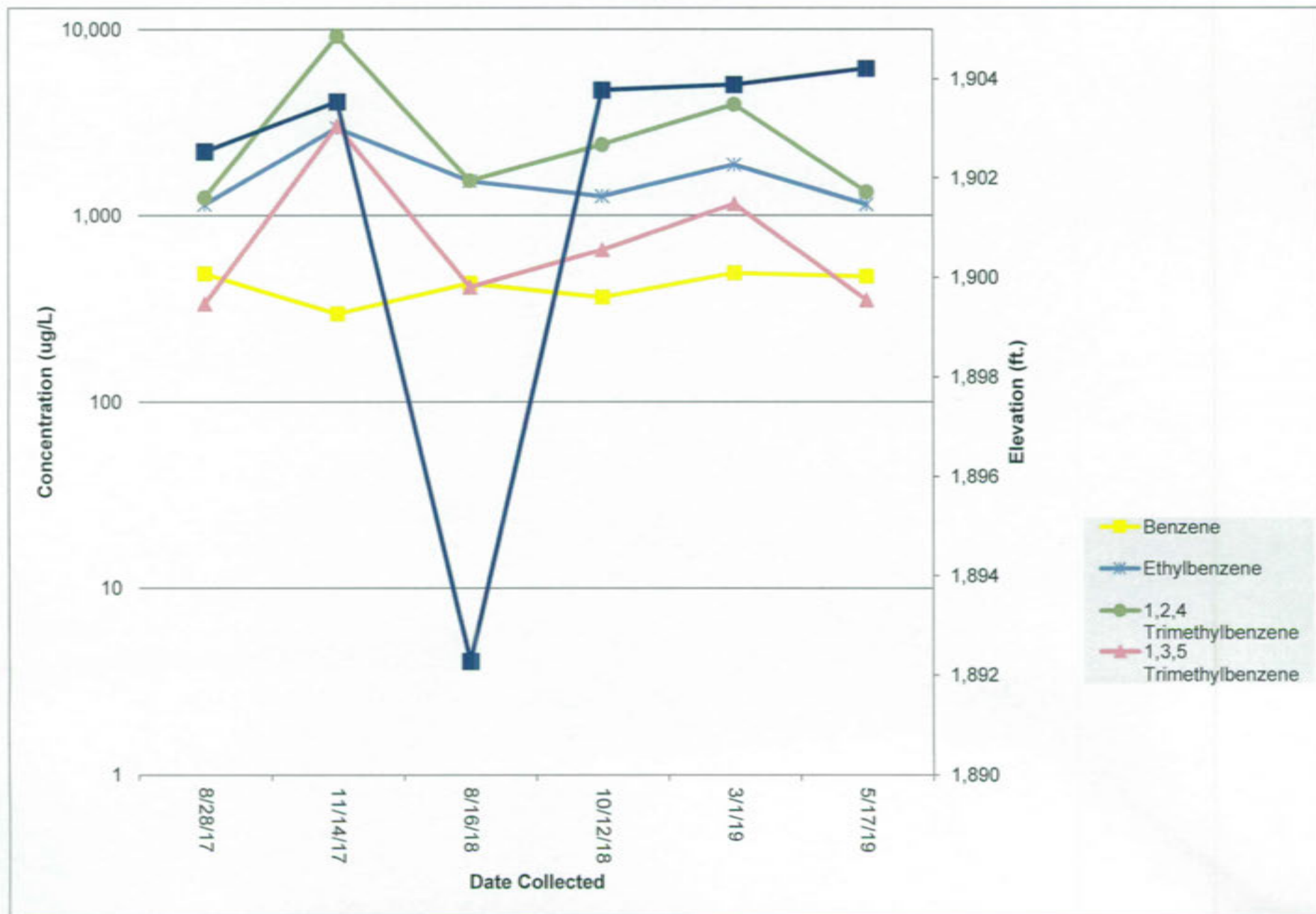


Figure 10 - Contaminant Concentrations in MW-7 Presented using the Natural Log

Russell City Store
1536 S.R. 66
Kane, Pennsylvania
ER&R Project #2014.74

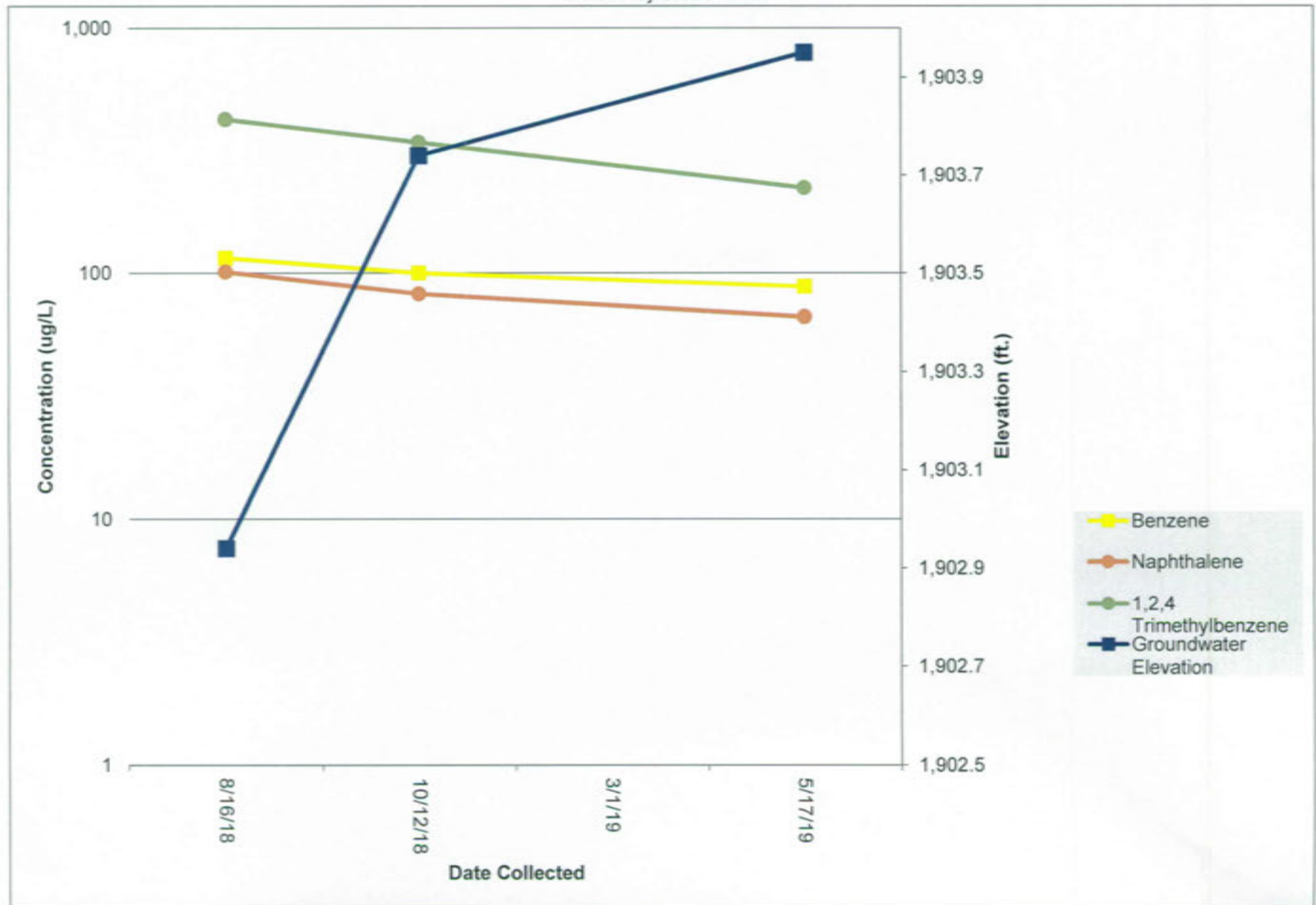
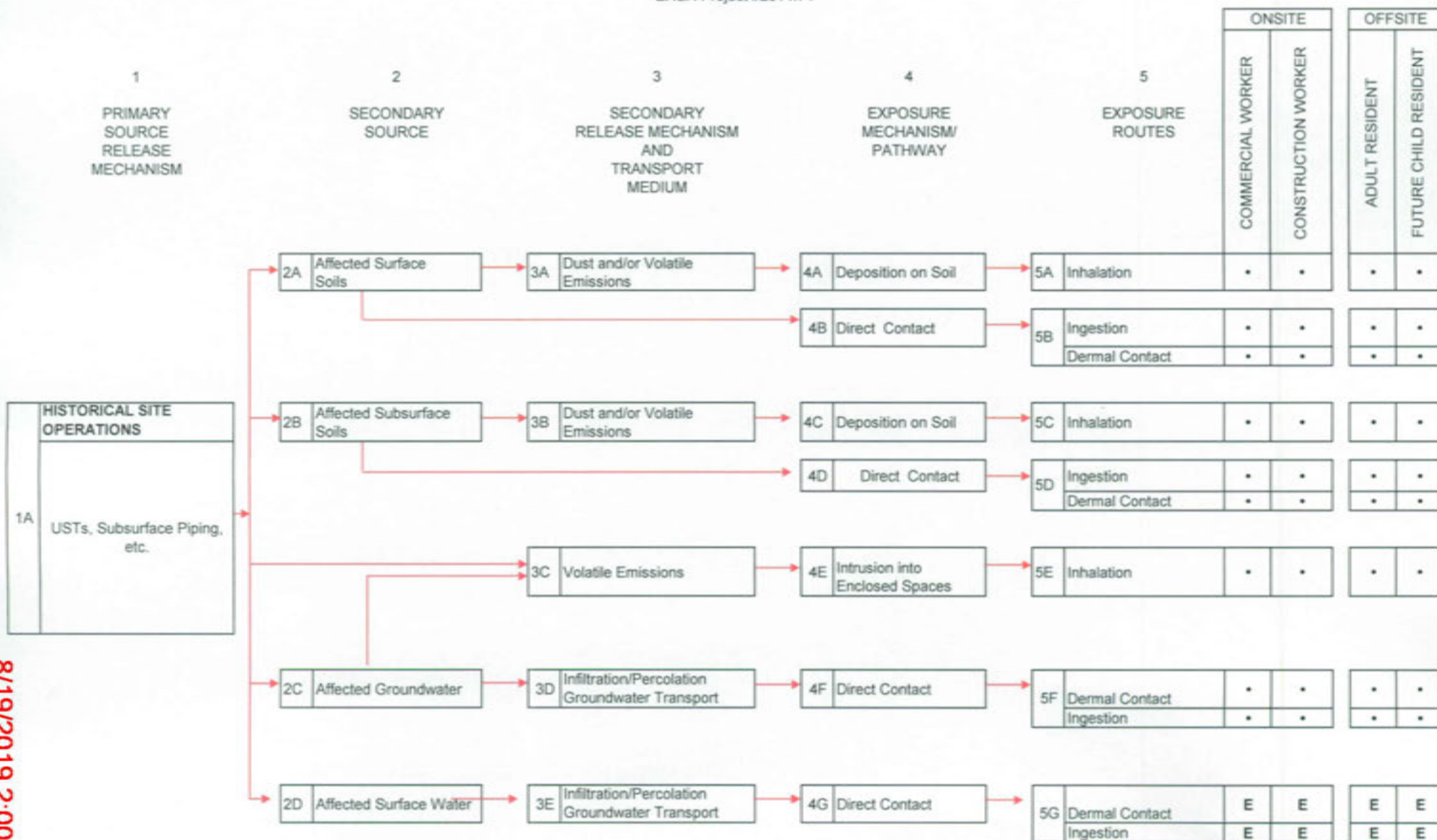


Figure 11
Conceptual Site Model
Russell City Store
1536 S.R. 66, Kane, Pennsylvania
ER&R Project #2014.74



KEY:
Red arrows indicate potential contaminant pathways

E Pathway Eliminated
• Complete Pathway

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Table 1
Initial Site Characterization - March 2015 Soil Analytical Data
Russell City Store
1536 S.R. 66, Kane, Pennsylvania
ER&R Project #2014.74

Sample Description	Sample Date	% Moisture	Benzene (µg/kg)	Ethyl benzene (µg/kg)	Isopropylbenzene (cumene) (µg/kg)	MTBE (µg/kg)	Napthalene (µg/kg)	Toluene (µg/kg)	1,2,4 Trimethylbenzene (µg/kg)	1,3,5 Trimethylbenzene (µg/kg)	Total Xylenes (µg/kg)
SB-1 2-3'	3/17/2015	12.0	1,110	9,340	5,450	<262	16,300	<262	106,000	68,300	30,500
SB-1 7.5-9'	3/17/2015	17.5	<5.5	<5.5	<5.5	<5.5	12.7	<5.5	7.8	<5.5	<16.5
SB-2 2.5-5'	3/17/2015	9.5	<244	<244	271	<244	781	<244	1,030	511	<732
SB-2 7-8'	3/17/2015	15.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<15.5
SB-3 5-6'	3/17/2015	9.3	39.9	17.5	<5.1	<0.73	7.9	<5.1	10.9	5.4	36.8
SB-4 3-5'	3/17/2015	7.3	<4.8	11.9	<4.8	<4.8	17.5	5.6	45.3	19.5	42.1
SB-5 10-12'	3/17/2015	4.4	<247	1,580	262	<247	1,510	<247	6,270	2,310	4,390
SB-6 10-12.5'	3/17/2015	5.7	579	4,500	509	<235	2,700	6,870	13,500	4,660	19,900
SB-7 11-12.5'	3/17/2015	6.6	15.8	67.9	26.3	<5.1	46.5	<5.1	225	148	98.2
SB-8 11-12'	3/17/2015	8.0	<5.0	54.1	20.7	<5.0	21.1	<5.0	184	87.3	108
PADEP Statewide Health Standards Residential Used Aquifer (µg/Kg)			500	70,000	600,000	2,000	25,000	100,000	8,400	74,000	1,000,000
Vapor Soil Screening Standards (µg/kg) Residential (Svsoil)			130	46,000	600,000	280	25,000	44,000	8,400	210,000	990,000

Notes:

1. Soil samples collected by ER&R and analyzed by Pace Analytical, Inc. (Greensburg, PA).
2. Soil results reported on a dry weight basis.
3. Soil sample analyses completed for PADEP's short list of petroleum products/unleaded gasoline parameters (March 15, 2008).
4. Results reported in micrograms per kilogram (µg/Kg).
5. Less than (<) values indicate reported concentrations are below laboratory reporting limits.
6. Results are compared to the PADEP Statewide Health Standard (SHS) Medium Specific Concentrations (MSC).
7. Results in **bold** exceed the SHS MCSa for a Residential Used Aquifer.
8. The PADEP Soil Statewide health standard (SHS) vapor intrusion screening values (Svsoil) represent Table 2 of the PADEP Vapor Intrusion Guidance Document (2017). Shaded cells do not meet these screening values.
9. Soil in the area surrounding SB-1 and SB-6 was excavated after this drilling event.

Table 2
Interim Remediation- May 2015 Soil Analytical Data
Russell City Store
1536 S.R. 66, Kane, Pennsylvania
ER&R Project #2014.74

Sample Description	Sample Date	% Moisture	Benzene (µg/kg)	Ethyl benzene (µg/kg)	Isopropylbenzene (cumene) (µg/kg)	MTBE (µg/kg)	Napthalene (µg/kg)	Toluene (µg/kg)	1,2,4 Trimethylbenzene (µg/kg)	1,3,5 Trimethylbenzene (µg/kg)	Total Xylenes (µg/kg)
BS-1 15'	5/20/2015	13.1	2,500	5,380	348	<268	1,090	3,100	6,250	2,060	12,400
BS-2 15'	5/20/2015	6.9	1,330	11,300	751	<221	2,130	15,700	14,300	4,490	56,500
BS-3 15'	5/20/2015	11.1	762	6,320	376	<233	1,530	696	7,080	1,820	11,200
West Wall 5'	5/20/2015	11.6	<247	<247	<247	<247	<247	<247	<247	<247	<742
Road Wall 3'	5/20/2015	9.8	<227	<227	<227	<227	<227	<227	<227	<227	<680
South Wall 2'	5/20/2015	12.8	585	452	<250	<250	309	952	1,270	601	4,150
East Wall	5/20/2015	12.5	<248	<248	<248	<248	<248	<248	508	<248	<745
Base 5'	5/20/2015	15.9	<252	<252	<252	<252	<252	<252	<252	<252	<756
PADEP Statewide Health Standard Residential Used Aquifer (µg/Kg)			500	70,000	600,000	2,000	25,000	100,000	8,400	74,000	1,000,000
Vapor Soil Screening Standards (µg/kg) Residential (Svsoil)			130	46,000	600,000	280	25,000	44,000	8,400	210,000	990,000

Notes:

1. Soil samples collected by ER&R and analyzed by Pace Analytical, Inc. (Greensburg, PA).
2. Soil results reported on a dry weight basis.
3. Soil sample analyses completed for PADEP's short list of petroleum products/unleaded gasoline parameters (March 15, 2008).
4. Results reported in micrograms per kilogram (µg/Kg).
5. Less than (<) values indicate reported concentrations are below laboratory reporting limits.
6. Results are compared to the PADEP Statewide Health Standard (SHS) Medium Specific Concentrations (MSC).
7. Results in **bold** exceed the Residential Used Aquifers SHS 100 X GW MSCs (most stringent standards).
8. The PADEP Soil Statewide health standard (SHS) vapor intrusion screening values (Svsoil) represent Table 2 of the PADEP Vapor Intrusion Guidance Document (2017). Shaded cells do not meet these screening values.
9. Soil in the area surrounding the sample South Wall 2' was excavated after this excavation event.

Table 3
Interim Remediation- March 2017 Soil Analytical Data
Russell City Store
1536 S.R. 66, Kane, Pennsylvania
ER&R Project #2014.74

Sample Description	Sample Collection Date	Sample Depth (ft.)	% Moisture	Benzene	Ethylbenzene	Isopropylbenzene (Cumene)	Methyl tert-butyl ether (MTBE)	Naphthalene	Toluene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Total Xylenes
SS-1	3/29/17	4.5'	16.1%	<211	4,500	964	<211	3,190	404	18,800	9,040	17,400
SS-3	3/29/17	4.5'	9.6%	<189	1,520	425	<189	1,720	196	7,920	3,840	5,820
SS-8	3/29/17	4.5'	14.5%	872	2,780	766	<249	4,490	1,030	14,800	7,020	25,400
SS-9	3/29/17	4.5'	13.8%	<260	3,150	1,370	<260	12,500	<260	42,900	21,200	6,360
SS-11	3/29/17	3'	7.9%	<246	<246	<246	<246	858	<246	2,840	1,710	<737
PADEP Statewide Health Standard Residential Used Aquifer (µg/Kg)				500	70,000	600,000	2,000	25,000	100,000	8,400	74,000	1,000,000
Vapor Soil Screening Standards (µg/kg) Residential (Svsoil)				130	46,000	600,000	280	25,000	44,000	8,400	210,000	990,000

Notes:

1. Soil samples collected by ER&R and analyzed by Pace Analytical, Inc. (Greensburg, PA).
2. Soil results reported on a dry weight basis.
3. Soil sample analyses completed for PADEP's short list of petroleum products/unleaded gasoline parameters (March 15, 2008).
4. Results reported in micrograms per kilogram (µg/Kg).
5. Less than (<) values indicate reported concentrations are below laboratory reporting limits.
6. Results are compared to the PADEP Statewide Health Standard (SHS) Medium Specific Concentrations (MSC).
7. Results in **bold** exceed the Residential Used Aquifers SHS 100 X GW MSCs (most stringent standards).
8. The PADEP Soil Statewide health standard (SHS) vapor intrusion screening values (Svsoil) represent Table 2 of the PADEP Vapor Intrusion Guidance Document (2017). Shaded cells do not meet these screening values.

Table 4- Groundwater Elevation Data
Russell City Store
1536 S.R. 66, Kane, Pennsylvania
ER&R Project #2014.74

Well ID #	Casing Elevation	Depth to water (ft) 8/28/17	GW Elevation 8/28/17	Depth to water (ft) 11/14/17	GW Elevation 11/14/17	Depth to water (ft) 7/31/18	GW Elevation 7/31/18	Depth to water (ft) 8/16/18	GW Elevation 8/16/18	Depth to water (ft) 8/29/18	GW Elevation 8/29/18	Depth to water (ft) 10/12/18	GW Elevation 10/12/18	Depth to water (ft) 3/1/19	GW Elevation 3/1/19	Depth to water (ft) 5/17/19	GW Elevation 5/17/19
MW-1	1910.66	11.43	1899.23	DRY	DRY	11.18	1899.48	10.85	1899.81	10.80	1888.43	10.30	1900.36	NA		10.15	1900.51
MW-2	1912.22	15.58	1896.64	15.27	1896.95	20.09	1892.13	20.60	1891.62	21.01	1875.63	19.75	1892.47	15.58	1896.64	14.74	1897.48
MW-3	1913.08	11.42	1901.66	12.35	1900.73	10.32	1902.76	10.77	1902.31	10.08	1891.58	10.75	1902.33	NA		8.92	1904.16
MW-4	1913.80	11.27	1902.53	10.26	1903.54	10.42	1903.38	10.86	1902.94	10.26	1892.27	10.03	1903.77	9.92	1903.88	9.59	1904.21
MW-5	1913.22	12.42	1900.80	11.14	1902.08	11.96	1901.26	11.79	1901.43	11.95	1888.85	11.00	1902.22	8.35	1904.87	7.09	1906.13
MW-6	1913.70					11.00	1902.70	11.18	1902.52	11.43	1902.27	11.47	1902.23	NA		8.69	1905.01
MW-7	1914.46					11.42	1903.04	11.86	1902.60	11.45	1903.01	10.72	1903.74	NA		10.51	1903.95
MW-8	1913.92					33.35	1880.57	Dry		35.76	1878.16	Dry		NA		35.39	1878.53
MW-9	1912.37					30.58	1881.79	30.48	1881.89	30.39	1881.98	27.30	1885.07	28.55	1883.82	30.76	1881.61
MW-10	1911.59					24.30	1887.29	24.55	1887.04	24.11	1887.48	23.44	1888.15	23.32	1888.27	22.95	1888.64
MW-11	1912.58					13.89	1898.69	14.43	1898.15	13.00	1899.58	12.87	1899.71	12.33	1900.25	11.69	1900.89
MW-12	1911.96					14.52	1897.44	15.06	1896.90	13.72	1898.24	12.44	1899.52	12.70	1899.26	11.45	1900.51
MW-13	1910.23					12.19	1898.04	12.55	1897.68	11.78	1898.45	11.23	1899.00	NA		10.79	1899.44
MW-14	1912.62					9.92	1902.70	10.09	1902.53	10.14	1902.48	8.48	1904.14	NA		7.39	1905.23
MW-15	1914.91													11.80	1903.11	11.15	1903.76
MW-16	1913.23													4.82	1908.41	3.83	1909.40
MW-17	1915.60													12.06	1903.54	11.32	1904.28

Notes:

1. All readings are reported in decimal feet.
2. Depth to water measurements collected with solinst water level tape.
3. NA = well not accessible on this date.

8/19/2019 2:00:31 PM

Table 5
Soil Boring BH-1 through BH-17 Soil Analytical Data
Russell City Store
1536 S.R. 66, Kane, Pennsylvania
ER&R Project #2014.74

Sample Description	Sample Date	% Moisture	Benzene (µg/kg)	Ethyl benzene (µg/kg)	Isopropylbenzene (cumene) (µg/kg)	MTBE (µg/kg)	Napthalene (µg/kg)	Toluene (µg/kg)	1,2,4 Trimethylbenzene (µg/kg)	1,3,5 Trimethylbenzene (µg/kg)	Total Xylenes (µg/kg)
BH-1 (4'-6')	7/31/2017	27.7	44	<6.2	<6.2	<6.2	<6.2	34.5	<6.2	<6.2	<6.2
BH-2 (3'-5')	7/31/2017	14.9	201	6.2	<5.1	<5.1	<5.1	45.2	<5.1	<5.1	23
BH-3 (5'-7')	7/31/2017	16.5	1,560	21.6	<4.8	<4.8	<4.8	272	11.0	<4.8	92
BH-4 (9'-11')	8/1/2017	6.1	<229	1,190	229	<229	1,560	285	7,130	1,020	2,930
BH-5 (5'-7')	8/1/2017	7.9	282	<267	<267	<267	339	<267	2,750	1,080	<802
BH-6 (5'-6')	7/17/2018	17.0	48	49.4	12.1	<3.2	31.8	121	101	27.5	295
BH-7 (9'-11')	7/17/2018	7.1	<4.6	<4.6	<4.6	<4.6	<4.6	<4.6	<4.6	<4.6	<13.8
BH-9 (11'-12')	7/18/2018	17.3	3,520	6,560	843	<244	1,690	265	5,300	4,750	9,430
BH-10 (9'-11')	7/18/2018	7.2	7.0	86.3	19.8	<4.4	15	4.7	140	59.8	210
BH-11 (6'-8')	7/18/2018	4.6	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<5.4	<16.3
BH-12 (7'-9')	7/18/2018	11.5	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<16.9
BH-13 (12.5'-15')	7/18/2018	5.2	<4.6	<4.6	<4.6	<4.6	<4.6	<4.6	<4.6	<4.6	<13.9
BH-14 (12.5'-14')	7/18/2018	4.3	35	<4.5	<4.5	<4.5	<4.5	<4.5	<4.5	<4.5	<13.5
BH-15 (5'-7')	1/16/2019	14.9	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5	<16.5
BH-15 (9'-11')	1/16/2019	4.4	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<15.4
BH-16 (5'-7')	1/16/2019	13.5	<8.1	<8.1	<8.1	<8.1	<8.1	<8.1	<8.1	<8.1	<24.3
BH-17 (5'-6')	1/16/2019	8.2	<5.0	6.4	<5.0	<5.0	64.6	<5.0	45.5	36.9	<15.1
BH-17 (15'-16')	1/16/2019	9.0	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<14.1
PADEP Statewide Health Standard Residential Used Aquifer (µg/Kg)			500	70,000	600,000	2,000	25,000	100,000	8,400	74,000	1,000,000
Vapor Soil Screening Standards (µg/kg) Residential (Svsoil)			130	46,000	600,000	280	25,000	44,000	8,400	210,000	990,000

Notes:

1. Soil samples collected by ER&R and analyzed by Pace Analytical, Inc. (Greensburg, PA).
2. Soil results reported on a dry weight basis.
3. Soil sample analyses completed for PADEP's short list of petroleum products/unleaded gasoline parameters (March 15, 2008).
4. Results reported in micrograms per kilogram (µg/Kg).
5. Less than (<) values indicate reported concentrations are below laboratory reporting limits.
6. Results are compared to the PADEP Statewide Health Standard (SHS) Medium Specific Concentrations (MSC).
7. Results in **bold** exceed the SHS MCSa for a Residential Used Aquifer.
8. The PADEP Soil Statewide health standard (SHS) vapor intrusion screening values (Svsoil) represent Table 2 of the PADEP Vapor Intrusion Guidance Document (2017). Shaded cells do not meet these screening values.
9. The Laboratory report lists samples collected on 7/18/18 and 1/16/19 as SB and should list them as BH.

Table 6
Groundwater Analytical Data
Russell City Store
1536 S.R. 66
Kane, Pennsylvania
ER&R Project #2014.74

Sample Location	Sample Date	Benzene	Ethylbenzene	Isopropylbenzene (Cumene)	Methyl tert-butyl ether (MTBE)	Naphthalene	Toluene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Xylenes (Total)
MW1	8/28/17	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<3.0
	11/14/17	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry
	8/16/18	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<3.0
	10/12/18	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<3.0
	3/1/19	Not	Accessible							
MW2	5/17/19	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<3.0
	8/28/17	<1.0	1.2	<1.0	<1.0	<2.0	<1.0	1.4	<1.0	3.3
	11/14/17	1.4	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<3.0
	8/16/18	1.6	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<3.0
	10/12/18	1.2	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<3.0
MW3	3/1/19	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<3.0
	5/17/19	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<3.0
	8/28/17	188	13.2	5.0	<1.0	<2.0	44.5	22.2	9.1	32.3
	11/14/17	79.8	15.0	16.4	<1.0	6.5	2.0	30.2	30.4	6.2
	8/16/18	71.8	7.9	5.1	<1.0	<10	<1.0	21.0	6.0	<3.0
MW4	10/12/18	107	2.9	12.2	<1.0	3.1	<1.0	39.2	10.3	<3.0
	3/1/19	Not	Accessible							
	5/17/19	131	2.9	15.7	<1.0	3.2	<1.0	43.9	8.3	<3.0
	8/28/17	484	1,140	95.6	<1.0	181	214	1,240	334	2,010
	11/14/17	296	2,940	114	<1.0	151	202	9,210	3,020	6,230
MW5	8/16/18	432	1,520	98.7	<1.0	189	274	1,530	411	2,860
	10/12/18	364	1,260	130	<1.0	312	228	2,390	651	2,640
	3/1/19	489	1,860	116	<1.0	203	147	3,940	1,150	2,950
	5/17/19	470	1,140	103	<1.0	183	232	1,330	350	1,590
	8/28/17	2.9	2.4	<1.0	<1.0	<2.0	<1.0	4.6	2.4	5.6
MW6	11/14/17	18.5	33.5	8.0	<1.0	5.5	3.3	171	74.1	84.9
	8/16/18	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<3.0
	10/12/18	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	2.4	<1.0	<3.0
	3/1/19	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<3.0
	5/17/19	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<3.0
MW7	8/16/18	98.5	20.3	2.4	<1.0	<1.0	1.5	6.5	4.3	10.1
	10/12/18	187	35.5	5.7	<1.0	2.6	1.0	15.9	13.1	16.9
	3/1/19	Not	Accessible							
	5/17/19	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<3.0
MW8	8/16/18	115	381	55.9	<1.0	101	79.5	426	177	310
	10/12/18	100	292	51.7	<1.0	82	61.4	343	143	192
	3/1/19	Not	Accessible							
	5/17/19	88.0	235	46.4	<1.0	66.3	37.7	223	90	124
MW9	8/29/18	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<3.0
	10/12/18	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<3.0
	3/1/19	Not	Accessible							
	5/17/19	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<3.0

Table 6
Groundwater Analytical Data
Russell City Store
1536 S.R. 66
Kane, Pennsylvania
ER&R Project #2014.74

Sample Location	Sample Date	Benzene	Ethylbenzene	Isopropylbenzene (Cumene)	Methyl tert-butyl ether (MTBE)	Naphthalene	Toluene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Xylenes (Total)
MW10	8/16/18	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<3.0
	10/12/18	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<3.0
	3/1/19	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<3.0
	5/17/19	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<3.0
MW11	8/16/18	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<3.0
	10/12/18	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<3.0
	3/1/19	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<3.0
	5/17/19	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<3.0
MW12	8/16/18	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<3.0
	10/12/18	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<3.0
	3/1/19	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<3.0
	5/17/19	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<3.0
MW13	8/16/18	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<3.0
	10/12/18	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<3.0
	3/1/19	Not	Accessible							
	5/17/19	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<3.0
MW14	8/16/18	18.7	2.6	<1.0	<1.0	<2.0	<1.0	<1.0	5.2	<3.0
	10/12/18	7.3	3.3	6.1	<1.0	<2.0	<1.0	1.5	4.1	<3.0
	3/1/19	Not	Accessible							
	5/17/19	1.2	1.8	3.6	<1.0	<2.0	<1.0	<1.0	1.7	<3.0
MW-15	3/1/19	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<3.0
	5/17/19	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<3.0
MW-16	3/1/19	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<3.0
	5/17/19	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<3.0
MW-17	3/1/19	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	1.1	1.4	<3.0
	5/17/19	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<3.0
PADEP Residential Used Aquifer SHS MSCs (µg/L)		5	700	840	20	100	1,000	15	420	10,000
Groundwater Screening Values Residential SV gw (µg/L)		23	700	1,900	6,300	100	34,000	59	420	10,000

Notes:

1. Laboratory analysis completed by Pace Analytical Services (Greensburg, PA).
2. Samples were analyzed for PADEP short list of unleaded gasoline parameters.
3. Volatile organic compounds analyzed by EPA Method 8260B.
4. Results reported in micrograms per liter (µg/L).
5. Less than values (<) indicate reported concentrations are below laboratory reporting limits.
6. Results are compared to the PADEP Statewide health standard medium specific concentrations (SHS MSCs) for a residential used aquifer.
7. The groundwater Statewide health standard (SHS) vapor intrusion screening values (SVgw) = Table 1 of the PADEP Vapor Intrusion Guidance (2017). Shaded values do not meet these screening values.

Table 7
Soil Vapor Analytical Data
Russell City Store
1536 S.R. 66
Kane, Pennsylvania 16728
ER&R Project #2014.74

<u>Sample Description</u>	<u>Sample Date</u>	Benzene (mg/m ³)	Ethylbenzene (mg/m ³)	Isopropylbenzene (cumene) (mg/m ³)	MTBE (mg/m ³)	Naphthalene (mg/m ³)	Toluene (mg/m ³)	1,2,4 Trimethylbenzene (mg/m ³)	1,3,5, Trimethylbenzene (mg/m ³)	Total Xylenes (mg/m ³)
VP-1	17-Oct-18	<0.94	<2.5	<7.2	<10.5	<7.7	60.200	<2.9	<2.9	<7.6
PADEP Sub-Slab Soil Gas SHS Vapor Intrusion Screening Values (SV _{ss}) Residential (ug/m ³)		120	370	16,000	3,600	28	200,000	280	280	4,000

NOTES:

1. Samples analyzed by Pace Analytical (Minneapolis, MN).
2. Results are reported in milligrams per cubic meter (mg/m³).
3. Results reported as < are "less than" values, indicate the analyte is not detected at or above the laboratory reporting limit.
4. Sample were analyzed for PADEP short list of unleaded gasoline parameters by Method TO-15.
5. VP - vapor point is installed as a sub-slab point.
6. Results are compared to the Residential Sub-slab Soil Gas Statewide Health Standards (SHS) Vapor Intrusion Screening Values (SV_{ss}) listed in Table 4 of PADEP Document 261-0.00-101 (January 18, 2017).

Appendix A
Historical Documents



FIELD ORDER

Person(s) Subject to Order MR. THEODORE LUTZ III		Facility ID No. 24-30431
Address of Person(s) Subject to Order 1536 ROUTE 66/948 DeYoung, PA 16728		Facility Name RUSSELL CITY STORE
Name and Title of Person Served Barbara Marshall (clerk)		Facility Address 1536 ROUTE 66/948 DeYoung, PA 16728
Date of Inspection 07/27/09	Time of Inspection 12:00 P.M. to .M.	Municipality HIGHLAND TOWNSHIP
DEP Regional Office and Phone Number Northwest Regional office (814) 332-6648		County ELK

The Department is the agency with the duty and authority to administer and enforce the Storage Tank and Spill Prevention Act, the Act of July 6, 1989, P.L. 169, as amended, 35 P.S. §§ 6021.101 – 6021.2104 ("Storage Tank Act"); and Section 1917-A of the Administrative Code of 1929, the Act of April 9, 1929, P.L. 177, as amended, 71 P.S. § 510-17 ("Administrative Code"); and the regulations of the Environmental Quality Board adopted thereunder.

The undersigned authorized representative of the Department has conducted an inspection of the above facility on the above date and has determined the existence of the violation(s) in this Order.

Pursuant to Sections 107(f), 1302, 1304, and 1309 of the Storage Tank Act, (35 P.S. §§ 6021.107(f), 6021.1302, 6021.1304, and 6021.1309, and Section 1917-A of the Administrative Code, 71 P.S. § 510-17, the Department hereby ORDERS that the Person(s) Subject to Order ("Person") identified above shall perform the compliance actions required in this Order.

Failure to comply with this Order constitutes unlawful conduct under Section 1310 of the Storage Tank Act, 35 P.S. § 6021.1310; and constitutes a statutory public nuisance under Section 1304 of the Storage Tank Act, 35 P.S. § 6021.1304. Section 1307 of the Storage Tank Act, 35 P.S. § 6021.1307, provides that the Department may assess a civil penalty of up to Ten Thousand Dollars (\$10,000) per day for each violation of this Order.

Nothing in this Order is intended, nor shall it be construed, to relieve or limit the obligations of the Person to comply with any existing or subsequent statute, regulation, permit or order. In addition, nothing set forth in this Order is intended, nor shall it be construed, to authorize any violation of any statute, regulation, order or permit issued or administered by the Department.

Violations

☐	A.	Failure of owner/operator of an underground storage tank system to perform required release detection Violation – Owner/operator failed to provide a method, or combination of methods, of release detection that meet the requirements of 25 Pa. Code §§ 245.441–245.446 for the underground storage tank system(s), in violation of 25 Pa. Code §§ 245.441–245.446 and Section 1310 of the Storage Tank Act, 35 P.S. § 6021.1310.
☐	B.	Failure of responsible party to immediately empty a storage tank after confirming a release Violation – Responsible party failed to immediately remove the regulated substance from a storage tank, after confirming that a release has occurred, in violation of 25 Pa. Code § 245.306(a) and Section 1310 of the Storage Tank Act, 35 P.S. § 6021.1310.

☒	C.	Failure of owner/operator of storage tanks / storage tank facilities to initiate and complete investigation of suspected release Violation – Owner/operator failed to initiate and complete investigation of an indication of a release of a regulated substance as soon as practicable but not later than 7 days after the indication of a release, in violation of 25 Pa. Code § 245.304(a) and Section 1310 of the Storage Tank Act, 35 P.S. § 6021.1310.
☐	D.	Failure of responsible party to timely dispose of or treat excavated contaminated soil Violation – Responsible party failed to dispose of or actively treat excavated contaminated soil within 90 days of first storage of that soil or other time frame authorized by Department in writing, in violation of 25 Pa. Code § 245.308(c) and Section 1310 of the Storage Tank Act, 35 P.S. § 6021.1310.
☐	E.	Failure of owner/operator of a storage tank facility to have a required inspection Violation – Owner/operator failed to have ☐ the underground storage tank system(s) inspected by a certified inspector in accordance with 25 Pa. Code §§ 245.411(b) - (d), in violation of 25 Pa. Code § 245.411 and Section 1310 of the Storage Tank Act, 35 P.S. § 6021.1310; or ☐ the aboveground storage tank system(s) inspected by a certified inspector in accordance with 25 Pa. Code §§ 245.551 – 245.553 and/or 245.616, in violation of 25 Pa. Code §§ 245.551 and/or 245.616 and Section 1310 of the Storage Tank Act, 35 P.S. § 6021.1310.
☐	F.	Failure of owner/operator of underground storage tanks / storage tank facilities to ensure that system has required spill and overfill prevention equipment Violation - Owner/operator failed to install specified spill and overfill prevention equipment, in violation of 25 Pa. Code § 245.421 and Section 1310 of the Storage Tank Act, 35 P.S. § 6021.1310.
☐	G.	Failure of owner/operator of underground storage tanks / storage tank facilities to comply with corrosion protection requirements Violation – Owner/operator failed to operate and maintain corrosion protection systems to continuously provide corrosion protection to the metal components of that portion of the tank and piping that routinely contain regulated substances, in violation of 25 Pa. Code § 245.432 and Section 1310 of the Storage Tank Act, 35 P.S. § 6021.1310.

Action(s) Required

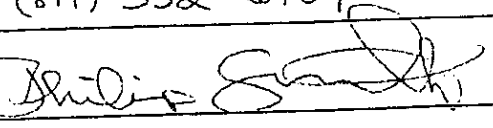
☐	1.	Within _____ days, Person(s) shall initiate a method, or combination of methods, of release detection, in accordance with the applicable requirements of 25 Pa. Code §§ 245.441–245.446 for the underground storage tank system(s) at the facility.
☐	2.	Within _____ hours, Person(s) shall empty the regulated substance from the storage tank(s) at the facility, as described in 25 Pa. Code §§ 245.451, 245.562(b) and/or 245.614(d).
☒	3.	Within <u>7</u> days, Person(s) shall initiate and complete investigation of an indication of a release of a regulated substance, in accordance with 25 Pa. Code § 245.304.
☐	4.	Within _____ days, Person(s) shall remove all excavated contaminated soil from the above-named Facility and dispose of that soil at a permitted facility, in accordance with all applicable Pennsylvania statutes.
☐	5.	Person(s) shall immediately cease all storage tank operations at the above-named Facility.
☐	6.	a. Within _____ days, Person(s) shall have the underground storage tank system(s) at the above-named Facility inspected by a certified inspector, in accordance with 25 Pa. Code § 245.411(a); and/or b. Within _____ days, Person(s) shall have the aboveground storage tank system(s) at the above-named Facility inspected by a certified inspector, in accordance with 25 Pa. Code §§ 245.551 and 245.616.
☐	7.	Within _____ days, Person(s) shall ensure that their underground tank system(s) have the spill and overfill prevention equipment required by and specified in 25 Pa. Code § 245.421.
☐	8.	Within _____ days, Person(s) shall operate and maintain corrosion protection systems to continuously provide corrosion protection to the metal components of that portion of the tank and piping that routinely contain regulated substances, in accordance with 25 Pa. Code § 245.432.
☐	9.	Notification to Department -- Person(s) shall notify the Department representative identified on Page 4 of this Order within _____ hours/days of complying with the required compliance action(s) checked above.

Description of Violation(s)

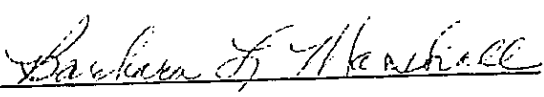
Failure to initiate and complete investigation
of a release of a regulated substance as
required by 25 Pa. Code 245.304(a)

NOTICE OF APPEAL RIGHTS

Any person aggrieved by this action may appeal, pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. Section 7514, and the Administrative Agency Law, 2 Pa.C.S. Chapter 5A, to the Environmental Hearing Board, Second Floor, Rachel Carson State Office Building, 400 Market Street, P.O. Box 8457, Harrisburg, PA 17105-8457, 717-787-3483. TDD users may contact the Board through the Pennsylvania Relay Service, 800-654-5984. Appeals must be filed with the Environmental Hearing Board within 30 days of receipt of written notice of this action unless the appropriate statute provides a different time period. Copies of the appeal form and the Board's rules of practice and procedure may be obtained from the Board. The appeal form and the Board's rules of practice and procedure are also available in braille or on audiotape from the Secretary to the Board at 717-787-3483. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law. IF YOU WANT TO CHALLENGE THIS ACTION, YOUR APPEAL MUST REACH THE BOARD WITHIN 30 DAYS. YOU DO NOT NEED A LAWYER TO FILE AN APPEAL WITH THE BOARD. IMPORTANT LEGAL RIGHTS ARE AT STAKE, HOWEVER, SO YOU SHOULD SHOW THIS DOCUMENT TO A LAWYER AT ONCE. IF YOU CANNOT AFFORD A LAWYER, YOU MAY QUALIFY FOR FREE PRO BONO REPRESENTATION. CALL THE SECRETARY TO THE BOARD (717-787-3483) FOR MORE INFORMATION.

DEPARTMENT REPRESENTATIVEName: PHILIP H. SMITHTitle: ENVIRONMENTAL PROTECTION
COMPLIANCE SPECIALISTTelephone: (814) 332-6184Signature: Date of Order: 07/27/09**ACKNOWLEDGEMENT OF RECEIPT**

The undersigned hereby acknowledges receipt of this Order. This signature does not constitute an admission that any or all of the violations listed in this Order have occurred or continue to occur.

Signature: 

BARBARA L. MARSHALL
(Print Name and Title, if any)

Date: _____

**NOTIFICATION OF REPORTABLE RELEASE (Owners and Operators)**
NOTIFICATION OF CONTAMINATION (Certified Installers and Inspectors)**NOTIFICATION OF REPORTABLE RELEASE (Owners and Operators)**

On August 21, 1993, the Storage Tank Program's Corrective Action Process (CAP) regulations became effective. These regulations establish release reporting requirements for owners and operators of storage tanks and storage tank facilities.

Subsection 245.305(a) of the regulations requires owners or operators to notify the appropriate regional office of the Department as soon as practicable, but no later than 2 hours, after the confirmation of a reportable release.

Subsection 245.305(d) requires owners or operators to provide written notification to the appropriate regional office and to the local municipality, within 15 days of the notice required by Subsection 245.305(a). This form may be used to comply with Subsection 245.305(d).

OWNERS AND OPERATORS (O/O)

PLEASE COMPLETE SECTIONS I, II, IIIA, IIIB, IV, V, VII and VIII.

NOTIFICATION OF CONTAMINATION (Certified Installers and Inspectors)

On September 21, 1991, the Storage Tank Program's Certification regulations became effective. These regulations establish standards of performance for certified installers and inspectors of storage tanks and storage tank facilities.

Subsection 245.132(a)(4) of the regulations requires certified installers and inspectors to report to the Department a release of a regulated substance or confirmed or suspected contamination of soil, surface or groundwater from regulated substances observed while performing services as a certified installer or inspector.

This form may be used to comply with Subsection 245.132(a)(4). The Department expects submission of the form within 48 hours of observing suspected or confirmed contamination. Where there is a reportable release, the form may be submitted jointly by the owner, operator, certified installer and certified inspector. In this instance, the form must be received by the appropriate regional office within 15 days of the notice required by Subsection 245.305(a).

CERTIFIED INSTALLERS AND INSPECTORS (I/I)

PLEASE COMPLETE SECTIONS I, II, IIIA, IIIC, VI, VII and VIII.

INSTRUCTIONS

- I. **FACILITY INFORMATION** - Record the name, I.D. number and physical location (not P.O. Box) of the facility at which a reportable release has been confirmed or at which suspected or confirmed contamination has been observed. Include the name and phone number of a person to contact at the facility.
- II. **OWNER INFORMATION** - Record the name, business address and phone number of the owner of the facility identified in Section I.
- III. **REGULATED SUBSTANCE INFORMATION** - Indicate to the best of your knowledge: A) the type of product or products involved; B) the quantity of product or products released; and C) whether the contamination is suspected or confirmed.
- IV. **REPORTABLE RELEASE INFORMATION** - Record the date of confirmation of the reportable release, e.g., "08/21/93"; the date and regional office notified; and the date the local municipality (provide name of municipality) was sent a copy of this form. Indicate to the best of your knowledge the extent of contamination resulting from the release of the regulated substance.
- V. **INTERIM REMEDIAL ACTIONS** - Indicate the interim remedial actions planned, initiated or completed.
- VI. **SUSPECTED/CONFIRMED CONTAMINATION INFORMATION** - Record the date of observation of the suspected or confirmed contamination, e.g., "01/01/94". Indicate to the best of your knowledge the indications of a suspected release or extent of confirmed contamination resulting from the release of the regulated substance.
- VII. **ADDITIONAL INFORMATION** - Provide any additional, relevant, available information concerning the reportable release or suspected or confirmed contamination. Include in this section a brief description of the activity that was being conducted when the reportable release was confirmed by the owner or operator or when the suspected/confirmed contamination was observed by the certified installer or inspector, e.g., during a(n) installation, repair or upgrade, removal from service or routine inspection.
- VIII. **CERTIFICATION** - Please print your name, and provide your signature and date of signature. If a certified installer/inspector, provide certification number and company certification number.

PLEASE SEND COMPLETED ORIGINAL FORM TO:

PA Department of Environmental Resources
Environmental Cleanup Program
Storage Tank Section
(and the appropriate address below, depending on where the FACILITY is located)

Southeast Region
Lee Park, Suite 6010
555 North Lane
Conshohocken, PA 19428
FAX: 610-832-6259/6260

Counties
Bucks, Chester, Delaware,
Montgomery,
Philadelphia

Northeast Region
Cross Valley Centre
667 North River Street
Plains, PA 18705
FAX: 717-826-5448

Counties
Carbon, Lackawanna, Lehigh,
Luzerne, Monroe, Northamp-
ton, Pike, Schuylkill, Susque-
hanna, Wayne, Wyoming

Southcentral Region
One Ararat Boulevard
Harrisburg, PA 17110
FAX: 717-540-7492

Counties
Adams, Bedford, Berks, Blair, Cum-
berland, Dauphin, Franklin, Fulton,
Huntingdon, Juniata, Lancaster,
Lebanon, Mifflin, Perry, York

Northcentral Region
200 Pine Street
Williamsport, PA 17701
FAX: 717-327-3565

Counties
Bradford, Cameron, Centre, Clinton,
Clearfield, Columbia, Lycoming,
Montour, Northumberland, Potter,
Snyder, Sullivan, Tioga, Union

Southwest Region
400 Waterfront Drive
Pittsburgh, PA 15222
FAX: 412-442-4194

Counties
Allegheny, Armstrong,
Beaver, Cambria, Fayette,
Greene, Indiana, Somerset,
Washington, Westmoreland

Northwest Region
1012 Water Street
Meadville, PA 16335
FAX: 814-332-6831

Counties
Butler, Clarion, Crawford,
Elk, Erie, Forest, Jefferson,
Lawrence, McKean, Mercer,
Venango, Warren

I. FACILITY INFORMATION (Both O/O and I/I)

Facility Name **Russell City Store** Facility I.D. Number **24-30431**
Street Address (P.O. Box not acceptable)
Route 66
City _____ State _____ Zip Code _____
DeYoung PA **16728**
County _____ Municipality _____
Elk **Highland Township**
Contact Person _____ Phone Number _____
Ted Lutz (814) 968-4415

II. OWNER INFORMATION (Both O/O and I/I)

Owner Name **Ted Lutz, III**
Address _____
Route 66
City _____
DeYoung
State _____ Zip Code _____
PA **16728**
Phone Number _____
(814) 968-4415

VII. ADDITIONAL INFORMATION (Both O/O and I/I)

Include a brief description of the activity that was being conducted when the reportable release was confirmed by the owner or operator or when the suspected/confirmed contamination was observed by the certified installer or inspector, e.g., during a(n) installation, repair or upgrade, removal from service or routine inspection.

Piping replacement in progress for upgrade requirements. Existing island remained in place, but odors in soil and minor staining noticed under island. Soil samples collected for analysis.

VIII. CERTIFICATION (Both O/O and I/I)

I, _____, hereby certify, under penalty of law as provided in 18 Pa. C.S.A. §4904 (relating to unsworn falsification to authorities) that I am the owner or operator of the above referenced storage tank facility and that the information provided by me in this notification is true, accurate and complete to the best of my knowledge and belief.

X Stan H. Sowl
Signature of Owner or Operator

X 1-23-99
Date

I, Stan H. Sowl, hereby certify, under penalty of law as provided in 18 Pa. C.S.A. §4904 (relating to unsworn falsification to authorities) that I am the certified installer who performed tank handling activities at the above referenced storage tank facility and that the information provided by me in this notification is true, accurate and complete to the best of my knowledge and belief.

Stan H. Sowl
Signature of Certified Installer

12/22/98
Date

1817

Installer Certification Number

1256

Company Certification Number

I, _____, hereby certify, under penalty of law as provided in 18 Pa. C.S.A. §4904 (relating to unsworn falsification to authorities) that I am the certified inspector who performed inspection activities at the above referenced storage tank facility and that the information provided by me in this notification is true, accurate and complete to the best of my knowledge and belief.

Signature of Certified Inspector

Date

Inspector Certification Number

Company Certification Number



Pennsylvania Department of Environmental Protection

230 Chestnut Street
Meadville, PA 16335-3481
August 28, 2000

Northwest Regional Office

814-332-6648
Fax: 814-332-6121

Mr. Ted Lutz
Route 66
Deyoung, PA 16728

Re: Storage Tanks/Act 2 Approval
Facility ID No. 24-30431
Russell City Store
Highland Township, Elk County

Dear Mr. Lutz

This letter acknowledges the Departments receipt of your Underground Storage Tank Closure Report submitted September 13, 1999, and the confirmatory soil pile sampling report submitted June 27, 2000 for the Russell City Store.

Please be advised that the reports have been approved by the Department in accordance with the provisions of the Land Recycling and Environmental Remediation Standards Act (Act 2), and the Storage Tank & Spill Prevention Act (Act 32). Liability protection under Act 2 is provided. The report indicates soils at the site meet the Statewide Health Standards for residential use.

This approval is based on the information submitted in the reports provided. It assumes soils will remain on site. If excavation occurs in the future, an evaluation must be made of its suitability for other uses.

Thank you for your cooperation in working with the Department in the remediation of this site. If you need additional information regarding this matter, please contact Don Hegburg of the Environmental Cleanup Program at 814-797-1191.

Sincerely

S. Craig Lobins
Regional Manager
Environmental Cleanup

cc: Mr. Stan Sowl
Registration File
D. Hegburg

SCL:jb



ATTACHMENT 4

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF LAND RECYCLING AND WASTE MANAGEMENT

COPY

UNDERGROUND STORAGE TANK SYSTEM
CLOSURE REPORT FORM

24-30431

Facility I.D.

Highland Township

Municipality

Elk

County

8/24/99

Date Prepared

Stan H. Sowl

Name of Person Submitting Report
(Please Print)

Harris Enterprises

Company Name
(If Applicable)

Enviromental Consultant

Title

Closure Method (Check all that apply):

- ☒ Removal
- ☐ Closure-In-Place
- ☐ Change-In-Service

Site Assessment Results (Check all that apply):

- ☐ No Obvious Contamination - Sample Results Meet Standards/Levels
- ☐ No Obvious Contamination - Sample Results Do Not Meet Standards/Levels
- ☒ Obvious, Localized Contamination - Sample Results Meet Standards/Levels
- ☐ Obvious, Localized Contamination - Sample Results Do Not Meet Standards/Levels
- ☐ Obvious, Extensive Contamination

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF LAND RECYCLING AND WASTE MANAGEMENT

DATE RECEIVED: _____

UNDERGROUND STORAGE TANK SYSTEM CLOSURE REPORT FORM

Owners who are permanently closing underground storage tanks may use this form to demonstrate that an underground storage tank closure was performed in accordance with the "Closure Requirements For Underground Storage Tank Systems" document. PLEASE PRINT OR TYPE. COMPLETE ALL QUESTIONS.

SECTION I. Owner/Facility/Tank/Waste Management and Disposal Information

1. Facility ID Number 24-30431 2. Facility Name Russell City Store
3. Facility County Elk 4. Facility Municipality Highland Township
5. Facility Address Route 66, DeYoung, PA 16728
6. Facility Contact Person Ted Lutz 7. Facility Telephone Number (814) 968-4415
8. Owner Name Ted Lutz
9. Owner Mailing Address Route 66 DeYoung, PA 16728
10. Description of Underground Storage Tanks (Complete for each tank closed)

DATE OF TANK CLOSURE (Month/Day/Year)		7/16/99	7/16/99	12/17/98	12/17/98
Tank Registration Number		001	002	003	004
Estimated Total Capacity (Gallons)		3,000	2,000	Piping Only	Piping Only
Substance(s) Stored Throughout Operating Life of Tank (Check All That Apply)	a. Petroleum				
	Unleaded Gasoline	☒	☒	☒	☐
	Leaded Gasoline	☒	☐	☐	☐
	Aviation Gasoline	☐	☐	☐	☐
	Kerosene	☐	☐	☐	☐
	Jet Fuel	☐	☐	☐	☒
	Diesel Fuel	☐	☐	☐	☐
	Fuel Oil No. 1	☐	☐	☐	☐
	Fuel Oil No. 2	☐	☐	☐	☐
	Fuel Oil No. 4	☐	☐	☐	☐
	Fuel Oil No. 5	☐	☐	☐	☐
	Fuel Oil No. 6	☐	☐	☐	☐
	New Motor Oil	☐	☐	☐	☐
	Used Motor Oil	☐	☐	☐	☐
	Other, Please Specify	_____	_____	_____	_____
NOTE: If Hazardous Substance Block is Checked, Attach Material Safety Data Sheets (MSDS)	b. Hazardous Substance	☐	☐	☐	☐
	Name of Principal CERCLA Substance	_____	_____	_____	_____
	AND Chemical Abstract Service (CAS) No.	_____	_____	_____	_____
	c. Unknown	☐	☐	☐	☐
Closure Method (Check Only One)	a. Removal	☒	☒	☒	☒
	b. Closure-in-Place	☐	☐	☐	☐
	c. Change-In-Service	☐	☐	☐	☐
Partial System Closure (Yes or No)		No	No	Yes	Yes

DATE OF TANK CLOSURE (Month/Day/Year)					
Tank Registration Number					
Estimated Total Capacity (Gallons)					
Substance(s) Stored Throughout Operating Life of Tank (Check All That Apply)	a. Petroleum				
	Unleaded Gasoline	☐	☐	☐	☐
	Leaded Gasoline	☐	☐	☐	☐
	Aviation Gasoline	☐	☐	☐	☐
	Kerosene	☐	☐	☐	☐
	Jet Fuel	☐	☐	☐	☐
	Diesel Fuel	☐	☐	☐	☐
	Fuel Oil No. 1	☐	☐	☐	☐
	Fuel Oil No. 2	☐	☐	☐	☐
	Fuel Oil No. 4	☐	☐	☐	☐
	Fuel Oil No. 5	☐	☐	☐	☐
	Fuel Oil No. 6	☐	☐	☐	☐
	New Motor Oil	☐	☐	☐	☐
	Used Motor Oil	☐	☐	☐	☐
	Other, Please Specify _____	☐	☐	☐	☐
NOTE: If Hazardous Substance Block is Checked, Attach Material Safety Data Sheets (MSDS)	b. Hazardous Substance				
	Name of Principal CERCLA Substance _____	☐	☐	☐	☐
	AND Chemical Abstract Service (CAS) No. _____				
	c. Unknown	☐	☐	☐	☐
Closure Method (Check Only One)	a. Removal	☐	☐	☐	☐
	b. Closure-in-Place	☐	☐	☐	☐
	c. Change-In-Service	☐	☐	☐	☐
Partial System Closure (Yes or No)					

Yes N/A

11. Briefly describe the storage tank facility and the nature of the operations which were conducted at the facility (both historical and present) including use of tanks: Facility has been a small grocery store and souvenir shop selling gas as a service to customers for over 30 years. Facility continues to operate as such.

- ☒ 12. A site location and sampling map of the site, drawn to scale, is attached. See page 11 of 11.
- ☐ 13. Original, color photographs of the closure process are attached (i.e, inside of excavation/piping runs, pit water, tanks showing condition). On File at Harris Enterprises
- ☒ 14. An amended "Registration of Storage Tanks" form was submitted to the DEP, Bureau of Water Quality Management, Division of Storage Tanks, P.O. Box 8762, Harrisburg, PA 17105-8762.
Date: 8/24/99
- ☒ ☐ 15. If a reportable release was confirmed, the appropriate regional office of DEP was notified by the owner or operator.
Date: 7/16/99 Office: Knox Regional

Yes N/A

☐ ☒ 16. If tanks were cleaned on-site:

- a. Briefly describe the disposition of usable product: All usable product was removed and used
- b. Briefly describe the disposal of unusable product, sludges, sediments, and wastewater generated during cleaning. Provide the name and permit number of the processing, treatment, storage or disposal facility. (Attach documentation of proper disposal): _____
- c. If tank contents were determined/deemed to be hazardous waste, provide:
- (1) Generator ID Number: _____
- (2) Licensed Hazardous Waste Transporter Name and ID Number: _____

☐ ☒ 17. If tanks were removed from the site for cleaning:

- a. Provide the name and permit number of the processing, treatment, storage or disposal facility performing the tank cleaning: _____
- b. If tank contents were determined/deemed to be hazardous waste, provide:
- (1) Generator ID Number: _____
- (2) Licensed Hazardous Waste Transporter Name and ID Number: _____

18. Briefly describe the disposition of tanks/piping (Attach documentation of proper disposal):
Tanks and piping was sold as scrap. A copy of the scrap-yard receipt is provided on Page 4A of 11.

☒ ☐ 19. If contaminated soil is excavated:

- a. Briefly describe the disposition and amount 5-8 (tons) of contaminated soil. Provide the name and permit number of the processing, treatment, storage or disposal facility. (Attach documentation of proper disposal):
Contaminated soil is being landfarmed. The soil is staged on and under plastic in 1 1/2-2' layers. Nutrients were added to augment natural biodegradation. The soil will be agitated regularly. Confirmatory soil samples will be collected periodically to***
- b. If contaminated soil is determined/deemed to be hazardous waste, provide:
- (1) Generator ID Number: _____
- (2) Licensed Hazardous Waste Transporter Name and ID Number: _____

***document success of treatment. A copy of the untreated soil analysis is found on Page 10D of 11.

LEHMAN & SON

Box 33, Star Route

Kane, PA 16735

837-8822 837-6899

Customer's
Order No.

Date 1/16 19 99

Name Russell City Store

Address

SOLD BY	CASH	C.O.D.	CHARGE	ON ACCT	MDSE. RETD	PAID OUT	
---------	------	--------	--------	---------	------------	----------	--

[illegible]

ALL claims and returned goods MUST be accompanied by this bill.

Rec'd By

Yes N/A

- ☒ ☐ 20. Briefly describe the disposition of and amount 30± (tons) of uncontaminated soil (attach analyses): Uncontaminated soil was field screened with PID.
Uncontaminated soil was used as backfill material. A soil sample
was collected and the analytical results are found on Page 10D of 11.

I, Theodore J. Lutz, III, hereby certify, under penalty of law as provided in 18 Pa. C.S. §4904
(Print Name)
(relating to unsworn falsification to authorities) that I am the owner of the above referenced storage tank(s) and that the information provided by me in this closure report (Section I) is true, accurate and complete to the best of my knowledge and belief.

X
Signature of Tank Owner

X
Date

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF LAND RECYCLING AND WASTE MANAGEMENT

UNDERGROUND STORAGE TANK SYSTEM
CLOSURE REPORT FORM

SECTION II. Tank Handling Information

Facility ID Number 24-30431

Yes N/A

1. Briefly describe the excavation and initial on-site staging of uncontaminated/contaminated soil:
Excavated soil was field screened with PID. Contaminated soil was staged on and under plastic. Uncontaminated soil was used as backfill material.
2. Briefly describe the method of piping system closure and the closure of the piping systems including the quantity and condition of the piping:
The piping system, including vents was removed entirely.
Approximately 40' of product piping in fair condition and 20' of vent piping in good condition was removed and scrapped. Piping**
3. Briefly describe the condition of the tanks and any problems encountered during tank removal:
Tank 001 was in fair condition with minimal scaling or rust. Tank 002 was in poor condition with scaling and pitting. No holes were observed in either tank. The only problem with Tank 001 was that**
4. Briefly describe the method used to purge the tanks of and monitor for explosive vapors: _____

- ☐ ☒ 5. If tanks were cleaned on-site:
- a. Briefly describe the tank cleaning process: _____

 - b. If subcontracted, name and address of company that performed the tank cleaning: _____

- ☐ ☒ 6. If tanks were closed-in-place, briefly describe the tank fill material: _____

- ☒ ☐ 7. If contamination was suspected or observed, the "Notification of Contamination" form was submitted.

**in good condition from Tank 003 and 004 upgrade was removed and scrapped.

***it was buried beneath a water line, gas line and a new product line from Tank 004 piping upgrade.

SECTION II. (continued)

I, Stan H. Sowl, hereby certify, under penalty of law as provided in 18 Pa. C.S. §4904
(Print Name)

(relating to unsworn falsification to authorities) that I am the certified installer who performed the tank handling activities associated with the closure of the above referenced storage tank(s) and that the information provided by me in this closure report (Section II) is true, accurate and complete to the best of my knowledge and belief.


Signature of Certified Installer

8/24/99
Date

1817
Installer Certification Number

1256
Company Certification Number

Harris Enterprises
Company Name

RD #1, Box 402
Street

Clarion, PA 16214
City/Town, State, Zip

(814) 764-5316
Phone

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF LAND RECYCLING AND WASTE MANAGEMENT

UNDERGROUND STORAGE TANK
CLOSURE REPORT FORM

- SECTION III. Site Assessment Information

Tank Registration # 001 (complete one sheet for EACH tank system and attach ALL laboratory sheets pertaining to that system)

Facility ID Number 24-30431

- A. Provide depth of BEDROCK and WATER IF encountered during excavation or soil boring (write "N/A" if NOT encountered).
Bedrock N/A feet below land surface Water N/A feet below land surface
- B. Provide Length of PIPING IF piping was closed-in-place (write "N/A" if NOT closed-in-place).
Length of piping N/A feet
- C. TANK SYSTEM REMOVED FROM THE GROUND
- 1). Was obvious contamination observed while excavating?
- ☒ NO → Conduct confirmatory sampling → See end of this section for options on submission and maintenance of closure records → Do not complete item C.2. below.
- ☐ YES → Report release to DEP within 2 hours → Describe contamination observed and likely source(s) (tank, piping, dispenser, spills, overfills): _____

_____ → Complete item C.2. below.
- 2). Was contamination localized (within three feet of the tank system in every direction with no obvious water contamination)?
- ☐ YES → Remove or remediate contaminated soil → Conduct confirmatory sampling → See end of this section for options on submission and maintenance of closure records → Call Indemnification Fund (717-787-0763).
- ☐ NO → Continue interim remedial actions → See end of this section for options on submission and maintenance of closure records → Call Indemnification Fund (717-787-0763).
- D. TANK SYSTEM CLOSED-IN-PLACE OR CHANGED-IN-SERVICE N/A
- Was obvious contamination observed during sampling, boring or assessing water depths?
- ☐ NO → Conduct confirmatory sampling → See end of this section for options on submission and maintenance of closure records.
- ☐ YES → Report release to DEP within 2 hours → Describe contamination observed and likely sources (i.e., tank, piping, dispenser, spills, overfills): _____

_____ →
- Continue with corrective action → See end of this section for options on submission and maintenance of closure records → Call Indemnification Fund (717-787-0763).

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF LAND RECYCLING AND WASTE MANAGEMENT

UNDERGROUND STORAGE TANK
CLOSURE REPORT FORM

- SECTION III. Site Assessment Information
Tank Registration # 002 (complete one sheet for EACH tank system and attach ALL laboratory sheets pertaining to that system)

Facility ID Number 24-30431

- A. Provide depth of BEDROCK and WATER IF encountered during excavation or soil boring (write "N/A" if NOT encountered).

Bedrock N/A feet below land surface Water N/A feet below land surface

- B. Provide Length of PIPING IF piping was closed-in-place (write "N/A" if NOT closed-in-place).
Length of piping N/A feet

C. TANK SYSTEM REMOVED FROM THE GROUND

- 1). Was obvious contamination observed while excavating?

☐ NO → Conduct confirmatory sampling → See end of this section for options on submission and maintenance of closure records → Do not complete item C.2. below.

☒ YES → Report release to DEP within 2 hours → Describe contamination observed and likely source(s) (tank, piping, dispenser, spills, overfills): Contamination observed from around tank fill, probable cause overfills/spills.

Some seepage or spillage from filter changes → Complete item C.2. below.
under island.

- 2). Was contamination localized (within three feet of the tank system in every direction with no obvious water contamination)?

☒ YES → Remove or remediate contaminated soil → Conduct confirmatory sampling → See end of this section for options on submission and maintenance of closure records → Call Indemnification Fund (717-787-0763).

☐ NO → Continue interim remedial actions → See end of this section for options on submission and maintenance of closure records → Call Indemnification Fund (717-787-0763).

D. TANK SYSTEM CLOSED-IN-PLACE OR CHANGED-IN-SERVICE N/A

Was obvious contamination observed during sampling, boring or assessing water depths?

☐ NO → Conduct confirmatory sampling → See end of this section for options on submission and maintenance of closure records.

☐ YES → Report release to DEP within 2 hours → Describe contamination observed and likely sources (i.e., tank, piping, dispenser, spills, overfills): _____

Continue with corrective action → See end of this section for options on submission and maintenance of closure records → Call Indemnification Fund (717-787-0763).

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF LAND RECYCLING AND WASTE MANAGEMENT

UNDERGROUND STORAGE TANK
CLOSURE REPORT FORM

- SECTION III. Site Assessment Information

Tank Registration # 003 (complete one sheet for EACH tank system and attach ALL laboratory sheets pertaining to that system)

PIPING ONLY

Facility ID Number 24-30431

- A. Provide depth of BEDROCK and WATER IF encountered during excavation or soil boring (write "N/A" if NOT encountered).

Bedrock N/A feet below land surface

Water N/A feet below land surface

- B. Provide Length of PIPING IF piping was closed-in-place (write "N/A" if NOT closed-in-place).
Length of piping N/A feet

C. TANK SYSTEM REMOVED FROM THE GROUND PIPING ONLY

- 1). Was obvious contamination observed while excavating?

☐ NO → Conduct confirmatory sampling → See end of this section for options on submission and maintenance of closure records → Do not complete item C.2. below.

☒ YES → Report release to DEP within 2 hours → Describe contamination observed and likely source(s) (tank, piping, dispenser, spills, overfills): Spillage under island from filter changes. Probable piping seepage.

→ Complete item C.2. below.

- 2). Was contamination localized (within three feet of the tank system in every direction with no obvious water contamination)?

☒ YES → Remove or remediate contaminated soil → Conduct confirmatory sampling → See end of this section for options on submission and maintenance of closure records → Call Indemnification Fund (717-787-0763).

☐ NO → Continue interim remedial actions → See end of this section for options on submission and maintenance of closure records → Call Indemnification Fund (717-787-0763).

D. TANK SYSTEM CLOSED-IN-PLACE OR CHANGED-IN-SERVICE N/A

Was obvious contamination observed during sampling, boring or assessing water depths?

☐ NO → Conduct confirmatory sampling → See end of this section for options on submission and maintenance of closure records.

☐ YES → Report release to DEP within 2 hours → Describe contamination observed and likely sources (i.e., tank, piping, dispenser, spills, overfills):

Continue with corrective action → See end of this section for options on submission and maintenance of closure records → Call Indemnification Fund (717-787-0763).

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF LAND RECYCLING AND WASTE MANAGEMENT

UNDERGROUND STORAGE TANK
CLOSURE REPORT FORM

- SECTION III. Site Assessment Information

Tank Registration # 004 (complete one sheet for EACH tank system and attach ALL laboratory sheets pertaining to that system)

PIPING AND ISLAND ONLY KEROSENE SYSTEM

Facility ID Number 24-30431

- A. Provide depth of BEDROCK and WATER IF encountered during excavation or soil boring (write "N/A" if NOT encountered).
Bedrock N/A feet below land surface Water N/A feet below land surface
- B. Provide Length of PIPING IF piping was closed-in-place (write "N/A" if NOT closed-in-place).
Length of piping N/A feet
- C. TANK SYSTEM REMOVED FROM THE GROUND
- 1). Was obvious contamination observed while excavating?
 - ☒ NO → Conduct confirmatory sampling → See end of this section for options on submission and maintenance of closure records → Do not complete item C.2. below.
 - ☐ YES → Report release to DEP within 2 hours → Describe contamination observed and likely source(s) (tank, piping, dispenser, spills, overfills): _____

_____ → Complete item C.2. below.
 - 2). Was contamination localized (within three feet of the tank system in every direction with no obvious water contamination)?
 - ☐ YES → Remove or remediate contaminated soil → Conduct confirmatory sampling → See end of this section for options on submission and maintenance of closure records → Call Indemnification Fund (717-787-0763).
 - ☐ NO → Continue interim remedial actions → See end of this section for options on submission and maintenance of closure records → Call Indemnification Fund (717-787-0763).
- D. TANK SYSTEM CLOSED-IN-PLACE OR CHANGED-IN-SERVICE N/A
- Was obvious contamination observed during sampling, boring or assessing water depths?
- ☐ NO → Conduct confirmatory sampling → See end of this section for options on submission and maintenance of closure records.
 - ☐ YES → Report release to DEP within 2 hours → Describe contamination observed and likely sources (i.e., tank, piping, dispenser, spills, overfills): _____

_____ →
- Continue with corrective action → See end of this section for options on submission and maintenance of closure records → Call Indemnification Fund (717-787-0763).

- E. If the answer to C.1. is "no", the answer to C.2. is "yes" or the answer to D. is "no", confirmatory samples are required. Use the sample/analysis information sheet on page 10 of 11 to provide the information on confirmatory sampling and complete the diagram on Page 11 of 11.

Options for Submission and Maintenance of Closure Site Assessment Records

Records of the site assessment must be maintained for at least three years after completion of permanent closure or change-in-service in one of the following ways:

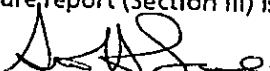
- (a) By the owners and operators who took the UST system out of service;
- (b) By the current owners and operators of the UST system site; or
- (c) By mailing these records to the implementing agency if they cannot be maintained at the closed facility.

At least one option must be chosen. If option (c) is chosen, the closure report form should be sent to the DEP regional office responsible for the county in which the tank was located.

Where the results of the site assessment indicate that obvious, localized soil contamination was encountered and the analytical results of the confirmatory sampling show levels below the statewide standard/action levels, this closure report form (Sections I, II, and III) or some other acceptable site characterization report must be received by the Department within 180 days of verbally reporting the release.

Where the results of the site assessment indicate that no obvious contamination or obvious, localized contamination was encountered, but the analytical results of the confirmatory sampling show levels above the statewide standard/action levels, or where there is obvious, extensive contamination, Section 245.310(a)(8) of the CAP regulation requires that details of removal from service be included in the site characterization report. A copy of the completed closure report form should be submitted as part of the site characterization report to satisfy the requirements of Section 245.310(a)(8) of the CAP regulations.

I, Stan H. Sowl, hereby certify, under penalty of law as provided in 18 Pa. C.S. §4904
(Print Name)
(relating to unsworn falsification to authorities) that I am the person who performed the site assessment activities associated with the closure of the above referenced storage tank(s) and that the information provided by me in this closure report (Section III) is true, accurate and complete to the best of my knowledge and belief.


Signature of Person Performing Site Assessment

Enviromental Consultant
Title of Person Performing Site Assessment

8/24/99

Date

Harris Enterprises
Name of Company Performing Site Assessment

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF LAND RECYCLING AND WASTE MANAGEMENT

UNDERGROUND STORAGE TANK SYSTEM
CLOSURE REPORT FORM

Sample/Analysis Information

(Attachment for Section III.)

Facility ID Number 24-30431

Sample I.D. (See diagram)	Parameter	Analytical Method	Media	Result (units) mg/kg	Detection Limit (units) mg/kg	Date Sample Taken	Date Sample Analyzed
Regular	Benzene	8260	Soil	0.055	0.005	12/21/98	12/29/98
Isl	Toluene	8260	Soil	0.356	0.005	12/21/98	12/29/98
	Ethylbenzene	8260	Soil	0.078	0.005	12/21/98	12/29/98
	Xylenes	8260	Soil	0.615	0.010	12/21/98	12/29/98
	Cumene	8260	Soil	<0.005	0.005	12/21/98	12/29/98
	Naphthalene	8260	Soil	0.108	0.005	12/21/98	12/29/98
	MTBE	8260	Soil	<0.005	0.005	12/21/98	12/29/98
RC Mid	Lead	7420	Soil	61.82	5.00	7/16/99	7/30/99
Isl	Benzene	8260	Soil	0.074	0.005	7/16/99	7/24/99
	Toluene	8260	Soil	0.377	0.005	7/16/99	7/24/99
	Ethylbenzene	8260	Soil	0.076	0.005	7/16/99	7/24/99
	Xylenes	8260	Soil	0.773	0.010	7/16/99	7/24/99
	Cumene	8260	Soil	<0.005	0.005	7/16/99	7/24/99
	1,2-Dibromethane	8260	Soil	<0.005	0.005	7/16/99	7/24/99
	1,2-Dichloroethane	8260	Soil	<0.005	0.005	7/16/99	7/24/99
	Naphthalene	8260	Soil	0.098	0.005	7/16/99	7/24/99
RL-Premium	Benzene	8260	Soil	0.053	0.005	8/10/99	8/11/99
Isl	Toluene	8260	Soil	0.211	0.005	8/10/99	8/11/99
	Ethylbenzene	8260	Soil	0.591	0.005	8/10/99	8/11/99
	Xylenes	8260	Soil	4.489	0.010	8/10/99	8/11/99
	Cumene	8260	Soil	0.154	0.005	8/10/99	8/11/99
	Naphthalene	8260	Soil	1.410	0.005	8/10/99	8/11/99
	MTBE	8260	Soil	0.211	0.005	8/10/99	8/11/99

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF LAND RECYCLING AND WASTE MANAGEMENT

UNDERGROUND STORAGE TANK SYSTEM
CLOSURE REPORT FORM

Sample/Analysis Information
(Attachment for Section III.)

Facility ID Number 24-30431

Sample I.D. (See diagram)	Parameter	Analytical Method	Media	Result (units) mg/kg	Detection Limit (units) mg/kg	Date Sample Taken	Date Sample Analyzed
Gas	Benzene	8260	Soil	<0.005	0.005	12/21/98	12/30/98
Pipeline	Toluene	8260	Soil	0.067	0.005	12/21/98	12/30/98
	Ethylbenzene	8260	Soil	<0.005	0.005	12/21/98	12/30/98
	Xylenes	8260	Soil	0.093	0.010	12/21/98	12/30/98
	Cumene	8260	Soil	<0.005	0.005	12/21/98	12/30/98
	Naphthalene	8260	Soil	0.032	0.005	12/21/98	12/30/98
	MTBE	8260	Soil	<0.005	0.005	12/21/98	12/30/98
	Lead	7420	Soil	91.25	5.00	12/21/98	1/7/99
RC 3K	Lead	7420	Soil	14.95	5.00	7/16/99	7/30/99
WW	Benzene	8260	Soil	0.090	0.005	7/16/99	7/24/99
	Toluene	8260	Soil	0.104	0.005	7/16/99	7/24/99
	Ethylbenzene	8260	Soil	0.042	0.005	7/16/99	7/24/99
	Xylenes	8260	Soil	0.173	0.010	7/16/99	7/24/99
	Cumene	8260	Soil	<0.005	0.005	7/16/99	7/24/99
	1,2-Dibrom oethane	8260	Soil	<0.005	0.005	7/16/99	7/24/99
	1,2-Dichlor oethane	8260	Soil	<0.005	0.005	7/16/99	7/24/99
	Naphthalene	8260	Soil	0.017	0.005	7/16/99	7/24/99
RC 3K A	Lead	7420	Soil	13.48	5.00	7/16/99	7/21/99
(F)	Benzene	8260	Soil	0.059	0.005	7/16/99	7/24/99
	Toluene	8260	Soil	1.549	0.005	7/16/99	7/24/99
	Ethylbenzene	8260	Soil	3.952	0.005	7/16/99	7/24/99
	Xylenes	8260	Soil	18.61	0.010	7/16/99	7/24/99
	Cumene	8260	Soil	0.254	0.005	7/16/99	7/24/99
	1,2-Dibrom oethane	8260	Soil	<0.005	0.005	7/16/99	7/24/99
	1,2-Dichlor oethane	8260	Soil	<0.005	0.005	7/16/99	7/24/99
	Naphthalene	8260	Soil	0.343	0.005	7/16/99	7/24/99

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF LAND RECYCLING AND WASTE MANAGEMENT

UNDERGROUND STORAGE TANK SYSTEM
CLOSURE REPORT FORM

Sample/Analysis Information

(Attachment for Section III.)

Facility ID Number 24-30431

Sample I.D. (See diagram)	Parameter	Analytical Method	Media	Result (units) mg/kg	Detection Limit (units) mg/kg	Date Sample Taken	Date Sample Analyzed
RC 3K B	Lead	7420	Soil	<5.00	5.00	7/16/99	7/21/99
(Mid)	Benzene	8260	Soil	<0.005	0.005	7/16/99	7/24/99
	Toluene	8260	Soil	0.034	0.005	7/16/99	7/24/99
	Ethylbenzene	8260	Soil	3.696	0.005	7/16/99	7/24/99
	Xylenes	8260	Soil	7.253	0.010	7/16/99	7/24/99
	Cumene	8260	Soil	1.062	0.005	7/16/99	7/24/99
	1,2-Dibrom oethane	8260	Soil	<0.005	0.005	7/16/99	7/24/99
	1,2-Dichlor oethane	8260	Soil	<0.005	0.005	7/16/99	7/24/99
	Naphthalene	8260	Soil	2.558	0.005	7/16/99	7/24/99
RC 3K C	Lead	7420	Soil	<5.00	5.00	7/16/99	7/21/99
	Benzene	8260	Soil	<0.005	0.005	7/16/99	7/24/99
	Toluene	8260	Soil	0.110	0.005	7/16/99	7/24/99
	Ethylbenzene	8260	Soil	9.589	0.005	7/16/99	7/24/99
	Xylenes	8260	Soil	51.41	0.010	7/16/99	7/24/99
	Cumene	8260	Soil	1.477	0.005	7/16/99	7/24/99
	1,2-Dibrom oethane	8260	Soil	<0.005	0.005	7/16/99	7/24/99
	1,2-Dichlor oethane	8260	Soil	<0.005	0.005	7/16/99	7/24/99
	Naphthalene	8260	Soil	2.411	0.005	7/16/99	7/24/99
Kerosene	Fluorene	8270	Soil	0.0899	0.0050	12/21/98	1/7/99
Isl.	Benzene	8260	Soil	<0.005	0.005	12/21/98	12/29/98
	Toluene	8260	Soil	0.135	0.005	12/21/98	12/29/98
	Ethylbenzene	8260	Soil	0.109	0.005	12/21/98	12/29/98
	Cumene	8260	Soil	<0.005	0.005	12/21/98	12/29/98
	Naphthalene	8260	Soil	0.392	0.005	12/21/98	12/29/98

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF LAND RECYCLING AND WASTE MANAGEMENT

UNDERGROUND STORAGE TANK SYSTEM
CLOSURE REPORT FORM

Sample/Analysis Information

(Attachment for Section III.)

Facility ID Number 24-30431

Sample I.D. (See diagram)	Parameter	Analytical Method	Media	Result (units) mg/Kg	Detection Limit (units) mg/Kg	Date Sample Taken	Date Sample Analyzed
RC 2K SW	Lead	7420	Soil	11.24	5.00	7/16/99	7/30/99
	Benzene	8260	Soil	0.068	0.005	7/16/99	7/24/99
	Toluene	8260	Soil	0.046	0.005	7/16/99	7/24/99
	Ethylbenzene	8260	Soil	0.133	0.005	7/16/99	7/24/99
	Xylenes	8260	Soil	0.400	0.010	7/16/99	7/24/99
	Cumene	8260	Soil	0.028	0.005	7/16/99	7/24/99
	1,2-Dibrom oethane	8260	Soil	<0.005	0.005	7/16/99	7/24/99
	1,2-Dichlor oethane	8260	Soil	<0.005	0.005	7/16/99	7/24/99
	Naphthalene	8260	Soil	<0.005	0.005	7/16/99	7/24/99
RC 2K A	Lead	7420	Soil	<5.00	5.00	7/16/99	7/21/99
(F)	Benzene	8260	Soil	0.019	0.005	7/16/99	7/24/99
	Toluene	8260	Soil	1.886	0.005	7/16/99	7/24/99
	Ethylbenzene	8260	Soil	2.342	0.005	7/16/99	7/24/99
	Xylenes	8260	Soil	13.94	0.010	7/16/99	7/24/99
	Cumene	8260	Soil	0.191	0.005	7/16/99	7/24/99
	1,2-Dibrom oethane	8260	Soil	<0.005	0.005	7/16/99	7/24/99
	1,2-Dichlor oethane	8260	Soil	<0.005	0.005	7/16/99	7/24/99
	Naphthalene	8260	Soil	1.062	0.005	7/16/99	7/24/99
RC 2K B	Lead	7420	Soil	<5.00	5.00	7/16/99	7/21/99
(Mid)	Benzene	8260	Soil	0.203	0.005	7/16/99	7/24/99
	Toluene	8260	Soil	0.120	0.005	7/16/99	7/24/99
	Ethylbenzene	8260	Soil	0.469	0.005	7/16/99	7/24/99
	Xylenes	8260	Soil	1.476	0.010	7/16/99	7/24/99
	Cumene	8260	Soil	0.064	0.005	7/16/99	7/24/99
	1,2-Dibrom oethane	8260	Soil	<0.005	0.005	7/16/99	7/24/99
	1,2-Dichlor oethane	8260	Soil	<0.005	0.005	7/16/99	7/24/99
	Naphthalene	8260	Soil	0.198	0.005	7/16/99	7/24/99

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF LAND RECYCLING AND WASTE MANAGEMENT

UNDERGROUND STORAGE TANK SYSTEM
CLOSURE REPORT FORM

Sample/Analysis Information

(Attachment for Section III.)

Facility ID Number 24-30431

Sample I.D. (See diagram)	Parameter	Analytical Method	Media	Result (units) mg/kg	Detection Limit (units) mg/kg	Date Sample Taken	Date Sample Analyzed
RC 2K C	Lead	7420	Soil	11.95	5.00	7/16/99	7/21/99
	Benzene	8260	Soil	0.065	0.005	7/16/99	7/24/99
	Toluene	8260	Soil	0.053	0.005	7/16/99	7/24/99
	Ethylbenzene	8260	Soil	0.172	0.005	7/16/99	7/24/99
	Xylenes	8260	Soil	0.600	0.010	7/16/99	7/24/99
	Cumene	8260	Soil	0.033	0.005	7/16/99	7/24/99
	1,2-Dibrom oethane	8260	Soil	<0.005	0.005	7/16/99	7/24/99
	1,2-Dichlor oethane	8260	Soil	<0.005	0.005	7/16/99	7/24/99
	Naphthalene	8260	Soil	0.093	0.005	7/16/99	7/24/99
RC Dirty	Lead	7420	Soil	24.36	5.00	7/16/99	7/30/99
	Benzene	8260	Soil	0.931	0.005	7/16/99	7/24/99
	Toluene	8260	Soil	2.150	0.005	7/16/99	7/24/99
	Ethylbenzene	8260	Soil	10.95	0.005	7/16/99	7/24/99
	Xylenes	8260	Soil	49.95	0.010	7/16/99	7/24/99
	Cumene	8260	Soil	1.518	0.005	7/16/99	7/24/99
	1,2-Dibrom oethane	8260	Soil	<0.005	0.005	7/16/99	7/24/99
	1,2-Dichlor oethane	8260	Soil	<0.005	0.005	7/16/99	7/24/99
	Naphthalene	8260	Soil	3.765	0.005	7/16/99	7/24/99
RC Clean	Lead	7420	Soil	76.69	5.00	7/16/99	7/30/99
	Benzene	8260	Soil	0.075	0.005	7/16/99	7/24/99
	Toluene	8260	Soil	0.199	0.005	7/16/99	7/24/99
	Ethylbenzene	8260	Soil	0.278	0.005	7/16/99	7/24/99
	Xylenes	8260	Soil	1.515	0.010	7/16/99	7/24/99
	Cumene	8260	Soil	0.040	0.005	7/16/99	7/24/99
	1,2-Dibrom oethane	8260	Soil	<0.005	0.005	7/16/99	7/24/99
	1,2-Dichlor oethane	8260	Soil	<0.005	0.005	7/16/99	7/24/99
	Naphthalene	8260	Soil	0.149	0.005	7/16/99	7/24/99

STEWART LABORATORIES

R.D. 1 • STRATTANVILLE, PENNSYLVANIA 16258 • PHONE (814) 379-3663

SAMPLE NUMBER: SS-60634
DATE RECEIVED: Dec 22, 1998
DATE REPORTED: Jan 04, 1999

Stan Sowl
Harris Enterprises
RD #1 Box 402
Clarion, PA 16214

ID: Regular Isl.; PID=38.2
Russell City

Russell City Store
Facility ID# 24-30431

P/O Number: 074002

SAMPLE DATA

Source: (Not Entered); Type: Grab Sample
Container(s): 40 mL Glass Vial(s), Half Pint (8 oz) Glass
Sampled By: JLS
Matrix: Soil/Oil/Solid; Preservation: Cool 4 Degrees C
Sampler Notes: UST Unleaded Parameters
Analyst Notes: Results are dry weight basis.
Report Type: Standard; Extractions: Methanol Extraction

CERTIFICATE OF ANALYSIS

ANALYSIS PARAMETER	DETECT	RESULTS	UNITS	METHOD	DATE	ANALYST
Moisture		15.82	%	SM-2540 G	Dec 29	JES
VOC	[UST]					
Benzene	0.005	0.055	mg/kg	SW846-8260	Dec 29	DDR
Toluene	0.005	0.356	"	"	"	"
Ethylbenzene	0.005	0.078	"	"	"	"
Xylenes(total)	0.010	0.615	"	"	"	"
Isopropylbenzene	0.005	<0.005	"	"	"	"
Naphthalene	0.005	0.108	"	"	"	"
tert-Butyl methylether	0.005	<0.005	"	"	"	"

Page 10E of 11

2 Parameters; 9 Lines
Page 1 of 1

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STEWART LABORATORIES

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SAMPLE NUMBER: SS-67514
DATE RECEIVED: Jul 20, 1999
DATE REPORTED: Aug 02, 1999

Stan Sowl
Harris Enterprises
RD #1 Box 402
Clarion, PA 16214

ID: RC Mid Isl
Russell City

Russell City Store
Facility ID# 24-30431

P/O Number: 074002

SAMPLE DATA

Source: (Not Entered); Type: Grab Sample
Container(s): 40 mL Glass Vial(s), One Pint (16 oz) Glass
Sampled By: SHS; Date Sampled: Jul 16, 1999
Matrix: Soil/Oil/Solid; Preservation: Cool 4 Degrees C
Sampler Notes: (None)
Analyst Notes: Results are dry weight basis.
Report Type: Standard; Extractions: Acid Digestion [Long], Methanol Extraction

CERTIFICATE OF ANALYSIS

ANALYSIS PARAMETER	DETECT	RESULTS	UNITS	METHOD	DATE	ANALYST
Moisture		15.82	%	SM-2540 G	Jul 28	CEC
Lead	(Pb) [F]	5.00	mg/kg	SW846-7420	Jul 30	JDH
VOC	[UST]					
Benzene	0.005	0.074	mg/kg	SW846-8260	Jul 24	DDR
Toluene	0.005	0.377	"	"	"	"
Ethylbenzene	0.005	0.076	"	"	"	"
Xylenes (total)	0.010	0.773	"	"	"	"
Isopropylbenzene	0.005	<0.005	"	"	"	"
1,2-Dibromoethane	0.005	<0.005	"	"	"	"
1,2-Dichloroethane	0.005	<0.005	"	"	"	"
Naphthalene	0.005	0.098	"	"	"	"

STEWART LABORATORIES

R.D. 1 • STRATTANVILLE, PENNSYLVANIA 16258 • PHONE (814) 379-3663

SAMPLE NUMBER: SS-68199
DATE RECEIVED: Aug 10, 1999
DATE REPORTED: Aug 18, 1999

Stan Sowl
Harris Enterprises
RD #1 Box 402
Clarion, PA 16214

ID: RL-Prem. Isl.

Russell City Store
Facility ID# 24-30431

SAMPLE DATA

Source: (Not Entered); Type: Grab Sample
Container(s): 40 mL Glass Vial(s), Half Pint (8 oz) Glass
Sampled By: MHS; Date Sampled: Aug 10, 1999
Matrix: Soil/Oil/Solid; Preservation: (None)
Sampler Notes: (None)
Analyst Notes: Results are dry weight basis.
Report Type: Standard; Extractions: Methanol Extraction

CERTIFICATE OF ANALYSIS

ANALYSIS PARAMETER	DETECT	RESULTS	UNITS	METHOD	DATE	ANALYST
Moisture		26.91	%	SM-2540 G	Aug 17	CEC
VOC	[UST]					
Benzene	0.005	0.053	mg/kg	SW846-8260	Aug 11	DDR
Toluene	0.005	0.211	"	"	"	"
Ethylbenzene	0.005	0.591	"	"	"	"
Xylenes(total)	0.010	4.489	"	"	"	"
Isopropylbenzene	0.005	0.154	"	"	"	"
Naphthalene	0.005	1.410	"	"	"	"
tert-Butyl methylether	0.005	0.211	"	"	"	"

10G

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R.D. 1

STRATTANVILLE, PENNSYLVANIA 16258

PHONE (814) 379-3663

SAMPLE NUMBER: SS-60636

DATE RECEIVED: Dec 22, 1998

DATE REPORTED: Jan 04, 1999

Stan Sowl
Harris Enterprises
RD #1 Box 402
Clarion, PA 16214

ID: Gas Pipeline; PID=0.0
Russell City

P/O Number: 074002

Russell City Store
Facility ID# 24-30431

SAMPLE DATA

Source: (Not Entered); Type: Grab Sample
Container(s): 40 mL Glass Vial(s), Half Pint (8 oz) Glass
Sampled By: JLS
Matrix: Soil/Oil/Solid; Preservation: Cool 4 Degrees C
Sampler Notes: UST Unleaded Parameters
Analyst Notes: Results are dry weight basis.
Report Type: Standard; Extractions: Methanol Extraction

CERTIFICATE OF ANALYSIS

ANALYSIS PARAMETER	DETECT	RESULTS	UNITS	METHOD	DATE	ANALYST
Moisture		16.95	%	SM-2540 G	Dec 29	JES
VOC	[UST]					
Benzene	0.005	<0.005	mg/kg	SW846-8260	Dec 30	JSA
Toluene	0.005	0.067	"	"	"	"
Ethylbenzene	0.005	<0.005	"	"	"	"
Xylenes(total)	0.010	0.093	"	"	"	"
Isopropylbenzene	0.005	<0.005	"	"	"	"
Naphthalene	0.005	0.032	"	"	"	"
tert-Butyl methylether	0.005	<0.005	"	"	"	"

Page 10H of 11

2 Parameters; 9 Lines
Page 1 of 1

DEP Certification: 16-328

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STEWART LABORATORIES

R.D. 1 • STRATTANVILLE, PENNSYLVANIA 16258 • PHONE (814) 379-3663

SAMPLE NUMBER: SS-60876
DATE RECEIVED: Jan 05, 1999
DATE REPORTED: Jan 12, 1999

Stan Sowl
Harris Enterprises
RD #1 Box 402
Clarion, PA 16214

ID: Gas Pipeline PID=0.0
Russell City
Additional Analysis On SS-60636

P/O Number: 074002

Russell City Store
Facility ID# 24-30431

SAMPLE DATA

Source: (Not Entered); Type: Grab Sample
Container(s): Half Pint (8 oz) Glass
Sampled By: JLS
Matrix: Soil/Oil/Solid; Preservation: Cool 4 Degrees C
Sampler Notes: (None)
Analyst Notes: Results are dry weight basis.
Report Type: Standard; Extractions: Acid Digestion [Long]

CERTIFICATE OF ANALYSIS

ANALYSIS PARAMETER	DETECT	RESULTS	UNITS	METHOD	DATE	ANALYST
Moisture		17.12	%	SM-2540 G	Jan 11	JES
Lead	(Pb)[F] 5.00	91.25	mg/kg	SW846-7420	Jan 07	DKW

Page 10H-1 of 11

2 Parameters; 2 Lines
Page 1 of 1

DEP Certification: 16-328


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STEWART LABORATORIES

R.D. 1

• STRATTANVILLE, PENNSYLVANIA 16258

• PHONE (814) 379-3663

SAMPLE NUMBER: SS-67511
DATE RECEIVED: Jul 20, 1999
DATE REPORTED: Aug 02, 1999

Stan Sowl
Harris Enterprises
RD #1 Box 402
Clarion, PA 16214

ID: RC 3K WW
Russell City
Tank/Piping

Russell City Store
Facility ID# 24-30431

P/O Number: 074002

SAMPLE DATA

Source: (Not Entered); Type: Grab Sample
Container(s): 40 mL Glass Vial(s), One Pint (16 oz) Glass
Sampled By: SHS; Date Sampled: Jul 16, 1999
Matrix: Soil/Oil/Solid; Preservation: Cool 4 Degrees C
Sampler Notes: (None)
Analyst Notes: Results are dry weight basis.
Report Type: Standard; Extractions: Acid Digestion [Long], Methanol Extraction

CERTIFICATE OF ANALYSIS

ANALYSIS PARAMETER	DETECT	RESULTS	UNITS	METHOD	DATE	ANALYST
Moisture		16.17	%	SM-2540 G	Jul 28	CEC
Lead	(Pb)[F]	14.95	mg/kg	SW846-7420	Jul 30	JDH
VOC	[UST]					
Benzene	0.005	0.090	mg/kg	SW846-8260	Jul 24	DDR
Toluene	0.005	0.104	"	"	"	"
Ethylbenzene	0.005	0.042	"	"	"	"
Xylenes(total)	0.010	0.173	"	"	"	"
Isopropylbenzene	0.005	<0.005	"	"	"	"
1,2-Dibromoethane	0.005	<0.005	"	"	"	"
1,2-Dichloroethane	0.005	<0.005	"	"	"	"
Naphthalene	0.005	0.017	"	"	"	"

STEWART LABORATORIES

R.D. 1

STRATTANVILLE, PENNSYLVANIA 16258

PHONE (814) 379-3663

SAMPLE NUMBER: SS-67507

DATE RECEIVED: Jul 20, 1999

DATE REPORTED: Aug 02, 1999

Stan Sowl
Harris Enterprises
RD #1 Box 402
Clarion, PA 16214

ID: RC 3K A (F)
Russell City
Tank/Piping

Russell City Store
Facility ID# 24-30431

P/O Number: 074002

SAMPLE DATA

Source: (Not Entered); Type: Grab Sample
Container(s): 40 mL Glass Vial(s), One Pint (16 oz) Glass
Sampled By: SHS; Date Sampled: Jul 16, 1999
Matrix: Soil/Oil/Solid; Preservation: Cool 4 Degrees C
Sampler Notes: (None)
Analyst Notes: Results are dry weight basis.
Report Type: Standard; Extractions: Acid Digestion [Long], Methanol Extraction

CERTIFICATE OF ANALYSIS

ANALYSIS PARAMETER	DETECT	RESULTS	UNITS	METHOD	DATE	ANALYST
Moisture		12.40	%	SM-2540 G	Jul 28	CEC
Lead	(Pb) [F]	5.00	13.48	mg/kg	SW846-7420	Jul 21 JDH
VOC	[UST]					
Benzene	0.005	0.059	mg/kg	SW846-8260	Jul 24	JSA
Toluene	0.005	1.549	"	"	"	"
Ethylbenzene	0.005	3.952	"	"	"	"
Xylenes (total)	0.010	18.61	"	"	"	"
Isopropylbenzene	0.005	0.254	"	"	"	"
1,2-Dibromoethane	0.005	<0.005	"	"	"	"
1,2-Dichloroethane	0.005	<0.005	"	"	"	"
Naphthalene	0.005	0.343	"	"	"	"

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SAMPLE NUMBER: SS-67508
DATE RECEIVED: Jul 20, 1999
DATE REPORTED: Aug 02, 1999

Stan Sowl
Harris Enterprises
RD #1 Box 402
Clarion, PA 16214

ID: RC 3K B (Mid)
Russell City
Tank/Piping

P/O Number: 074002

Russell City Store
Facility ID# 24-30431

SAMPLE DATA

Source: (Not Entered); Type: Grab Sample
Container(s): 40 mL Glass Vial(s), One Pint (16 oz) Glass
Sampled By: SHS; Date Sampled: Jul 16, 1999
Matrix: Soil/Oil/Solid; Preservation: Cool 4 Degrees C
Sampler Notes: (None)
Analyst Notes: Results are dry weight basis.
Report Type: Standard; Extractions: Acid Digestion [Long], Methanol Extraction

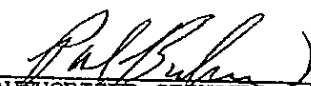
CERTIFICATE OF ANALYSIS

ANALYSIS PARAMETER	DETECT	RESULTS	UNITS	METHOD	DATE	ANALYST
Moisture		7.77	%	SM-2540 G	Jul 28	CEC
Lead	(Pb) [F]	5.00	<5.00	mg/kg	SW846-7420	Jul 21 JDH
VOC	[UST]	0.005	<0.005	mg/kg	SW846-8260	Jul 24 JSA DDR
Benzene		0.005	0.034	"	"	"
Toluene		0.005	3.696	"	"	"
Ethylbenzene		0.010	7.253	"	"	"
Xylenes(total)		0.005	1.062	"	"	"
Isopropylbenzene		0.005	<0.005	"	"	"
1,2-Dibromoethane		0.005	<0.005	"	"	"
1,2-Dichloroethane		0.005	2.558	"	"	"
Naphthalene		0.005		"	"	"

Page 10K of 11

3 Parameters; 11 Lines
Page 1 of 1

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SAMPLE NUMBER: SS-67509
DATE RECEIVED: Jul 20, 1999
DATE REPORTED: Aug 02, 1999

Stan Sowl
Harris Enterprises
RD #1 Box 402
Clarion, PA 16214

ID: RC 3K C
Russell City
Tank/Piping

Russell City Store
Facility ID# 24-30431

P/O Number: 074002

SAMPLE DATA

Source: (Not Entered); Type: Grab Sample
Container(s): 40 mL Glass Vial(s), One Pint (16 oz) Glass
Sampled By: SHS; Date Sampled: Jul 16, 1999
Matrix: Soil/Oil/Solid; Preservation: Cool 4 Degrees C
Sampler Notes: (None)
Analyst Notes: Results are dry weight basis.
Report Type: Standard; Extractions: Acid Digestion [Long], Methanol Extraction

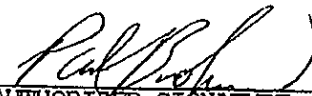
CERTIFICATE OF ANALYSIS

ANALYSIS PARAMETER	DETECT	RESULTS	UNITS	METHOD	DATE	ANALYST
Moisture		6.68	%	SM-2540 G	Jul 28	CEC
Lead	(Pb) [F]	5.00	<5.00	mg/kg	Jul 21	JDH
VOC	[UST]					
Benzene	0.005	<0.005	mg/kg	SW846-8260	Jul 24	DDR
Toluene	0.005	0.110	"	"	"	"
Ethylbenzene	0.005	9.589	"	"	"	"
Xylenes (total)	0.010	51.41	"	"	"	"
Isopropylbenzene	0.005	1.477	"	"	"	"
1,2-Dibromoethane	0.005	<0.005	"	"	"	"
1,2-Dichloroethane	0.005	<0.005	"	"	"	"
Naphthalene	0.005	2.411	"	"	"	"

Page 10L of 11

3 Parameters; 11 Lines
Page 1 of 1

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R.D. 1

• STRATTANVILLE, PENNSYLVANIA 16258

• PHONE (814) 379-3663

SAMPLE NUMBER: SS-60632
DATE RECEIVED: Dec 22, 1998
DATE REPORTED: Jan 08, 1999

Stan Sowl
Harris Enterprises
RD #1 Box 402
Clarion, PA 16214

ID: Kerosene Isl.; PID=0.0
Russell City

Russell City Store
Facility ID# 24-30431

P/O Number: 074002

SAMPLE DATA

Source: (Not Entered); Type: Grab Sample
Container(s): 40 mL Glass Vial(s), Half Pint (8 oz) Glass
Sampled By: JLS
Matrix: Soil/Oil/Solid; Preservation: Cool 4 Degrees C
Sampler Notes: UST Kerosene Parameters
Analyst Notes: Results are dry weight basis.
Report Type: Standard; Extractions: Methanol Extraction, Soxhlet Extraction

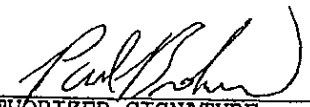
CERTIFICATE OF ANALYSIS

ANALYSIS PARAMETER	DETECT	RESULTS	UNITS	METHOD	DATE	ANALYST
Moisture		19.73	%	SM-2540 G	Dec 29	JES
Semivolatiles	[UST]					
Fluorene	0.0050	0.0899	mg/kg	SW846-8270	Jan 07	JSA
VOC	[UST]					
Benzene	0.005	<0.005	mg/kg	SW846-8260	Dec 29	DDR
Toluene	0.005	0.135	"	"	"	"
Ethylbenzene	0.005	0.109	"	"	"	"
Isopropylbenzene	0.005	<0.005	"	"	"	"
Naphthalene	0.005	0.392	"	"	"	"

Page 10M of 11

3 Parameters; 9 Lines
Page 1 of 1

DEP Certification: 16-328


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SAMPLE NUMBER: SS-67510
DATE RECEIVED: Jul 20, 1999
DATE REPORTED: Aug 02, 1999

Stan Sowl
Harris Enterprises
RD #1 Box 402
Clarion, PA 16214

ID: RC 2K SW
Russell City
Tank/Piping

Russell City Store
Facility ID# 24-30431

P/O Number: 074002

SAMPLE DATA

Source: (Not Entered); Type: Grab Sample
Container(s): 40 mL Glass Vial(s), One Pint (16 oz) Glass
Sampled By: SHS; Date Sampled: Jul 16, 1999
Matrix: Soil/Oil/Solid; Preservation: Cool 4 Degrees C
Sampler Notes: (None)
Analyst Notes: Results are dry weight basis.
Report Type: Standard; Extractions: Acid Digestion [Long], Methanol Extraction

CERTIFICATE OF ANALYSIS

ANALYSIS PARAMETER	DETECT	RESULTS	UNITS	METHOD	DATE	ANALYST
Moisture		7.31	%	SM-2540 G	Jul 28	CEC
Lead	(Pb)[F]	5.00	mg/kg	SW846-7420	Jul 30	JDH
VOC	[UST]					
Benzene	0.005	0.068	mg/kg	SW846-8260	Jul 24	DDR
Toluene	0.005	0.046	"	"	"	"
Ethylbenzene	0.005	0.133	"	"	"	"
Xylenes(total)	0.010	0.400	"	"	"	"
Isopropylbenzene	0.005	0.028	"	"	"	"
1,2-Dibromoethane	0.005	<0.005	"	"	"	"
1,2-Dichloroethane	0.005	<0.005	"	"	"	"
Naphthalene	0.005	<0.005	"	"	"	"

STEWART LABORATORIES

R.D. 1 • STRATTANVILLE, PENNSYLVANIA 16258 • PHONE (814) 379-3663

SAMPLE NUMBER: SS-67504
DATE RECEIVED: Jul 20, 1999
DATE REPORTED: Aug 02, 1999

Stan Sowl
Harris Enterprises
RD #1 Box 402
Clarion, PA 16214

ID: RC 2K A (F)
Russell City
Tank/Piping

Russell City Store
Facility ID# 24-30431

P/O Number: 074002

SAMPLE DATA

Source: (Not Entered); Type: Grab Sample
Container(s): 40 mL Glass Vial(s), One Pint (16 oz) Glass
Sampled By: SHS; Date Sampled: Jul 16, 1999
Matrix: Soil/Oil/Solid; Preservation: Cool 4 Degrees C
Sampler Notes: (None)
Analyst Notes: Results are dry weight basis.
Report Type: Standard; Extractions: Acid Digestion [Long], Methanol Extraction

CERTIFICATE OF ANALYSIS

ANALYSIS PARAMETER	DETECT	RESULTS	UNITS	METHOD	DATE	ANALYST
Moisture		5.05	%	SM-2540 G	Jul 28	CEC
Lead	(Pb) [F] 5.00	<5.00	mg/kg	SW846-7420	Jul 21	JDH
VOC	[UST]					
Benzene	0.005	0.019	mg/kg	SW846-8260	Jul 24	JSA
Toluene	0.005	1.886	"	"	"	"
Ethylbenzene	0.005	2.342	"	"	"	"
Xylenes (total)	0.010	13.94	"	"	"	"
Isopropylbenzene	0.005	0.191	"	"	"	"
1,2-Dibromoethane	0.005	<0.005	"	"	"	"
1,2-Dichloroethane	0.005	<0.005	"	"	"	"
Naphthalene	0.005	1.062	"	"	"	"

Page 10 of 11

3 Parameters; 11 Lines
Page 1 of 1

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R.D. 1 • STRATTANVILLE, PENNSYLVANIA 16258 • PHONE (814) 379-3663

SAMPLE NUMBER: SS-67505
DATE RECEIVED: Jul 20, 1999
DATE REPORTED: Aug 02, 1999

Stan Sowl
Harris Enterprises
RD #1 Box 402
Clarion, PA 16214

ID: RC 2K B (Mid)
Russell City
Tank/Piping

P/O Number: 074002

Russell City Store
Facility ID# 24-30431

SAMPLE DATA

Source: (Not Entered); Type: Grab Sample
Container(s): 40 mL Glass Vial(s), One Pint (16 oz) Glass
Sampled By: SHS; Date Sampled: Jul 16, 1999
Matrix: Soil/Oil/Solid; Preservation: Cool 4 Degrees C
Sampler Notes: (None)
Analyst Notes: Results are dry weight basis.
Report Type: Standard; Extractions: Acid Digestion [Long], Methanol Extraction

CERTIFICATE OF ANALYSIS

ANALYSIS PARAMETER	DETECT	RESULTS	UNITS	METHOD	DATE	ANALYST
Moisture		8.42	%	SM-2540 G	Jul 28	CEC
Lead	(Pb) [F]	5.00	<5.00	mg/kg	SW846-7420	Jul 21 JDH
VOC	[UST]					
Benzene		0.005	0.203	mg/kg	SW846-8260	Jul 24 JSA
Toluene		0.005	0.120	"	"	"
Ethylbenzene		0.005	0.469	"	"	"
Xylenes(total)		0.010	1.476	"	"	"
Isopropylbenzene		0.005	0.064	"	"	"
1,2-Dibromoethane		0.005	<0.005	"	"	"
1,2-Dichloroethane		0.005	<0.005	"	"	"
Naphthalene		0.005	0.198	"	"	"

STEWART LABORATORIES

R.D. 1 • STRATTANVILLE, PENNSYLVANIA 16258 • PHONE (814) 379-3663

SAMPLE NUMBER: SS-67506
DATE RECEIVED: Jul 20, 1999
DATE REPORTED: Aug 02, 1999

Stan Sowl
Harris Enterprises
RD #1 Box 402
Clarion, PA 16214

ID: RC 2K C
Russell City
Tank/Piping

Russell City Store
Facility ID# 24-30431

P/O Number: 074002

SAMPLE DATA

Source: (Not Entered); Type: Grab Sample
Container(s): 40 mL Glass Vial(s), One Pint (16 oz) Glass
Sampled By: SHS; Date Sampled: Jul 16, 1999
Matrix: Soil/Oil/Solid; Preservation: Cool 4 Degrees C
Sampler Notes: (None)
Analyst Notes: Results are dry weight basis.
Report Type: Standard; Extractions: Acid Digestion [Long], Methanol Extraction

CERTIFICATE OF ANALYSIS

ANALYSIS PARAMETER	DETECT	RESULTS	UNITS	METHOD	DATE	ANALYST
Moisture		9.76	%	SM-2540 G	Jul 29	CEC
Lead	(Pb) [F]	11.95	mg/kg	SW846-7420	Jul 21	JDH
VOC	[UST]					
Benzene	0.005	0.065	mg/kg	SW846-8260	Jul 24	JSA
Toluene	0.005	0.053	"	"	"	"
Ethylbenzene	0.005	0.172	"	"	"	"
Xylenes(total)	0.010	0.600	"	"	"	"
Isopropylbenzene	0.005	0.033	"	"	"	"
1,2-Dibromoethane	0.005	<0.005	"	"	"	"
1,2-Dichloroethane	0.005	<0.005	"	"	"	"
Naphthalene	0.005	0.093	"	"	"	"

STEWART LABORATORIES

R.D. 1 • STRATTANVILLE, PENNSYLVANIA 16258 • PHONE (814) 379-3663

SAMPLE NUMBER: SS-67512
DATE RECEIVED: Jul 20, 1999
DATE REPORTED: Aug 02, 1999

Stan Sowl
Harris Enterprises
RD #1 Box 402
Clarion, PA 16214

ID: RC Dirty
Russell City
Tank/Piping

P/O Number: 074002

Russell City Store
Facility ID# 24-30431

SAMPLE DATA

Source: (Not Entered); Type: Grab Sample
Container(s): 40 mL Glass Vial(s), One Pint (16 oz) Glass
Sampled By: SHS; Date Sampled: Jul 16, 1999
Matrix: Soil/Oil/Solid; Preservation: Cool 4 Degrees C
Sampler Notes: (None)
Analyst Notes: Results are dry weight basis.
Report Type: Standard; Extractions: Acid Digestion [Long], Methanol Extraction

CERTIFICATE OF ANALYSIS

ANALYSIS PARAMETER	DETECT	RESULTS	UNITS	METHOD	DATE	ANALYST	
Moisture		9.57	%	SM-2540 G	Jul 28	CEC	
Lead	(Pb) [F]	5.00	24.36	mg/kg	SW846-7420	Jul 30	JDH
VOC	[UST]						
Benzene	0.005	0.931	mg/kg	SW846-8260	Jul 24	DDR	
Toluene	0.005	2.150	"	"	"	"	
Ethylbenzene	0.005	10.95	"	"	"	"	
Xylenes (total)	0.010	49.95	"	"	"	"	
Isopropylbenzene	0.005	1.518	"	"	"	"	
1,2-Dibromoethane	0.005	<0.005	"	"	"	"	
1,2-Dichloroethane	0.005	<0.005	"	"	"	"	
Naphthalene	0.005	3.765	"	"	"	"	

STEWART LABORATORIES

R.D. 1

• STRATTANVILLE, PENNSYLVANIA 16258

• PHONE (814) 379-3663

SAMPLE NUMBER: SS-67513
DATE RECEIVED: Jul 20, 1999
DATE REPORTED: Aug 02, 1999

Stan Sowl
Harris Enterprises
RD #1 Box 402
Clarion, PA 16214

ID: RC Clean
Russell City
Tank/Piping

Russell City Store
Facility ID# 24-30431

P/O Number: 074002

SAMPLE DATA

Source: (Not Entered); Type: Composite Sample
Container(s): 40 mL Glass Vial(s), One Pint (16 oz) Glass
Sampled By: SHS; Date Sampled: Jul 16, 1999
Matrix: Soil/Oil/Solid; Preservation: Cool 4 Degrees C
Sampler Notes: (None)
Analyst Notes: Results are dry weight basis.
Report Type: Standard; Extractions: Acid Digestion [Long], Methanol Extraction

CERTIFICATE OF ANALYSIS

ANALYSIS PARAMETER	DETECT	RESULTS	UNITS	METHOD	DATE	ANALYST
Moisture		12.49	%	SM-2540 G	Jul 28	CEC
Lead	(Pb) [F]	5.00	mg/kg	SW846-7420	Jul 30	JDH
VOC	[UST]					
Benzene	0.005	0.075	mg/kg	SW846-8260	Jul 24	DDR
Toluene	0.005	0.199	"	"	"	"
Ethylbenzene	0.005	0.278	"	"	"	"
Xylenes (total)	0.010	1.515	"	"	"	"
Isopropylbenzene	0.005	0.040	"	"	"	"
1,2-Dibromoethane	0.005	<0.005	"	"	"	"
1,2-Dichloroethane	0.005	<0.005	"	"	"	"
Naphthalene	0.005	0.149	"	"	"	"

SAMPLE LOCATION	SAMPLE ID	FIELD VOC (ppm)	SAMPLE DEPTH (ft)	DESCRIPTION
▲ 1	Regular ISL	38.2	2'	Beneath Regular Pump (Upgraded)
▲ 2	RC ISL (M)	0.0	2'	Beneath Midgrade Pump (Removed)
▲ 3		18.5	2'	Beneath Premium Pump (Upgraded)
▲ 4	Gas Pipeline	0.0	3'	Beneath Removed Product Lines
▲ 5	RC 3K WW	2.4	9-10	Tank 001 Excavation West Wall
▲ 6	RC 3K A(F)	445	7-8	Tank 001 Beneath Fill/ Product
▲ 7	RC 3K B(MID)	1026	7-8	Tank 001 Beneath Mid Tank
▲ 8	RC 3K C	1338	7-8	Tank 001 Beneath End Tank
▲ 9	RC 3K EW	0.0	9-10	Tank 001 Excavation East Wall
▲ 10	RC 3K NW	0.0	9-10	Tank 001 Excavation North Wall
▲ 11	Kerosene Island	0.0	2'	Beneath Kerosene Island (Removed)
▲ 12	RC 2K NW	16	9-10	Tank 003 Excavation North Wall
▲ 13	RC 2K EW	322	9-10	Tank 003 Excavation East Wall
▲ 14	RC 2K SW	642	9-10	Tank 003 Excavation South Wall
▲ 15	RC 2K WW	0.0	9-10	Tank 003 Excavation West Wall
▲ 16	RC 2K A (P)	154	7-8	Tank 003 Beneath Fill/ Product
▲ 17	RC 2K B(MID)	215	7-8	Tank 003 Beneath Mid Tank
▲ 18	RC 2K C	118	7-8	Tank 003 Beneath Vent
▲ 19	RC DIRTY	586	---	Contaminated Soil
▲ 20	RC Clean	6.4	---	Uncontaminated Soil

▲ Sample Submitted for Analysis
 ▲ Sample not Submitted for Analysis

Russell City Store
 Facility ID# 24-30431

Site Location and Sampling Map - Use this page or suitable facsimile to provide a large scale map of the site where tanks were closed. Scales between 1" = 10 and 1" = 100 feet frequently work out well. Include the following information as each applies to the site: facility name and I.D., county, township or borough, property boundaries or area of interest, buildings, roads and streets with names or route numbers, utilities, location and ID number of storage tanks removed including piping and dispensers, soil stockpile locations, excavations or other locations of product recovery, north arrow, approximate map scale and legend. Also show depth and location of samples with sample ID numbers cross-referenced to the same ID numbers shown on Page 10 of 11.

Facility Name and ID: Russell City Store Facility ID# 24-30431

County: Elk County

Township/Borough: Highland Township

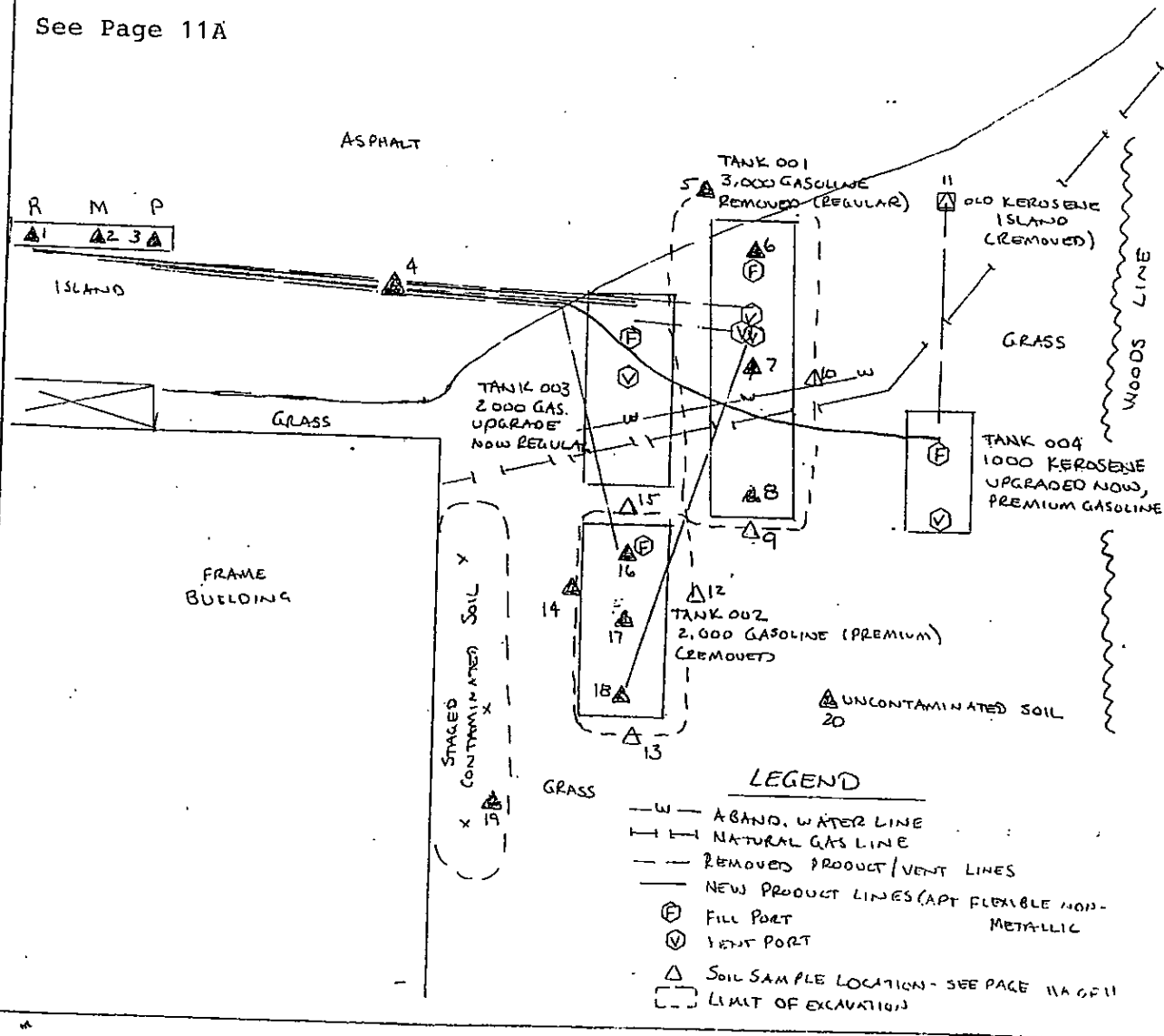
SCALE: 1" = 10'

MARIENVILLE

PA RT 66

KANE

See Page 11A



Appendix B
UST Closure Documents



4250 Route 6N
Edinboro, Pennsylvania 16412

Environmental Remediation & Recovery, Inc.

Telephone (814)734-6411
Fax (814)734-4756

January 26, 2015

Mr. David Hall
Storage Tank Section
Northwest Regional Office
Pennsylvania Department of Environmental Protection
230 Chestnut Street
Meadville, Pennsylvania 16335

RE: Russell City Store
1536 State Route 66
DeYoung, Pennsylvania 16728
PADEP Facility ID # 24-30431
USTIF Claim #2014170
ER&R Project # 2014.74

Dear Mr. Hall:

An underground storage tank (UST) was closed, by removal, at the above listed site on November 26, 2014. Impacted soils were encountered proximate to the former dispenser island. PADEP and Highland Township were notified of the confirmed release. USTIF was similarly notified of a potential claim.

The UST system closure report form and supporting documentation are attached. Additional site characterization and source removal work are scheduled to be completed in the near future. A site characterization report (including detailed maps and photographs) are forthcoming and will be submitted to the Department.

Thank you for your cooperation in this matter. Comments or questions may be directed to the undersigned by phoning 814.734.6411.

Sincerely,

Environmental Remediation and Recovery, Inc.

David J. Birchard, P.G.
Project Manager

Encl.

Cc: J Cramer - ICF
T Lutz

DATE RECEIVED: _____

UNDERGROUND STORAGE TANK SYSTEM CLOSURE REPORT FORM

Owners who are permanently closing underground storage tanks may use this form to demonstrate that an underground storage tank closure was performed in accordance with the "Closure Requirements for Underground Storage Tank Systems" document. PLEASE PRINT OR TYPE. COMPLETE ALL QUESTIONS.

SECTION I. Owner/Facility/Tank/Waste Management and Disposal Information

1. Facility ID Number 24-30431
2. Facility Name Russell City Store
3. Facility County Elk
4. Facility Municipality Highland Township
5. Facility Address 1536 SR 66, DeYoung, PA 16728
6. Facility Contact Person Roy E. Foust
7. Facility Telephone Number (716) 397-7555
8. Owner Name Theodore Lutz
9. Owner Mailing Address 1536 SR 66, DeYoung, PA 16728
10. Description of Underground Storage Tanks (Complete for each tank closed)

DATE OF TANK CLOSURE (Month/Day/Year)		11/25/2014	11/25/2014		
Tank Registration Number		003	004		
Estimated Total Capacity (Gallons)		2,000	1,000		
Substance(s) Stored Throughout Operating Life of Tank (Check All That Apply)	a. Petroleum				
	Unleaded Gasoline	☒	☒	☐	☐
	Leaded Gasoline	☐	☐	☐	☐
	Aviation Gasoline	☐	☐	☐	☐
	Kerosene	☐	☐	☐	☐
	Jet Fuel	☐	☐	☐	☐
	Diesel Fuel	☐	☐	☐	☐
	Fuel Oil No. 1	☐	☐	☐	☐
	Fuel Oil No. 2	☐	☐	☐	☐
	Fuel Oil No. 4	☐	☐	☐	☐
	Fuel Oil No. 5	☐	☐	☐	☐
	Fuel Oil No. 6	☐	☐	☐	☐
	New Motor Oil	☐	☐	☐	☐
	Used Motor Oil	☐	☐	☐	☐
	Other, Please Specify				
NOTE: If Hazardous Substance Block is Checked, Attach Material Safety Data Sheets (MSDS)	b. Hazardous Substance	☐	☐	☐	☐
	Name of Principal CERCLA Substance				
	AND Chemical Abstract Service (CAS) No.				
Closure Method (Check Only One)	c. Unknown	☐	☐	☐	☐
	a. Removal	☒	☒	☐	☐
	b. Closure-in-Place	☐	☐	☐	☐
Partial System Closure (Yes or No)	c. Change-In-Service	☐	☐	☐	☐
		No	No		

DATE OF TANK CLOSURE (Month/Day/Year)		- -	- -	- -	- -
Tank Registration Number					
Estimated Total Capacity (Gallons)					
Substance(s) Stored Throughout Operating Life of Tank (Check All That Apply)	a. Petroleum				
	Unleaded Gasoline	☐	☐	☐	☐
	Leaded Gasoline	☐	☐	☐	☐
	Aviation Gasoline	☐	☐	☐	☐
	Kerosene	☐	☐	☐	☐
	Jet Fuel	☐	☐	☐	☐
	Diesel Fuel	☐	☐	☐	☐
	Fuel Oil No. 1	☐	☐	☐	☐
	Fuel Oil No. 2	☐	☐	☐	☐
	Fuel Oil No. 4	☐	☐	☐	☐
	Fuel Oil No. 5	☐	☐	☐	☐
	Fuel Oil No. 6	☐	☐	☐	☐
	New Motor Oil	☐	☐	☐	☐
	Used Motor Oil	☐	☐	☐	☐
	Other, Please Specify				
NOTE: If Hazardous Substance Block is Checked, Attach Material Safety Data Sheets (MSDS)	b. Hazardous Substance	☐	☐	☐	☐
	Name of Principal CERCLA Substance	☐	☐	☐	☐
	AND Chemical Abstract Service (CAS) No.				
	c. Unknown	☐	☐	☐	☐
Closure Method (Check Only One)	a. Removal	☐	☐	☐	☐
	b. Closure-in-Place	☐	☐	☐	☐
	c. Change-In-Service	☐	☐	☐	☐
Partial System Closure (Yes or No)					

Yes N/A

11. Briefly describe the storage tank facility and the nature of the operations which were conducted at the facility (both historical and present) including use of tanks:

The site was operated as a country store with limited retail fueling. The tanks were utilized to fuel vehicles.

- ☒ ☐ 12. A site location and sampling map of the site, drawn to scale, is attached. Figure 1 & 2 of the UST Closure Report.
- ☒ ☐ 13. Original, color photographs of the closure process are attached (i.e., inside of excavation/piping runs, pit water, tanks showing condition). Attachment A of the UST Closure Report.
- ☒ ☐ 14. An amended "Storage Tanks Registration/Permitting Application Form" was submitted to the DEP, Bureau of Waste Management, Division of Storage Tanks, P.O. Box 8762, Harrisburg, PA 17105-8762.

Date: January 27, 2014

- ☐ ☒ 15. If a reportable release was confirmed, the appropriate regional office of DEP was notified by the owner or operator.

Date: 12 - 22 - 2014

Office: NWRO

Yes N/A

☒ ☐ 16. If tanks were cleaned on-site:

a. Briefly describe the disposition of usable product: _____

Useable product was removed by a pneumatic drum vacuum.

b. Briefly describe the disposal of unusable product, sludges, sediments, and wastewater generated during cleaning. Provide the name and permit number of the processing, treatment, storage or disposal facility. (Attach documentation of proper disposal):

Very little sludge or product was present and less than 10 gallons was given to the excavation contractor to burn in his waste oil burner.

c. If tank contents were determined/deemed to be hazardous waste, provide:

(1) Generator ID Number: NA

(2) Licensed Hazardous Waste Transporter Name and ID Number: NA

☐ ☒ 17. If tanks were removed from the site for cleaning:

a. Provide the name and permit number of the processing, treatment, storage or disposal facility performing the tank cleaning: _____

b. If tank contents were determined/deemed to be hazardous waste, provide:

(1) Generator ID Number: _____

(2) Licensed Hazardous Waste Transporter Name and ID Number: _____

18. Briefly describe the disposition of tanks/piping (Attach documentation of proper disposal):

The clean and vapor free USTs and piping were given to the excavation contractor as scrap steel. The dispensers were retained by the owner.

☐ ☒ 19. If contaminated soil is excavated:

a. Briefly describe the disposition and amount _____ (tons) of contaminated soil. Provide the name and permit number of the processing, treatment, storage or disposal facility. (Attach documentation of proper disposal):

b. If contaminated soil is determined/deemed to be hazardous waste, provide:

(1) Generator ID Number: _____

(2) Licensed Hazardous Waste Transporter Name and ID Number: _____

Yes N/A

☐ ☒ 20. Briefly describe the disposition of and amount _____ (tons) of uncontaminated soil (attach analyses):

I, Theodore Lutz, hereby certify, under penalty of law as provided in 18 Pa. C.S. §4904
(Print Name)

(relating to unsworn falsification to authorities) that I am the owner of the above referenced storage tank(s) and that the information provided by me in this closure report (Section I) is true, accurate and complete to the best of my knowledge and belief.

Signature of Tank Owner

Date

Company Name
(If Applicable)

Title

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENTUNDERGROUND STORAGE TANK SYSTEM
CLOSURE REPORT FORM

SECTION II. Tank Handling Information

Facility ID Number 24-30431

Yes N/A

1. Briefly describe the excavation and initial on-site staging of uncontaminated/contaminated soil:
All soil was staged on-site during tank removal activities and reused for backfill following the tank removal. Contaminated soil was not encountered.
2. Briefly describe the method of piping system closure and the closure of the piping systems including the quantity and condition of the piping:
Piping was disconnected and removed as necessary to remove the tanks. Fiberglass vent and vapor recovery pipe was in good condition. Double wall plastic piping was in good condition. All piping was removed.
3. Briefly describe the condition of the tanks and any problems encountered during tank removal:
The tank was in very good condition.
4. Briefly describe the method used to purge the tanks of and monitor for explosive vapors:
Vacuum extraction and lower explosive limit (LEL) meter.
- ☒ ☐ 5. If tanks were cleaned on-site:
 - a. Briefly describe the tank cleaning process: Tanks were entered and scraped clean.
 - b. If subcontracted, name and address of company that performed the tank cleaning:
- ☐ ☒ 6. If tanks were closed-in-place, briefly describe the tank fill material:
- ☒ ☐ 7. If contamination was suspected or observed, the "Notification of Contamination" form was submitted.

SECTION II. (continued)

I, Michael Waltz, hereby certify, under penalty of law as provided in 18 Pa. C.S. §4904
 (Print Name)
 (relating to unsworn falsification to authorities) that I am the certified installer who performed the tank handling activities
 associated with the closure of the above referenced storage tank(s) and that the information provided by me in this closure
 report (Section I) is true, accurate and complete to the best of my knowledge and belief.


 Signature of Certified Installer

1 / 23 / 15
 Date

3717
 Installer Certification Number

1315
 Company Certification Number

Environmental Remediation and Recovery, Inc.
 Company Name

4250 Route 6N
 Street

Edinboro, PA 16412
 City/Town, State, Zip

814 - 734 - 6411
 Phone

UNDERGROUND STORAGE TANK CLOSURE REPORT FORM

SECTION III. Site Assessment Information

Tank Registration # 003 (complete one sheet for EACH tank system and attach ALL laboratory sheets pertaining to that system)

Facility ID Number 24 - 30431

- A. Provide depth of *BEDROCK* and *WATER* IF encountered during excavation or soil boring (write "N/A: if NOT encountered).

Bedrock NA feet below land surface

Water NA feet below land surface

- B. Provide Length of *PIPING* IF piping was closed-in-place (write "N/A" if NOT closed-in-place).

Length of piping NA feet

C. **TANK SYSTEM REMOVED FROM THE GROUND**

- 1). Was obvious contamination observed while excavating?

☐ NO -----> Conduct confirmatory sampling -----> See end of this section for options on submission and maintenance of closure records -----> Do not complete item C.2. below.

☒ YES-----> Report release to DEP within 2 hours -----> Describe contamination observed and likely source(s) tank, piping, dispenser, spills, overfills):

Contamination was only observed below the dispensers.

-----> Complete item C.2. below.

- 2). Was contamination localized (within three feet of the tank system in every direction with no obvious water contamination)?

☐ YES -----> Remove or remediate contaminated soil -----> Conduct confirmatory sampling-----> See end of this section for options on submission and maintenance of closure records -----> Call Indemnification Fund (717-787-0763).

☒ NO-----> Continue interim remedial actions -----> See end of this section for options on submission and maintenance of closure records -----> Call Indemnification Fund (717-787-0763).

D. **TANK SYSTEM CLOSED-IN-PLACE OR CHANGED-IN-SERVICE**

Was obvious contamination observed during sampling, boring or assessing water depths?

☐ NO -----> Conduct confirmatory sampling -----> See end of this section for options on submission and maintenance of closure records.

☐ YES-----> Report release to DEP within 2 hours -----> Describe contamination observed and likely source(s) tank, piping, dispenser, spills, overfills):

Continue with corrective action -----> See end of this section for options on submission and maintenance of closure records -----> Call Indemnification Fund (717-787-0763).

- E. If the answer to C.1. is "no", the answer to C.2. is "yes" or the answer to D. is "no", confirmatory samples are required. Use the sample/analysis information sheet on page 10 of 11 to provide the information on confirmatory sampling and complete the diagram on Page 11 of 11.

Options for Submission and Maintenance of Closure Site Assessment Records

Records of the site assessment must be maintained for at least three years after completion of permanent closure or change-in-service in one of the following ways:

- (a) By the owners and operators who took the UST system out of service;
- (b) By the current owners and operators of the UST system site; or
- (c) By mailing these records to the implementing agency if they cannot be maintained at the closed facility.

At least one option must be chosen. If option (c) is chosen, the closure report form should be sent to the DEP regional office responsible for the county in which the tank is located.

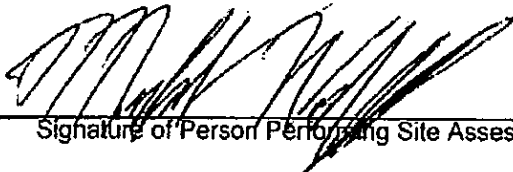
Where the results of the site assessment indicate that obvious, localized soil contamination was encountered and the analytical results of the confirmatory sampling show levels below the statewide standard/action levels, this closure report form (Sections I, II, and III) or some other acceptable site characterization report must be received by the Department within 180 days of verbally reporting the release.

Where the results of the site assessment indicate that no obvious contamination or obvious, localized contamination was encountered, but the analytical results of the confirmatory sampling show levels above the statewide standard/action levels, or where there is obvious, extensive contamination, Section 245.310(a)(8) of the CAP regulation requires that details of removal from service be included in the site characterization report. A copy of the completed closure report form should be submitted as part of the site characterization report to satisfy the requirements of Section 245.310(a)(8) of the CAP regulations.

I, Michael Waltz, P.G., hereby certify, under penalty of law as provided in 18 Pa. C.S. §4904 (relating

(Print Name)

to unsworn falsification to authorities) that I am the person who performed the site assessment activities associated with the closure of the above referenced storage tank(s) and that the information provided by me in this closure report (Section III) is true, accurate and complete to the best of my knowledge and belief.



Signature of Person Performing Site Assessment

1 / 23 / 15

Date

Project Manager

Title of Person Performing Site Assessment

Environmental Remediation & Recovery, Inc.

Name of Company Performing Site Assessment

814-734-6411

Telephone Number of Person Performing Site Assessment

UNDERGROUND STORAGE TANK CLOSURE REPORT FORM

SECTION III. Site Assessment Information

Tank Registration # 004 (complete one sheet for EACH tank system and attach ALL laboratory sheets pertaining to that system)

Facility ID Number 24 - 30431

- A. Provide depth of *BEDROCK* and *WATER* IF encountered during excavation or soil boring (write "N/A" if NOT encountered).

Bedrock NA feet below land surface

Water NA feet below land surface

- B. Provide Length of *PIPING* IF piping was closed-in-place (write "N/A" if NOT closed-in-place).

Length of piping NA feet

C. TANK SYSTEM REMOVED FROM THE GROUND

- 1). Was obvious contamination observed while excavating?

☐ NO -----> Conduct confirmatory sampling -----> See end of this section for options on submission and maintenance of closure records -----> Do not complete item C.2. below.

☒ YES-----> Report release to DEP within 2 hours -----> Describe contamination observed and likely source(s) tank, piping, dispenser, spills, overfills):

Contamination was only observed below the dispensers.

-----> Complete item C.2. below.

- 2). Was contamination localized (within three feet of the tank system in every direction with no obvious water contamination)?

☐ YES -----> Remove or remediate contaminated soil -----> Conduct confirmatory sampling----->

See end of this section for options on submission and maintenance of closure records -----> Call Indemnification Fund (717-787-0763).

☒ NO-----> Continue interim remedial actions -----> See end of this section for options on submission and maintenance of closure records -----> Call Indemnification Fund (717-787-0763).

D. TANK SYSTEM CLOSED-IN-PLACE OR CHANGED-IN-SERVICE

Was obvious contamination observed during sampling, boring or assessing water depths?

☐ NO -----> Conduct confirmatory sampling -----> See end of this section for options on submission and maintenance of closure records.

☐ YES-----> Report release to DEP within 2 hours -----> Describe contamination observed and likely source(s) tank, piping, dispenser, spills, overfills):

Continue with corrective action -----> See end of this section for options on submission and maintenance of closure records -----> Call Indemnification Fund (717-787-0763).

- E. If the answer to C.1. is "no", the answer to C.2. if "yes" or the answer to D. is "no", confirmatory samples are required. Use the sample/analysis information sheet on page 10 of 11 to provide the information on confirmatory sampling and complete the diagram on Page 11 of 11.

Options for Submission and Maintenance of Closure Site Assessment Records

Records of the site assessment must be maintained for at least three years after completion of permanent closure or change-in-service in one of the following ways:

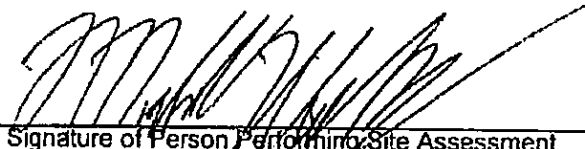
- (a) By the owners and operators who took the UST system out of service;
- (b) By the current owners and operators of the UST system site; or
- (c) By mailing these records to the implementing agency if they cannot be maintained at the closed facility.

At least one option must be chosen. If option (c) is chosen, the closure report form should be sent to the DEP regional office responsible for the county in which the tank is located.

Where the results of the site assessment indicate that obvious, localized soil contamination was encountered and the analytical results of the confirmatory sampling show levels below the statewide standard/action levels, this closure report form (Sections I, II, and III) or some other acceptable site characterization report must be received by the Department within 180 days of verbally reporting the release.

Where the results of the site assessment indicate that no obvious contamination or obvious, localized contamination was encountered, but the analytical results of the confirmatory sampling show levels above the statewide standard/action levels, or where there is obvious, extensive contamination, Section 245.310(a)(8) of the CAP regulation requires that details of removal from service be included in the site characterization report. A copy of the completed closure report form should be submitted as part of the site characterization report to satisfy the requirements of Section 245.310(a)(8) of the CAP regulations.

I, Michael Waltz, P.G. (Print Name) hereby certify, under penalty of law as provided in 18 Pa. C.S. §4904 (relating to unsworn falsification to authorities) that I am the person who performed the site assessment activities associated with the closure of the above referenced storage tank(s) and that the information provided by me in this closure report (Section III) is true, accurate and complete to the best of my knowledge and belief.



Signature of Person Performing Site Assessment

1 / 23 / 15

Date

Senior Project Manager

Title of Person Performing Site Assessment

Environmental Remediation & Recovery, Inc.

Name of Company Performing Site Assessment

814-734-6411

Telephone Number of Person Performing Site Assessment

Site Location and Sampling Map - Use this page or suitable facsimile to provide a large scale map of the site where tanks were closed. Scales between 1" = 10 and 1" = 100 feet frequently work out well. Include the following information as each applies to the site: facility name and I.D., county, township or borough, property boundaries or area of interest, buildings, roads and streets with names or route numbers, utilities, location and ID number of storage tanks removed including piping and dispensers, soil stockpile locations, excavations or other locations of product recovery, north arrow, approximate map scale and legend. Also show depth and location of samples with sample ID numbers cross-referenced to the same ID numbers shown on Page 10 of 11.

Facility Name and ID: Russell City Store 24 - 30431

County: Elk

Township/Borough: Highland Township

SEE ATTACHED FIGURE 1 AND 2



ENVIRONMENTAL REMEDIATION & RECOVERY, INC.
 4250 ROUTE 6N
 EDINBORO, PA 16412
 TELEPHONE: (814) 734-6411
 FAX: (814) 734-4756

Non-Hazardous Bill of Lading/Product Shipment

Destination:

Generator:

Project #:

2014.74

Delivery Date:

11-25-14

Type of Shipment: Bulk Liquid Bulk Solid Drum
 Other

Quantity	Units	Description	Unit Price	Comments
1	2000-gal	STI-P23 tank	Scrap	Not to be used
1	1000-gal	STI-P3 tank	Scrap	for fuel or water
1	Drum	Liquid, waste		To be recycled oil reactor

Truck # 12

Shipper/ER&R (print) M Waltz

Signature

Transporter (print) S Dyne

Signature

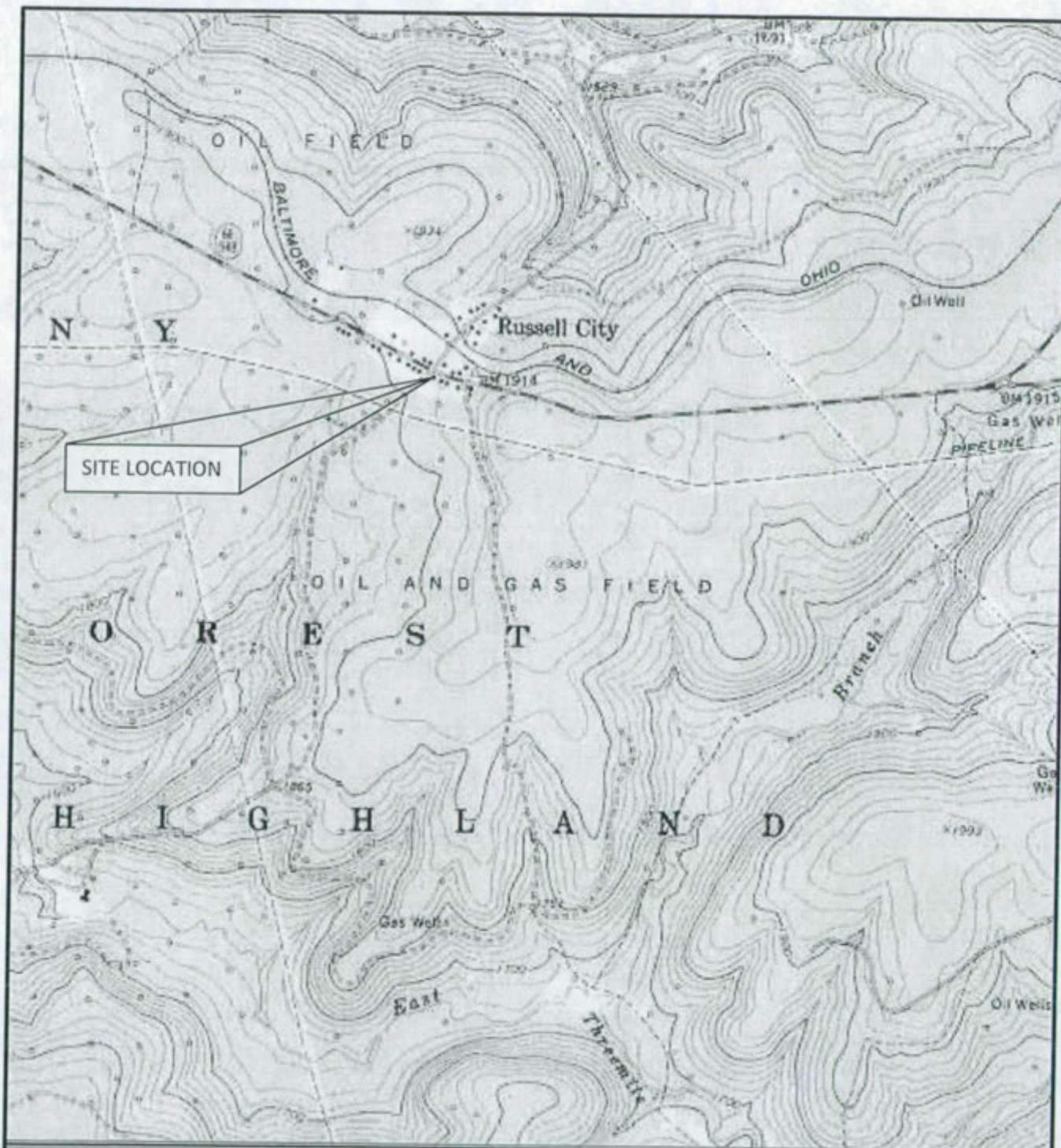
Receiver (print) S Dyne

Signature

Table 1
Analytical Results for Soil Samples
UST Removal
Russell City, Pennsylvania
ERIS Project #2014.74

Sample ID & Location	Units	UST 3 South	UST 3 Center	UST 3 North	UST 4 North	UST 4 Center	UST 4 South	Line	Dispenser East	Dispenser West	Residential USED Aquifer STANDARDS in µg/Kg		Non-Residential USED Aquifer STANDARDS in µg/Kg		Vapor Evaluation	
		11/25/2014	11/25/2014	11/25/2014	11/25/2014	11/25/2014	11/26/2014				11/25/2014	11/25/2014	PADEP Action Levels (100 X GW MISCs) Medium-Specific Concentrations	PADEP Action Levels (Generic Value) Medium-Specific Concentrations	PADEP Action Levels (100 X GW MISCs) Medium-Specific Concentrations	PADEP Action Levels (Generic Value) Medium-Specific Concentrations
Sample Date		14:00	14:05	14:10	15:00	15:05	15:10	15:20	16:00	16:30						
Sample Time		8.0	8.0	8.0	8.0	8.0	8.0	3.0	2.0	2.0						
Sample Depth	Feet															
Laboratory ID#		30135589	30135589	30135589	30135589	30135589	30135589	30135589	30135589	30135589						
Percent Moisture	%	9.9%	10.6%	9.9%	12.9%	9.4%	24.2%	13.2%	14.7%	11.6%						
Benzene	µg/kg	<4.7	<5.0	<5.4	<4.9	<4.5	<5.4	<5.2	76.5	8.5						
Ethylbenzene	µg/kg	<4.7	10.7	<5.4	<4.8	<4.5	<5.4	<5.2	42.8	<4.5						
Isopropylbenzene (Cumene)	µg/kg	11.4	43.7	<5.4	<4.9	<4.5	<5.4	<5.2	52.8	<4.5						
Methyl tert-butyl ether (MTBE)	µg/kg	<4.7	<5.0	<5.4	<4.9	<4.5	<5.4	<5.2	<4.7	<4.5						
Naphthalene	µg/kg	10.4	51.8	<5.4	<4.9	<4.5	<5.4	<5.2	12,000	10,300						
Toluene	µg/kg	<4.7	<5.0	<5.4	<4.9	<4.5	<5.4	<5.2	<4.7	<4.5						
1,2,4 Trimethylbenzene	µg/kg	31.2	948	25.1	11.1	5.8	<5.4	<5.2	32,300	48,900						
1,3,5 Trimethylbenzene	µg/kg	23.4	321	7.3	<4.9	<4.5	<5.4	<5.2	42,900	39,700						
Total Xylenes	µg/kg	<14.2	<15.0	<15.2	<14.8	<13.4	<18.1	<15.7	442	171						
															</	

Notes:
1. Soil results are reported on a dry weight basis in µg/kg.
2. NS = Parameter does not have a indoor air standard.
3. Volatile organic compounds analyzed by EPA Method 8260B (GC/MS).
4. Laboratory analysis completed by Pace Analytical Services, Inc. (Greensburg, PA).
5. < less than values indicate concentrations below the laboratory reporting limits.
6. Samples analyzed for PADEPs short list of unlisted gasoline parameters.
7. Vapor Soil Screening values represent Tables 4 (residential) and Table 5 (nonresidential) of PADEP Vapor intrusion guidance document (2004).
8. NOC = Not of Concern for indoor air protection.



1: 24,000 Series Map

0 2,000 ft.
1 inch = 2,000 ft.

SOURCE:
U.S.G.S. RUSSELL CITY
QUADRANGLE
PENNSYLVANIA
7.5 MINUTE SERIES
(TOPOGRAPHIC)
CREATED 1966 / 1983

Figure 1

Geographic Location Map

Russell City Store
1536 State Route 66
Kane, Pennsylvania, 16728

PROJECT:
2014.74

DATE:

DRAWN BY: KH
REVIEWED BY: DB

FILE:
SERVER/PQ2014.74topo.doc



Environmental
Remediation &
Recovery, Inc.

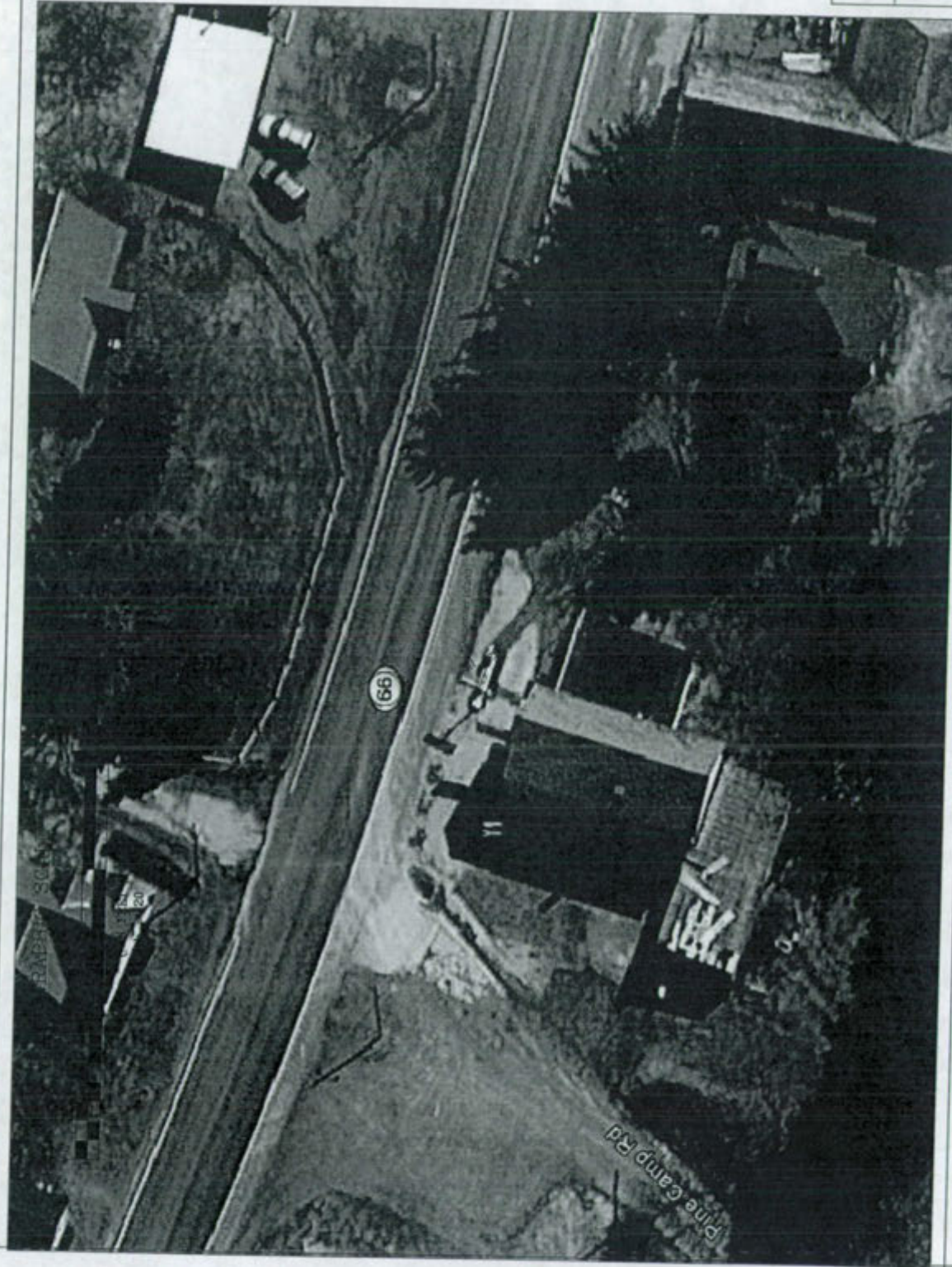


Figure 2
Site Detail Map

Russell City Store
S.R. 66
McKean County, Pennsylvania

Project #:	2014.75	Date:	January 2014	Drawn by:	NJ	QC'd File:	see page 10/10/14
Revision History		Revised by:		Revised by:			
Revision		By					

ER&R, Inc.

4255 ROUTE 66
CONROCK, PENNSYLVANIA



8/19/2019 2:03:05 PM



8/19/2019 2:03:06 PM



Pace Analytical Services, Inc.
1638 Rossytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

December 19, 2014

Mike Waltz
Environmental Remediation & Recovery, Inc.
4250 Route 6N
Edinboro, PA 16412

RE: Project: LUTZ UST REMOVAL
Pace Project No.: 30135589

Dear Mike Waltz:

Enclosed are the analytical results for sample(s) received by the laboratory on December 02, 2014. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Timothy Reed
timothy.reed@pacelabs.com
Project Manager

Enclosures

cc: Karann Holman, Environmental Remediation & Recovery, Inc.



REPORT OF LABORATORY ANALYSIS

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Page 1 of 23

8/19/2019 2:06:50 PM



Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: LUTZ UST REMOVAL
Pace Project No.: 30135589

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ACCLASS DOD-ELAP Accreditation #: ADE-1544
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California/TNI Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Guam/PADEP Certification
Hawaii/PADEP Certification
Idaho Certification
Illinois/PADEP Certification
Indiana/PADEP Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235

Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188
Utah/TNI Certification #: PA014572014-4
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin/PADEP Certification
Wyoming Certification #: 8TMS-Q

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SAMPLE SUMMARY

Project: LUTZ UST REMOVAL

Pace Project No.: 30135589

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30135589001	UST 3 S	Solid	11/25/14 14:00	12/02/14 10:00
30135589002	UST 3 C	Solid	11/25/14 14:05	12/02/14 10:00
30135589003	UST 3 N	Solid	11/25/14 14:10	12/02/14 10:00
30135589004	UST 4 N	Solid	11/25/14 15:00	12/02/14 10:00
30135589005	UST 4 C	Solid	11/25/14 15:05	12/02/14 10:00
30135589006	UST 4 S	Solid	11/25/14 15:10	12/02/14 10:00
30135589007	LINE	Solid	11/25/14 15:30	12/02/14 10:00
30135589008	DISP E	Solid	11/25/14 16:00	12/02/14 10:00
30135589009	DISP W	Solid	11/25/14 16:30	12/02/14 10:00

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Page 3 of 23

SAMPLE ANALYTE COUNT

Project: LUTZ UST REMOVAL
Pace Project No.: 30135589

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30135589001	UST 3 S	EPA 8260B	JEW	12
		ASTM D2974-87	AMR	1
30135589002	UST 3 C	EPA 8260B	JEW	12
		ASTM D2974-87	AMR	1
30135589003	UST 3 N	EPA 8260B	JEW	12
		ASTM D2974-87	AMR	1
30135589004	UST 4 N	EPA 8260B	JEW	12
		ASTM D2974-87	AMR	1
30135589005	UST 4 C	EPA 8260B	JEW	12
		ASTM D2974-87	AMR	1
30135589006	UST 4 S	EPA 8260B	JEW	12
		ASTM D2974-87	AMR	1
30135589007	LINE	EPA 8260B	JEW	12
		ASTM D2974-87	AMR	1
30135589008	DISP E	EPA 8260B	JEW	12
		ASTM D2974-87	AMR	1
30135589009	DISP W	EPA 8260B	JEW	12
		ASTM D2974-87	AMR	1

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PROJECT NARRATIVE

Project: LUTZ UST REMOVAL
Pace Project No.: 30135589

Method: EPA 8260B
Description: 8260 MSV UST
Client: Environmental Remediation and Recovery, Inc.
Date: December 19, 2014

General Information:

9 samples were analyzed for EPA 8260B. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (Including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

QC Batch: MSV/21812

S2: Surrogate recovery outside laboratory control limits due to matrix interferences (confirmed by similar results from sample re-analysis).

- DISP E (Lab ID: 30135589008)
 - Toluene-d8 (S)
- DISP W (Lab ID: 30135589009)
 - Toluene-d8 (S)

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSV/21812

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: MSV/21834

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Additional Comments:

Workorder Comments:

This project was revised on 12/19/14 in order to add TMBs to the volatile list.

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PROJECT NARRATIVE

Project: LUTZ UST REMOVAL
Pace Project No.: 30135589

Method: EPA 8260B
Description: 8260 MSV UST
Client: Environmental Remediation and Recovery, Inc.
Date: December 19, 2014

Analyte Comments:

QC Batch: MSV/21812

E: Analyte concentration exceeded the calibration range. The reported result is estimated.

- UST 3 C (Lab ID: 30135589002)
- 1,2,4-Trimethylbenzene

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: LUTZ UST REMOVAL

Pace Project No.: 30135589

Sample: UST 3 S Lab ID: 30135589001 Collected: 11/25/14 14:00 Received: 12/02/14 10:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST									
Analytical Method: EPA 8260B									
Benzene	ND	ug/kg	4.7	0.74	1		12/09/14 12:03	71-43-2	M5
Ethylbenzene	ND	ug/kg	4.7	2.4	1		12/09/14 12:03	100-41-4	M5
Isopropylbenzene (Cumene)	11.4	ug/kg	4.7	1.0	1		12/09/14 12:03	98-82-8	M5
Methyl-tert-butyl ether	ND	ug/kg	4.7	0.67	1		12/09/14 12:03	1634-04-4	M5
Naphthalene	10.4	ug/kg	4.7	2.4	1		12/09/14 12:03	91-20-3	M5
Toluene	ND	ug/kg	4.7	0.61	1		12/09/14 12:03	108-88-3	M5
1,2,4-Trimethylbenzene	31.2	ug/kg	4.7	1.1	1		12/09/14 12:03	95-63-6	M5
1,3,5-Trimethylbenzene	23.4	ug/kg	4.7	1.3	1		12/09/14 12:03	108-67-8	M5
Xylene (Total)	ND	ug/kg	14.2	2.9	1		12/09/14 12:03	1330-20-7	M5
Surrogates									
Toluene-d8 (S)	98	%	73-124		1		12/09/14 12:03	2037-26-5	M5
4-Bromofluorobenzene (S)	107	%	71-124		1		12/09/14 12:03	460-00-4	M5
1,2-Dichloroethane-d4 (S)	110	%	83-138		1		12/09/14 12:03	17060-07-0	M5
Percent Moisture									
Analytical Method: ASTM D2974-87									
Percent Moisture	9.9	%	0.10	0.10	1		12/15/14 19:04		

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Page 7 of 23

8/19/2019 2:06:53 PM

ANALYTICAL RESULTS

Project: LUTZ UST REMOVAL
Pace Project No.: 30135589

Sample: UST 3 C Lab ID: 30135589002 Collected: 11/25/14 14:05 Received: 12/02/14 10:00 Matrix: Solid
Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST									
Analytical Method: EPA 8260B									
Benzene	ND	ug/kg	5.0	0.78	1		12/08/14 17:31	71-43-2	M5
Ethylbenzene	10.7	ug/kg	5.0	2.6	1		12/08/14 17:31	100-41-4	M5
Isopropylbenzene (Cumene)	43.7	ug/kg	5.0	1.1	1		12/08/14 17:31	98-82-8	M5
Methyl-tert-butyl ether	ND	ug/kg	5.0	0.71	1		12/08/14 17:31	1634-04-4	M5
Naphthalene	51.8	ug/kg	5.0	2.5	1		12/08/14 17:31	91-20-3	M5
Toluene	ND	ug/kg	5.0	0.64	1		12/08/14 17:31	108-88-3	M5
1,2,4-Trimethylbenzene	648	ug/kg	5.0	1.2	1		12/08/14 17:31	95-83-6	E,M5
1,3,5-Trimethylbenzene	321	ug/kg	5.0	1.4	1		12/08/14 17:31	108-67-8	M5
Xylene (Total)	ND	ug/kg	15.0	3.1	1		12/08/14 17:31	1330-20-7	M5
Surrogates									
Toluene-d8 (S)	98 %		73-124		1		12/08/14 17:31	2037-26-5	M5
4-Bromofluorobenzene (S)	106 %		71-124		1		12/08/14 17:31	460-00-4	M5
1,2-Dichloroethane-d4 (S)	107 %		83-138		1		12/08/14 17:31	17060-07-0	M5
Percent Moisture									
Analytical Method: ASTM D2974-87									
Percent Moisture	10.6 %		0.10	0.10	1		12/15/14 19:05		

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Page 8 of 23

8/19/2019 2:06:53 PM

ANALYTICAL RESULTS

Project: LUTZ UST REMOVAL

Pace Project No.: 30135589

Sample: UST 3 N Lab ID: 30135589003 Collected: 11/25/14 14:10 Received: 12/02/14 10:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST									
Analytical Method: EPA 8260B									
Benzene	ND	ug/kg	5.4	0.84	1		12/08/14 17:54	71-43-2	M5
Ethylbenzene	ND	ug/kg	5.4	2.8	1		12/08/14 17:54	100-41-4	M5
Isopropylbenzene (Cumene)	ND	ug/kg	5.4	1.1	1		12/08/14 17:54	98-82-8	M5
Methyl-tert-butyl ether	ND	ug/kg	5.4	0.77	1		12/08/14 17:54	1634-04-4	M5
Naphthalene	ND	ug/kg	5.4	2.7	1		12/08/14 17:54	91-20-3	M5
Toluene	ND	ug/kg	5.4	0.69	1		12/08/14 17:54	108-88-3	M5
1,2,4-Trimethylbenzene	26.1	ug/kg	5.4	1.3	1		12/08/14 17:54	95-63-6	M5
1,3,5-Trimethylbenzene	7.3	ug/kg	5.4	1.5	1		12/08/14 17:54	108-67-8	M5
Xylene (Total)	ND	ug/kg	16.2	3.3	1		12/08/14 17:54	1330-20-7	M5
Surrogates									
Toluene-d8 (S)	100	%	73-124		1		12/08/14 17:54	2037-26-5	M5
4-Bromofluorobenzene (S)	97	%	71-124		1		12/08/14 17:54	480-00-4	M5
1,2-Dichloroethane-d4 (S)	102	%	83-138		1		12/08/14 17:54	17060-07-0	M5
Percent Moisture									
Analytical Method: ASTM D2974-87									
Percent Moisture	9.9	%	0.10	0.10	1		12/15/14 19:05		

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Page 9 of 23

8/19/2019 2:06:54 PM

ANALYTICAL RESULTS

Project: LUTZ UST REMOVAL

Pace Project No.: 30135589

Sample: UST 4 N

Lab ID: 30135589004

Collected: 11/25/14 15:00

Received: 12/02/14 10:00

Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST									
Analytical Method: EPA 8260B									
Benzene	ND	ug/kg	4.9	0.77	1		12/08/14 18:16	71-43-2	M5
Ethylbenzene	ND	ug/kg	4.9	2.5	1		12/08/14 18:16	100-41-4	M5
Isopropylbenzene (Cumene)	ND	ug/kg	4.9	1.0	1		12/08/14 18:16	98-82-8	M5
Methyl-tert-butyl ether	ND	ug/kg	4.9	0.70	1		12/08/14 18:16	1634-04-4	M5
Naphthalene	ND	ug/kg	4.9	2.5	1		12/08/14 18:16	91-20-3	M5
Toluene	ND	ug/kg	4.9	0.63	1		12/08/14 18:16	108-88-3	M5
1,2,4-Trimethylbenzene	11.1	ug/kg	4.9	1.1	1		12/08/14 18:16	95-63-6	M5
1,3,5-Trimethylbenzene	ND	ug/kg	4.9	1.3	1		12/08/14 18:16	108-67-8	M5
Xylene (Total)	ND	ug/kg	14.8	3.0	1		12/08/14 18:16	1330-20-7	M5
Surrogates									
Toluene-d8 (S)	98 %		73-124		1		12/08/14 18:16	2037-26-5	M5
4-Bromofluorobenzene (S)	96 %		71-124		1		12/08/14 18:16	460-00-4	M5
1,2-Dichloroethane-d4 (S)	101 %		83-138		1		12/08/14 18:16	17060-07-0	M5
Percent Moisture									
Analytical Method: ASTM D2974-87									
Percent Moisture	12.5 %		0.10	0.10	1		12/15/14 19:06		

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Page 10 of 23

8/19/2019 2:06:54 PM

ANALYTICAL RESULTS

Project: LUTZ UST REMOVAL

Pace Project No.: 30135589

Sample: UST 4 C Lab ID: 30135689005 Collected: 11/25/14 15:05 Received: 12/02/14 10:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST									
Analytical Method: EPA 8260B									
Benzene	ND	ug/kg	4.5	0.70	1		12/08/14 18:38	71-43-2	M5
Ethylbenzene	ND	ug/kg	4.5	2.3	1		12/08/14 18:38	100-41-4	M5
Isopropylbenzene (Cumene)	ND	ug/kg	4.5	0.84	1		12/08/14 18:38	98-82-8	M5
Methyl-tert-butyl ether	ND	ug/kg	4.5	0.63	1		12/08/14 18:38	1634-04-4	M5
Naphthalene	ND	ug/kg	4.5	2.2	1		12/08/14 18:38	91-20-3	M5
Toluene	ND	ug/kg	4.5	0.57	1		12/08/14 18:38	108-88-3	M5
1,2,4-Trimethylbenzene	5.8	ug/kg	4.5	1.0	1		12/08/14 18:38	85-83-6	M5
1,3,5-Trimethylbenzene	ND	ug/kg	4.5	1.2	1		12/08/14 18:38	108-67-8	M5
Xylene (Total)	ND	ug/kg	13.4	2.7	1		12/08/14 18:38	1330-20-7	M5
Surrogates									
Toluene-d8 (S)	98 %		73-124		1		12/08/14 18:38	2037-26-5	M5
4-Bromofluorobenzene (S)	96 %		71-124		1		12/08/14 18:38	460-00-4	M5
1,2-Dichloroethane-d4 (S)	102 %		83-138		1		12/08/14 18:38	17060-07-0	M5
Percent Moisture									
Analytical Method: ASTM D2974-87									
Percent Moisture	9.9 %		0.10	0.10	1		12/15/14 19:07		

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Page 11 of 23

ANALYTICAL RESULTS

Project: LUTZ UST REMOVAL

Pace Project No.: 30135589

Sample: UST 4 S

Lab ID: 30135589006

Collected: 11/25/14 15:10

Received: 12/02/14 10:00

Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST									
Analytical Method: EPA 8260B									
Benzene	ND	ug/kg	5.4	0.84	1		12/08/14 19:00	71-43-2	M5
Ethylbenzene	ND	ug/kg	5.4	2.8	1		12/08/14 19:00	100-41-4	M5
Isopropylbenzene (Cumene)	ND	ug/kg	5.4	1.1	1		12/08/14 19:00	98-82-8	M5
Methyl-tert-butyl ether	ND	ug/kg	5.4	0.76	1		12/08/14 19:00	1634-04-4	M5
Naphthalene	ND	ug/kg	5.4	2.7	1		12/08/14 19:00	91-20-3	M5
Toluene	ND	ug/kg	5.4	0.69	1		12/08/14 19:00	108-88-3	M5
1,2,4-Trimethylbenzene	ND	ug/kg	5.4	1.2	1		12/08/14 19:00	95-83-6	M5
1,3,5-Trimethylbenzene	ND	ug/kg	5.4	1.4	1		12/08/14 19:00	108-67-8	M5
Xylene (Total)	ND	ug/kg	16.1	3.3	1		12/08/14 19:00	1330-20-7	M5
Surrogates									
Toluene-d8 (S)	100 %		73-124		1		12/08/14 19:00	2037-28-5	M5
4-Bromofluorobenzene (S)	97 %		71-124		1		12/08/14 19:00	460-00-4	M5
1,2-Dichloroethane-d4 (S)	101 %		83-138		1		12/08/14 19:00	17060-07-0	M5
Percent Moisture									
Analytical Method: ASTM D2974-87									
Percent Moisture	24.2 %		0.10	0.10	1		12/15/14 19:08		

REPORT OF LABORATORY ANALYSIS

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Date: 12/19/2014 11:32 AM

Page 12 of 23

8/19/2019 2:06:56 PM

ANALYTICAL RESULTS

Project: LUTZ UST REMOVAL
Pace Project No.: 30135589

Sample: LINE Lab ID: 30135589007 Collected: 11/25/14 15:30 Received: 12/02/14 10:00 Matrix: Solid
Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST									
Analytical Method: EPA 8260B									
Benzene	ND	ug/kg	5.2	0.82	1		12/08/14 19:23	71-43-2	M5
Ethylbenzene	ND	ug/kg	5.2	2.7	1		12/08/14 19:23	100-41-4	M5
Isopropylbenzene (Cumene)	ND	ug/kg	5.2	1.1	1		12/08/14 19:23	98-82-8	M5
Methyl-tert-butyl ether	ND	ug/kg	5.2	0.75	1		12/08/14 19:23	1634-04-4	M5
Naphthalene	ND	ug/kg	5.2	2.6	1		12/08/14 19:23	91-20-3	M5
Toluene	ND	ug/kg	5.2	0.67	1		12/08/14 18:23	108-88-3	M5
1,2,4-Trimethylbenzene	ND	ug/kg	5.2	1.2	1		12/08/14 19:23	95-63-6	M5
1,3,5-Trimethylbenzene	ND	ug/kg	5.2	1.4	1		12/08/14 19:23	108-67-8	M5
Xylene (Total)	ND	ug/kg	15.7	3.2	1		12/08/14 19:23	1330-20-7	M5
Surrogates									
Toluene-d8 (S)	99 %		73-124		1		12/08/14 19:23	2037-26-5	M5
4-Bromofluorobenzene (S)	93 %		71-124		1		12/08/14 19:23	460-00-4	M5
1,2-Dichloroethane-d4 (S)	102 %		83-138		1		12/08/14 18:23	17060-07-0	M5
Percent Moisture									
Analytical Method: ASTM D2974-87									
Percent Moisture	13.2 %		0.10	0.10	1		12/15/14 19:09		

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Date: 12/19/2014 11:32 AM

Page 13 of 23

ANALYTICAL RESULTS

Project: LUTZ UST REMOVAL

Pace Project No.: 30135589

Sample: DISP E Lab ID: 30135589008 Collected: 11/25/14 16:00 Received: 12/02/14 10:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST									
Analytical Method: EPA 8260B									
Benzene	76.5	ug/kg	4.7	0.73	1		12/08/14 19:45	71-43-2	M5
Ethylbenzene	42.8	ug/kg	4.7	2.4	1		12/08/14 19:45	100-41-4	M5
Isopropylbenzene (Cumene)	52.8	ug/kg	4.7	0.99	1		12/08/14 19:45	98-82-8	M5
Methyl-tert-butyl ether	ND	ug/kg	4.7	0.66	1		12/08/14 19:45	1634-04-4	M5
Naphthalene	12000	ug/kg	2380	1200	500		12/09/14 12:25	91-20-3	M5
Toluene	ND	ug/kg	4.7	0.60	1		12/08/14 19:45	108-88-3	M5
1,2,4-Trimethylbenzene	32300	ug/kg	2380	552	500		12/09/14 12:25	95-63-6	M5
1,3,5-Trimethylbenzene	43900	ug/kg	2380	642	500		12/09/14 12:25	108-67-8	M5
Xylene (Total)	442	ug/kg	14.0	2.8	1		12/08/14 19:45	1330-20-7	M5
Surrogates									
Toluene-d8 (S)	129	%	73-124		1		12/08/14 19:45	2037-26-5	M5,S2
4-Bromofluorobenzene (S)	72	%	71-124		1		12/08/14 19:45	460-00-4	M5
1,2-Dichloroethane-d4 (S)	107	%	83-138		1		12/08/14 19:45	17060-07-0	M5
Percent Moisture									
Analytical Method: ASTM D2974-87									
Percent Moisture	14.7	%	0.10	0.10	1		12/15/14 19:10		

REPORT OF LABORATORY ANALYSIS

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Date: 12/19/2014 11:32 AM

Page 14 of 23

8/19/2019 2:06:56 PM

ANALYTICAL RESULTS

Project: LUTZ UST REMOVAL

Pace Project No.: 30135589

Sample: DISP W Lab ID: 30135589009 Collected: 11/25/14 16:30 Received: 12/02/14 10:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST									
Analytical Method: EPA 8260B									
Benzene	6.6 ug/kg		4.5	0.70	1		12/08/14 20:07	71-43-2	M5
Ethylbenzene	ND ug/kg		4.5	2.3	1		12/08/14 20:07	100-41-4	M5
Isopropylbenzene (Cumene)	ND ug/kg		4.5	0.95	1		12/08/14 20:07	98-82-8	M5
Methyl-tert-butyl ether	ND ug/kg		4.5	0.64	1		12/08/14 20:07	1634-04-4	M5
Naphthalene	10200 ug/kg		2530	1280	500		12/09/14 12:48	91-20-3	M5
Toluene	ND ug/kg		4.5	0.58	1		12/08/14 20:07	108-88-3	M5
1,2,4-Trimethylbenzene	46900 ug/kg		2530	588	500		12/09/14 12:48	95-83-6	M5
1,3,5-Trimethylbenzene	38700 ug/kg		2530	684	500		12/09/14 12:48	108-67-8	M5
Xylene (Total)	171 ug/kg		13.5	2.8	1		12/08/14 20:07	1330-20-7	M5
Surrogates									
Toluene-d8 (S)	42 %		73-124		1		12/08/14 20:07	2037-26-5	M5, S2
4-Bromofluorobenzene (S)	104 %		71-124		1		12/08/14 20:07	460-00-4	M5
1,2-Dichloroethane-d4 (S)	99 %		83-138		1		12/08/14 20:07	17060-07-0	M5
Percent Moisture									
Analytical Method: ASTM D2974-87									
Percent Moisture	11.6 %		0.10	0.10	1		12/15/14 19:10		

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Date: 12/19/2014 11:32 AM

Page 15 of 23

8/19/2019 2:06:57 PM

QUALITY CONTROL DATA

Project: LUTZ UST REMOVAL
Pace Project No.: 30135589

QC Batch: MSV/21812 Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B Analysis Description: 8260 MSV UST-SOIL
Associated Lab Samples: 30135589002, 30135589003, 30135589004, 30135589005, 30135589006, 30135589007, 30135589008, 30135589009

METHOD BLANK: 826919 Matrix: Solid
Associated Lab Samples: 30135589002, 30135589003, 30135589004, 30135589005, 30135589006, 30135589007, 30135589008, 30135589009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	ND	5.0	12/08/14 11:58	M5
1,3,5-Trimethylbenzene	ug/kg	ND	5.0	12/08/14 11:58	M5
Benzene	ug/kg	ND	5.0	12/08/14 11:58	M5
Ethylbenzene	ug/kg	ND	5.0	12/08/14 11:58	M5
Isopropylbenzene (Cumene)	ug/kg	ND	5.0	12/08/14 11:58	M5
Methyl-tert-butyl ether	ug/kg	ND	5.0	12/08/14 11:58	M5
Naphthalene	ug/kg	ND	5.0	12/08/14 11:58	M5
Toluene	ug/kg	ND	5.0	12/08/14 11:58	M5
Xylene (Total)	ug/kg	ND	15.0	12/08/14 11:58	M5
1,2-Dichloroethane-d4 (S)	%	101	83-138	12/08/14 11:58	M5
4-Bromofluorobenzene (S)	%	98	71-124	12/08/14 11:58	M5
Toluene-d8 (S)	%	102	73-124	12/08/14 11:58	M5

LABORATORY CONTROL SAMPLE: 826920

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	20	16.7	84	54-131	M5
1,3,5-Trimethylbenzene	ug/kg	20	16.5	82	54-131	M5
Benzene	ug/kg	20	15.9	79	52-126	M5
Ethylbenzene	ug/kg	20	17.7	88	54-128	M5
Isopropylbenzene (Cumene)	ug/kg	20	16.9	85	58-144	M5
Methyl-tert-butyl ether	ug/kg	20	19.8	99	57-129	M5
Naphthalene	ug/kg	20	17.0	85	36-152	M5
Toluene	ug/kg	20	17.3	86	53-127	M5
Xylene (Total)	ug/kg	60	54.6	91	53-127	M5
1,2-Dichloroethane-d4 (S)	%			98	83-138	M5
4-Bromofluorobenzene (S)	%			96	71-124	M5
Toluene-d8 (S)	%			96	73-124	M5

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REPORT OF LABORATORY ANALYSIS

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Date: 12/19/2014 11:32 AM

Page 16 of 23

8/19/2019 2:06:58 PM

QUALITY CONTROL DATA

Project: LUTZ UST REMOVAL
Pace Project No.: 30135589

QC Batch: MSV/21834 Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B Analysis Description: 8260 MSV UST-SOIL
Associated Lab Samples: 30135589001

METHOD BLANK: 828032

Matrix: Solid

Associated Lab Samples: 30135589001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	ND	5.0	12/09/14 10:39	M5
1,3,5-Trimethylbenzene	ug/kg	ND	5.0	12/09/14 10:39	M5
Benzene	ug/kg	ND	5.0	12/09/14 10:39	M5
Ethylbenzene	ug/kg	ND	5.0	12/09/14 10:39	M5
Isopropylbenzene (Cumene)	ug/kg	ND	5.0	12/09/14 10:39	M5
Methyl-tert-butyl ether	ug/kg	ND	5.0	12/09/14 10:39	M5
Naphthalene	ug/kg	ND	5.0	12/09/14 10:39	M5
Toluene	ug/kg	ND	5.0	12/09/14 10:39	M5
Xylene (Total)	ug/kg	ND	15.0	12/09/14 10:39	M5
1,2-Dichloroethane-d4 (S)	%	95	83-138	12/09/14 10:39	M5
4-Bromofluorobenzene (S)	%	99	71-124	12/09/14 10:39	M5
Toluene-d8 (S)	%	101	73-124	12/09/14 10:39	M5

LABORATORY CONTROL SAMPLE: 828033

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	20	15.3	77	54-131	M5
1,3,5-Trimethylbenzene	ug/kg	20	15.2	76	54-131	M5
Benzene	ug/kg	20	14.9	75	52-126	M5
Ethylbenzene	ug/kg	20	15.7	78	54-128	M5
Isopropylbenzene (Cumene)	ug/kg	20	15.1	76	58-144	M5
Methyl-tert-butyl ether	ug/kg	20	18.8	94	57-129	M5
Naphthalene	ug/kg	20	16.7	84	36-152	M5
Toluene	ug/kg	20	16.0	80	53-127	M5
Xylene (Total)	ug/kg	60	49.7	83	53-127	M5
1,2-Dichloroethane-d4 (S)	%			97	83-138	M5
4-Bromofluorobenzene (S)	%			98	71-124	M5
Toluene-d8 (S)	%			99	73-124	M5

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Date: 12/19/2014 11:32 AM

Page 17 of 23

8/19/2019 2:06:58 PM

QUALITY CONTROL DATA

Project: LUTZ UST REMOVAL

Pace Project No.: 30135589

QC Batch: PMST/5037

QC Batch Method: ASTM D2974-87

Analysis Method: ASTM D2974-87

Analysis Description: Dry Weight/Percent Moisture

Associated Lab Samples: 30135589001, 30135589002, 30135589003, 30135589004, 30135589005, 30135589006, 30135589007,
30135589008, 30135589009

SAMPLE DUPLICATE: 830349

Parameter	Units	30135589003 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	12.1	12.2	1	20	

SAMPLE DUPLICATE: 830350

Parameter	Units	30135605005 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	9.0	9.2	2	20	

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Date: 12/19/2014 11:32 AM

QUALIFIERS

Project: LUTZ UST REMOVAL
Pace Project No.: 30135589

DEFINITIONS

DF - Dilution Factor; if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

WORKORDER QUALIFIERS

WO: 30135589

[1] This project was revised on 12/19/14 in order to add TMBs to the volatile list.

BATCH QUALIFIERS

Batch: MSV/21812

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/21834

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

E Analyte concentration exceeded the calibration range. The reported result is estimated.

M5 A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

S2 Surrogate recovery outside laboratory control limits due to matrix interferences (confirmed by similar results from sample re-analysis).

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: LUTZ UST REMOVAL
Pace Project No.: 30135589

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30135589001	UST 3 S	EPA 8260B	MSV/21834		
30135589002	UST 3 C	EPA 8260B	MSV/21812		
30135589003	UST 3 N	EPA 8260B	MSV/21812		
30135589004	UST 4 N	EPA 8260B	MSV/21812		
30135589005	UST 4 C	EPA 8260B	MSV/21812		
30135589006	UST 4 S	EPA 8260B	MSV/21812		
30135589007	LINE	EPA 8260B	MSV/21812		
30135589008	DISP E	EPA 8260B	MSV/21812		
30135589009	DISP W	EPA 8260B	MSV/21812		
30135589001	UST 3 S	ASTM D2974-87	PMST/5037		
30135589002	UST 3 C	ASTM D2974-87	PMST/5037		
30135589003	UST 3 N	ASTM D2974-87	PMST/5037		
30135589004	UST 4 N	ASTM D2974-87	PMST/5037		
30135589005	UST 4 C	ASTM D2974-87	PMST/5037		
30135589006	UST 4 S	ASTM D2974-87	PMST/5037		
30135589007	LINE	ASTM D2974-87	PMST/5037		
30135589008	DISP E	ASTM D2974-87	PMST/5037		
30135589009	DISP W	ASTM D2974-87	PMST/5037		

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

30135589

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	ER+R	Request To:	Mike waltz	Account:	TRINIA KUMM
Address:	4250 Rt 60N	Copy To:		Company Name:	ER+R
City/State:	Edinboro PA 16742	Purchase Order No.:		Address:	4250 Rt 60N Edinboro PA
Phone:	814-734-6418	Project Name:	PA 16742	Site Location:	PA
Requested Due Date:	SHUNDARD	Project Number:	2014-74	State:	PA

ITEM #	Section D Required Client Information	Matrix Codes MATRIX / CODE	COLLECTED		SAMPLE TYPE (see valid codes to left)	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
			COMPOSITE START	COMPOSITE END/START								
1	UST 3S	DW	DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME
2	UST 3C	WT	11-25-14	2:00			12-1-14	8:00	FEREX TRAFFIC 3334480	12-1-14	9:00	
3	UST 3N	WW		2:05								
4	UST 4N	PP		2:10								
5	UST 4S	OL		3:00								
6	UST 4S	BL		3:05								
7	LINE	WP		3:10								
8	DISPE	AR		3:30								
9	DISPEW	TS		4:00								
10		OT		4:30								
11												
12												

ORIGINAL

SAMPLER NAME AND SIGNATURE
 PRONT Name of SAMPLER: Mallory Smith / Mike waltz
 SIGNATURE of SAMPLER: [Signature] DATE: 12-1-14

FALL-Q-020rev.07, 15-May-2007



Sample Condition Upon Receipt

Client Name: ER & R

Project # 30135589

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Tracking #: 7720 32314680

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals Intact: ☐ yes ☒ no Biological Tissue is Frozen: Yes No

Packing Material: Bubble Wrap _____ Bubble Bags _____ None ☒ Other _____

Thermometer Used 4 Type of Ice: ☒ Wet ☐ Blue ☐ None ☒ Samples on Ice, cooling process has begun

Cooler Temp.: Observed Temp.: 1.3 °C Correction Factor: 0.1 °C Final Temp: 1.2 °C

Date and Initials of person

12-8-14
examining contents: CNT

Temp should be above freezing to 6°C

Comments:

Chain of Custody Present:	☒ Yes ☐ No ☐ N/A	1.
Chain of Custody Filled Out:	☒ Yes ☐ No ☐ N/A	2.
Chain of Custody Relinquished:	☒ Yes ☐ No ☐ N/A	3.
Sampler Name & Signature on COC:	☒ Yes ☐ No ☐ N/A	4.
Samples Arrived within Hold Time:	☒ Yes ☐ No ☐ N/A	5.
Short Hold Time Analysis (<72hr):	☐ Yes ☒ No ☐ N/A	6.
Rush Turn Around Time Requested:	☐ Yes ☒ No ☐ N/A	7.
Sufficient Volume:	☒ Yes ☐ No ☐ N/A	8.
Correct Containers Used:	☒ Yes ☐ No ☐ N/A	9.
-Pace Containers Used:	☒ Yes ☐ No ☐ N/A	
Containers Intact:	☒ Yes ☐ No ☐ N/A	10.
Filtered volume received for Dissolved tests	☐ Yes ☐ No ☒ N/A	11.
Sample Labels match COC:	☒ Yes ☐ No ☐ N/A	12.
-Includes date/time/ID/Analysis Matrix: <u>SL</u>		
All containers needing preservation have been checked.	☐ Yes ☐ No ☒ N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☐ Yes ☐ No ☒ N/A	
exceptions: VOA, coliform, TOC, O&G, W-DRO (water)	☐ Yes ☒ No	Initial when completed <u>CNT</u> Lot # of added preservative
Samples checked for dechlorination:	☐ Yes ☐ No ☒ N/A	14.
Headspace in VOA Vials (>6mm):	☐ Yes ☐ No ☒ N/A	15.
Trip Blank Present:	☐ Yes ☐ No ☒ N/A	16.
Trip Blank Custody Seals Present	☐ Yes ☐ No ☒ N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution:

Field Data Required?

Y / N

Person Contacted: Mr. Montague

Date/Time: _____

Comments/ Resolution: No 13F

Project Manager Review: _____

Date: 11/13/14

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

Project Number: 30135589
Client Name: EAL

Client Name:

$$= 12 + 12$$

SCURF Back (C016-4 15May2012).xls

[illegible]

Appendix C
Notice of Reportable Release

NOTIFICATION OF REPORTABLE RELEASE (Owners and Operators)

☒ Initial
☐ Follow-Up

NOTIFICATION OF CONTAMINATION (Certified Installers and Inspectors)

NOTIFICATION OF REPORTABLE RELEASE (Owners and Operators)

The Storage Tank Program's Corrective Action Process (CAP) regulations establish release reporting requirements for owners and operators of storage tanks and storage tank facilities.

Subsection 245.305(a) of the regulations requires owners or operators to notify the appropriate regional office of the Department as soon as practicable, but no later than 24 hours after the confirmation of a reportable release.

Subsection 245.305(d) requires owners or operators to provide an initial written notification to the Department, each municipality in which the reportable release occurred, and each municipality where that release has impacted environmental media or water supplies, buildings, or sewer or other utility lines, within 15 days of the notice required by subsection 245.305(a).

Subsection 245.305(e) requires owners or operators to provide follow-up written notification to the Department and to each impacted municipality of new impacts to environmental media or water supplies, buildings, or sewer or other utility lines discovered after the initial written notification required by subsection 245.305(d). Written notification is to be made within 15 days of the discovery of the new impact.

This form may be used to comply with subsections 245.305(d) and (e).

OWNERS AND OPERATORS (O/O)

INDICATE IF THIS IS AN INITIAL OR FOLLOW-UP NOTIFICATION BY MARKING THE APPROPRIATE BOX FOUND IN THE TOP RIGHT-HAND CORNER OF THIS FORM. PLEASE COMPLETE ALL INFORMATION IN SECTIONS I, II, IIIA, IIIB, IV, V, VII and VIII.

NOTIFICATION OF CONTAMINATION (Certified Installers and Inspectors)

The Storage Tank Program's Certification regulations establish standards of performance for certified installers and inspectors of storage tanks and storage tank facilities.

Subsection 245.132(a)(4) of the regulations requires certified installers and inspectors to report to the Department a release of a regulated substance or confirmed or suspected contamination of soil, surface or groundwater from regulated substances observed while performing services as a certified installer or inspector.

This form may be used to comply with subsection 245.132(a)(4). Subsection 245.132(a)(4) requires submission of the form within 48 hours of observing suspected or confirmed contamination. Where there is a reportable release, the form may be submitted jointly by the owner, operator, certified installer and certified inspector. In this instance, the form must be received by the appropriate regional office within 15 days of the notice required by subsection 245.305(a).

CERTIFIED INSTALLERS AND INSPECTORS (I/I)
PLEASE COMPLETE ALL INFORMATION IN SECTIONS I, II, IIIA, IIIC, VI, VII and VIII.

INSTRUCTIONS

- I. **FACILITY INFORMATION** - Record the name, I.D. number and physical location (not P.O. Box) of the facility at which a reportable release has been confirmed or at which suspected or confirmed contamination has been observed. Include the name and phone number of a person to contact at the facility.
- II. **OWNER/OPERATOR INFORMATION** - Record the name, business address and telephone number of the owner of the facility identified in Section I. Also, record the name and telephone number of the operator of the facility.
- III. **REGULATED SUBSTANCE INFORMATION** - Indicate to the best of your knowledge: A) the type of product or products involved; B) the quantity of product or products released; and C) whether the contamination is suspected or confirmed.
- IV. **REPORTABLE RELEASE INFORMATION** - Record the date of confirmation of the reportable release, e.g., "9/18/01"; the date and regional office notified; and the date the local municipality(ies) [provide name of municipality(ies)] was/were sent a copy of this form. Indicate to the best of your knowledge the source/cause of the release, how the release was discovered and the environmental media affected and impacts.
- V. **INTERIM REMEDIAL ACTIONS** - Indicate the interim remedial actions planned, initiated or completed.
- VI. **SUSPECTED/CONFIRMED CONTAMINATION INFORMATION** - Record the date of observation of the suspected or confirmed contamination, e.g., "11/24/01". Indicate to the best of your knowledge the indications of a suspected release or extent of confirmed contamination resulting from the release of the regulated substance.
- VII. **ADDITIONAL INFORMATION** - Provide any additional, relevant, available information concerning the reportable release or suspected or confirmed contamination. Include in this section specific details or problems about the release. For example, if the piping was the source of the release and the cause was corrosion of a metal connector or flexible connector, it is important to include that information here. Use additional 8½" x 11" sheets of paper, if necessary.
- VIII. **CERTIFICATION** - Please print your name, and provide your signature and date of signature. If a certified installer/inspector, provide certification number and company certification number.
- IX. **ATTACHMENT** - If a certified installer/inspector, provide a copy of failed valid tightness test(s), if applicable.

PLEASE SEND COMPLETED ORIGINAL FORM TO:

PA Department of Environmental Protection
Environmental Cleanup and Brownfields Program
Storage Tank Section
(and the appropriate address below,
depending on where the FACILITY is located)

Southeast Region 2 East Main Street Norristown, PA 19401 PHONE: 484-250-5900 FAX: 484-250-5961 Counties Bucks, Chester, Delaware, Montgomery, Philadelphia	Northeast Region 2 Public Square W3aes-Barre, PA 18711-1915 PHONE: 670-826-2511 FAX: 670-820-4907 Counties Carbon, Lackawanna, Lehigh, Luzerne, Monroe, Northampton, Pike, Schuylkill, Susquehanna, Wayne, Wyoming	South-central Region 909 Elmerton Avenue Harrisburg, PA 17110 PHONE: 866-825-0208 FAX: 717-705-4630 Counties Adams, Bedford, Berks, Blair, Cumberland, Dauphin, Franklin, Fulton, Huntingdon, Juniata, Lancaster, Lebanon, Mifflin, Perry, York	North-central Region 208 W. Third Street, Suite 101 Williamsport, PA 17701 PHONE: 670-321-6525/327-3636 FAX: 670-327-3420 Counties Bradford, Cameron, Centre, Clinton, Clearfield, Columbia, Lycoming, Montour, Northumberland, Potter, Snyder, Sullivan, Tioga, Union	Southwest Region 400 Waterfront Drive Pittsburgh, PA 15222 PHONE: 412-442-4091/4000 FAX: 412-442-4328 Counties Allegheny, Armstrong, Beaver, Cambria, Fayette, Greene, Indiana, Somerset, Washington, Westmoreland	Northwest Region 230 Chestnut Street Meadville, PA 16335-3481 PHONE: 814-332-6945 800-373-3398 FAX: 814-332-6121 Counties Butler, Clarion, Crawford, Elk, Erie, Forest, Jefferson, Lawrence, McKean, Mercer, Venango, Warren
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- 2 -

V. INTERIM REMEDIAL ACTIONS (O/O Only)(Mark All That Apply ☒):

	Planned	Initiated	Completed	Not Applicable
Regulated Substance Removed from Storage Tanks	☐	☐	☐	☒
Fire, Explosion and Safety Hazards Mitigated	☐	☐	☐	☒
Contaminated Soil Excavated	☒	☐	☐	☐
Free Product Recovered	☐	☐	☐	☒
Water Supplies Identified and Sampled	☐	☐	☐	☒
Temporary Water Supplies Provided	☐	☐	☐	☒
Other (Specify)	☐	☐	☐	☐

VI. SUSPECTED / CONFIRMED CONTAMINATION INFORMATION (I/I Only)Date of Observation of Suspected/Confirmed Contamination: 12 / 19 / 2014
m d yIndication of Suspected Contamination (Mark All That Apply ☒):

- Unusual Level of Vapors ☐
- Erratic Behavior of Product Dispensing Equipment ☐
- Release Detection Results Indicate a Release ☐
- Discovery of Holes in the Storage Tank ☐
- Other (Specify) ☐

Extent of Confirmed Contamination (Mark All That Apply ☒):

- Product Stained or Product Saturated Soil or Backfill ☐
- Ponded Product ☐
- Free Product or Sheen on Ponded Water ☐
- Free Product or Sheen on the Ground Water Surface ☐
- Free Product or Sheen on Surface Water ☐
- Other (Specify) lab data - UST closure samples ☒

VII. ADDITIONAL INFORMATION (Both O/O and I/I)

Provide any additional, relevant, available information concerning the reportable release or suspected or confirmed contamination. Include specific details or problems about the release. For example, if the piping was the source of the release and the cause was corrosion of a metal connector or flexible connector, it is important to include that information here. Provide DEP-assigned and owner/operator-assigned tank number(s), where applicable. Use additional 8½" x 11" sheets of paper, if necessary.

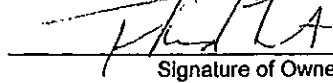
An underground storage tank (UST) system was closed, by removal, on 25-Nov-2014. Confirmatory soil samples were collected and analyzed associated with the closure site assessment. Analytical results indicate exceedances to SHS-MSCs in soil samples collected proximate to the dispenser island.

Localized contamination is anticipated. Source removal is being planned as an interim corrective action to address the UST release. Attainment samples will be collected.

VIII. CERTIFICATION (Both O/O and I/I)

I, Theodore Lutz, hereby certify, under penalty of law as provided in 18 Pa.
(Print Name)

C.S.A. §4904 (relating to unsworn falsification to authorities) that I am the owner or operator of the above referenced storage tank facility and that the information provided by me in this notification is true, accurate and complete to the best of my knowledge and belief.


Signature of Owner or Operator

1/16/15
Date

I, Michael Waltz, hereby certify, under penalty of law as provided in 18 Pa.
(Print Name)

C.S.A. §4904 (relating to unsworn falsification to authorities) that I am the certified installer who performed tank handling activities at the above referenced storage tank facility and that the information provided by me in this notification is true, accurate and complete to the best of my knowledge and belief.


Signature of Certified Installer

12 / 24 / 2014
Date

3717
Installer Certification Number

1315
Company Certification Number

I, _____, hereby certify, under penalty of law as provided in 18 Pa.
(Print Name)

C.S.A. §4904 (relating to unsworn falsification to authorities) that I am the certified inspector who performed inspection activities at the above referenced storage tank facility and that the information provided by me in this notification is true, accurate and complete to the best of my knowledge and belief.

Signature of Certified Inspector

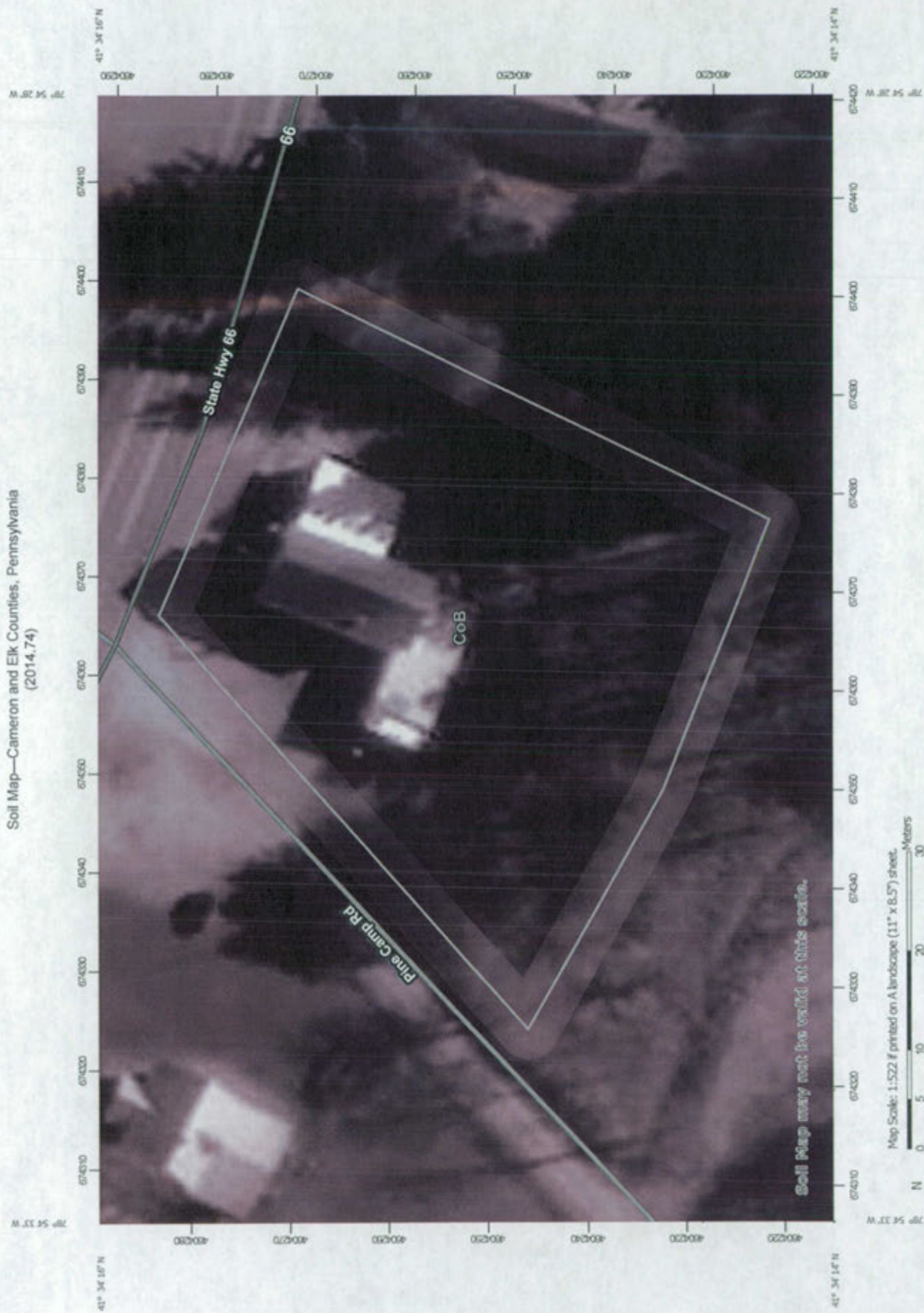
/ /
Date

Inspector Certification Number

Company Certification Number

Appendix D
Web Soil Survey

Soil Map—Cameron and Elk Counties, Pennsylvania
(2014.74)



Map Scale: 1:522 if printed on A landscape (11" x 8.5") sheet.

Map projection: Web Mercator Corner coordinates: WGS84 Edge ties: UTM Zone 17N WGS84

MAP LEGEND

Area of Interest (AOI)	Area of Interest (AOI)	Soil Area
Soils	Soil Map Unit Polygons	Stony Spot
	Soil Map Unit Lines	Very Stony Spot
	Soil Map Unit Points	Wet Spot
		Other
Special Point Features		Special Line Features
Blowout		Water Features
Borrow Pit		Streams and Canals
Clay Spot		Transportation
Closed Depression		Rails
Gravel Pit		Interstate Highways
Gravelly Spot		US Routes
Landfill		Major Roads
Lava Flow		Local Roads
Marsh or swamp		Background
Mine or Quarry		Aerial Photography
Miscellaneous Water		
Perennial Water		
Rock Outcrop		
Saline Spot		
Sandy Spot		
Severely Eroded Spot		
Sinkhole		
Slide or Slip		
Sodic Spot		

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.
Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Cameron and Elk Counties, Pennsylvania
Survey Area Data: Version 16, Sep 19, 2018

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 24, 2009—Jun 2, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
CoB	Cookport channery loam, 3 to 8 percent slopes	0.6	100.0%
Totals for Area of Interest		0.6	100.0%



Cameron and Elk Counties, Pennsylvania

CoB—Cookport channery loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 2wshg
Elevation: 1,190 to 3,110 feet
Mean annual precipitation: 38 to 50 inches
Mean annual air temperature: 45 to 49 degrees F
Frost-free period: 126 to 165 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Cookport and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Cookport

Setting

Landform: Ridges
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Concave, linear
Across-slope shape: Linear
Parent material: Acid fine-loamy residuum weathered from sandstone

Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material
Oe - 1 to 2 inches: moderately decomposed plant material
A - 2 to 4 inches: channery loam
E - 4 to 8 inches: channery loam
Bt - 8 to 23 inches: channery loam
Btx - 23 to 40 inches: channery sandy clay loam
C - 40 to 46 inches: channery sandy loam
R - 46 to 56 inches: bedrock

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: 16 to 30 inches to fragipan; 40 to 72 inches to lithic bedrock
Natural drainage class: Moderately well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.01 to 0.20 in/hr)
Depth to water table: About 15 to 21 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Low (about 3.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2e

Hydrologic Soil Group: D

Hydric soil rating: No

Minor Components

Hazleton

Percent of map unit: 10 percent

Landform: Hillslopes

Landform position (two-dimensional): Shoulder, summit

Landform position (three-dimensional): Interfluve

Down-slope shape: Convex

Across-slope shape: Convex, linear, concave

Hydric soil rating: No

Nolo

Percent of map unit: 5 percent

Landform: Depressions

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Interfluve, head slope

Down-slope shape: Concave

Across-slope shape: Concave

Hydric soil rating: Yes

Data Source Information

Soil Survey Area: Cameron and Elk Counties, Pennsylvania

Survey Area Data: Version 16, Sep 19, 2018

Appendix E
Laboratory Certificates of Analysis – Water Supply System

Analytical Services, Inc.

PADEP Lab ID# 33-00411

Billing Address: P.O. Box 237, Brockway, PA 15824

Physical Address: 51 ProChem Tech Drive, Brockway, PA 15824

Website: www.asibrockway.com

Laboratory: (814) 265-8749

Fax: (814) 265-8749

Email: analytical@windstream.net

Environmental Remediation & Recovery, Inc.

4250 Route 6 North

Edinboro, PA 16412

ATTN: Dave Birchard

RE: ASI# 162025

Please find enclosed the analytical results for samples received by the laboratory. Analyses were performed in accordance with 25 Pa. Code Chapter 252 as well as the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted below or in the body of the report.

This laboratory report shall not be reproduced, except in full, without the written consent of Analytical Services, Inc.

Project Narrative

Organic analysis subcontracted to NELAP laboratory # PA 07-062, see attached report.

Approved By:



10/30/2018

Analytical Services, Inc.

PADEP Lab ID# 33-00411

Billing Address: P.O. Box 237, Brockway, PA 15824

Physical Address: 51 ProChem Tech Drive, Brockway, PA 15824

Website: www.asibrockway.com

Laboratory: (814) 265-8749

Fax: (814) 265-8749

Email: analytical@windstream.net

Standard Qualifiers and Acronyms

1A: Analytical Services, Inc. does not hold accreditation from the PA DEP for this analyte and matrix combination.

SUB: This test was subcontracted to a PA DEP or NELAP laboratory as listed in the case narrative.

2C: Sample contained headspace when required to be sampled without headspace.

5C: Insufficient sample quantity supplied to the laboratory to meet method or QC requirements.

1H: Sample was received at the laboratory after the expiration of the holding time.

3H: Sample was analyzed outside the required holding time. Results may be biased low.

1K: The BOD (or CBOD) analysis did not meet minimum DO depletion of at least 2 mg/L.

2K: The BOD (or CBOD) analysis did not meet the minimum residual DO of at least 1 mg/L.

3K: The dilution water blank exceeded the maximum DO depletion of 0.2 mg/L.

1E: The results are below the lower limit of quantitation, but above the minimum detection limit. Results are estimated.

3E: Samples analysis did not achieve method requirement of 2.5-200 mg of residue on filter. Result is estimated.

BOD: Biochemical Oxygen Demand

CBOD: Carbonaceous Biochemical Oxygen Demand

MDL: Method Detection Limit

TNTC: Too Numerous to Count

DO: Dissolved Oxygen

QC: Quality Control

Analytical Services, Inc.

Analytical Report

Customer: Environmental Remediation & Recovery, Inc. Laboratory Sample ID: 162025
4250 Route 6 North Sample Date and Time: 10/17/18 09:30
Edinboro, PA 16412 Received Date: 10/17/18 11:00
Attention: Dave Birchard

162025.01	Cold Restroom Tap (Russell City Store)
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Microbiological Analysis

Parameter	Result	Units	Quantitation Limit	Method	Date Analyzed	Time	Analyst	Notes
Total Coliforms (PA)	Present	N/A	Cannot be present	SM 9223B	10/18/18	15:42	LG/CM	
E. Coli / PA confirmation	Absent	N/A	Cannot be present	SM 9223B	10/18/18	15:42	LG/CM	

Note: Total Coliform analysis started on 10/17/18 at 15:40. Final confirmation of results was completed 10/18/18 at 15:42.

Analytical Services, Inc.

Analytical Report

Customer: Environmental Remediation & Recovery, Inc. Laboratory Sample ID: 162025
4250 Route 6 North Sample Date and Time: 10/17/18 9:30
Edinboro, PA 16412 Received Date: 10/17/18 11:00
Attention: Dave Birchard

162025.02	Cold Restroom Tap (Russell City Store)
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Total Analysis

Parameter	Result	Units	Quantitation Limit	Method	Date Analyzed	Time	Analyst	Notes
VOC's								SUB



2019 Ninth Avenue
PO Box 1925
Altoona, PA 16603
(814) 946-4306
NELAP: PA 07-062, VA 460212

89 Kristi Road
Pennsdale, PA 17756
(570) 546-8899
PaDEP: PA 41-04684



State Certifications: MD 275, WV 364

www.fairwaylaboratories.com

Analytical Services, Inc - Brockway

Project: GENERAL

51 ProChem Tech Drive

Project Number: 162025

Reported:

Brockway PA, 15824

Collector: CLIENT

10/26/18 10:53

Project Manager: Analytical Services, Inc - Bro

Number of Containers: 3

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Sample Type	Date Sampled	Date Received
COLD RESTROOM TAP (RUSSEL CITY STORE)	8J19107-01	Water	Grab	10/17/18 09:30	10/19/18 16:15

Client Sample ID: COLD RESTROOM TAP (RUSSEL CITY STORE)

Date/Time Sampled: 10/17/18 09:30

Laboratory Sample ID: 8J19107-01 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Analytical Method	* Analyst	Note
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Volatile Organic Compounds by EPA Method 8260B/Prep Method 5030

1,3,5-Trimethylbenzene	<0.38	0.38	1.00	ug/l	10/23/18 08:03	EPA 8260B	bag	
1,2,4-Trimethylbenzene	<0.32	0.32	1.00	ug/l	10/23/18 08:03	EPA 8260B	bag	
Benzene	<0.25	0.25	1.00	ug/l	10/23/18 08:03	EPA 8260B	bag	
Toluene	<0.26	0.26	1.00	ug/l	10/23/18 08:03	EPA 8260B	bag	
Ethylbenzene	<0.37	0.37	1.00	ug/l	10/23/18 08:03	EPA 8260B	bag	
Xylenes (total)	<1.07	1.07	2.00	ug/l	10/23/18 08:03	EPA 8260B	bag	
Isopropylbenzene	<0.46	0.46	1.00	ug/l	10/23/18 08:03	EPA 8260B	bag	
Methyl tert-butyl ether	<0.21	0.21	1.00	ug/l	10/23/18 08:03	EPA 8260B	bag	
Naphthalene	<0.27	0.27	1.00	ug/l	10/23/18 08:03	EPA 8260B	bag	
Surrogate: 4-Bromofluorobenzene	95.6 %		70-130		10/23/18 08:03	EPA 8260B	bag	
Surrogate: 1,2-Dichloroethane-d4	97.2 %		70-130		10/23/18 08:03	EPA 8260B	bag	
Surrogate: Fluorobenzene	98.4 %		70-130		10/23/18 08:03	EPA 8260B	bag	

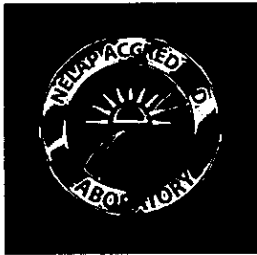
Fairway Laboratories, Inc.

Reviewed and Submitted by:

Michael P. Tyler
Laboratory Director

Fairway Labs in Altoona, PA is a NELAP (National Environmental Laboratory Accreditation Program) accredited lab, and as such, certifies that all applicable test results meet the requirements of NELAP, unless otherwise stated on the analytical report.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



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PO Box 1925
Altoona, PA 16603
(814) 946-4306
NELAP: PA 07-062, VA 460212

89 Kristi Road
Pennsdale, PA 17756
(570) 546-8899
PaDEP: PA 41-04684



State Certifications: MD 275, WV 364

www.fairwaylaboratories.com

Analytical Services, Inc - Brockway

Project: GENERAL

51 ProChem Tech Drive

Project Number: 162025

Reported:

Brockway PA, 15824

Collector: CLIENT

10/26/18 10:53

Project Manager: Analytical Services, Inc - Bro

Number of Containers: 3

Definitions

If surrogate values are not within the indicated range, then the results are considered to be estimated.

Reporting limits are adjusted accordingly when samples are analyzed at a dilution due to the matrix.

MBAS, calculated as LAS, mol wt 348

If the solid sample weight for VOC analysis does not fall within the 3.5-6.5 gram range, the results are considered estimated values.

Unless otherwise noted, all results for solids are reported on a dry weight basis.

Samples collected by Fairway Laboratories' personnel are done so in accordance with Standard Operating Procedures established by Fairway Laboratories.

- # The following analyses are to be performed immediately upon sampling: pH, sulfite, chlorine residual, dissolved oxygen, filtration for ortho phosphorus, and ferrous iron. The date and time reported reflect the time the samples were analyzed at the laboratory; and should be considered as analyzed outside the EPA holding time.
- ^ The following analytes are to be filtered immediately upon sampling: Hexavalent Chromium. Filtration through a 0.45 micron filter within 15 minutes of sampling is required for compliance with the Clean Water Act (CWA) for reporting of hexavalent chromium to prevent interconversion of chromium species.
- * P indicates analysis performed by Fairway Laboratories, Inc. at the Pennsdale location. This location is PaDEP Chapter 252 certified.
- * G indicates analysis performed by Fairway Laboratories, Inc. at the Greensburg location PaDEP: 65-00392. This location is PaDEP Chapter 252 certified.
- < Represents "less than" - indicates that the result was less than the reporting limit.
- MDL Method Detection Limit - is the lowest or minimum level that provides 99% confidence level that the analyte is detected. Any reported result values that are less than the RL are considered estimated values. If Radiological results are reported, the MDC - Minimum Detectable Concentration is shown in the MDL column.
- RL Reporting Limit - is the lowest or minimum level at which the analyte can be quantified.
- [CALC] Indicates a calculated result. Calculations use results from other analyses performed under accredited methods.

Fairway Laboratories, Inc.

Fairway Labs in Altoona, PA is a NELAP (National Environmental Laboratory Accreditation Program) accredited lab, and as such, certifies that all applicable test results meet the requirements of NELAP, unless otherwise stated on the analytical report.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



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89 Kristi Road
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PaDEP: PA 41-04684



www.fairwaylaboratories.com

State Certifications: MD 275, WV 364

Analytical Services, Inc - Brockway

Project: GENERAL

51 ProChem Tech Drive

Project Number: 162025

Reported:

Brockway PA, 15824

Collector: CLIENT

10/26/18 10:53

Project Manager: Analytical Services, Inc - Bro

Number of Containers: 3

Terms & Conditions

Services provided by Fairway Laboratories Inc. are limited to the terms and conditions stated herein, unless otherwise agreed to in a formal contract.

CHAIN OF CUSTODY Fairway Laboratories Inc. ("Fairway," "us" or "we") will initiate a chain-of-custody/request for analysis upon sample receipt unless the client includes a completed form with the received sample(s). Upon request, Fairway will provide chain-of-custody forms for use.

CONFIDENTIALITY Fairway maintains confidentiality in all of our client interactions. The client's consent will be required before releasing information about the services provided.

CONTRACTS All contracts are subject to review and approval by Fairway's legal council. Each contract must be signed by a corporate officer.

PAYMENT/BILLING Unless otherwise set forth in a signed contract or purchase order, terms of payment are "NET 30 Days." The time allowed for payment shall begin based on the invoice date. A 1.5% per month service charge may be added to all unpaid balances beyond the initial 30 days. In its sole discretion, Fairway reserves the right to request payment before services and hold sample results for payment of due balances. We will not bill a third party without prior agreement among all parties acknowledging and accepting responsibility for payment.

SAMPLE COLLECTION AND SUBMISSION Clients not requesting collection services from Fairway are responsible for proper collection, preservation, packaging, and delivery of samples to the laboratory in accordance with current law and commercial practice. Fairway shall have no responsibility for sample integrity prior to the receipt of the sample(s) and/or for any inaccuracy in test or analyses results as a result of the failure of the client or any third party to maintain the integrity of samples prior to delivery to Fairway. All samples submitted must be accompanied by a completed chain of custody or similar document clearly noting the requested analyses, dates/time sampled, client contact information, and trail of custody. Samples received at the laboratory after business hours are verified on the next business day. Discrepancies are documented on the Receiving Document.

SUBCONTRACTING Some analyses may require subcontracting to another laboratory. Unless the client indicates otherwise, this decision will be made by Fairway. Subcontracted work will be identified on the final report in accordance with NELAC requirements.

RETURN OF RESULTS Fairway routinely provides faxed or verbal results within 10 working days of receipt of sample(s) and a hard copy of the data results is routinely received via US Postal Service within 15 working days. At the request of the client, Fairway may offer expedited return of sample results. Surcharges may apply to rush requests. All rush requests must be pre-approved by Fairway. We reserve the right to charge an archive retrieval fee for results older than one (1) year from the date of the request. All records will be maintained by Fairway for 5 years, after which, they will be destroyed.

SAMPLE DISPOSAL Fairway will maintain samples for four (4) weeks after the sample receipt date. Fairway will dispose of samples which are not and/or do not contain hazardous wastes (as such term is defined by applicable federal or state law), unless prior arrangements have been made for long-term storage. Fairway reserves the right to charge a disposal fee for the proper disposal of samples found or suspected to contain hazardous waste. A return shipping charge will be invoiced for samples returned to the client at their request.

HAZARD COMMUNICATION The client has the responsibility to inform the laboratory of any hazardous characteristics known or suspected about the sample, and to provide information on hazard prevention and personal protection as necessary or otherwise required by applicable law.

WARRANTY AND LIMITATION OF LIABILITY For services rendered, Fairway warrants that it will apply its best scientific knowledge and judgment and to employ its best level of effort consistent with professional standards within the environmental testing industry in performing the analytical services requested by its clients. We disclaim any other warranties, expressed or implied by law. Fairway does not accept any legal responsibility for the purposes for which client uses the test results.

LITIGATION All costs associated with compliance to any subpoena for documents, for testimony in a court of law, or for any other purpose relating to work performed by Fairway Laboratories, Inc. shall be invoiced by Fairway and paid by client. These costs shall include, but are not limited to, hourly charges for the persons involved, travel, mileage, and accommodations and for any and all other expenses associated with said litigation.

Fairway Laboratories, Inc.

Fairway Labs in Altoona, PA is a NELAP (National Environmental Laboratory Accreditation Program) accredited lab, and as such, certifies that all applicable test results meet the requirements of NELAP, unless otherwise stated on the analytical report.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

PO Box 237
51 ProChemTech Drive
Brockway, PA 15824-0237
Phone: (814) 265-8749 FAX: (814) 265-8749
www.ssibrockway.com

Sub to: **FAIRWAY LABORATORIES. INC.**
Address: **2019 9th Ave.**
Altoona, PA 16602
Phone: **(814) 948-4306**
FAX: **(814) 948-8791**

COC ID:	ASI # 162025
Date Shipped:	
Delivery Method:	LABORATORY COURIER
Project:	
Email results to:	analytical@windstream.net
DUE DATE:	

Sample Identification	Sample Date/Time	Testing	Method	Matrix	# of Containers	Type of Container	Preservation
Cold Restroom Tap (Russell City Store)	10/17/2018 9:30	VOCs (List Attached)		DW	3	40mL Vials	HCl

Comments:

Temp: _____ °C	On ice: Yes ☐ No ☐	Is this sample reportable to DEP-DWELR? Yes ☐ No ☐
Approved Container: _____	Yes ☐ No ☐	PWS Client Name: _____
Sample Preserved: _____	Yes ☐ No ☐	Contact Name: _____ Phone: _____
Sample w/in Hold: _____	Yes ☐ No ☐	PWS ID # _____
Three digit PWS location _____		
Monitoring Period - Monthly, Quarterly, Annual, etc. _____		
Sample Type - E, D, R, P, S, etc. _____		

RELINQUISHED BY SIGNATURE:	DATE:	TIME:	RECEIVED BY SIGNATURE:	DATE:	TIME:
Mayhew	10-19-18	1325	James Wardrop	10-19-18	1325
James Wardrop	10-19-18	1615			
			Colley	10-19-18	1615

Page of

Page 2 of 2

Correct containers for all the analysis requested? ☒ * Matrix: both

Matrix: lutz

[illegible]

CLIENT RESPONSE:	()
Proceed with analysis; quality data	()
Will Resample	()
Provided Information	()
No Response; Proceed and qualified	()

*** Comments:**

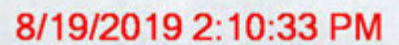
[illegible]

Appendix F
Water Well Survey

Water Well Survey Data
Parcels 500 ft Down Gradient of Russell City Store
1536 Routes 66/948
ER&R Project #2014.74

Elk County Tax Assessment Parcel #	Property Address	Resident Name(s)	Owner Name(s)	Mailing Address	Well or Spring on Property? Y/N	Connected to Unpermitted Water Supply System? Y/N	Notes	Method of survey
04-04-192-8572	1492 Routes 66/948 Kane, PA 16735	John M. Jubon	John M. Jubon	11 Route 66 Deyoung, PA 16728	N	unknown		door-to-door N/A; 1st class and cert mailings
04-04-192-8585	1500 Routes 66/948 Kane, PA 16735	Gail L. Wilson	Gail L. Wilson	7390 Route 59 Lewis Run, PA 16738	N	Y	seasonal home	door-to-door N/A; 1st class and cert mailings
04-04-192-8598	1508 Routes 66/948 Kane, PA 16735	Daniel A. Klaiber	Same	Same	Y	Y	Shallow well on property; reportedly unused since 2010 property purchase	
04-04-192-8911	1518 Routes 66/948 Kane, PA 16735	Theodore J. Lutz	Same	1536 Routes 66/948 Kane, PA 16735	N	Y		
04-04-192-8921	Routes 66/948 Kane, PA 16735	NA	Tennessee Gas Pipeline CO. (Scott Lewis)	1211 Greenville Mercer Rd. Mercer, PA 16137	Y	N	vacant land; well reportedly unused for potable purposes	certified mail
04-04-192-8937	Routes 66/948 Kane, PA 16735	NA	Theodore J. Lutz	1536 Routes 66/948 Kane, PA 16735	N	N		
04-04-192-9754	1550 Routes 66/948 Kane, PA 16735	Michael and Loretta Niklas	green house to the east		NR	NR	closed-in-place USTs on the parcel	sent certified mail, attempt 5-11, 5-20, 5-26 - undelivered
04-04-192-9759	1550 Routes 66/948 Kane, PA 16735	NA	Michael and Loretta Niklas	Same	NR	NR	commercial land	certified mail
04-04-192-9833	Routes 66/948 Kane, PA 16735	NA	East Resources, Inc.	Box 4369 Houston, TX 77210	NR	NR	commercial land	
04-04-192-9467	1543 Routes 66/948 Kane, PA 16735	Steven and Ginger Yasurek	Same	Box 10 Unit 2 Route 66 Deyoung, PA 16728	well on property; refused to reply			sent certified mail
04-04-192-9498	1551 Routes 66/948 Kane, PA 16735	NA	Steven and Ginger Yasurek	Box 10 Unit 2 Route 66 Deyoung, PA 16728	well on property; refused to reply			sent certified mail
04-04-192-8669	1525 Coon Run Rd. Kane, PA 16735	John and Amy Hutchins	Same	Same	N	Y		sent certified mail
04-04-192-8656	1519 Routes 66/948 Kane, PA 16735	Robert and Sally Allhouse	Same	Same	N	Y		
04-04-192-9416	Coon Run Rd. Kane, PA 16735	NA	John and Amy Hutchins	1525 Coon Run Rd. Kane, PA 16735	N	Y	vacant land	certified mail
04-04-192-8391	Routes 66/948 Kane, PA 16735	NA	Cornelia Howard	1520 River Forest Dr. Freeport, PA 16229	N	N	vacant land	
04-04-192-8642	1501 Routes 66/948 Kane, PA 16735	Timothy and Jason Michel	Same	120 Doubt Rd. Renfrew, PA 16053	N	Y	seasonal home	certified mail
04-04-192-9118	Coon Run Rd. Kane, PA 16735	Robert D. Heeter	Same	1423 West 37th St Erie, PA 16508	N	Y	seasonal home	
04-04-192-9168	85 Coon Run Rd. Kane, PA 16735	Ken and Amy Beers	Same	Same	N	N		
04-04-192-9522	Coon Run Rd. Kane, PA 16735	Gregory and Christine Fassbind	Same	40632 North Lake Bluff Dr. Antioch IL, 60002			seasonal home	
04-04-192-9294	90 Coon Run Rd. Kane, PA 16735	Daniel and Carrie Dempsey	Same	Same	N	Y	seasonal home	
04-04-011-9375	1574 Routes 66/948 Kane, PA 16735	Lynda Letzia	Same	Unit 1 Box 7 De Young, PA 16728	spring; no access granted	Y	Parcels 04-04-192-9769, 04- 04-192-9867, 04-04-192- 9871 combined to one parcel 04-04-011-9375 in 2010	
04-04-192-8241	1463 Routes 66/948 Kane, PA 16735	Franklin G. Reigel	Same	Same	N	Y		
04-04-192-8446	1484 SR 66/948 Kane PA 16735	David & Lois Ann Raubenstrauch	same	same				
04-04-192-8442	1454 SR 66/948 Kane PA 16735	Margaret Larson	same	same				

DeYoung post office closed in 2017; all mail handled through Kane PO
updated Oct-2018 reviewed Jun-2019



Appendix G
Site Specific Health & Safety Plan

HEALTH AND SAFETY PLAN

Russell City Store
1536 State Route 66
Kane, Pennsylvania, 16735
PADEP Facility ID # 24-30431



SAFETY MEETING ATTENDANCE LOG

Date: _____

Attended By:

Printed Name/Company

Signature

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Topics covered:

- ___ HASP location
- ___ Telephone Service
- ___ Emergency Phone Numbers
- ___ Safety Equipment Availability
- ___ Site Ingress/Egress
- ___ Site Security
- ___ Site Evacuation
- ___ Other _____
- ___ _____

Meeting conducted by: Name _____
Title _____

1.0 PROJECT INFORMATION

This site specific health and safety plan (HASP) has been developed by Environmental Remediation & Recovery, Inc. (ER&R) in order to inform workers of the potential health and safety hazards associated with subsurface investigation activities at the Russell City Store Site located in Kane, Pennsylvania. The proposed work plan includes the installation of soil borings and monitoring wells.

The HASP also establishes the health and safety procedures required to help minimize potential risks to the personnel who will be performing the prescribed scope of work. All proposed activities must be conducted in compliance with the HASP in addition to applicable federal, state and local health, safety and construction regulations.

Subcontractors, if applicable, may develop their own HASP related to their specific on site activities. These HASP must minimally be as protective as ER&R's HASP and must be submitted to ER&R for corporate review prior to start of on site activities. Subcontracted personnel (e.g., each individual on site), which chose to follow ER&R's HASP, must review and acknowledge receipt of the HASP (Front Cover Page).

Personnel covered by this HASP who cannot or will not comply with the HASP requirements will be excluded from site activities.

A pre-entry health and safety pre-construction "tailgate" meeting will be conducted prior to the commencement of on site activities and at other times as deemed necessary. The focus of each tailgate meeting shall be to discuss the specifics of the HASP as well as any other specific health and/or safety concerns.

The procedures in this HASP have been developed based upon current knowledge regarding specific chemical and physical hazards that are known, anticipated or alleged for each of the tasks to be conducted at the site. Should additional site specific or background knowledge become available pertaining to site hazards, or should operations at the site change during completion of field activities, it may be necessary to modify this HASP. All proposed modifications to this HASP must be reviewed and approved by ER&R before any such modifications are implemented. Any significant modifications must be incorporated into the written HASP and the document must be reissued.

2.0 PROJECT DESCRIPTION

The site is located at the northeastern corner of the intersection formed by State Route 66 and Pine Camp Road in the Borough of DeYoung (Highland Twp.), Elk County, Pennsylvania. According to Elk County records the parcel (04-04-192-9741) is owned by Soggy Bottom, LLC. The parcel is 0.34 acres. The site was developed and has operated as a retail refueling and convenience store since the 1960's, referred to as Russell City Store.

USTs 003 and 004 were closed, by removal, on November 25, 2014. The two tanks were located on the northeastern corner of the site. The USTs were located with the long axis in the north-south direction perpendicular to State Route 66 with UST #004 (unleaded) being the easternmost of the USTs. The tanks and tank piping were removed without incident and obvious soil contamination was not encountered. The excavated soils were reused for backfill. The USTs were in very good condition upon removal.

Confirmatory soil samples were collected and analyzed as part of the closure site assessment. Samples were submitted for analysis of PADEP Short list parameters for unleaded gasoline. The samples collected from beneath and the east and west dispenser contained concentrations of

1,3,5 trimethylbenzene and 1,2,4 trimethylbenzene above PADEP Statewide Health Standards. A Notice of Reportable Release was submitted to the PADEP on December 22, 2014.

3.0 SCOPE OF WORK

Site characterization work at the site is being completed by Environmental Remediation & Recovery, Inc. (Edinboro, PA). ER&R shall comply with all federal, state, and local laws, regulations and ordinances in the conduct of its operations within the State highway right-of-way. A site specific Health and Safety Plan (HASP) will be developed prior to site work.

ER&R's scope of work includes installation of shallow soil borings to be installed at strategic locations both on- and off-site. Five drilling locations will be sited within the SR 66 right-of-way, pending the approval of a PADOT right-of-entry (R/E) agreement. Work will be complete by ER&R, Inc. Drilling equipment and support vehicles brought onto the right-of-way will be parked in an area that will ensure that it will not be a safety hazard or impede the traveling public or PennDOT operations.

Prior to the drilling event, the Pennsylvania One-Call System will be activated in order to locate member underground utilities at the site. Additionally, drilling locations will be cleared to a minimum depth of four feet below grade (hand-clearing technique) in order prevent damage to any unknown or unmarked underground utilities.

Soil and groundwater (if encountered) samples will be collected during drilling activities. Soil samples will be field screened for the presence of volatile organic compounds (VOCs) using a portable photo-ionization detector. Based upon field screening results, one sample interval from each boring will be selected for laboratory analysis and field preserved using EPA Method 5035. Requested analytes will include the PADEP short list (new) of unleaded gasoline parameters. Drilling spoils generated during the subsurface investigation will be containerized and staged on-site pending waste characterization. Generated waste will not be stored on the right-of-way.

The five soil borings will be completed as monitoring wells in order to evaluate water quality in order to fully characterize the contaminant plume. The monitoring wells will be in a paved area of the right-of-way. Well construction will include 2-inch diameter PVC flush thread well screen/riser, silica sand pack, bentonite seal, grout and a traffic rated manhead. They will be completed using flush-mount construction.

Wells will not be installed in areas where they are likely to be damaged by routine maintenance. Wells will not be installed in areas where storm water puddles or storm water flow concentrates. Monitoring well casing references, soil boring locations and site features will be surveyed to a common datum by a PA licensed surveyor.

Monitoring wells will be developed to remove sediment and fines generated during drilling. Depth to groundwater measurements will be collected. Based upon current knowledge, no liquid waste is anticipated. Development and purge water will be treated with a portable granular activated carbon unit and discharged to the ground surface on-site. Generated waste water will not be treated or discharged in the right-of-way.

Monitoring wells will be purged and sampled on a quarterly basis. Samples will be collected in laboratory prepared bottleware and submitted for analysis of the PADEP short list (new) of unleaded gasoline parameters. The life expectancy of the monitoring wells in two years.

4.0 PROJECT ORGANIZATION

The ER&R Field Project Manager (PM) will ensure that all required health and safety equipment is on site and in good working order.

The PM is responsible for:

- ensuring that the HASP adequately addresses all anticipated hazardous site conditions,
- verifying that all project personnel have the necessary training to perform the work, and
- responding promptly to any unanticipated site conditions.

Prior to any employees beginning excavation work at the site, all personnel will have had the opportunity to review this HASP and have any questions answered that may arise during their review. The PM, as previously indicated, shall conduct a "tailgate" meeting to brief all site personnel on the contents of the HASP. The purpose of the tailgate meeting shall be to disseminate pertinent site information prior to commencement of field activities.

A brief site walkover will be conducted to familiarize site personnel with specific conditions, boundaries, physical hazards, routes of ingress/egress, utility markings, etc. These actions by ER&R do not in anyway relieve ER&R subcontractors or other visitors from their responsibility to provide their personnel with adequate and proper supervision, safety training, instruction, personal protective equipment (PPE), etc.

5.0 HAZARD ASSESSMENT

Hazards associated with the scope of work are both physical and chemical.

5.1 Safety Hazards

Fire – Emergencies, such as fires, can often be recognized early by visual, olfactory or other means. In order to recognize the potential for fire emergencies to occur, routine surveillance should be performed of the work area. All situations that may result in a fire emergency should be corrected immediately.

If it is safe to do so, field personnel will use the on-site fire extinguisher to control or extinguish the fire, and will remove or isolate materials that may contribute to the fire. If such actions are not safe, evacuate the area immediately. Assemble in a predestinated area and account for all personnel. Contact the fire and police departments.

Spill or Release of Hazardous Material - Clean up, isolate, or contain any spill as appropriate using absorbent material (booms, pads, etc.). Contact ER&R H&S Officer, emergency response personnel, and/or client company officials as appropriate.

5.2 Physical Hazards

The primary hazards anticipated at the site are electrical, fire, explosion and machinery-related.

Of prime concern is the presence of underground hazards. Prior to the start of work, the Pennsylvania One Call utility location system was activated a minimum of three business days prior to commencement of field work.

Machinery:

During excavation operations machinery will be operated on site. Hardhat, steel-toed safety shoes and eye protection must be worn when operating said equipment. Care and common sense should be exercised when working on or around this equipment. A safe distance shall be maintained between site personnel and moving equipment. The excavator will clear all locations of active underground lines (electric, gas, telephone, cable etc.) with the appropriate utility companies prior to the start of excavation.

Hands Tools and Power Equipment:

All hand tools and power equipment used for this project shall be inspected and maintained in good working order. Operators of same shall be familiar with the particular equipment operator's manual and procedures for safe operation. Tools and equipment shall be used in a safe manner and used only for those functions for which they were designed to perform.

5.3 Chemical Hazards

Known or suspected hazardous/toxic materials include: Petroleum products including unleaded gasoline, diesel fuel and associated chemicals. Chemical hazards related to this project concern exposure to these materials via inhalation and dermal contact. The highest potential for exposure occurs during the performance of the actual Tank Cleaning and Removal (Confined Space Entry). Additional precautions may be necessary to avoid inhalation or ingestion from residue remaining in tanks.

6.0 EMERGENCY RESPONSE PROCEDURES

Emergency phone numbers and other information are provided as Attachment A. In the event of injury or emergency situation a Supervisors Accident Incident Report shall be completed (see Attachment B) and the following procedures shall be implemented:

6.1 First Aid

Skin Contact - Remove any contaminated equipment and clothing. Thoroughly wash affected area with soap and water. Seek qualified medical help if necessary.

Inhalation - Move to fresh air at least 50 feet upwind from vapor source if encountered. Seek qualified medical help if necessary.

Eye Contact - Hold eye(s) open, flush with clean water for a minimum of 10 minutes. Seek qualified medical attention.

Ingestion - Do not induce vomiting. Seek qualified medical attention.

Injury - A first aid kit shall be available on-site in case of personal injury. Administer first aid and seek qualified medical assistance if necessary. Medical emergencies take precedence over decontamination procedures. Prior to the start of work, site personnel will be informed as to the location of the nearest hospital and telephone.

6.2 Heat Emergencies

There are three common emergencies brought about by prolonged exposure to excessive heat: heat cramps, heat exhaustion and heat stroke. The following paragraphs outline the signs and symptoms commonly associated with the above described emergencies.

Heat Cramps - severe muscle cramps (usually in legs and abdomen) followed by exhaustion and pain in ears, nose, hands and feet.

Heat Exhaustion - often identified by rapid shallow breathing, weak pulse, cold clammy skin, heavy perspiration, total body weakness, dizziness and possible unconsciousness.

Heat Stroke - identified by deep breaths followed by shallow rapid breathing, strong pulse then rapid weak pulse, dry hot skin, dilated pupils, loss of consciousness (possible coma); known to cause seizures or muscular twitching.

In the event any of these symptoms are identified, seek medical attention, move victim to nearby cool area and monitor condition and seek immediate medical attention.

7.0 PERSONAL PROTECTIVE EQUIPMENT (PPE)

Level D PPE (consisting of hard hats, safety shoes and eye protection) will be worn while working within the designated work site. Due to the excessive noise levels of some operating equipment, hearing protection will be provided for each worker and utilized when conditions warrant its use.

In the event site conditions change or additional health/safety information is gathered, personal protective equipment will be adjusted and/or increased in accordance with the known hazard.

8.0 SITE CONTROL

Work zones shall be appropriately demarcated and identified in order to exclude non-project related personnel and/or equipment from entering the work zone. Similarly, the work zone shall be identified in order to minimize disruptions to everyday, ongoing plant activities, if applicable.

Designation of Work Zones

The designation of the work and support zones shall be completed as appropriate. Access by personnel, contractors and subcontractors shall be controlled as appropriate in each zone.

9.0 DECONTAMINATION

9.1 Personnel

Disposable, dedicated working and sampling equipment shall be utilized whenever possible in the event of exposure. Proper decontamination is required for all contaminated personnel and equipment. Personnel decontamination will be accomplished by following a systematic procedure of cleaning and removing personal protective clothing. Contaminated personal protective equipment such as boots and hard hats, will be rinsed free of heavy amounts of contamination scrubbed in a detergent solution (Alconox) and rinsed clean. Any exposed human flesh shall be thoroughly flushed with clean water, scrubbed with soap and water and rinsed clean with copious amounts of clean water.

Disposable personal protective equipment (poly tyvek coveralls, gloves, etc.) will be transferred to appropriate waste receptacles on site.

9.2 Equipment Decontamination

Excavation equipment should be decontaminated at the completion of excavation activities, minimizing dust and disturbance.

Disposable sampling devices must be contained and disposed of in an appropriate manner. Non-disposable equipment used for the collection, preparation, preservation and storage of samples must be cleaned prior to their usage and after each subsequent use. If possible, try to minimize field decontamination by using disposable equipment.

Materials needed for decontamination are based upon the equipment to be cleaned. Generally the equipment used is as follows:

- Cleaning solutions. These are dependent upon the parameters which are being analyzed.
- Water. In some cases, tap water may be adequate for initial or intermediate rinses. The final rinse must be with deionized or distilled water.
- Paper towels for use in wiping outside surfaces that are not exposed to the sample.
- Plastic for staging /covering soils

The procedure to be used to decontaminate sampling equipment is described below:

Scrub equipment with Alconox detergent
Rinse with tap water
Wash or rinse through the use of a squirt bottle
Rinse with isopropyl alcohol
Rinse three times with deionized/distilled water
Air dry all equipment

10.0 FIELD GENERATED WASTE DISPOSAL

All field generated, contaminated waste material shall be containerized. Field generated waste may include soil cuttings which will be placed on plastic and covered until evaluated. For purposes of this HASP, all wastes are presumed to be classified as non-hazardous waste.

11.0 GENERAL WORK PRECAUTIONS

No eating, drinking, use of tobacco products including chewing tobacco, or other hand-to-mouth contact activities are permitted within the immediate designated work area.

Emergency telephone numbers are provided on Appendix B.

12.0 POTENTIAL OR ACTUAL FIRE/EXPLOSION

Emergencies, such as fires, can often be recognized early by visual, olfactory or other means. In order to recognize the potential for fire emergencies to occur, routine surveillance should be performed of the work area. All situations that may result in a fire emergency should be corrected immediately.

If it is safe to do so, field personnel will use the on-site fire extinguisher to control or extinguish the fire, and will remove or isolate materials, which may contribute to the fire. If such actions are not safe, evacuate the area immediately. Assemble in a predesignated area and account for all personnel. Contact the project manager and the fire and police departments.

13.0 SPILL OR RELEASE OF HAZARDOUS MATERIAL

Clean up, isolate or contain any spill as appropriate using absorbent material (booms, pads, etc.). Contact emergency response personnel, Project Manager.

14.0 EVACUATION OF WORK AREA

In the event of an emergency requiring an evacuation of the work area, a verbal command will be given by the Project Manager to evacuate the area. Personnel will immediately exit the work area and assemble in the predesignated location. The Project Manager will account for all personnel and issue further instructions, if necessary. Personnel will not re-enter the work area until the emergency condition has been evaluated and correction and the PM authorizes re-entry.

**ATTACHMENT B
ACCIDENT/INCIDENT REPORT**

Injured Employee Name _____

Title _____

Date of accident/incident _____

Time _____

Location of accident/incident _____

Description of type of work employee engaged in when injured

Nature of accident/incident

How did accident/incident occur?

What can be done to prevent this accident/incident from recurring?

Project Manager Signature _____

Date _____

Reviewer's Signature _____

Date _____

ATTACHMENT A

EMERGENCY SERVICES PHONE NUMBERS

Russell City Store
1536 State Route 66
Kane, Pennsylvania, 16735
PADEP Facility ID # 24-30431

Emergency Medical Facility: Kane Community Hospital
Telephone (814) 837-8585/ 911

Fire Department: Kane Volunteer Fire Department
Telephone 911

Ambulance: Kane Ambulance Service
Telephone 911

Police Department: Kane Police Department
Telephone 911

Poison Control Center: Pittsburgh Poison Center
Telephone (412) 681-6669

PADEP Northwest Regional Office Meadville:

Emergency Response
Coordinator: (814) 332-6816 Dan Holler
Emergency Response: (800) 373-3398
Telephone: (814) 332-6945

Environmental Remediation & Recovery, Inc.

Project Manager: David J. Birchard
Office Telephone: (814) 734-6411
Cell: (814) 449-1768

The following items are recommended on-site during working hours:

- a. First Aid Kit
- b. Portable Eye Wash Station
- c. Portable Fire Extinguisher, "A" "B" "C" Dry Chemical Type
- d. Communication Equipment (Cellular Phone)

Appendix H
ER&R Soil/Groundwater Sampling and Waste Management Plan

Environmental Remediation & Recovery, Inc.
Soil/Groundwater Sampling and Waste Management Plan
Russell City Store
1536 State Route 66, Kane, PA
PADEP Facility ID # 24-30431
USTIF Claim # 2014-0170
ER&R Project # 2014.74

1.0 Introduction

The following pertains to ER&R's standard operating procedures for the collection of environmental samples which includes procedures for sampling plan preparation, ER&R personnel training, collecting environmental samples, and outlines for the standard quality assurance/quality control practices.

The procedures in this document have been standardized to make them applicable to all types of environmental investigation. Under certain site-specific conditions, all of the procedures discussed may not be appropriate. In such cases, it will be necessary to adapt the procedures given to the specific conditions of the investigation.

2.0 Site Specific Information

The Site is located at the northeastern corner of the intersection formed by State Route 66 and Pine Camp Road in the Kane, Elk County, Pennsylvania. The Site is comprised of two parcels totaling 0.43 acres. According to Elk County records the parcels (04-04-192-9741 and 04-04-192-8937) are owned by Soggy Bottom LLC. The Site is bounded to the east by a former automotive garage, to the west by Pine Camp Road (a private drive), to the north by Route 66 and to the south by undeveloped property. Residential properties are located across Route 66 to the north. The Site is served with water provided by the Spring Water Company of DeYoung. The Site utilizes an on-lot sanitary wastewater treatment.

A two-story wood framed building (approximately 2500 SF) is located near the north central portion of the property. The building consists of a general store and storage area on the first floor with a second floor private residence. An addition was constructed on the eastern side of the original structure. Exact construction dates are unknown and outside the scope of this report. The Site is currently operated by a tenant, Mr. Frye, as DJ's Russell City Store.

3.0 Health and Safety Training - Field Operations

Site personnel associated with field activities in which the potential for exposure to hazardous substances above the Permissible Exposure Limit (PEL) are required to participate in a health and safety training program that complies with the criteria set forth by ER&R and OSHA as per 29 CFR 1910.120. This program instructs employees on general health and safety principles and procedures, proper operation of monitoring instruments, and use of personal protective equipment.

There must be a task specific Health and Safety Plan written for all phases of fieldwork conducted on any project. The personnel working on any task must have read and signed the Health and Safety Plan before initiating work on that project.

Specialized training is provided as dictated by the nature of site activities. Specialized training provides for activities such as confined space entry, excavations and handling of unidentified substances. Employees involved in these types of activities are given off-site instruction regarding potential hazards involved with safety activities and the appropriate health and safety procedures.

Site personnel involved in the field activities will have received the appropriate basic training plus additional training where needed. Specialty training shall be provided as determined by task and responsibility. All training of personnel is conducted under direct supervision of a trained Health and Safety Officer.

4.0 Preliminary Field Procedures

Prior to going to a site, specifics of the well construction shall be obtained. The diameter of the well casing is the most important as it will directly affect the equipment and procedures used during well evacuation and sampling. It is also important to know the accessibility of the wells. This may affect the selection of sampling equipment to be used or, at a minimum, the procedure for getting the equipment to the well location.

4.1 Well Measurements

Prior to collecting groundwater samples, depth to ground water elevations will be measured using an electronic water level tape. The tape shall be decontaminated between each measurement to minimize cross-contamination. Decontamination procedures are discussed in Section 8.2.

5.0 Procedures for Collection of Groundwater Samples

Groundwater samples will be collected quarterly from the monitoring wells by a trained technician(s) under the direction of the Project Manager (PM).

Prior to sampling, locate all the wells on a site map and determine the order in which each well will be sampled. If water quality information is available, the sampling order should proceed from the least contaminated well to the most contaminated well. Direction of known ground water flow can also be used to determine sampling order. Wells up gradient of the source area should be sampled first, then proceed from wells farthest down gradient and work towards the source area.

5.1 Equipment

The following list of equipment may be needed when developing/purging and sampling monitoring wells:

- Field book/Site map
- Appropriate sample containers.
- Coolers and ice packs.
- Field measurement equipment.
- Chain of Custody Forms.
- Many monitoring wells have locking caps and keys will be necessary to gain access. In addition, some sites may be secured, in which keys and/or permission may be necessary.
- Tools: including screwdrivers, ratchets, hammers, pipe wrenches, bolt cutters, and chisels. All or any of these may be necessary for removing steel security caps on wells, which have not been recently opened.
- A tape measure may be useful for measuring the diameter of the well casing and the elevation of the well casing below ground level.
- Electronic water level indicators for determining the static water level and the total depth of the well if it is unknown.
- Well development/purging equipment – the peristaltic pump, Grundfos pump, or disposable bailers, YSI multi-parameter meter, etc.
- Decontamination solution/water used for decontaminating all non-disposable equipment that comes into contact with the ground water or contaminated material.

After assembling all of the required sampling equipment, be sure that it is in proper working order, and has been decontaminated.

5.2 Monitoring Well Purging

Prior to developing/purging the well, it is necessary to determine the volume of water in the well casing. It is the company policy that three to five well volumes be purged prior to sample collection. If the well goes dry during purging, allow it to recover and re-purge, if possible.

On subsequent sampling events, the purging method, flow rate, relative purge volume, and percentage of recovery should be standardized at a given well. This will help ensure that the data obtained will be comparable from one sampling event to the next.

Purge water will be filtered through granular activated carbon and discharged to a landscaped portion of the site.

5.3 Monitoring Well sampling

The groundwater samples should be taken using one of the following:

- A dedicated disposable bailer attached to non-reusable bailing cord
- The peristaltic or Grundfos pump using disposable plastic/silicon tubing

The diameter of the well casing is important, as it will directly affect the equipment and procedures used during well purging and sampling. It is also important to know the accessibility of the wells. This may affect the selection of sampling equipment to be used or, at a minimum, the procedure for getting the equipment to the well location.

Before any samples are collected, the well must be allowed to recover so that there is enough water to collect the necessary sample volume. It is important that all instruments used in the well be thoroughly decontaminated before being used at another location.

When collecting the ground water needed for filling the sample bottles, the bailer should be gently lowered into the water column, jerked gently to insure the ball valve is closed, and retrieved at a steady rate to the surface. When transferring the water from the bailer to the sample containers, care must be taken to avoid agitation to the sample, which will promote the loss of volatile constituents, and promote chemical oxidation.

The geochemistry of ground water is such that exposure of ground water samples to atmospheric conditions can result in substantial loss of sample integrity. It is necessary that upon collection, the samples are prepared, preserved, and stored in such a manner as to prevent any changes in sample chemistry.

Any contaminated monitoring or tank pit wells will be sampled last to avoid cross contamination.

6.0 Soil Sampling

The collection of subsurface soil samples can constitute a substantial safety hazard. The most important safety factor involved is the avoidance of buried containers, pockets of highly contaminated material, and underground utilities - such as electric lines, natural gas pipelines, water mains, tank system product lines, etc. A thorough background information search should be completed before obtaining subsurface samples.

For this site little detailed information was available and borings were cleared with an air excavator from surface to 4' below grade level prior to drilling.

Subsurface sampling must address the depths from which the samples are obtained. The depths at which samples are to be taken will depend upon the suspected contaminants, their general mobility's, and the method by which they have entered the subsurface environment. Generally,

subsurface samples can be obtained by three methods: shallow subsurface sampling by hand-operated equipment, deep subsurface samples by use of a drilling rig or a backhoe.

The following is a list of recommended equipment for sampling subsurface soils:

- Field book/Site map
- Health & Safety Plans
- Chain of custody forms
- Sampling devices
- Decontamination solutions/de-ionized water
- Buckets, washbasins, scrub brushes, and sponges used to decontaminate equipment.
- Ziploc bags
- Nitrile Gloves
- Photo-ionization detector (PID)
- Scale
- Camera/film

Depending upon the depth and type of samples to be collected, a variety of methods are available for sampling subsurface soils. These include:

- A shovel may be used to depths of several inches or several feet.
- A hand auger may be used to collect subsurface samples at depths up to four to five feet; however, it mixes and thus destroys the cohesive structure and stratigraphic character of the soil preventing detailed soil description. A hand driven split spoon sampler provides a means to obtain somewhat undisturbed core samples.
- Drilling rig-operated sampling devices. These may be placed into two categories: (1) solid stem augers and (2) hollow stem augers. The solid stem augers mix the soil as it is brought to the surface, making representative samples from discrete depths impossible to obtain. Hollow stem augers use a split spoon or Shelby tube to collect a representative sample.
- Soil samples may be collected from a backhoe trench. To collect the required samples, use a long handled auger or the backhoe bucket.

All soil samples will be placed in wide mouth sample jars with Teflon-lined lids or Zip lock bags. The following procedure will be utilized when conducting analytical screening of petroleum hydrocarbon contaminated soils utilizing a portable Photoionization Detector (PID).

1. Fill a clean 16 oz. glass jar or Zip lock bag to fifty-percent (50%) capacity with the sample to be analyzed. Quickly seal the zip lock bag.
2. Allow headspace development for at least 10 minutes. Vigorously shake the bag for 10 seconds both at the beginning and end of the headspace development period.
3. Once the headspace has developed stick the probe into the bag or jar. Exercise care to avoid uptake of water droplets or soil particulate.
4. Following probe insertion record highest meter response of the jar headspace concentration. A maximum response should occur between two and five seconds. Erratic meter response may occur at high organic vapor concentrations or conditions of elevated headspace moisture, in which case headspace data should be rejected.
5. PID field instruments will be operated and calibrated using isobutylene span gas to yield "total organic vapors" in ppm as benzene. PID instruments will be operated with a 10.2 eV (+/-) lamp source. Operation, maintenance and calibration will be performed in accordance with the manufacturer's specifications. For headspace analysis, instrument calibration will be checked/adjusted daily.
6. Sample descriptions, locations and screening results are to be recorded in a field book.
7. Proper decontamination procedures will be used in cleaning all the soil sampling equipment.

6.1 Soil Sample Preparation

Method 5035 must be used for soil sample collection and preservation in Pennsylvania. Weigh a five gram sample from the bag or jar, using a sterile cut off plastic syringe or other coring device. Transfer the soil to the correct preserved VOA vile and weigh to the nearest 0.01 gram. Write this weight on the label. You must also take a sample in a unpreserved jar to determine the dry weight.

Each sample must be sealed after it is collected and labeled. A sample label or tag affixed to the container must have a minimum of the following information:

- | | |
|-------------------------------|------------------------|
| - Date and time of collection | - Site or project name |
| - Sample number | - Preservative |
| - Sample location description | - Sampler |
| - Analysis to be performed. | |

Samples will be placed on ice immediately after collection. A temperature of 4°C will be maintained until the samples are delivered to the laboratory. If samples are stored at ER&R upon arrival from the field, they will be recorded in a sample logbook and placed in a refrigerator until shipment to the laboratory.

7.0 Sample Preservation and Handling

The objective of the sampling program is to obtain a sample that is representative of actual groundwater or soil quality. The following methods have been selected to ensure that the samples are properly preserved and handled from the time of collection to analysis.

7.1 Sample Containers and Labeling

All samples will be transferred directly to the appropriate laboratory provided sample containers. Sample bottles will be pre-labeled with site-specific information prior to use. Labels should include project name, date, time, sample location, collectors name, parameters of analysis, and preservative. Field samples will be kept in a cooler or refrigerator at all times to maintain a temperature 4°C.

ER&R will provide a chain-of-possession and custody of any samples which are collected. The primary objective of these procedures is to create an accurate written record, which can be used to trace the possession and handling of the sample from the moment of its collection through analysis. The chain-of-custody form is designed to summarize the contents of the shipment, the dates and times of any custody transfer, and the signatures of all parties relinquishing and receiving the samples.

7.2 Sample Shipping

Once the samples have been collected, prepared, preserved, and appropriately stored, they must be packaged for shipment and/or delivery to the laboratory. From the time of sample collection until the analyses have been completed, chain-of-custody procedures must be followed to ensure the proper handling and possession of the samples. All samples must be packaged in accordance with DOT/EPA specification. The packaging procedures will vary depending upon the sample concentrations and their DOT hazard class. All sample containers must be placed in a strong outside shipping container and will be forwarded for overnight delivery to the specified laboratory.

8.0 Decontamination Procedures

8.1 Drilling Equipment

Drilling equipment shall be decontaminated prior to initial use, between boring locations, and at the completion of drilling activities. Items necessary to decontaminate are as follows:

- back of the drilling rig
- auger flights
- down-hole equipment
- miscellaneous sampling tools used during drilling operations.

Steam cleaning should be used to decontaminate the above items. Drilling equipment such as the well screen, and well casing should be stored in a clean area.

8.2 Sampling Equipment

Disposable sampling devices must be contained and disposed of in an appropriate manner. Non-disposable equipment used for the collection, preparation, preservation and storage of samples must be cleaned prior to their usage and after each subsequent use. Decontamination will most likely be conducted in the field if necessary or offsite once the tasks are completed. If possible, try to minimize field decontamination by using disposable equipment.

Materials needed for decontamination are based on the equipment to be cleaned. Generally the equipment used is as follows:

- Cleaning solutions include isopropyl alcohol, 50/50 bleach solution, Alconox™, potable water, and distilled water. These are dependent on the parameters, which are being analyzed.
- Water. In some cases, tap water may be adequate for initial or intermediate rinses. The final rinse must be with de-ionized/distilled water.
- Storage containers. These are used to transport large volumes of de-ionized/distilled water to the site.
- Buckets and washbasins. For use in the washing and rinsing of equipment.
- Paper towels. For use in cleaning all outside surfaces or surfaces that do not come in contact with the sample.

The procedure to be used to decontaminate sampling equipment is described below:

- Scrub equipment with Alconox™ detergent.
- Rinse with tap water.
- Wash or rinse through the use of a squirt bottle.
- Rinse with isopropyl alcohol.
- Rinse three times with de-ionized/distilled water.
- Air-dry all equipment.
- Store to protect equipment from contamination until next use.

To decontaminate pumps, tubing or other equipment not amenable to cleaning by the above methods, flush the equipment in several steps. Decontaminate by pumping tap and the de-ionized water through the tubing. The outside tubing can be decontaminated by use of a hand held pressure sprayer or steam cleaner.

8.0 Waste Management

Before starting work on a job, all project wastes, trash, and/or scrap must be taken into consideration. The waste that will be generated must be estimated and the need for containers and waste removal, if necessary, can be determined. Waste materials must be properly stored and handled to minimize the potential for an accident or injury due to excessive clutter, the potential for a spill, or impact to the environment. During outdoor activities, receptacles must be covered to prevent dispersion of waste materials and to control potential runoff.

Before a job, employees must be instructed on the proper disposal method for wastes, including general instruction on disposal of non-hazardous wastes, trash or scrap metals. If wastes generated are classified as hazardous, employees must be trained to ensure proper disposal. To minimize environmental impact, recycling is encouraged. All recyclable wastes should be segregated to ensure opportunities for reuse or recycling.

Field generated waste may include soil cuttings, contaminated purge waters, disposable sampling equipment, and disposable protective equipment. Segregation of hazardous and non-hazardous wastes and containerization may be necessary. Drums and appropriate labels shall be completed for any contaminated waste. Handling, storage and disposal of field-related hazardous wastes are subject to the regulations contained in the Resource Conservation and Recovery Act (RCRA) and applicable state and local laws.

Drummed wastes shall be labeled with an appropriate "non-hazardous" waste label. Labels shall provide the following information:

- Description of waste (i.e., decontamination water, purged water – MW-1, drill cutting- SB-3, etc.)
- Date of generation
- Amount of waste in the drum
- Client or generator name.

Appendix I
Soil Boring Logs

ER&R

Environmental Remediation and Recovery, Inc.
4250 Route 6N
Edinboro, Pennsylvania

Test Boring Record

Sheet 1 of 1

Soil Boring: SB-1

Project #: 2014.74

Commenced (date/time) 3/17/2015

Soil Boring Status

Location: Russell City Store

Completed (date/time)	3/17/2015
-----------------------	-----------

A. Grouted to surface	Ft.
1	1.0
2	2.0
3	3.0
4	4.0
5	5.0
6	6.0
7	7.0
8	8.0
9	9.0
10	10.0
11	11.0
12	12.0
13	13.0
14	14.0
15	15.0
16	16.0
17	17.0
18	18.0
19	19.0
20	20.0
21	21.0
22	22.0
23	23.0
24	24.0
25	25.0
26	26.0
27	27.0
28	28.0
29	29.0
30	30.0
31	31.0
32	32.0
33	33.0
34	34.0
35	35.0
36	36.0
37	37.0
38	38.0
39	39.0
40	40.0
41	41.0
42	42.0
43	43.0
44	44.0
45	45.0
46	46.0
47	47.0
48	48.0
49	49.0
50	50.0
51	51.0
52	52.0
53	53.0
54	54.0
55	55.0
56	56.0
57	57.0
58	58.0
59	59.0
60	60.0
61	61.0
62	62.0
63	63.0
64	64.0
65	65.0
66	66.0
67	67.0
68	68.0
69	69.0
70	70.0
71	71.0
72	72.0
73	73.0
74	74.0
75	75.0
76	76.0
77	77.0
78	78.0
79	79.0
80	80.0
81	81.0
82	82.0
83	83.0
84	84.0
85	85.0
86	86.0
87	87.0
88	88.0
89	89.0
90	90.0
91	91.0
92	92.0
93	93.0
94	94.0
95	95.0
96	96.0
97	97.0
98	98.0
99	99.0
100	100.0

B. Monitoring Well- see below:

HSA Auger Size: _____" I.D.

Sampling Method: Geoprobe: x

Well Construction

SPT: _____ **CME system:** _____

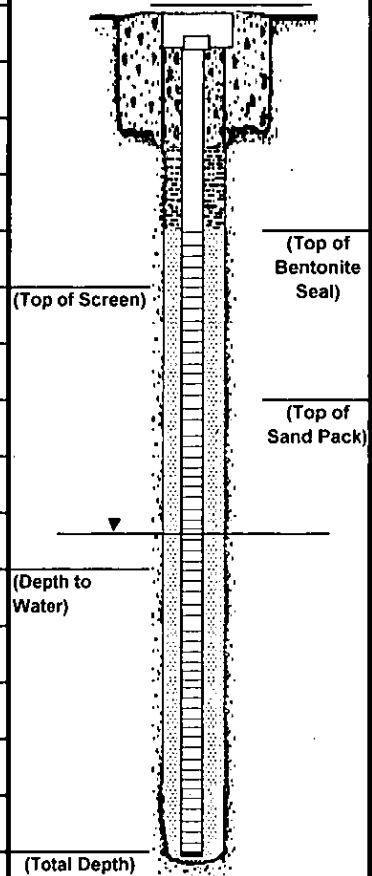
Driller: Chatfield Drilling

Logged By: D. Birchard

Dia.:

[illegible]

**Casing
Elevation :**



**ER&R**Environmental Remediation and Recovery, Inc.
4250 Route 6N
Edinboro, Pennsylvania**Test Boring Record**Sheet 1 of 1Soil Boring: SB-2Project #: 2014.74Commenced (date/time) 3/17/2015Location: Russell City StoreCompleted (date/time) 3/17/2015HSA Auger Size: " I.D.

Sampling Method: Geoprobe: x

SPT: CME system:Driller: Chatfield DrillingLogged By: D. Birchard**Soil Boring Status**A. Grouted to surface Ft.

B. Monitoring Well- see below:

Well ConstructionDia.:

Depth	SPT- Blows per Ft.	Recovery	PID (ppm)	USCS Classification	Lithology Description: Color, Grain Size, Hardness, Etc.	Casing Elevation :
0-5'			-		asphalt	
0.5-1'			2.5		asphalt aggregate	
1-2.5'			25	MH	black to dark brown silty clay	
2.5-5'			180		weathered sandy siltstone	
5-6'			130	GW	gravelly sand partially sorted angular gravels	
6-7.5'			105	GW	gravelly sand with intermittent weathered rock fragments	
7.5-9'			3.4	CL	tight dense dark brown clay	
9-10'			7.4	SM	silty sand dark brown to black	
10-11'			10	GW	gravelly sand very moist	
11-12'			5	SP/CL	medium brown sand to clay transition	
12-13.5'			4		highly friable dark brown to black shale	
						(Total Depth)

ER&R

Environmental Remediation and Recovery, Inc.
4250 Route 6N
Edinboro, Pennsylvania

Test Boring Record

Sheet 1 of 1

Soil Boring: SB-4

Project #: 2014.74

Commenced (date/time) 3/17/2015

Soil Boring Status

Location: Russell City Store

Completed (date/time) 3/17/2015

A. Grouted to surface	Ft.
-----------------------	-----

HSA Auger Size: " I.D.

Sampling Method: Geoprobe: x

B. Monitoring Well- see below:

Driller: Chatfield Drilling

SPT: **CME system:**

Well Construction

Logged By: D. Birchard

Dia.:

[illegible]

ER&R

Environmental Remediation and Recovery, Inc.
4250 Route 6N
Edinboro, Pennsylvania

Test Boring Record

Sheet 1 of 1

Soil Boring: SB-5

Project #: 2014.74

Commenced (date/time) 3/17/2015

Soil Boring Status

Location: Russell City Store

Completed (date/time)	3/17/2015
-----------------------	-----------

A. Grouted to surface		Ft.
1	10	10
2	10	20
3	10	30
4	10	40
5	10	50
6	10	60
7	10	70
8	10	80
9	10	90
10	10	100
11	10	110
12	10	120
13	10	130
14	10	140
15	10	150
16	10	160
17	10	170
18	10	180
19	10	190
20	10	200
21	10	210
22	10	220
23	10	230
24	10	240
25	10	250
26	10	260
27	10	270
28	10	280
29	10	290
30	10	300
31	10	310
32	10	320
33	10	330
34	10	340
35	10	350
36	10	360
37	10	370
38	10	380
39	10	390
40	10	400
41	10	410
42	10	420
43	10	430
44	10	440
45	10	450
46	10	460
47	10	470
48	10	480
49	10	490
50	10	500
51	10	510
52	10	520
53	10	530
54	10	540
55	10	550
56	10	560
57	10	570
58	10	580
59	10	590
60	10	600
61	10	610
62	10	620
63	10	630
64	10	640
65	10	650
66	10	660
67	10	670
68	10	680
69	10	690
70	10	700
71	10	710
72	10	720
73	10	730
74	10	740
75	10	750
76	10	760
77	10	770
78	10	780
79	10	790
80	10	800
81	10	810
82	10	820
83	10	830
84	10	840
85	10	850
86	10	860
87	10	870
88	10	880
89	10	890
90	10	900
91	10	910
92	10	920
93	10	930
94	10	940
95	10	950
96	10	960
97	10	970
98	10	980
99	10	990
100	10	1000

B. Monitoring Well- see below:

HSA Auger Size: " I.D.

Sampling Method: Geoprobe: x

Well Construction

Driller: Chatfield Drilling

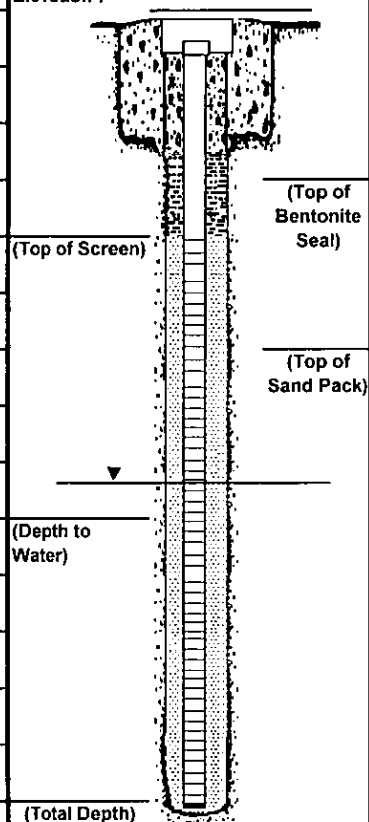
SPT: **CME system:**

Dia.:

Logged By: D. Birchard

[illegible]

**Casing
Elevation :**



Soil Boring: SB-6

Project #: 2014.74

Commenced (date/time) 3/17/2015

Soil Boring Status

Russell City Store

Completed (date/time) 3/17/2015

A. Grouted to surface		Ft.
1	10	10
2	10	20
3	10	30
4	10	40
5	10	50
6	10	60
7	10	70
8	10	80
9	10	90
10	10	100
11	10	110
12	10	120
13	10	130
14	10	140
15	10	150
16	10	160
17	10	170
18	10	180
19	10	190
20	10	200
21	10	210
22	10	220
23	10	230
24	10	240
25	10	250
26	10	260
27	10	270
28	10	280
29	10	290
30	10	300
31	10	310
32	10	320
33	10	330
34	10	340
35	10	350
36	10	360
37	10	370
38	10	380
39	10	390
40	10	400
41	10	410
42	10	420
43	10	430
44	10	440
45	10	450
46	10	460
47	10	470
48	10	480
49	10	490
50	10	500
51	10	510
52	10	520
53	10	530
54	10	540
55	10	550
56	10	560
57	10	570
58	10	580
59	10	590
60	10	600
61	10	610
62	10	620
63	10	630
64	10	640
65	10	650
66	10	660
67	10	670
68	10	680
69	10	690
70	10	700
71	10	710
72	10	720
73	10	730
74	10	740
75	10	750
76	10	760
77	10	770
78	10	780
79	10	790
80	10	800
81	10	810
82	10	820
83	10	830
84	10	840
85	10	850
86	10	860
87	10	870
88	10	880
89	10	890
90	10	900
91	10	910
92	10	920
93	10	930
94	10	940
95	10	950
96	10	960
97	10	970
98	10	980
99	10	990
100	10	1000

HSA Auger Size: " I.D.

Sampling Method: Geoprobe: x

B. Monitoring Well- see below:

Driller: Chatfield Drilling

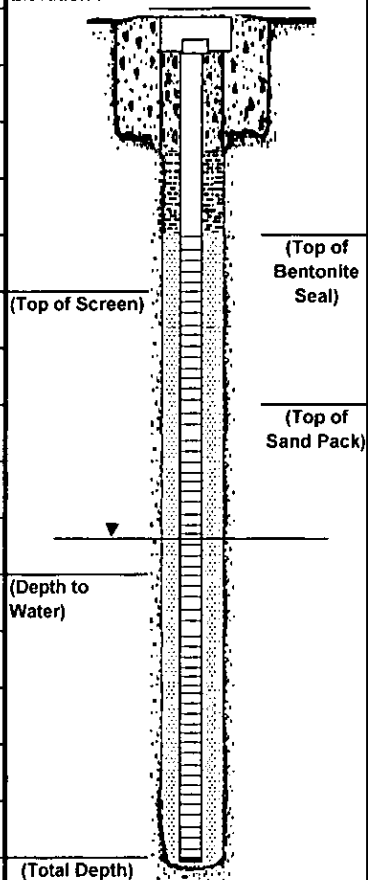
SPT: CME system

Well Construction

Dia.:

[illegible]

**Casing
Elevation :**



ER&R

Environmental Remediation and Recovery, Inc.
4250 Route 6N
Edinboro, Pennsylvania

Test Boring Record

Sheet 1 of 1

Soil Boring: SB-7

Project #: 2014.74

Commenced (date/time) 3/17/2015

Soil Boring Status

Location: Russell City Store

Completed (date/time) 3/17/2015

Grout		Cement		Water		Total	
Yds.	Cu. Yds.	Yds.	Cu. Yds.	Yds.	Cu. Yds.	Yds.	Cu. Yds.
1	1.00	1	1.00	1	1.00	3	3.00
2	2.00	2	2.00	2	2.00	6	6.00
3	3.00	3	3.00	3	3.00	9	9.00
4	4.00	4	4.00	4	4.00	12	12.00
5	5.00	5	5.00	5	5.00	15	15.00
6	6.00	6	6.00	6	6.00	18	18.00
7	7.00	7	7.00	7	7.00	21	21.00
8	8.00	8	8.00	8	8.00	24	24.00
9	9.00	9	9.00	9	9.00	27	27.00
10	10.00	10	10.00	10	10.00	30	30.00
11	11.00	11	11.00	11	11.00	33	33.00
12	12.00	12	12.00	12	12.00	36	36.00
13	13.00	13	13.00	13	13.00	39	39.00
14	14.00	14	14.00	14	14.00	42	42.00
15	15.00	15	15.00	15	15.00	45	45.00
16	16.00	16	16.00	16	16.00	48	48.00
17	17.00	17	17.00	17	17.00	51	51.00
18	18.00	18	18.00	18	18.00	54	54.00
19	19.00	19	19.00	19	19.00	57	57.00
20	20.00	20	20.00	20	20.00	60	60.00
21	21.00	21	21.00	21	21.00	63	63.00
22	22.00	22	22.00	22	22.00	66	66.00
23	23.00	23	23.00	23	23.00	69	69.00
24	24.00	24	24.00	24	24.00	72	72.00
25	25.00	25	25.00	25	25.00	75	75.00
26	26.00	26	26.00	26	26.00	78	78.00
27	27.00	27	27.00	27	27.00	81	81.00
28	28.00	28	28.00	28	28.00	84	84.00
29	29.00	29	29.00	29	29.00	87	87.00
30	30.00	30	30.00	30	30.00	90	90.00
31	31.00	31	31.00	31	31.00	93	93.00
32	32.00	32	32.00	32	32.00	96	96.00
33	33.00	33	33.00	33	33.00	99	99.00
34	34.00	34	34.00	34	34.00	102	102.00
35	35.00	35	35.00	35	35.00	105	105.00
36	36.00	36	36.00	36	36.00	108	108.00
37	37.00	37	37.00	37	37.00	111	111.00
38	38.00	38	38.00	38	38.00	114	114.00
39	39.00	39	39.00	39	39.00	117	117.00
40	40.00	40	40.00	40	40.00	120	120.00
41	41.00	41	41.00	41	41.00	123	123.00
42	42.00	42	42.00	42	42.00	126	126.00
43	43.00	43	43.00	43	43.00	129	129.00
44	44.00	44	44.00	44	44.00	132	132.00
45	45.00	45	45.00	45	45.00	135	135.00
46	46.00	46	46.00	46	46.00	138	138.00
47	47.00	47	47.00	47	47.00	141	141.00
48	48.00	48	48.00	48	48.00	144	144.00

HSA Auger Size: " I.D.

Sampling Method: Geoprobe: x

B. Monitoring Well- see below:

Driller: Chatfield Drilling

SPT: CME system:

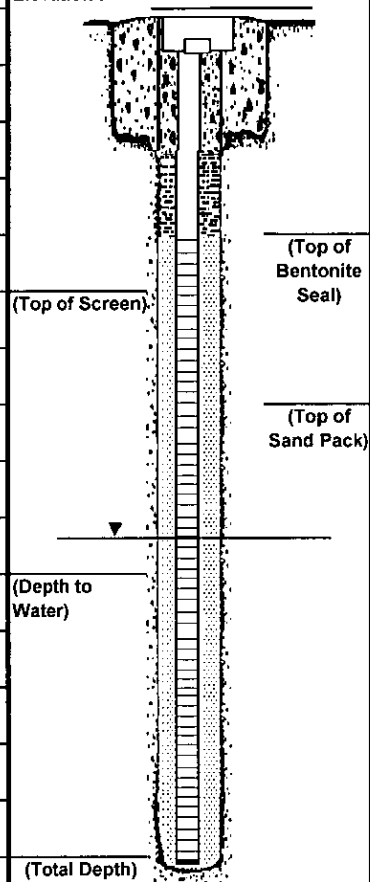
Well Construction

Logged By: D. Birchard

Dia.:

[illegible]

**Casing
Elevation :**



ER&R

Environmental Remediation and Recovery, Inc.
4250 Route 6N
Edinboro, Pennsylvania

Test Boring Record

Sheet 1 of 1

Soil Boring: BH-1

Project #: 2014.74

Commenced (date/time) 7/31/2017

Location: Russell City Store

Completed (date/time) 7/31/2017

HSA Auger Size: 4.25" " I.D.

Sampling Method: Geoprobe:

SPT: X **CME system:**

Driller: Chatfield Drilling

Logged By: D. Birchard

Soil Boring Status

A. Grouted to surface		Ft.
1	10	10
2	10	20
3	10	30
4	10	40
5	10	50
6	10	60
7	10	70
8	10	80
9	10	90
10	10	100
11	10	110
12	10	120
13	10	130
14	10	140
15	10	150
16	10	160
17	10	170
18	10	180
19	10	190
20	10	200
21	10	210
22	10	220
23	10	230
24	10	240
25	10	250
26	10	260
27	10	270
28	10	280
29	10	290
30	10	300
31	10	310
32	10	320
33	10	330
34	10	340
35	10	350
36	10	360
37	10	370
38	10	380
39	10	390
40	10	400
41	10	410
42	10	420
43	10	430
44	10	440
45	10	450
46	10	460
47	10	470
48	10	480
49	10	490
50	10	500
51	10	510
52	10	520
53	10	530
54	10	540
55	10	550
56	10	560
57	10	570
58	10	580
59	10	590
60	10	600
61	10	610
62	10	620
63	10	630
64	10	640
65	10	650
66	10	660
67	10	670
68	10	680
69	10	690
70	10	700
71	10	710
72	10	720
73	10	730
74	10	740
75	10	750
76	10	760
77	10	770
78	10	780
79	10	790
80	10	800
81	10	810
82	10	820
83	10	830
84	10	840
85	10	850
86	10	860
87	10	870
88	10	880
89	10	890
90	10	900
91	10	910
92	10	920
93	10	930
94	10	940
95	10	950
96	10	960
97	10	970
98	10	980
99	10	990
100	10	1000

B. Monitoring Well- see below:

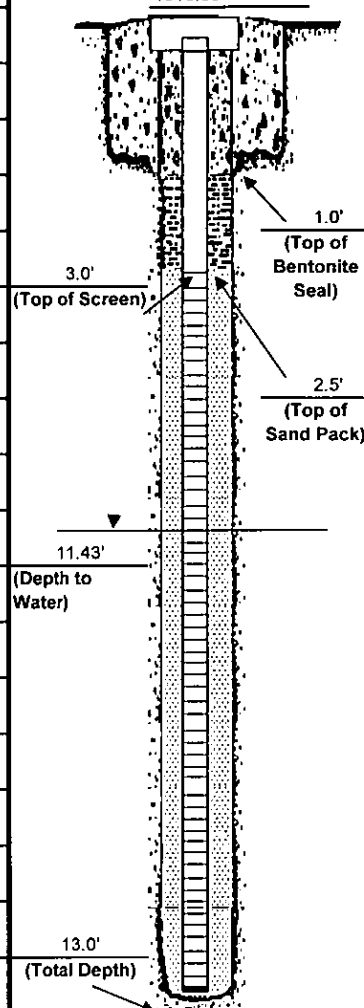
Well Construction: MW 1

Dia.: 2"

[illegible]

Casing

Elevation : 1910.66'



ER&R

Environmental Remediation and Recovery, Inc.
4250 Route 6N
Edinboro, Pennsylvania

Test Boring Record

Sheet 1 of 1

Soil Boring: BH-2

Project #: 2014.74

Commenced (date/time) 7/31/2017

Location: Russell City Store

Completed (date/time) 7/31/2017

HSA Auger Size: 4.25" " I.D.

Sampling Method: Geoprobe:

SPT: X **CME system:**

Driller: Chatfield Drilling

Logged By: D. Birchard

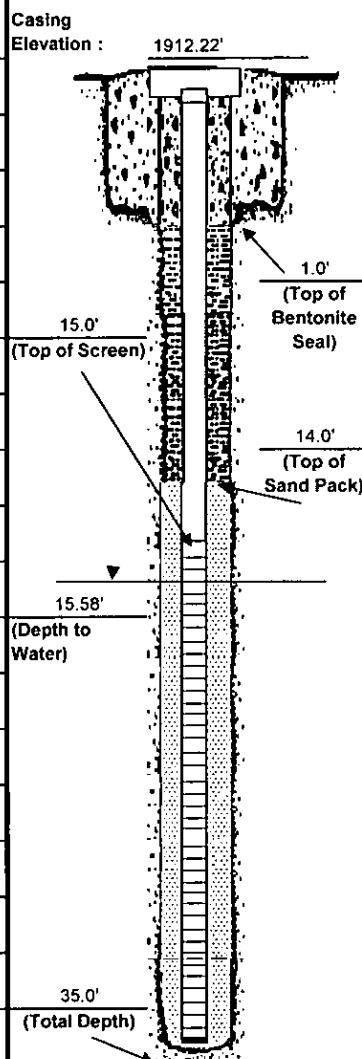
Soil Boring Status

A. Grouted to surface		Ft.
1	10	10
2	10	20
3	10	30
4	10	40
5	10	50
6	10	60
7	10	70
8	10	80
9	10	90
10	10	100
11	10	110
12	10	120
13	10	130
14	10	140
15	10	150
16	10	160
17	10	170
18	10	180
19	10	190
20	10	200
21	10	210
22	10	220
23	10	230
24	10	240
25	10	250
26	10	260
27	10	270
28	10	280
29	10	290
30	10	300
31	10	310
32	10	320
33	10	330
34	10	340
35	10	350
36	10	360
37	10	370
38	10	380
39	10	390
40	10	400
41	10	410
42	10	420
43	10	430
44	10	440
45	10	450
46	10	460
47	10	470
48	10	480
49	10	490
50	10	500
51	10	510
52	10	520
53	10	530
54	10	540
55	10	550
56	10	560
57	10	570
58	10	580
59	10	590
60	10	600
61	10	610
62	10	620
63	10	630
64	10	640
65	10	650
66	10	660
67	10	670
68	10	680
69	10	690
70	10	700
71	10	710
72	10	720
73	10	730
74	10	740
75	10	750
76	10	760
77	10	770
78	10	780
79	10	790
80	10	800
81	10	810
82	10	820
83	10	830
84	10	840
85	10	850
86	10	860
87	10	870
88	10	880
89	10	890
90	10	900
91	10	910
92	10	920
93	10	930
94	10	940
95	10	950
96	10	960
97	10	970
98	10	980
99	10	990
100	10	1000

B. Monitoring Well- see below:

Well Construction: MW 2

Dia.: 2"

[illegible]

Soil Boring: BH-3

Project #: 2014.74

Commenced (date/time) 7/31/2017

Soil Boring Status

Location: Russell City Store

Completed (date/time)	7/31/2017
-----------------------	-----------

A. Grouted to surface	Ft.
-----------------------	-----

B. Monitoring Well- see below:

HSA Auger Size: 4.25" " I.D.

Sampling Method: **Geoprobe:**

Well Construction: MW 3

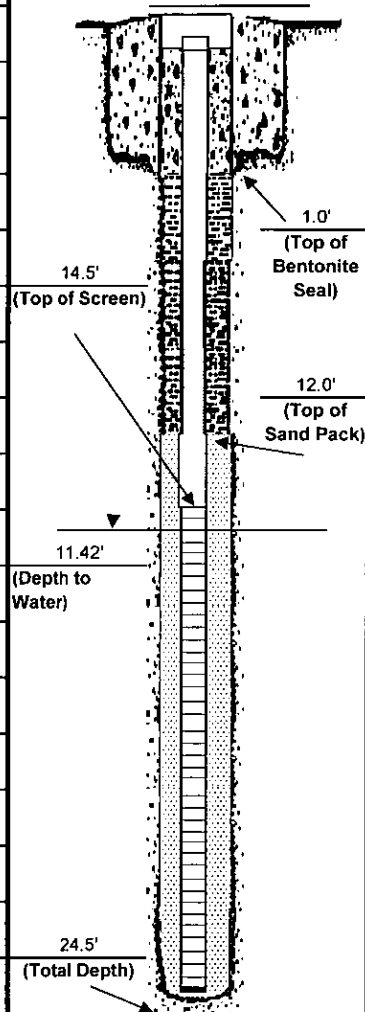
Driller: Chatfield Drilling

Logged By: D. Birchard

Dia.: 2"

[illegible]

Casing
Elevation : 1913.08'



ER&R

Environmental Remediation and Recovery, Inc.
4250 Route 6N
Edinboro, Pennsylvania

Test Boring Record

Sheet **1** **of** **1**

Soil Boring: BH-4

Project #: 2014.74

Commenced (date/time) 8/1/2017

Soil Boring Status

Location: Russell City Store

Completed (date/time) 8/1/2017

A. Grouted to surface	Ft.
-----------------------	-----

B. Monitoring Well- see below:

HSA Auger Size: 4.25" " I.D.

Sampling Method: Geoprobe:

Well Construction: MW 4

Dia.: 2"

Driller: Chatfield Drilling

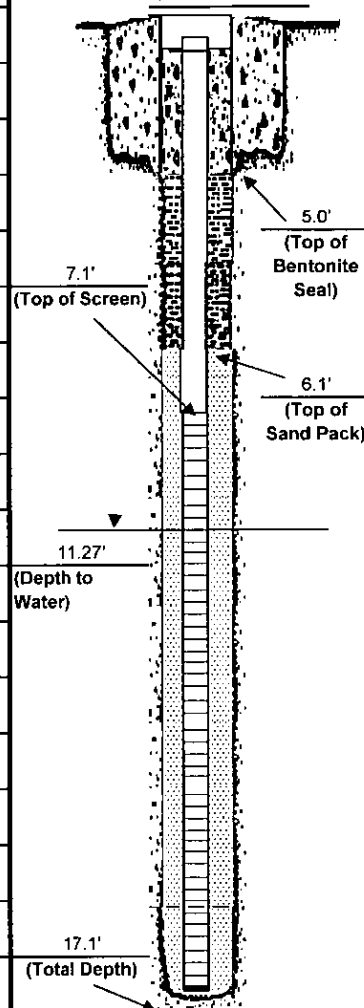
SPT: X CME syste

Logged By: D. Birchard

[illegible]

Casing

Elevation : 1913.8'



ER&R

Environmental Remediation and Recovery, Inc.
4250 Route 6N
Edinboro, Pennsylvania

Test Boring Record

Sheet 1 of 1

Soil Boring: BH-5

Project #: 2014.74

Commenced (date/time) 8/1/2017

Location: Russell City Store

Completed (date/time) 8/1/2017

HSA Auger Size: 4.25" " I.D.

Sampling Method: Geoprobe:

Driller: Chatfield Drilling

SPT: X CME system

Logged By: D. Birchard

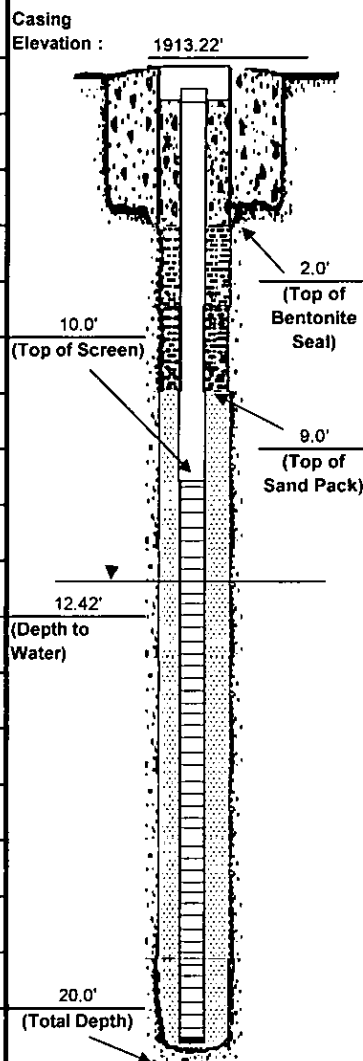
Soil Boring Status

A. Grouted to surface		Ft.
1	10	10
2	10	20
3	10	30
4	10	40
5	10	50
6	10	60
7	10	70
8	10	80
9	10	90
10	10	100
11	10	110
12	10	120
13	10	130
14	10	140
15	10	150
16	10	160
17	10	170
18	10	180
19	10	190
20	10	200
21	10	210
22	10	220
23	10	230
24	10	240
25	10	250
26	10	260
27	10	270
28	10	280
29	10	290
30	10	300
31	10	310
32	10	320
33	10	330
34	10	340
35	10	350
36	10	360
37	10	370
38	10	380
39	10	390
40	10	400
41	10	410
42	10	420
43	10	430
44	10	440
45	10	450
46	10	460
47	10	470
48	10	480
49	10	490
50	10	500
51	10	510
52	10	520
53	10	530
54	10	540
55	10	550
56	10	560
57	10	570
58	10	580
59	10	590
60	10	600
61	10	610
62	10	620
63	10	630
64	10	640
65	10	650
66	10	660
67	10	670
68	10	680
69	10	690
70	10	700
71	10	710
72	10	720
73	10	730
74	10	740
75	10	750
76	10	760
77	10	770
78	10	780
79	10	790
80	10	800
81	10	810
82	10	820
83	10	830
84	10	840
85	10	850
86	10	860
87	10	870
88	10	880
89	10	890
90	10	900
91	10	910
92	10	920
93	10	930
94	10	940
95	10	950
96	10	960
97	10	970
98	10	980
99	10	990
100	10	1000

B. Monitoring Well- see below:

Well Construction: MW 5

Dia.: 2"

[illegible]

ER&R

Environmental Remediation and Recovery, Inc.
4250 Route 6N
Edinboro, Pennsylvania

Test Boring Record

Sheet 1 **of** 1

Soil Boring: BH-6

Project #: 2014.74

Commenced (date/time) 7/17/2018

Soil Boring Status

Location: Russell City Store

Completed (date/time) 7/18/2018

A. Grouted to surface	Ft.
-----------------------	-----

HSA Auger Size: 6.25" " I.D.

Sampling Method: Geoprobe:

B. Monitoring Well- see below:

Driller: Chatfield Drilling

SPT: x CME system:

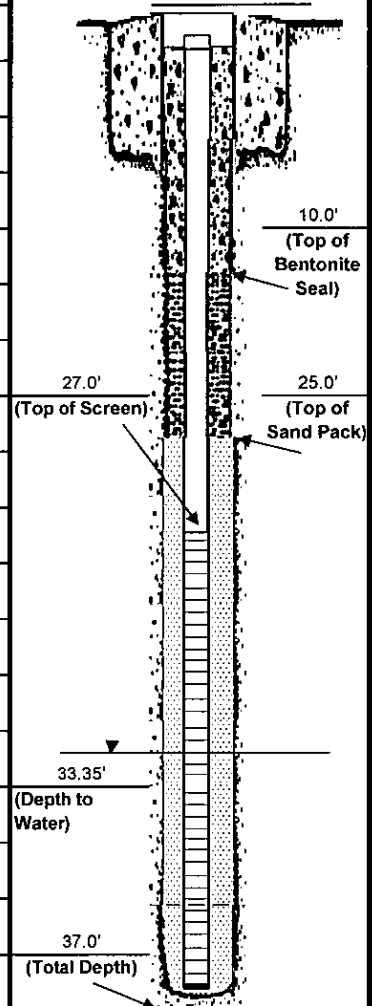
Well Construction: MW 8

Logged By: D. Birchard

Dia.: 2"

[illegible]

**Casing
Elevation :** 1913.92'



ER&R

Environmental Remediation and Recovery, Inc.
4250 Route 6N
Edinboro, Pennsylvania

Test Boring Record

Sheet 1 of 1

Soil Boring: BH-7

Project #: 2014.74

Commenced (date/time) 7/17/2018

Soil Boring Status

Location: Russell City Store

Completed (date/time)	7/18/2018
-----------------------	-----------

A. Grouted to surface	Ft.
-----------------------	-----

HSA Auger Size: 6.25" " I.D.

Sampling Method: Geoprobe:

B. Monitoring Well- see below:

Driller: Chatfield Drilling

SPT: x **CME system:**

Well Construction MW-10

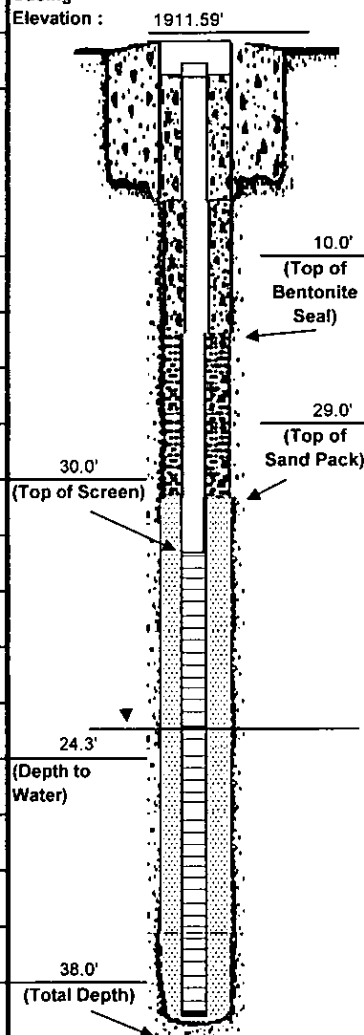
Logged By: D. Birchard

Dia.: 2"

[illegible]

Casing

Elevation : 1911.59'



ER&R

Environmental Remediation and Recovery, Inc.
4250 Route 6N
Edinboro, Pennsylvania

Test Boring Record

Sheet 1 of 1

Soil Boring: BH-9

Project #: 2014.74

Commenced (date/time) 7/18/2018

Location: Russell City Store

Completed (date/time)	7/18/2018
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HSA Auger Size: 4.25" " I.D.

Sampling Method: **Geoprobe:**
SPT: X **CME system:**

SPT: X **CME system:**

Driller: Chatfield Drilling

Logged By: D. Birchard

Soil Boring Status

A. Grouted to surface	Ft.
1	10.0
2	10.0
3	10.0
4	10.0
5	10.0
6	10.0
7	10.0
8	10.0
9	10.0
10	10.0
11	10.0
12	10.0
13	10.0
14	10.0
15	10.0
16	10.0
17	10.0
18	10.0
19	10.0
20	10.0
21	10.0
22	10.0
23	10.0
24	10.0
25	10.0
26	10.0
27	10.0
28	10.0
29	10.0
30	10.0
31	10.0
32	10.0
33	10.0
34	10.0
35	10.0
36	10.0
37	10.0
38	10.0
39	10.0
40	10.0
41	10.0
42	10.0
43	10.0
44	10.0
45	10.0
46	10.0
47	10.0
48	10.0
49	10.0
50	10.0
51	10.0
52	10.0
53	10.0
54	10.0
55	10.0
56	10.0
57	10.0
58	10.0
59	10.0
60	10.0
61	10.0
62	10.0
63	10.0
64	10.0
65	10.0
66	10.0
67	10.0
68	10.0
69	10.0
70	10.0
71	10.0
72	10.0
73	10.0
74	10.0
75	10.0
76	10.0
77	10.0
78	10.0
79	10.0
80	10.0
81	10.0
82	10.0
83	10.0
84	10.0
85	10.0
86	10.0
87	10.0
88	10.0
89	10.0
90	10.0
91	10.0
92	10.0
93	10.0
94	10.0
95	10.0
96	10.0
97	10.0
98	10.0
99	10.0
100	10.0

B. Monitoring Well- see below:

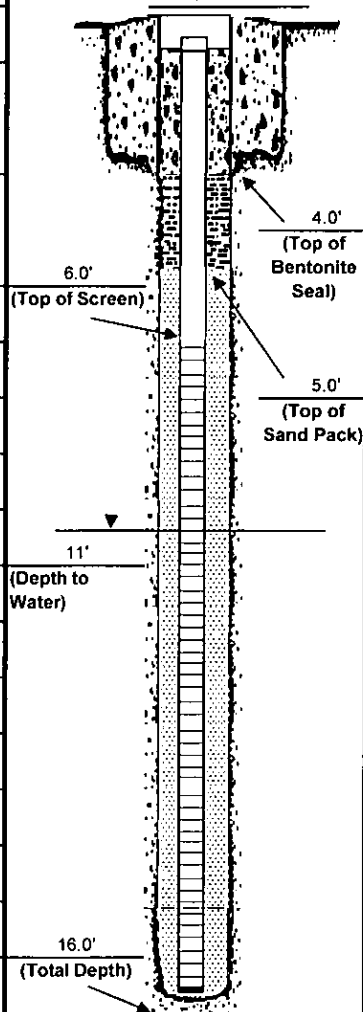
Well Construction: MW 6

Dia.: 2"

[illegible]

**Casing
Elevation :**

1913.7'



Soil Boring: BH-10

Project #: 2014.74

Commenced (date/time) 7/18/2018

Soil Boring Status

Location: Russell City Store

Completed (date/time)	7/18/2018
-----------------------	-----------

	Ft.
A. Grouted to surface	

HSA Auger Size: 4.25" " I.D.

Sampling Method: **Geoprobe:**
SPT: X **CME system:**

B. Monitoring Well- see below:

Driller: Chatfield Drilling

Logged By: D. Birchard

Well Construction: MW 7

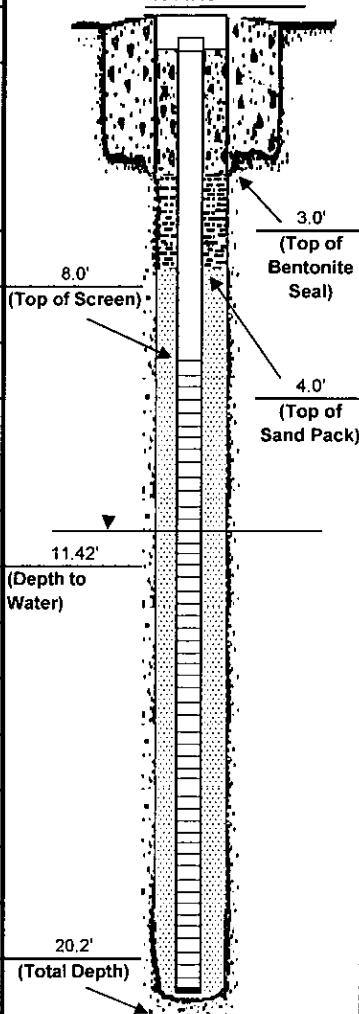
Dia.: 2"

[illegible]

Casing

Elevation : 1914.46'

1914.46'



Test Boring Record

Environmental Remediation and Recovery, Inc.
4250 Route 6N
Edinboro, Pennsylvania

Sheet 1 of 1

Soil Boring: BH-11

Project #: 2014.74

Commenced (date/time) 7/18/2018

Location: Russell City Store

Completed (date/time) 7/18/2018

HSA Auger Size: 4.25" " I.D.

Sampling Method: **Geoprobe:**
SPT: X **CME system:**

Driller: Chatfield Drilling

Logged By: D. Birchard

Soil Boring Status

A. Grouted to surface		Ft.
1	10	10
2	10	20
3	10	30
4	10	40
5	10	50
6	10	60
7	10	70
8	10	80
9	10	90
10	10	100
11	10	110
12	10	120
13	10	130
14	10	140
15	10	150
16	10	160
17	10	170
18	10	180
19	10	190
20	10	200
21	10	210
22	10	220
23	10	230
24	10	240
25	10	250
26	10	260
27	10	270
28	10	280
29	10	290
30	10	300
31	10	310
32	10	320
33	10	330
34	10	340
35	10	350
36	10	360
37	10	370
38	10	380
39	10	390
40	10	400
41	10	410
42	10	420
43	10	430
44	10	440
45	10	450
46	10	460
47	10	470
48	10	480
49	10	490
50	10	500
51	10	510
52	10	520
53	10	530
54	10	540
55	10	550
56	10	560
57	10	570
58	10	580
59	10	590
60	10	600
61	10	610
62	10	620
63	10	630
64	10	640
65	10	650
66	10	660
67	10	670
68	10	680
69	10	690
70	10	700
71	10	710
72	10	720
73	10	730
74	10	740
75	10	750
76	10	760
77	10	770
78	10	780
79	10	790
80	10	800
81	10	810
82	10	820
83	10	830
84	10	840
85	10	850
86	10	860
87	10	870
88	10	880
89	10	890
90	10	900
91	10	910
92	10	920
93	10	930
94	10	940
95	10	950
96	10	960
97	10	970
98	10	980
99	10	990
100	10	1000

B. Monitoring Well- see below:

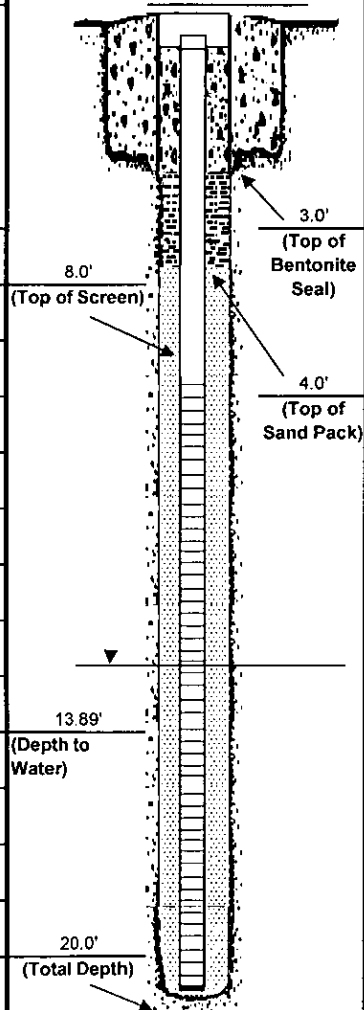
Well Construction: MW 11

Dia.: 2"

[illegible]

Casing

Elevation : 1912.58'



ER&R Test Boring Record

Environmental Remediation and Recovery, Inc.
4250 Route 6N
Edinboro, Pennsylvania

Sheet 1 of 1

Soil Boring: BH-12

Project #: 2014.74

Commenced (date/time) 7/18/2018

Soil Boring Status

Location: Russell City Store

Completed (date/time)	7/18/2018
-----------------------	-----------

A. Grouted to surface		Ft.
1	10	10
2	10	20
3	10	30
4	10	40
5	10	50
6	10	60
7	10	70
8	10	80
9	10	90
10	10	100
11	10	110
12	10	120
13	10	130
14	10	140
15	10	150
16	10	160
17	10	170
18	10	180
19	10	190
20	10	200
21	10	210
22	10	220
23	10	230
24	10	240
25	10	250
26	10	260
27	10	270
28	10	280
29	10	290
30	10	300
31	10	310
32	10	320
33	10	330
34	10	340
35	10	350
36	10	360
37	10	370
38	10	380
39	10	390
40	10	400
41	10	410
42	10	420
43	10	430
44	10	440
45	10	450
46	10	460
47	10	470
48	10	480
49	10	490
50	10	500
51	10	510
52	10	520
53	10	530
54	10	540
55	10	550
56	10	560
57	10	570
58	10	580
59	10	590
60	10	600
61	10	610
62	10	620
63	10	630
64	10	640
65	10	650
66	10	660
67	10	670
68	10	680
69	10	690
70	10	700
71	10	710
72	10	720
73	10	730
74	10	740
75	10	750
76	10	760
77	10	770
78	10	780
79	10	790
80	10	800
81	10	810
82	10	820
83	10	830
84	10	840
85	10	850
86	10	860
87	10	870
88	10	880
89	10	890
90	10	900
91	10	910
92	10	920
93	10	930
94	10	940
95	10	950
96	10	960
97	10	970
98	10	980
99	10	990
100	10	1000

HSA Auger Size: 4.25" " I.D.

Sampling Method: **Geoprobe:**

B. Monitoring Well- see below:

Driller: Chatfield Drilling

SPT: X CME syste

Well Construction: MW 12

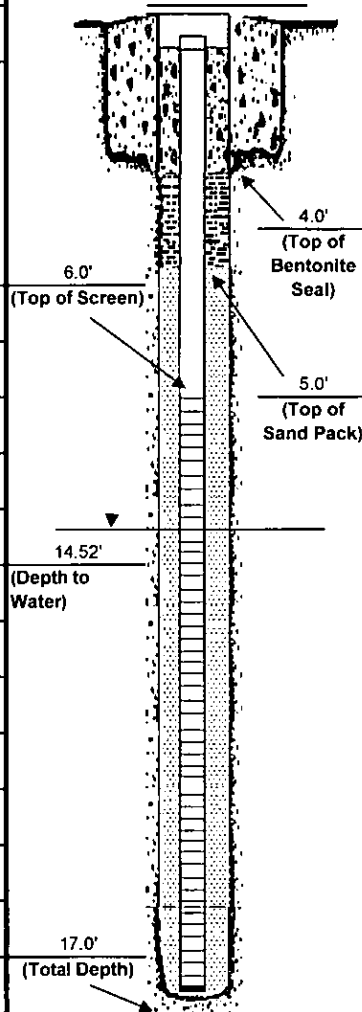
Logged By: D. Birchard

Dia.: 2"

[illegible]

Casing

Elevation : 1911.96'



ER&R Test Boring Record

Environmental Remediation and Recovery, Inc.
4250 Route 6N
Edinboro, Pennsylvania

Sheet 1 of 1

Soil Boring: BH-13

Project #: 2014.74

Commenced (date/time) 7/19/2018

Soil Boring Status

Location: Russell City Store

Completed (date/time) 7/19/2018

A. Grouted to surface		Ft.
1	10	10
2	10	20
3	10	30
4	10	40
5	10	50
6	10	60
7	10	70
8	10	80
9	10	90
10	10	100
11	10	110
12	10	120
13	10	130
14	10	140
15	10	150
16	10	160
17	10	170
18	10	180
19	10	190
20	10	200
21	10	210
22	10	220
23	10	230
24	10	240
25	10	250
26	10	260
27	10	270
28	10	280
29	10	290
30	10	300
31	10	310
32	10	320
33	10	330
34	10	340
35	10	350
36	10	360
37	10	370
38	10	380
39	10	390
40	10	400
41	10	410
42	10	420
43	10	430
44	10	440
45	10	450
46	10	460
47	10	470
48	10	480
49	10	490
50	10	500
51	10	510
52	10	520
53	10	530
54	10	540
55	10	550
56	10	560
57	10	570
58	10	580
59	10	590
60	10	600
61	10	610
62	10	620
63	10	630
64	10	640
65	10	650
66	10	660
67	10	670
68	10	680
69	10	690
70	10	700
71	10	710
72	10	720
73	10	730
74	10	740
75	10	750
76	10	760
77	10	770
78	10	780
79	10	790
80	10	800
81	10	810
82	10	820
83	10	830
84	10	840
85	10	850
86	10	860
87	10	870
88	10	880
89	10	890
90	10	900
91	10	910
92	10	920
93	10	930
94	10	940
95	10	950
96	10	960
97	10	970
98	10	980
99	10	990
100	10	1000

HSA Auger Size: 4.25" " I.D.

Sampling Method: Geoprobe:

B. Monitoring Well- see below:

Driller: Chatfield Drilling

SPT: X **CME system:**

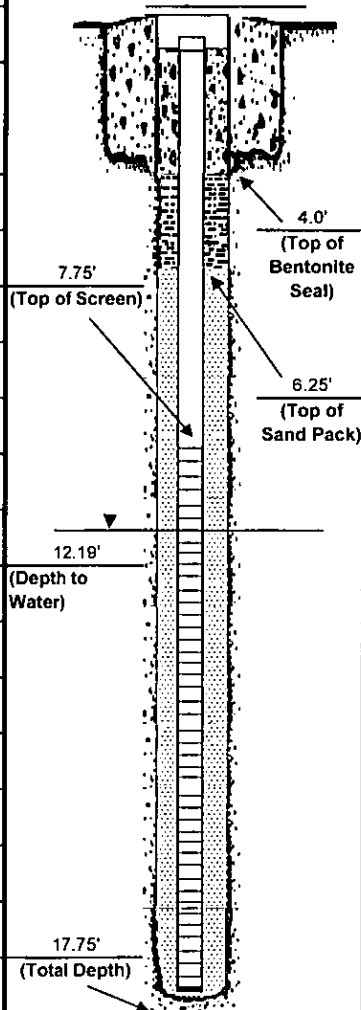
Well Construction: MW 13

Logged By: D. Birchard

Dia.: 2"

[illegible]

**Casing
Elevation :** 1910.23'



ER&R Test Boring Record

Environmental Remediation and Recovery, Inc.
4250 Route 6N
Edinboro, Pennsylvania

Sheet 1 of 1

Soil Boring: BH-14

Project #: 2014.74

Commenced (date/time) 7/19/2018

Soil Boring Status

Location: Russell City Store

Completed (date/time)	7/19/2019
-----------------------	-----------

A. Grouted to surface		Ft.
1	10	10
2	10	20
3	10	30
4	10	40
5	10	50
6	10	60
7	10	70
8	10	80
9	10	90
10	10	100
11	10	110
12	10	120
13	10	130
14	10	140
15	10	150
16	10	160
17	10	170
18	10	180
19	10	190
20	10	200
21	10	210
22	10	220
23	10	230
24	10	240
25	10	250
26	10	260
27	10	270
28	10	280
29	10	290
30	10	300
31	10	310
32	10	320
33	10	330
34	10	340
35	10	350
36	10	360
37	10	370
38	10	380
39	10	390
40	10	400
41	10	410
42	10	420
43	10	430
44	10	440
45	10	450
46	10	460
47	10	470
48	10	480
49	10	490
50	10	500
51	10	510
52	10	520
53	10	530
54	10	540
55	10	550
56	10	560
57	10	570
58	10	580
59	10	590
60	10	600
61	10	610
62	10	620
63	10	630
64	10	640
65	10	650
66	10	660
67	10	670
68	10	680
69	10	690
70	10	700
71	10	710
72	10	720
73	10	730
74	10	740
75	10	750
76	10	760
77	10	770
78	10	780
79	10	790
80	10	800
81	10	810
82	10	820
83	10	830
84	10	840
85	10	850
86	10	860
87	10	870
88	10	880
89	10	890
90	10	900
91	10	910
92	10	920
93	10	930
94	10	940
95	10	950
96	10	960
97	10	970
98	10	980
99	10	990
100	10	1000

B. Monitoring Well- see below:

HSA Auger Size: 4.25" " I.D.

Sampling Method: **Geoprobe:**

Well Construction: MW 14

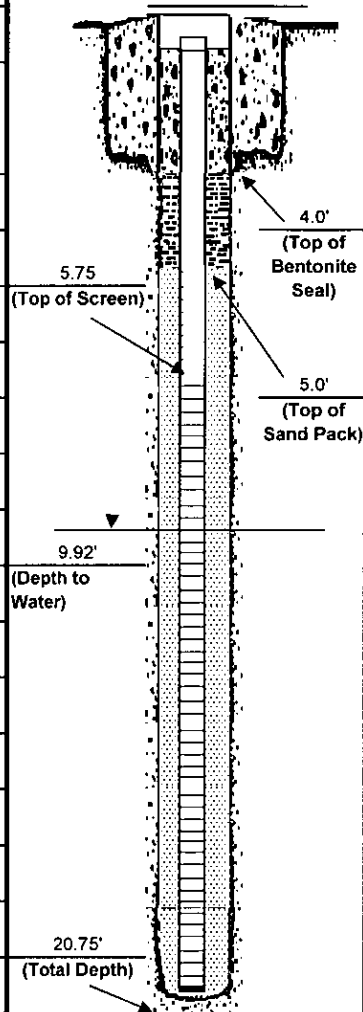
Driller: Chatfield Drilling

Logged By: D. Birchard

Dia.: 2"

[illegible]

Casing
Elevation : 1912.62'



ER&R Test Boring Record

Environmental Remediation and Recovery, Inc.
4250 Route 6N
Edinboro, Pennsylvania

Sheet 1 of 1

Soil Boring: BH-15

Project #: 2014.74

Commenced (date/time) 1/15/2019

Soil Boring Status

Location: Russell City Store

Completed (date/time) 1/15/2019

A. Grouted to surface	Ft.
-----------------------	-----

B. Monitoring Well- see below:

HSA Auger Size: 4.25" " I.D.

Sampling Method: **Geoprobe:**

Well Construction: MW 15

SPT: X **CME system**

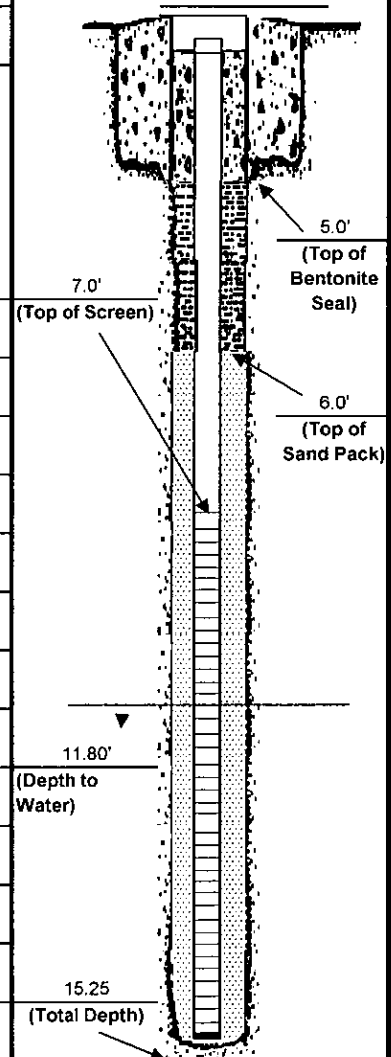
Driller: Chatfield Drilling

Logged By: D. Birchard

Dia.: 2"

[illegible]

Casing
Elevation : 1914.91'



ER&R Test Boring Record

Environmental Remediation and Recovery, Inc.
4250 Route 6N
Edinboro, Pennsylvania

Sheet 1 of 1

Soil Boring: BH-16

Project #: 2014.74

Commenced (date/time) 1/15/2019

Soil Boring Status

Location: Russell City Store

Completed (date/time) 1/15/2019

A. Grouted to surface		Ft.
1	10	10
2	10	20
3	10	30
4	10	40
5	10	50
6	10	60
7	10	70
8	10	80
9	10	90
10	10	100
11	10	110
12	10	120
13	10	130
14	10	140
15	10	150
16	10	160
17	10	170
18	10	180
19	10	190
20	10	200
21	10	210
22	10	220
23	10	230
24	10	240
25	10	250
26	10	260
27	10	270
28	10	280
29	10	290
30	10	300
31	10	310
32	10	320
33	10	330
34	10	340
35	10	350
36	10	360
37	10	370
38	10	380
39	10	390
40	10	400
41	10	410
42	10	420
43	10	430
44	10	440
45	10	450
46	10	460
47	10	470
48	10	480
49	10	490
50	10	500
51	10	510
52	10	520
53	10	530
54	10	540
55	10	550
56	10	560
57	10	570
58	10	580
59	10	590
60	10	600
61	10	610
62	10	620
63	10	630
64	10	640
65	10	650
66	10	660
67	10	670
68	10	680
69	10	690
70	10	700
71	10	710
72	10	720
73	10	730
74	10	740
75	10	750
76	10	760
77	10	770
78	10	780
79	10	790
80	10	800
81	10	810
82	10	820
83	10	830
84	10	840
85	10	850
86	10	860
87	10	870
88	10	880
89	10	890
90	10	900
91	10	910
92	10	920
93	10	930
94	10	940
95	10	950
96	10	960
97	10	970
98	10	980
99	10	990
100	10	1000

B. Monitoring Well- see below:

HSA Auger Size: 4.25" " I.D.

Sampling Method: Geoprobe:

Well Construction: MW 16

Dia.: 2"

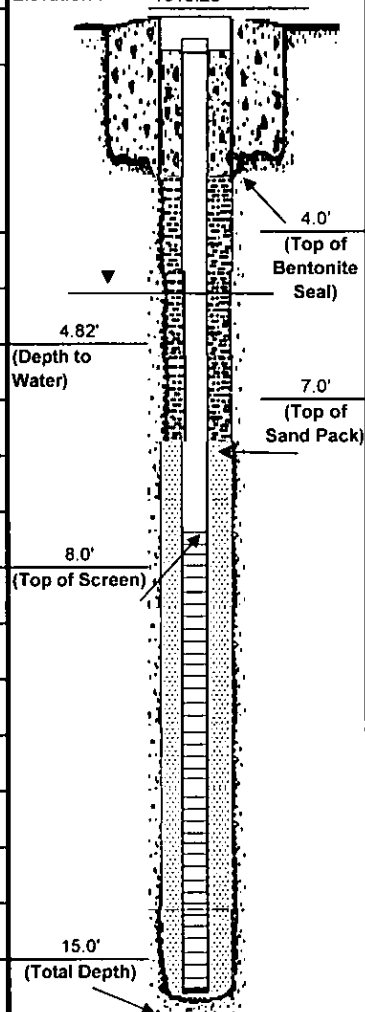
Driller: Chatfield Drilling

SPT: X CME system:
 Logged By: D. Birchard

[illegible]

**Casing
Elevation :**

1913.23'



Test Boring Record

Environmental Remediation and Recovery, Inc.
4250 Route 6N
Edinboro, Pennsylvania

Sheet 1 of 1

Soil Boring: BH 17

Project #: 2014.74

Commenced (date/time) 1/15/2019

Soil Boring Status

Location: Russell City Store

Completed (date/time) 1/15/2019

A. Grouted to surface		Ft.
1	10	10
2	10	20
3	10	30
4	10	40
5	10	50
6	10	60
7	10	70
8	10	80
9	10	90
10	10	100
11	10	110
12	10	120
13	10	130
14	10	140
15	10	150
16	10	160
17	10	170
18	10	180
19	10	190
20	10	200
21	10	210
22	10	220
23	10	230
24	10	240
25	10	250
26	10	260
27	10	270
28	10	280
29	10	290
30	10	300
31	10	310
32	10	320
33	10	330
34	10	340
35	10	350
36	10	360
37	10	370
38	10	380
39	10	390
40	10	400
41	10	410
42	10	420
43	10	430
44	10	440
45	10	450
46	10	460
47	10	470
48	10	480
49	10	490
50	10	500
51	10	510
52	10	520
53	10	530
54	10	540
55	10	550
56	10	560
57	10	570
58	10	580
59	10	590
60	10	600
61	10	610
62	10	620
63	10	630
64	10	640
65	10	650
66	10	660
67	10	670
68	10	680
69	10	690
70	10	700
71	10	710
72	10	720
73	10	730
74	10	740
75	10	750
76	10	760
77	10	770
78	10	780
79	10	790
80	10	800
81	10	810
82	10	820
83	10	830
84	10	840
85	10	850
86	10	860
87	10	870
88	10	880
89	10	890
90	10	900
91	10	910
92	10	920
93	10	930
94	10	940
95	10	950
96	10	960
97	10	970
98	10	980
99	10	990
100	10	1000

B. Monitoring Well- see below:

HSA Auger Size: 4.25" " I.D.

Sampling Method: Geoprobe:

Well Construction: MW 17

Driller: Chatfield Drilling

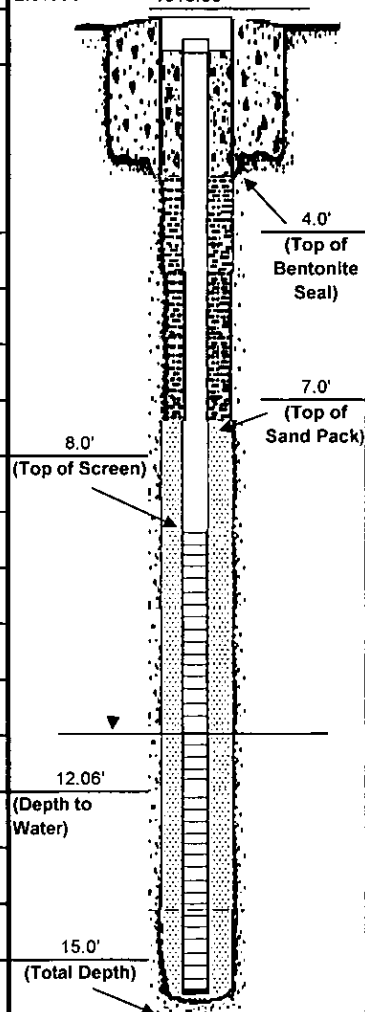
Logged By: D. Birchard

Dia.: 2"

[illegible]

**Casing
Elevation :**

1915.60'



Appendix J
Laboratory Certificates of Analysis – Soil

April 02, 2015

Mr. Dave Birchard
Environmental Remediation & Recovery, Inc.
4250 Route 6N
Edinboro, PA 16412

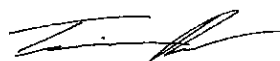
RE: Project: Russel City Store
Pace Project No.: 30143245

Dear Mr. Birchard:

Enclosed are the analytical results for sample(s) received by the laboratory on March 19, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Timothy Reed
timothy.reed@pacelabs.com
Project Manager

Enclosures

cc: Karann Holman, Environmental Remediation & Recovery,
Inc.



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: Russel City Store
Pace Project No.: 30143245

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ACCLASS DOD-ELAP Accreditation #: ADE-1544
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California/TNI Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Guam/PADEP Certification
Hawaii/PADEP Certification
Idaho Certification
Illinois/PADEP Certification
Indiana/PADEP Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235

Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188
Utah/TNI Certification #: PA014572014-4
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin/PADEP Certification
Wyoming Certification #: 8TMS-Q

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: Russel City Store
Pace Project No.: 30143245

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30143245001	SB1 2-3'	Solid	03/17/15 09:30	03/19/15 09:30
30143245002	SB1 7.5-9'	Solid	03/17/15 09:45	03/19/15 09:30
30143245003	SB2 2.5-5'	Solid	03/17/15 10:00	03/19/15 09:30
30143245004	SB2 7-8'	Solid	03/17/15 10:15	03/19/15 09:30
30143245005	SB3 5-6'	Solid	03/17/15 10:30	03/19/15 09:30
30143245006	SB4 3-5'	Solid	03/17/15 10:45	03/19/15 09:30
30143245007	SB5 10-12'	Solid	03/17/15 11:00	03/19/15 09:30
30143245008	SB6 10-12.5'	Solid	03/17/15 11:15	03/19/15 09:30
30143245009	SB7 11-12.5'	Solid	03/17/15 11:30	03/19/15 09:30
30143245010	SB8 11-12'	Solid	03/17/15 11:45	03/19/15 09:30

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Russel City Store
Pace Project No.: 30143245

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30143245001	SB1 2-3'	EPA 8260B	JEW, MAK	12
		ASTM D2974-87	AMR	1
30143245002	SB1 7.5-9'	EPA 8260B	JEW	12
		ASTM D2974-87	AMR	1
30143245003	SB2 2.5-5'	EPA 8260B	JEW	12
		ASTM D2974-87	AMR	1
30143245004	SB2 7-8'	EPA 8260B	JEW	12
		ASTM D2974-87	AMR	1
30143245005	SB3 5-6'	EPA 8260B	JEW	12
		ASTM D2974-87	AMR	1
30143245006	SB4 3-5'	EPA 8260B	JEW	12
		ASTM D2974-87	AMR	1
30143245007	SB5 10-12'	EPA 8260B	JEW	12
		ASTM D2974-87	AMR	1
30143245008	SB6 10-12.5'	EPA 8260B	JEW	12
		ASTM D2974-87	AMR	1
30143245009	SB7 11-12.5'	EPA 8260B	JEW	12
		ASTM D2974-87	AMR	1
30143245010	SB8 11-12'	EPA 8260B	JEW	12
		ASTM D2974-87	AMR	1

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Russel City Store
Pace Project No.: 30143245

Sample: SB1 2-3' Lab ID: 30143245001 Collected: 03/17/15 09:30 Received: 03/19/15 09:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST Analytical Method: EPA 8260B									
Benzene	1110	ug/kg	262	40.8	50		03/27/15 20:37	71-43-2	
Ethylbenzene	9340	ug/kg	262	135	50		03/27/15 20:37	100-41-4	
Isopropylbenzene (Cumene)	5450	ug/kg	262	55.5	50		03/27/15 20:37	98-82-8	
Methyl-tert-butyl ether	ND	ug/kg	262	37.2	50		03/27/15 20:37	1634-04-4	
Naphthalene	16300	ug/kg	262	132	50		03/27/15 20:37	91-20-3	
Toluene	ND	ug/kg	262	33.7	50		03/27/15 20:37	108-88-3	
1,2,4-Trimethylbenzene	106000	ug/kg	2620	607	500		03/30/15 18:23	95-63-6	
1,3,5-Trimethylbenzene	68300	ug/kg	2620	707	500		03/30/15 18:23	108-67-8	
Xylene (Total)	30500	ug/kg	785	160	50		03/27/15 20:37	1330-20-7	
Surrogates									
Toluene-d8 (S)	169	%	73-124		50		03/27/15 20:37	2037-26-5	S0
4-Bromofluorobenzene (S)	76	%	71-124		50		03/27/15 20:37	460-00-4	
1,2-Dichloroethane-d4 (S)	94	%	83-138		50		03/27/15 20:37	17060-07-0	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	12.0	%	0.10	0.10	1		03/31/15 15:01		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Russel City Store
Pace Project No.: 30143245

Sample: SB1 7.5-9' Lab ID: 30143245002 Collected: 03/17/15 09:45 Received: 03/19/15 09:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST Analytical Method: EPA 8260B									
Benzene	ND	ug/kg	5.5	0.86	1		03/27/15 21:57	71-43-2	
Ethylbenzene	ND	ug/kg	5.5	2.8	1		03/27/15 21:57	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/kg	5.5	1.2	1		03/27/15 21:57	98-82-8	
Methyl-tert-butyl ether	ND	ug/kg	5.5	0.78	1		03/27/15 21:57	1634-04-4	
Naphthalene	12.7	ug/kg	5.5	2.8	1		03/27/15 21:57	91-20-3	
Toluene	ND	ug/kg	5.5	0.71	1		03/27/15 21:57	108-88-3	
1,2,4-Trimethylbenzene	7.8	ug/kg	5.5	1.3	1		03/27/15 21:57	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	5.5	1.5	1		03/27/15 21:57	108-67-8	
Xylene (Total)	ND	ug/kg	16.5	3.4	1		03/27/15 21:57	1330-20-7	
Surrogates									
Toluene-d8 (S)	92	%	73-124		1		03/27/15 21:57	2037-26-5	
4-Bromofluorobenzene (S)	107	%	71-124		1		03/27/15 21:57	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	83-138		1		03/27/15 21:57	17060-07-0	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	17.5	%	0.10	0.10	1		03/31/15 15:02		

REPORT OF LABORATORY ANALYSIS

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Date: 04/02/2015 04:42 PM

Page 6 of 22

8/19/2019 2:14:43 PM

ANALYTICAL RESULTS

Project: Russel City Store
Pace Project No.: 30143245

Sample: SB2 2.5-5' Lab ID: 30143245003 Collected: 03/17/15 10:00 Received: 03/19/15 09:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST Analytical Method: EPA 8260B									
Benzene	ND	ug/kg	244	38.1	50		03/27/15 21:04	71-43-2	
Ethylbenzene	ND	ug/kg	244	125	50		03/27/15 21:04	100-41-4	
Isopropylbenzene (Cumene)	271	ug/kg	244	51.8	50		03/27/15 21:04	98-82-8	
Methyl-tert-butyl ether	ND	ug/kg	244	34.7	50		03/27/15 21:04	1634-04-4	
Naphthalene	781	ug/kg	244	123	50		03/27/15 21:04	91-20-3	
Toluene	ND	ug/kg	244	31.4	50		03/27/15 21:04	108-88-3	
1,2,4-Trimethylbenzene	1030	ug/kg	244	56.6	50		03/27/15 21:04	95-63-6	
1,3,5-Trimethylbenzene	511	ug/kg	244	65.9	50		03/27/15 21:04	108-67-8	
Xylene (Total)	ND	ug/kg	732	149	50		03/27/15 21:04	1330-20-7	
Surrogates									
Toluene-d8 (S)	93	%	73-124		50		03/27/15 21:04	2037-26-5	
4-Bromofluorobenzene (S)	97	%	71-124		50		03/27/15 21:04	460-00-4	
1,2-Dichloroethane-d4 (S)	87	%	83-138		50		03/27/15 21:04	17060-07-0	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	9.5	%	0.10	0.10	1		03/31/15 15:03		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Russel City Store
Pace Project No.: 30143245

Sample: SB2 7-8' Lab ID: 30143245004 Collected: 03/17/15 10:15 Received: 03/19/15 09:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST Analytical Method: EPA 8260B									
Benzene	ND	ug/kg	5.2	0.81	1		03/30/15 19:56	71-43-2	
Ethylbenzene	ND	ug/kg	5.2	2.7	1		03/30/15 19:56	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/kg	5.2	1.1	1		03/30/15 19:56	98-82-8	
Methyl-tert-butyl ether	ND	ug/kg	5.2	0.74	1		03/30/15 19:56	1634-04-4	
Naphthalene	ND	ug/kg	5.2	2.6	1		03/30/15 19:56	91-20-3	
Toluene	ND	ug/kg	5.2	0.67	1		03/30/15 19:56	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/kg	5.2	1.2	1		03/30/15 19:56	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	5.2	1.4	1		03/30/15 19:56	108-67-8	
Xylene (Total)	ND	ug/kg	15.5	3.2	1		03/30/15 19:56	1330-20-7	
Surrogates									
Toluene-d8 (S)	101	%	73-124		1		03/30/15 19:56	2037-26-5	
4-Bromofluorobenzene (S)	96	%	71-124		1		03/30/15 19:56	460-00-4	
1,2-Dichloroethane-d4 (S)	107	%	83-138		1		03/30/15 19:56	17060-07-0	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	15.2	%	0.10	0.10	1		03/31/15 15:03		

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Date: 04/02/2015 04:42 PM

Page 8 of 22

8/19/2019 2:14:44 PM

ANALYTICAL RESULTS

Project: Russel City Store
Pace Project No.: 30143245

Sample: SB3 5-6' Lab ID: 30143245005 Collected: 03/17/15 10:30 Received: 03/19/15 09:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST									
Analytical Method: EPA 8260B									
Benzene	39.9	ug/kg	5.1	0.80	1		03/30/15 20:22	71-43-2	
Ethylbenzene	17.5	ug/kg	5.1	2.6	1		03/30/15 20:22	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/kg	5.1	1.1	1		03/30/15 20:22	98-82-8	
Methyl-tert-butyl ether	ND	ug/kg	5.1	0.73	1		03/30/15 20:22	1634-04-4	
Naphthalene	7.9	ug/kg	5.1	2.6	1		03/30/15 20:22	91-20-3	
Toluene	ND	ug/kg	5.1	0.66	1		03/30/15 20:22	108-88-3	
1,2,4-Trimethylbenzene	10.9	ug/kg	5.1	1.2	1		03/30/15 20:22	95-63-6	
1,3,5-Trimethylbenzene	5.4	ug/kg	5.1	1.4	1		03/30/15 20:22	108-67-8	
Xylene (Total)	36.8	ug/kg	15.4	3.1	1		03/30/15 20:22	1330-20-7	
Surrogates									
Toluene-d8 (S)	95	%	73-124		1		03/30/15 20:22	2037-26-5	
4-Bromofluorobenzene (S)	101	%	71-124		1		03/30/15 20:22	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	83-138		1		03/30/15 20:22	17060-07-0	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Percent Moisture	9.3	%	0.10	0.10	1		03/31/15 15:03		

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ANALYTICAL RESULTS

Project: Russel City Store
Pace Project No.: 30143245

Sample: SB4 3-5' Lab ID: 30143245006 Collected: 03/17/15 10:45 Received: 03/19/15 09:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST Analytical Method: EPA 8260B									
Benzene	ND	ug/kg	4.8	0.76	1		03/30/15 20:49	71-43-2	
Ethylbenzene	11.9	ug/kg	4.8	2.5	1		03/30/15 20:49	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/kg	4.8	1.0	1		03/30/15 20:49	98-82-8	
Methyl-tert-butyl ether	ND	ug/kg	4.8	0.69	1		03/30/15 20:49	1634-04-4	
Naphthalene	17.5	ug/kg	4.8	2.4	1		03/30/15 20:49	91-20-3	
Toluene	5.6	ug/kg	4.8	0.62	1		03/30/15 20:49	108-88-3	
1,2,4-Trimethylbenzene	45.3	ug/kg	4.8	1.1	1		03/30/15 20:49	95-63-6	
1,3,5-Trimethylbenzene	19.5	ug/kg	4.8	1.3	1		03/30/15 20:49	108-67-8	
Xylene (Total)	42.1	ug/kg	14.5	3.0	1		03/30/15 20:49	1330-20-7	
Surrogates									
Toluene-d8 (S)	96	%	73-124		1		03/30/15 20:49	2037-26-5	
4-Bromofluorobenzene (S)	95	%	71-124		1		03/30/15 20:49	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	83-138		1		03/30/15 20:49	17060-07-0	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	7.3	%	0.10	0.10	1		03/31/15 15:15		

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ANALYTICAL RESULTS

Project: Russel City Store
Pace Project No.: 30143245

Sample: SB5 10-12' Lab ID: 30143245007 Collected: 03/17/15 11:00 Received: 03/19/15 09:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST Analytical Method: EPA 8260B									
Benzene	ND	ug/kg	247	38.6	50		03/27/15 21:30	71-43-2	
Ethylbenzene	1580	ug/kg	247	127	50		03/27/15 21:30	100-41-4	
Isopropylbenzene (Cumene)	262	ug/kg	247	52.4	50		03/27/15 21:30	98-82-8	
Methyl-tert-butyl ether	ND	ug/kg	247	35.1	50		03/27/15 21:30	1634-04-4	
Naphthalene	1510	ug/kg	247	125	50		03/27/15 21:30	91-20-3	
Toluene	ND	ug/kg	247	31.8	50		03/27/15 21:30	108-88-3	
1,2,4-Trimethylbenzene	6270	ug/kg	247	57.3	50		03/27/15 21:30	95-63-6	
1,3,5-Trimethylbenzene	2310	ug/kg	247	66.7	50		03/27/15 21:30	108-67-8	
Xylene (Total)	4390	ug/kg	741	151	50		03/27/15 21:30	1330-20-7	
Surrogates									
Toluene-d8 (S)	92	%	73-124		50		03/27/15 21:30	2037-26-5	
4-Bromofluorobenzene (S)	99	%	71-124		50		03/27/15 21:30	460-00-4	
1,2-Dichloroethane-d4 (S)	87	%	83-138		50		03/27/15 21:30	17060-07-0	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	4.4	%	0.10	0.10	1		03/31/15 15:04		

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ANALYTICAL RESULTS

Project: Russel City Store
Pace Project No.: 30143245

Sample: SB6 10-12.5' Lab ID: 30143245008 Collected: 03/17/15 11:15 Received: 03/19/15 09:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST Analytical Method: EPA 8260B									
Benzene	579	ug/kg	235	36.7	50		03/30/15 21:15	71-43-2	
Ethylbenzene	4500	ug/kg	235	121	50		03/30/15 21:15	100-41-4	
Isopropylbenzene (Cumene)	509	ug/kg	235	49.8	50		03/30/15 21:15	98-82-8	
Methyl-tert-butyl ether	ND	ug/kg	235	33.4	50		03/30/15 21:15	1634-04-4	
Naphthalene	2700	ug/kg	235	118	50		03/30/15 21:15	91-20-3	
Toluene	6870	ug/kg	235	30.2	50		03/30/15 21:15	108-88-3	
1,2,4-Trimethylbenzene	13500	ug/kg	235	54.5	50		03/30/15 21:15	95-63-6	
1,3,5-Trimethylbenzene	4660	ug/kg	235	63.5	50		03/30/15 21:15	108-67-8	
Xylene (Total)	19900	ug/kg	705	144	50		03/30/15 21:15	1330-20-7	
Surrogates									
Toluene-d8 (S)	102	%	73-124		50		03/30/15 21:15	2037-26-5	
4-Bromofluorobenzene (S)	100	%	71-124		50		03/30/15 21:15	460-00-4	
1,2-Dichloroethane-d4 (S)	95	%	83-138		50		03/30/15 21:15	17060-07-0	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	5.7	%	0.10	0.10	1		03/31/15 15:04		

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ANALYTICAL RESULTS

Project: Russel City Store

Pace Project No.: 30143245

Sample: SB7 11-12.5' Lab ID: 30143245009 Collected: 03/17/15 11:30 Received: 03/19/15 09:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST Analytical Method: EPA 8260B									
Benzene	15.8	ug/kg	5.1	0.79	1		03/30/15 21:42	71-43-2	
Ethylbenzene	67.9	ug/kg	5.1	2.6	1		03/30/15 21:42	100-41-4	
Isopropylbenzene (Cumene)	26.3	ug/kg	5.1	1.1	1		03/30/15 21:42	98-82-8	
Methyl-tert-butyl ether	ND	ug/kg	5.1	0.72	1		03/30/15 21:42	1634-04-4	
Naphthalene	46.5	ug/kg	5.1	2.5	1		03/30/15 21:42	91-20-3	
Toluene	ND	ug/kg	5.1	0.65	1		03/30/15 21:42	108-88-3	
1,2,4-Trimethylbenzene	225	ug/kg	5.1	1.2	1		03/30/15 21:42	95-63-6	
1,3,5-Trimethylbenzene	148	ug/kg	5.1	1.4	1		03/30/15 21:42	108-67-8	
Xylene (Total)	98.2	ug/kg	15.2	3.1	1		03/30/15 21:42	1330-20-7	
Surrogates									
Toluene-d8 (S)	95	%	73-124		1		03/30/15 21:42	2037-26-5	
4-Bromofluorobenzene (S)	103	%	71-124		1		03/30/15 21:42	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	83-138		1		03/30/15 21:42	17060-07-0	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	6.6	%	0.10	0.10	1		03/31/15 15:04		

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ANALYTICAL RESULTS

Project: Russel City Store
Pace Project No.: 30143245

Sample: SB8 11-12' Lab ID: 30143245010 Collected: 03/17/15 11:45 Received: 03/19/15 09:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST Analytical Method: EPA 8260B									
Benzene	ND	ug/kg	5.0	0.78	1		03/30/15 22:08	71-43-2	
Ethylbenzene	54.1	ug/kg	5.0	2.6	1		03/30/15 22:08	100-41-4	
Isopropylbenzene (Cumene)	20.7	ug/kg	5.0	1.1	1		03/30/15 22:08	98-82-8	
Methyl-tert-butyl ether	ND	ug/kg	5.0	0.71	1		03/30/15 22:08	1634-04-4	
Naphthalene	21.1	ug/kg	5.0	2.5	1		03/30/15 22:08	91-20-3	
Toluene	ND	ug/kg	5.0	0.64	1		03/30/15 22:08	108-88-3	
1,2,4-Trimethylbenzene	184	ug/kg	5.0	1.2	1		03/30/15 22:08	95-63-6	
1,3,5-Trimethylbenzene	87.3	ug/kg	5.0	1.4	1		03/30/15 22:08	108-67-8	
Xylene (Total)	108	ug/kg	15.0	3.1	1		03/30/15 22:08	1330-20-7	
Surrogates									
Toluene-d8 (S)	104	%	73-124		1		03/30/15 22:08	2037-26-5	
4-Bromofluorobenzene (S)	101	%	71-124		1		03/30/15 22:08	460-00-4	
1,2-Dichloroethane-d4 (S)	108	%	83-138		1		03/30/15 22:08	17060-07-0	

Percent Moisture

Analytical Method: ASTM D2974-87

Percent Moisture	8.0	%	0.10	0.10	1		03/31/15 15:05		
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QUALITY CONTROL DATA

Project: Russel City Store
Pace Project No.: 30143245

QC Batch: MSV/22887 Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B Analysis Description: 8260 MSV UST-SOIL
Associated Lab Samples: 30143245001, 30143245002, 30143245003, 30143245007

METHOD BLANK: 871226 Matrix: Solid
Associated Lab Samples: 30143245001, 30143245002, 30143245003, 30143245007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	ND	5.0	03/27/15 12:27	
1,3,5-Trimethylbenzene	ug/kg	ND	5.0	03/27/15 12:27	
Benzene	ug/kg	ND	5.0	03/27/15 12:27	
Ethylbenzene	ug/kg	ND	5.0	03/27/15 12:27	
Isopropylbenzene (Cumene)	ug/kg	ND	5.0	03/27/15 12:27	
Methyl-tert-butyl ether	ug/kg	ND	5.0	03/27/15 12:27	
Naphthalene	ug/kg	ND	5.0	03/27/15 12:27	
Toluene	ug/kg	ND	5.0	03/27/15 12:27	
Xylene (Total)	ug/kg	ND	15.0	03/27/15 12:27	
1,2-Dichloroethane-d4 (S)	%	92	83-138	03/27/15 12:27	
4-Bromofluorobenzene (S)	%	96	71-124	03/27/15 12:27	
Toluene-d8 (S)	%	98	73-124	03/27/15 12:27	

LABORATORY CONTROL SAMPLE: 871227

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	20	19.1	95	54-131	
1,3,5-Trimethylbenzene	ug/kg	20	20.2	101	54-131	
Benzene	ug/kg	20	23.5	117	52-126	
Ethylbenzene	ug/kg	20	19.5	98	54-128	
Isopropylbenzene (Cumene)	ug/kg	20	19.4	97	58-144	
Methyl-tert-butyl ether	ug/kg	20	23.8	119	57-129	
Naphthalene	ug/kg	20	16.0	80	36-152	
Toluene	ug/kg	20	19.5	98	53-127	
Xylene (Total)	ug/kg	60	57.5	96	53-127	
1,2-Dichloroethane-d4 (S)	%			95	83-138	
4-Bromofluorobenzene (S)	%			96	71-124	
Toluene-d8 (S)	%			92	73-124	

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Date: 04/02/2015 04:42 PM

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Page 15 of 22

8/19/2019 2:14:48 PM

QUALITY CONTROL DATA

Project: Russel City Store
Pace Project No.: 30143245

QC Batch: MSV/22921 Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B Analysis Description: 8260 MSV UST-SOIL
Associated Lab Samples: 30143245004, 30143245005, 30143245006, 30143245008, 30143245009, 30143245010

METHOD BLANK: 872570 Matrix: Solid
Associated Lab Samples: 30143245004, 30143245005, 30143245006, 30143245008, 30143245009, 30143245010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	ND	5.0	03/30/15 18:10	
1,3,5-Trimethylbenzene	ug/kg	ND	5.0	03/30/15 18:10	
Benzene	ug/kg	ND	5.0	03/30/15 18:10	
Ethylbenzene	ug/kg	ND	5.0	03/30/15 18:10	
Isopropylbenzene (Cumene)	ug/kg	ND	5.0	03/30/15 18:10	
Methyl-tert-butyl ether	ug/kg	ND	5.0	03/30/15 18:10	
Naphthalene	ug/kg	ND	5.0	03/30/15 18:10	
Toluene	ug/kg	ND	5.0	03/30/15 18:10	
Xylene (Total)	ug/kg	ND	15.0	03/30/15 18:10	
1,2-Dichloroethane-d4 (S)	%	99	83-138	03/30/15 18:10	
4-Bromofluorobenzene (S)	%	95	71-124	03/30/15 18:10	
Toluene-d8 (S)	%	97	73-124	03/30/15 18:10	

LABORATORY CONTROL SAMPLE: 872571

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	20	19.2	96	54-131	
1,3,5-Trimethylbenzene	ug/kg	20	19.2	96	54-131	
Benzene	ug/kg	20	19.7	99	52-126	
Ethylbenzene	ug/kg	20	19.4	97	54-128	
Isopropylbenzene (Cumene)	ug/kg	20	20.5	102	58-144	
Methyl-tert-butyl ether	ug/kg	20	19.9	99	57-129	
Naphthalene	ug/kg	20	16.6	83	36-152	
Toluene	ug/kg	20	20.1	101	53-127	
Xylene (Total)	ug/kg	60	57.5	96	53-127	
1,2-Dichloroethane-d4 (S)	%			96	83-138	
4-Bromofluorobenzene (S)	%			100	71-124	
Toluene-d8 (S)	%			99	73-124	

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Date: 04/02/2015 04:42 PM

Page 16 of 22

8/19/2019 2:14:48 PM

QUALITY CONTROL DATA

Project: Russel City Store
Pace Project No.: 30143245

QC Batch: PMST/5205 Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 30143245001, 30143245002, 30143245003, 30143245004, 30143245005, 30143245006, 30143245007,
30143245008, 30143245009, 30143245010

SAMPLE DUPLICATE: 872992

Parameter	Units	30143244001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	15.5	14.5	7	20	

SAMPLE DUPLICATE: 872993

Parameter	Units	30143244002 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	4.6	7.3	46	20	D6

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QUALIFIERS

Project: Russel City Store
Pace Project No.: 30143245

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.
ND - Not Detected at or above adjusted reporting limit.
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
MDL - Adjusted Method Detection Limit.
PQL - Practical Quantitation Limit.
RL - Reporting Limit.
S - Surrogate
1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.
Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.
LCS(D) - Laboratory Control Sample (Duplicate)
MS(D) - Matrix Spike (Duplicate)
DUP - Sample Duplicate
RPD - Relative Percent Difference
NC - Not Calculable.
SG - Silica Gel - Clean-Up
U - Indicates the compound was analyzed for, but not detected.
N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.
Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.
TNI - The NELAC Institute.

ANALYTE QUALIFIERS

D6 The relative percent difference (RPD) between the sample and sample duplicate exceeded laboratory control limits.
S0 Surrogate recovery outside laboratory control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Russel City Store
Pace Project No.: 30143245

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30143245001	SB1 2-3'	EPA 8260B	MSV/22887		
30143245002	SB1 7.5-9'	EPA 8260B	MSV/22887		
30143245003	SB2 2.5-5'	EPA 8260B	MSV/22887		
30143245004	SB2 7-8'	EPA 8260B	MSV/22921		
30143245005	SB3 5-6'	EPA 8260B	MSV/22921		
30143245006	SB4 3-5'	EPA 8260B	MSV/22921		
30143245007	SB5 10-12'	EPA 8260B	MSV/22887		
30143245008	SB6 10-12.5'	EPA 8260B	MSV/22921		
30143245009	SB7 11-12.5'	EPA 8260B	MSV/22921		
30143245010	SB8 11-12'	EPA 8260B	MSV/22921		
30143245001	SB1 2-3'	ASTM D2974-87	PMST/5205		
30143245002	SB1 7.5-9'	ASTM D2974-87	PMST/5205		
30143245003	SB2 2.5-5'	ASTM D2974-87	PMST/5205		
30143245004	SB2 7-8'	ASTM D2974-87	PMST/5205		
30143245005	SB3 5-6'	ASTM D2974-87	PMST/5205		
30143245006	SB4 3-5'	ASTM D2974-87	PMST/5205		
30143245007	SB5 10-12'	ASTM D2974-87	PMST/5205		
30143245008	SB6 10-12.5'	ASTM D2974-87	PMST/5205		
30143245009	SB7 11-12.5'	ASTM D2974-87	PMST/5205		
30143245010	SB8 11-12'	ASTM D2974-87	PMST/5205		

REPORT OF LABORATORY ANALYSIS

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A		Section B		Section C	
Required Client Information:		Required Project Information:		Invoice Information:	
Company: <u>ELR</u>	Report To: <u>D. Birchard</u>	Attendee: <u>Tania Kleinm</u>			
Address: <u>4250 Rt 6N</u>	Copy To: <u>K. Holmann</u>	Company Name: <u>ELR</u>			
<u>Edinboro PA 16728</u>		Address: <u>4250 Rt 6N</u>			
Email To: <u>D. Birchard</u>	Purchase Order No.:	Pace Quote Reference:			
Phone: <u>814 731 6411</u>	Project Name: <u>Russell City Store</u>	Pace Project Manager: <u>Tim Reed</u>			
Fax:	Project Number: <u>2014.74</u>	Pace Profile #:			
Requested Due Date/TAT: <u>7 day</u>					
Page: <u>1</u> of <u>1</u>		1833701			
		REGULATORY AGENCY			
		☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER ☒ UST ☐ RCRA ☐ OTHER _____			
Site Location		STATE: <u>PA</u>			

[illegible]

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS				Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	<i>[Signature]</i>	3/16/15	4:00	<i>[Signature]</i>	3-11-15	0930					Y	2	Y	

ORIGINAL

SAMPLER NAME AND SIGNATURE	
PRINT Name of SAMPLER:	<i>Nick Bessie</i>
SIGNATURE of SAMPLER:	<i>[Signature]</i>
DATE Signed (MM/DD/YYYY): 3/17/15	

Page 20 of 22



Sample Condition Upon Receipt

Client Name: ER3R

Project # 30143245

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Tracking #: 7731 5932 9680

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals Intact: ☐ yes ☐ no Biological Tissue Is Frozen: Yes No

Packing Material: Bubble Wrap ☒ Bubble Bags _____ None _____ Other foam

Thermometer Used #6 Type of Ice: ☒ Wet ☐ Blue ☐ None ☒ Samples on Ice, cooling process has begun

Cooler Temp.: Observed Temp.: 1.9 °C Correction Factor: -0.3 °C Final Temp: 1.6 °C

Temp should be above freezing to 6°C

Comments:

Date and Initials of person

examining contents: SA 5:00

Chain of Custody Present:	☒ Yes ☐ No ☐ N/A	1.
Chain of Custody Filled Out:	☒ Yes ☐ No ☐ N/A	2.
Chain of Custody Relinquished:	☒ Yes ☐ No ☐ N/A	3.
Sampler Name & Signature on COC:	☒ Yes ☐ No ☐ N/A	4.
Samples Arrived within Hold Time:	☒ Yes ☐ No ☐ N/A	5.
Short Hold Time Analysis (<72hr):	☐ Yes ☒ No ☐ N/A	6.
Rush Turn Around Time Requested:	☐ Yes ☒ No ☐ N/A	7.
Sufficient Volume:	☒ Yes ☐ No ☐ N/A	8.
Correct Containers Used:	☒ Yes ☐ No ☐ N/A	9.
-Pace Containers Used:	☒ Yes ☐ No ☐ N/A	
Containers Intact:	☒ Yes ☐ No ☐ N/A	10.
Filtered volume received for Dissolved tests	☐ Yes ☐ No ☒ N/A	11.
Sample Labels match COC:	☒ Yes ☐ No ☐ N/A	12.
-Includes date/time/ID/Analysis Matrix: <u>Si</u>		
All containers needing preservation have been checked.	☐ Yes ☐ No ☒ N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☐ Yes ☐ No ☒ N/A	
exceptions: VOA, coliform, TOC, O&G, Phenols	☐ Yes ☒ No	Initial when completed <u>SQA</u> Lot # of added preservative
Samples checked for dechlorination:	☐ Yes ☐ No ☒ N/A	14.
Headspace in VOA Vials (>6mm):	☐ Yes ☐ No ☒ N/A	15.
Trip Blank Present:	☐ Yes ☒ No ☐ N/A	16.
Trip Blank Custody Seals Present	☐ Yes ☐ No ☒ N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution:

Field Data Required?

Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____

Date: 3/20/15

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

Project Number:

Client Name: E R + R

page 2

Face Analytical

	Item No.	890
	Matrix Code	15
Glass Jar (120 / 250 / 500 / 1L)		
Soil kit (SB, M, soil jar)	5	
Chemistry (250 / 500 / 1L)		
Organics (1L)		
Nutrient (250 / 500)		
Phenolics (250 ml)		
TOC (40 ml / 250 ml)		
TOX (250 ml)		
Total Metals		
Dissolved Metals preserved Y		
O & G (1L)		
TPH (1L)		
VOA (40 ml 30 ml)		
Cyanide (250 ml)		
Sulfide (500 ml)		
Bacteria (120 ml)		
Wipes / swipe smear/ filter		
Radcham NaIgene (125 / 250 / 500 / 1L)		
Radchem NaIgene (1/2 gal. / 1 gal.L)		
CubItainer (500 ml / 4L)		
Ziploc		
Other		
Other		

June 08, 2015

Nick Feisler
Environmental Remediation & Recovery, Inc.
4250 Route 6N
Edinboro, PA 16412

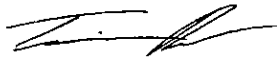
RE: Project: 2014.79 Russel City Store
Pace Project No.: 30148798

Dear Nick Feisler:

Enclosed are the analytical results for sample(s) received by the laboratory on May 22, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Timothy Reed
timothy.reed@pacelabs.com
Project Manager

Enclosures

cc: Karann Holman, Environmental Remediation & Recovery,
Inc.



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: 2014.79 Russel City Store
Pace Project No.: 30148798

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ACLASS DOD-ELAP Accreditation #: ADE-1544
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California/TNI Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Guam/PADEP Certification
Hawaii/PADEP Certification
Idaho Certification
Illinois/PADEP Certification
Indiana/PADEP Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235

Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188
Utah/TNI Certification #: PA014572014-4
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin/PADEP Certification
Wyoming Certification #: 8TMS-Q

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SAMPLE SUMMARY

Project: 2014.79 Russel City Store
Pace Project No.: 30148798

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30148798001	BS1	Solid	05/20/15 10:00	05/22/15 09:15
30148798002	BS2	Solid	05/20/15 10:20	05/22/15 09:15
30148798003	BS3	Solid	05/20/15 10:40	05/22/15 09:15

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SAMPLE ANALYTE COUNT

Project: 2014.79 Russel City Store
Pace Project No.: 30148798

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30148798001	BS1	EPA 8260B	JEW	12	PASI-PA
		ASTM D2974-87	AMR	1	PASI-PA
30148798002	BS2	EPA 8260B	JEW	12	PASI-PA
		ASTM D2974-87	AMR	1	PASI-PA
30148798003	BS3	EPA 8260B	JEW	12	PASI-PA
		ASTM D2974-87	AMR	1	PASI-PA

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: 2014.79 Russel City Store
Pace Project No.: 30148798

Method: EPA 8260B
Description: 8260B MSV
Client: Environmental Remediation and Recovery, Inc.
Date: June 08, 2015

General Information:

3 samples were analyzed for EPA 8260B. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: MSV/23635

L0: Analyte recovery in the laboratory control sample (LCS) was outside QC limits.

- LCS (Lab ID: 900767)
- Methyl-tert-butyl ether

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSV/23635

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 2014.79 Russel City Store
Pace Project No.: 30148798

Sample: BS1 Lab ID: 30148798001 Collected: 05/20/15 10:00 Received: 05/22/15 09:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV Analytical Method: EPA 8260B									
Benzene	2500	ug/kg	268	72.9	50		05/31/15 22:04	71-43-2	M5
Ethylbenzene	5380	ug/kg	268	54.1	50		05/31/15 22:04	100-41-4	M5
Isopropylbenzene (Cumene)	348	ug/kg	268	92.7	50		05/31/15 22:04	98-82-8	M5
Methyl-tert-butyl ether	ND	ug/kg	268	130	50		05/31/15 22:04	1634-04-4	L3,M5
Naphthalene	1090	ug/kg	268	52.0	50		05/31/15 22:04	91-20-3	M5
Toluene	3100	ug/kg	268	83.6	50		05/31/15 22:04	108-88-3	M5
1,2,4-Trimethylbenzene	6250	ug/kg	268	76.6	50		05/31/15 22:04	95-63-6	M5
1,3,5-Trimethylbenzene	2060	ug/kg	268	90.0	50		05/31/15 22:04	108-67-8	M5
Xylene (Total)	12400	ug/kg	804	152	50		05/31/15 22:04	1330-20-7	M5
Surrogates									
Toluene-d8 (S)	103	%	73-124		50		05/31/15 22:04	2037-26-5	M5
4-Bromofluorobenzene (S)	104	%	71-124		50		05/31/15 22:04	460-00-4	M5
1,2-Dichloroethane-d4 (S)	94	%	83-138		50		05/31/15 22:04	17060-07-0	M5

Percent Moisture Analytical Method: ASTM D2974-87

Percent Moisture 13.1 % 0.10 0.10 1 06/03/15 18:00

Sample: BS2 Lab ID: 30148798002 Collected: 05/20/15 10:20 Received: 05/22/15 09:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV Analytical Method: EPA 8260B									
Benzene	1330	ug/kg	221	60.2	50		05/31/15 22:30	71-43-2	M5
Ethylbenzene	11300	ug/kg	221	44.7	50		05/31/15 22:30	100-41-4	M5
Isopropylbenzene (Cumene)	751	ug/kg	221	76.6	50		05/31/15 22:30	98-82-8	M5
Methyl-tert-butyl ether	ND	ug/kg	221	108	50		05/31/15 22:30	1634-04-4	L3,M5
Naphthalene	2130	ug/kg	221	43.0	50		05/31/15 22:30	91-20-3	M5
Toluene	15700	ug/kg	221	69.1	50		05/31/15 22:30	108-88-3	M5
1,2,4-Trimethylbenzene	14300	ug/kg	221	63.3	50		05/31/15 22:30	95-63-6	M5
1,3,5-Trimethylbenzene	4490	ug/kg	221	74.4	50		05/31/15 22:30	108-67-8	M5
Xylene (Total)	56500	ug/kg	6640	1260	500		06/03/15 19:49	1330-20-7	M5
Surrogates									
Toluene-d8 (S)	101	%	73-124		50		05/31/15 22:30	2037-26-5	M5
4-Bromofluorobenzene (S)	106	%	71-124		50		05/31/15 22:30	460-00-4	M5
1,2-Dichloroethane-d4 (S)	97	%	83-138		50		05/31/15 22:30	17060-07-0	M5

Percent Moisture Analytical Method: ASTM D2974-87

Percent Moisture 6.9 % 0.10 0.10 1 06/03/15 18:00

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 2014.79 Russel City Store
Pace Project No.: 30148798

Sample: BS3 Lab ID: 30148798003 Collected: 05/20/15 10:40 Received: 05/22/15 09:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV Analytical Method: EPA 8260B									
Benzene	762	ug/kg	233	63.4	50		05/31/15 22:56	71-43-2	M5
Ethylbenzene	6320	ug/kg	233	47.1	50		05/31/15 22:56	100-41-4	M5
Isopropylbenzene (Cumene)	376	ug/kg	233	80.7	50		05/31/15 22:56	98-82-8	M5
Methyl-tert-butyl ether	ND	ug/kg	233	113	50		05/31/15 22:56	1634-04-4	L3,M5
Naphthalene	1530	ug/kg	233	45.2	50		05/31/15 22:56	91-20-3	M5
Toluene	696	ug/kg	233	72.7	50		05/31/15 22:56	108-88-3	M5
1,2,4-Trimethylbenzene	7080	ug/kg	233	66.7	50		05/31/15 22:56	95-63-6	M5
1,3,5-Trimethylbenzene	1820	ug/kg	233	78.3	50		05/31/15 22:56	108-67-8	M5
Xylene (Total)	11200	ug/kg	699	132	50		05/31/15 22:56	1330-20-7	M5
Surrogates									
Toluene-d8 (S)	101	%	73-124		50		05/31/15 22:56	2037-26-5	M5
4-Bromofluorobenzene (S)	103	%	71-124		50		05/31/15 22:56	460-00-4	M5
1,2-Dichloroethane-d4 (S)	95	%	83-138		50		05/31/15 22:56	17060-07-0	M5
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	11.1	%	0.10	0.10	1		06/03/15 18:09		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 2014.79 Russel City Store
Pace Project No.: 30148798

QC Batch: MSV/23635 Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B Analysis Description: 8260 MSV UST-SOIL
Associated Lab Samples: 30148798001, 30148798002, 30148798003

METHOD BLANK: 900766 Matrix: Solid
Associated Lab Samples: 30148798001, 30148798002, 30148798003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	ND	5.0	05/31/15 17:38	M5
1,3,5-Trimethylbenzene	ug/kg	ND	5.0	05/31/15 17:38	M5
Benzene	ug/kg	ND	5.0	05/31/15 17:38	M5
Ethylbenzene	ug/kg	ND	5.0	05/31/15 17:38	M5
Isopropylbenzene (Cumene)	ug/kg	ND	5.0	05/31/15 17:38	M5
Methyl-tert-butyl ether	ug/kg	ND	5.0	05/31/15 17:38	M5
Naphthalene	ug/kg	ND	5.0	05/31/15 17:38	M5
Toluene	ug/kg	ND	5.0	05/31/15 17:38	M5
Xylene (Total)	ug/kg	ND	15.0	05/31/15 17:38	M5
1,2-Dichloroethane-d4 (S)	%	97	83-138	05/31/15 17:38	M5
4-Bromofluorobenzene (S)	%	101	71-124	05/31/15 17:38	M5
Toluene-d8 (S)	%	97	73-124	05/31/15 17:38	M5

LABORATORY CONTROL SAMPLE: 900767

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	20	22.2	111	54-131	M5
1,3,5-Trimethylbenzene	ug/kg	20	21.8	109	54-131	M5
Benzene	ug/kg	20	23.7	119	52-126	M5
Ethylbenzene	ug/kg	20	24.2	121	54-128	M5
Isopropylbenzene (Cumene)	ug/kg	20	23.2	116	58-144	M5
Methyl-tert-butyl ether	ug/kg	20	26.4	132	57-129	L0,M5
Naphthalene	ug/kg	20	20.6	103	36-152	M5
Toluene	ug/kg	20	22.0	110	53-127	M5
Xylene (Total)	ug/kg	60	68.1	113	53-127	M5
1,2-Dichloroethane-d4 (S)	%			98	83-138	M5
4-Bromofluorobenzene (S)	%			104	71-124	M5
Toluene-d8 (S)	%			99	73-124	M5

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Date: 06/08/2015 12:43 PM

Page 8 of 15

8/19/2019 2:14:55 PM

QUALITY CONTROL DATA

Project: 2014.79 Russel City Store
Pace Project No.: 30148798

QC Batch: PMST/5372 Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 30148798001, 30148798002

SAMPLE DUPLICATE: 902147

Parameter	Units	30148892001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	14.9	15.2	2	20	

SAMPLE DUPLICATE: 902148

Parameter	Units	30148892002 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	8.0	8.2	2	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 2014.79 Russel City Store
Pace Project No.: 30148798

QC Batch:	PMST/5373	Analysis Method:	ASTM D2974-87
QC Batch Method:	ASTM D2974-87	Analysis Description:	Dry Weight/Percent Moisture
Associated Lab Samples:	30148798003		

SAMPLE DUPLICATE: 902156

Parameter	Units	30148798003 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	11.1	10.1	9	20	

SAMPLE DUPLICATE: 902157

Parameter	Units	30148804001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	11.6	9.5	20	20	

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REPORT OF LABORATORY ANALYSIS

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Date: 06/08/2015 12:43 PM

Page 10 of 15

8/19/2019 2:14:56 PM

QUALIFIERS

Project: 2014.79 Russel City Store
Pace Project No.: 30148798

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.
ND - Not Detected at or above adjusted reporting limit.
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
MDL - Adjusted Method Detection Limit.
PQL - Practical Quantitation Limit.
RL - Reporting Limit.
S - Surrogate
1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.
Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.
LCS(D) - Laboratory Control Sample (Duplicate)
MS(D) - Matrix Spike (Duplicate)
DUP - Sample Duplicate
RPD - Relative Percent Difference
NC - Not Calculable.
SG - Silica Gel - Clean-Up
U - Indicates the compound was analyzed for, but not detected.
N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.
Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.
TNI - The NELAC Institute.

LABORATORIES

PASI-PA Pace Analytical Services - Greensburg

BATCH QUALIFIERS

Batch: MSV/23635

(M5) A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

L0 Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
L3 Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.
M5 A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 2014.79 Russel City Store
Pace Project No.: 30148798

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30148798001	BS1	EPA 8260B	MSV/23635		
30148798002	BS2	EPA 8260B	MSV/23635		
30148798003	BS3	EPA 8260B	MSV/23635		
30148798001	BS1	ASTM D2974-87	PMST/5372		
30148798002	BS2	ASTM D2974-87	PMST/5372		
30148798003	BS3	ASTM D2974-87	PMST/5373		

REPORT OF LABORATORY ANALYSIS

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30148798

30148798

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	ERIL	Report To:	N. Fiesler	Attendant:	Tania Klemm
Address:	4250 RT 6N	Copy To:	D. Birchard	Company Name:	ERL
City/State/Zip:	Edinboro PA 16412			Address:	4250 RT 6N
Email To:	N. Fiesler @ Environmental Protection, Inc.	Purchase Order No.:		Prec Quote Reference:	
Phone:	814 734 6411	Project Name:	Russel City Store	Prec Project Manager:	Tim Reed
Requested Due Date/TAT:	5th	Project Number:	2014 79		
				REGULATORY AGENCY	
				☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER ☒ UST ☐ RCRA ☐ OTHER _____	
				Site Location	
				STATE:	PA

[illegible]

Page 13 of 15

F-ALL-Q-020rev.07, 15-May-2007



Sample Condition Upon Receipt

30148798

Client Name: ER&R

Project # _____

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____Tracking #: 773658302840Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no Biological Tissue Is Frozen: Yes NoPacking Material: Bubble Wrap _____ Bubble Bags _____ None _____ Other foamThermometer Used B Type of Ice: Wet Blue None ☐ Samples on Ice, cooling process has begunCooler Temp.: Observed Temp.: 2.9 °C Correction Factor: +0.1 °C Final Temp: 3.0 °C

Date and Initials of person

examining contents: Ann
5/22/15

Temp should be above freezing to 6°C

Comments:

Chain of Custody Present:	☒ Yes ☐ No ☐ N/A	1.
Chain of Custody Filled Out:	☒ Yes ☐ No ☐ N/A	2.
Chain of Custody Relinquished:	☒ Yes ☐ No ☐ N/A	3.
Sampler Name & Signature on COC:	☒ Yes ☐ No ☐ N/A	4.
Samples Arrived within Hold Time:	☒ Yes ☐ No ☐ N/A	5.
Short Hold Time Analysis (<72hr):	☐ Yes ☒ No ☐ N/A	6.
Rush Turn Around Time Requested:	☐ Yes ☒ No ☐ N/A	7.
Sufficient Volume:	☒ Yes ☐ No ☐ N/A	8.
Correct Containers Used:	☒ Yes ☐ No ☐ N/A	9.
-Pace Containers Used:	☒ Yes ☐ No ☐ N/A	
Containers Intact:	☒ Yes ☐ No ☐ N/A	10.
Filtered Volume received for Dissolved tests	☐ Yes ☐ No ☒ N/A	11.
Sample Labels match COC:	☒ Yes ☐ No ☐ N/A	12.
-Includes date/time/ID/Analysis Matrix:	<u>SL</u>	
All containers needing preservation have been checked.	☐ Yes ☐ No ☒ N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☐ Yes ☐ No ☒ N/A	
exceptions: VOA, coliform, TOC, O&G, Phenols	☐ Yes ☒ No	Initial when completed <u>Ann</u> Lot # of added preservative
Samples checked for dechlorination:	☐ Yes ☐ No ☒ N/A	14.
Headspace in VOA Vials (>6mm):	☐ Yes ☐ No ☒ N/A	15.
Trip Blank Present:	☐ Yes ☐ No ☒ N/A	16.
Trip Blank Custody Seals Present	☐ Yes ☐ No ☒ N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution:

Field Data Required?

Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____

Date: 5-26-15

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

Project Number:

Client Name:

Face Analytical

[illegible]

SCURF Back (C016-4 15May2012).xls

April 13, 2017

Mr. Dave Birchard
Environmental Remediation & Recovery, Inc.
4250 Route 6N
Edinboro, PA 16412

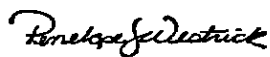
RE: Project: Russell City Store
Pace Project No.: 30214756

Dear Mr. Birchard:

Enclosed are the analytical results for sample(s) received by the laboratory on March 31, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Penny Westrick
penny.westrick@pacelabs.com
724 850-5610
Project Manager

Enclosures

cc: Karann Holman, Environmental Remediation & Recovery,
Inc.
Ms. Mallory Shilling, Environmental Remediation &
Recovery, Inc.



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: Russell City Store
Pace Project No.: 30214756

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590

Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683

Georgia Certification #: C040

Guam Certification

Hawaii Certification

Idaho Certification

Illinois Certification

Indiana Certification

Iowa Certification #: 391

Kansas/TNI Certification #: E-10358

Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008

Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091

Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification

Missouri Certification #: 235

Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14

Nevada Certification #: PA014572015-1

New Hampshire/TNI Certification #: 2976

New Jersey/TNI Certification #: PA 051

New Mexico Certification #: PA01457

New York/TNI Certification #: 10888

North Carolina Certification #: 42706

North Dakota Certification #: R-190

Oregon/TNI Certification #: PA200002

Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457

Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8

Utah/TNI Certification #: PA014572015-5

USDA Soil Permit #: P330-14-00213

Vermont Dept. of Health: ID# VT-0282

Virgin Island/PADEP Certification

Virginia/VELAP Certification #: 460198

Washington Certification #: C868

West Virginia DEP Certification #: 143

West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: Russell City Store
Pace Project No.: 30214756

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30214756001	SS1	Solid	03/29/17 13:00	03/31/17 09:30
30214756002	SS3	Solid	03/29/17 13:10	03/31/17 09:30
30214756003	SS8	Solid	03/29/17 13:20	03/31/17 09:30
30214756004	SS9	Solid	03/29/17 13:30	03/31/17 09:30
30214756005	SS11	Solid	03/29/17 13:40	03/31/17 09:30
30214756006	Trip Blank	Water	03/29/17 00:01	03/31/17 09:30

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SAMPLE ANALYTE COUNT

Project: Russell City Store
Pace Project No.: 30214756

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30214756001	SS1	EPA 8260B	JEW	13
		ASTM D2974-87	JPD	1
30214756002	SS3	EPA 8260B	JEW	13
		ASTM D2974-87	JPD	1
30214756003	SS8	EPA 8260B	JEW	13
		ASTM D2974-87	JPD	1
30214756004	SS9	EPA 8260B	JEW	13
		ASTM D2974-87	JPD	1
30214756005	SS11	EPA 8260B	JEW	13
		ASTM D2974-87	JPD	1
30214756006	Trip Blank	EPA 8260B	JAS	13

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Russell City Store
Pace Project No.: 30214756

Sample: SS1 Lab ID: 30214756001 Collected: 03/29/17 13:00 Received: 03/31/17 09:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Comments: • Percent moisture bottle did not have a collection time listed on it.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV Analytical Method: EPA 8260B Preparation Method: EPA 5035A									
Benzene	ND	ug/kg	211	57.4	50	04/04/17 12:25	04/04/17 21:27	71-43-2	
Ethylbenzene	4500	ug/kg	211	42.6	50	04/04/17 12:25	04/04/17 21:27	100-41-4	
Isopropylbenzene (Cumene)	964	ug/kg	211	73.0	50	04/04/17 12:25	04/04/17 21:27	98-82-8	
Methyl-tert-butyl ether	ND	ug/kg	211	103	50	04/04/17 12:25	04/04/17 21:27	1634-04-4	
Naphthalene	3190	ug/kg	211	40.9	50	04/04/17 12:25	04/04/17 21:27	91-20-3	
Toluene	404	ug/kg	211	65.8	50	04/04/17 12:25	04/04/17 21:27	108-88-3	
1,2,4-Trimethylbenzene	18800	ug/kg	2110	603	500	04/04/17 12:25	04/05/17 12:01	95-63-6	
1,3,5-Trimethylbenzene	9040	ug/kg	211	70.9	50	04/04/17 12:25	04/04/17 21:27	108-67-8	
Xylene (Total)	17400	ug/kg	633	120	50	04/04/17 12:25	04/04/17 21:27	1330-20-7	
Surrogates									
Toluene-d8 (S)	126	%	68-135		50	04/04/17 12:25	04/04/17 21:27	2037-26-5	
4-Bromofluorobenzene (S)	104	%	65-146		50	04/04/17 12:25	04/04/17 21:27	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	69-137		50	04/04/17 12:25	04/04/17 21:27	17060-07-0	
Dibromofluoromethane (S)	99	%	70-130		50	04/04/17 12:25	04/04/17 21:27	1868-53-7	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	16.1	%	0.10	0.10	1		04/12/17 21:29		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Russell City Store
Pace Project No.: 30214756

Sample: SS3 Lab ID: 30214756002 Collected: 03/29/17 13:10 Received: 03/31/17 09:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV									
Analytical Method: EPA 8260B Preparation Method: EPA 5035A									
Benzene	ND	ug/kg	189	51.4	50	04/04/17 12:25	04/05/17 12:54	71-43-2	
Ethylbenzene	1520	ug/kg	189	38.1	50	04/04/17 12:25	04/05/17 12:54	100-41-4	
Isopropylbenzene (Cumene)	425	ug/kg	189	65.3	50	04/04/17 12:25	04/05/17 12:54	98-82-8	
Methyl-tert-butyl ether	ND	ug/kg	189	91.8	50	04/04/17 12:25	04/05/17 12:54	1634-04-4	
Naphthalene	1720	ug/kg	189	36.6	50	04/04/17 12:25	04/05/17 12:54	91-20-3	
Toluene	196	ug/kg	189	58.9	50	04/04/17 12:25	04/05/17 12:54	108-88-3	
1,2,4-Trimethylbenzene	7920	ug/kg	189	54.0	50	04/04/17 12:25	04/05/17 12:54	95-63-6	
1,3,5-Trimethylbenzene	3840	ug/kg	189	63.5	50	04/04/17 12:25	04/05/17 12:54	108-67-8	
Xylene (Total)	5820	ug/kg	567	107	50	04/04/17 12:25	04/05/17 12:54	1330-20-7	
Surrogates									
Toluene-d8 (S)	114	%	68-135		50	04/04/17 12:25	04/05/17 12:54	2037-26-5	
4-Bromofluorobenzene (S)	104	%	65-146		50	04/04/17 12:25	04/05/17 12:54	460-00-4	
1,2-Dichloroethane-d4 (S)	94	%	69-137		50	04/04/17 12:25	04/05/17 12:54	17060-07-0	
Dibromofluoromethane (S)	98	%	70-130		50	04/04/17 12:25	04/05/17 12:54	1868-53-7	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Percent Moisture	9.6	%	0.10	0.10	1		04/12/17 21:29		

REPORT OF LABORATORY ANALYSIS

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Date: 04/13/2017 04:30 PM

Page 6 of 18

8/19/2019 2:15:02 PM

ANALYTICAL RESULTS

Project: Russell City Store

Pace Project No.: 30214756

Sample: SS8 Lab ID: 30214756003 Collected: 03/29/17 13:20 Received: 03/31/17 09:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV Analytical Method: EPA 8260B Preparation Method: EPA 5035A									
Benzene	872	ug/kg	249	67.7	50	04/04/17 12:25	04/05/17 13:20	71-43-2	
Ethylbenzene	2780	ug/kg	249	50.3	50	04/04/17 12:25	04/05/17 13:20	100-41-4	
Isopropylbenzene (Cumene)	766	ug/kg	249	86.2	50	04/04/17 12:25	04/05/17 13:20	98-82-8	
Methyl-tert-butyl ether	ND	ug/kg	249	121	50	04/04/17 12:25	04/05/17 13:20	1634-04-4	
Naphthalene	4490	ug/kg	249	48.3	50	04/04/17 12:25	04/05/17 13:20	91-20-3	
Toluene	1030	ug/kg	249	77.7	50	04/04/17 12:25	04/05/17 13:20	108-88-3	
1,2,4-Trimethylbenzene	14800	ug/kg	249	71.2	50	04/04/17 12:25	04/05/17 13:20	95-63-6	
1,3,5-Trimethylbenzene	7020	ug/kg	249	83.7	50	04/04/17 12:25	04/05/17 13:20	108-67-8	
Xylene (Total)	25400	ug/kg	747	141	50	04/04/17 12:25	04/05/17 13:20	1330-20-7	
Surrogates									
Toluene-d8 (S)	113	%	68-135		50	04/04/17 12:25	04/05/17 13:20	2037-26-5	
4-Bromofluorobenzene (S)	101	%	65-146		50	04/04/17 12:25	04/05/17 13:20	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	69-137		50	04/04/17 12:25	04/05/17 13:20	17060-07-0	
Dibromofluoromethane (S)	97	%	70-130		50	04/04/17 12:25	04/05/17 13:20	1868-53-7	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	14.5	%	0.10	0.10	1		04/12/17 21:29		

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ANALYTICAL RESULTS

Project: Russell City Store
Pace Project No.: 30214756

Sample: SS9 Lab ID: 30214756004 Collected: 03/29/17 13:30 Received: 03/31/17 09:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV Analytical Method: EPA 8260B Preparation Method: EPA 5035A									
Benzene	ND	ug/kg	260	70.8	50	04/04/17 12:25	04/04/17 22:46	71-43-2	
Ethylbenzene	3150	ug/kg	260	52.6	50	04/04/17 12:25	04/04/17 22:46	100-41-4	
Isopropylbenzene (Cumene)	1370	ug/kg	260	90.1	50	04/04/17 12:25	04/04/17 22:46	98-82-8	
Methyl-tert-butyl ether	ND	ug/kg	260	127	50	04/04/17 12:25	04/04/17 22:46	1634-04-4	
Naphthalene	12500	ug/kg	260	50.5	50	04/04/17 12:25	04/04/17 22:46	91-20-3	
Toluene	ND	ug/kg	260	81.2	50	04/04/17 12:25	04/04/17 22:46	108-88-3	
1,2,4-Trimethylbenzene	42900	ug/kg	2600	745	500	04/04/17 12:25	04/05/17 12:27	95-63-6	
1,3,5-Trimethylbenzene	21200	ug/kg	2600	875	500	04/04/17 12:25	04/05/17 12:27	108-67-8	
Xylene (Total)	6360	ug/kg	781	148	50	04/04/17 12:25	04/04/17 22:46	1330-20-7	
Surrogates									
Toluene-d8 (S)	133	%	68-135		50	04/04/17 12:25	04/04/17 22:46	2037-26-5	
4-Bromofluorobenzene (S)	106	%	65-146		50	04/04/17 12:25	04/04/17 22:46	460-00-4	
1,2-Dichloroethane-d4 (S)	107	%	69-137		50	04/04/17 12:25	04/04/17 22:46	17060-07-0	
Dibromofluoromethane (S)	96	%	70-130		50	04/04/17 12:25	04/04/17 22:46	1868-53-7	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	13.8	%	0.10	0.10	1		04/12/17 21:29		

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Date: 04/13/2017 04:30 PM

Page 8 of 18

8/19/2019 2:15:03 PM

ANALYTICAL RESULTS

Project: Russell City Store
Pace Project No.: 30214756

Sample: SS11 Lab ID: 30214756005 Collected: 03/29/17 13:40 Received: 03/31/17 09:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Analytical Method: EPA 8260B Preparation Method: EPA 5035A									
Benzene	ND	ug/kg	246	66.8	50	04/04/17 12:25	04/04/17 23:13	71-43-2	
Ethylbenzene	ND	ug/kg	246	49.6	50	04/04/17 12:25	04/04/17 23:13	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/kg	246	85.0	50	04/04/17 12:25	04/04/17 23:13	98-82-8	
Methyl-tert-butyl ether	ND	ug/kg	246	119	50	04/04/17 12:25	04/04/17 23:13	1634-04-4	
Naphthalene	858	ug/kg	246	47.7	50	04/04/17 12:25	04/04/17 23:13	91-20-3	
Toluene	ND	ug/kg	246	76.7	50	04/04/17 12:25	04/04/17 23:13	108-88-3	
1,2,4-Trimethylbenzene	2840	ug/kg	246	70.3	50	04/04/17 12:25	04/04/17 23:13	95-63-6	
1,3,5-Trimethylbenzene	1710	ug/kg	246	82.6	50	04/04/17 12:25	04/04/17 23:13	108-67-8	
Xylene (Total)	ND	ug/kg	737	140	50	04/04/17 12:25	04/04/17 23:13	1330-20-7	
Surrogates									
Toluene-d8 (S)	107	%	68-135		50	04/04/17 12:25	04/04/17 23:13	2037-26-5	
4-Bromofluorobenzene (S)	105	%	65-146		50	04/04/17 12:25	04/04/17 23:13	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	69-137		50	04/04/17 12:25	04/04/17 23:13	17060-07-0	
Dibromofluoromethane (S)	98	%	70-130		50	04/04/17 12:25	04/04/17 23:13	1868-53-7	

Percent Moisture

Analytical Method: ASTM D2974-87

Percent Moisture	7.9	%	0.10	0.10	1		04/12/17 21:29		
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ANALYTICAL RESULTS

Project: Russell City Store
Pace Project No.: 30214756

Sample: Trip Blank		Lab ID: 30214756006		Collected: 03/29/17 00:01		Received: 03/31/17 09:30		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV									
Analytical Method: EPA 8260B									
Benzene	ND	ug/L	1.0	0.35	1		04/04/17 12:56	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.21	1		04/04/17 12:56	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.25	1		04/04/17 12:56	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.27	1		04/04/17 12:56	1634-04-4	
Naphthalene	ND	ug/L	2.0	0.39	1		04/04/17 12:56	91-20-3	
Toluene	ND	ug/L	1.0	0.29	1		04/04/17 12:56	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.21	1		04/04/17 12:56	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.40	1		04/04/17 12:56	108-67-8	
Xylene (Total)	ND	ug/L	3.0	1.1	1		04/04/17 12:56	1330-20-7	
Surrogates									
Toluene-d8 (S)	90	%	59-140		1		04/04/17 12:56	2037-26-5	
4-Bromofluorobenzene (S)	101	%	78-117		1		04/04/17 12:56	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	70-128		1		04/04/17 12:56	17060-07-0	
Dibromofluoromethane (S)	97	%	66-132		1		04/04/17 12:56	1868-53-7	

REPORT OF LABORATORY ANALYSIS

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Date: 04/13/2017 04:30 PM

Page 10 of 18

8/19/2019 2:15:04 PM

QUALITY CONTROL DATA

Project: Russell City Store
Pace Project No.: 30214756

QC Batch: 254264 Analysis Method: EPA 8260B
QC Batch Method: EPA 5035A Analysis Description: 8260B MSV UST-SOIL
Associated Lab Samples: 30214756001, 30214756002, 30214756003, 30214756004, 30214756005

METHOD BLANK: 1251996 Matrix: Solid
Associated Lab Samples: 30214756001, 30214756002, 30214756003, 30214756004, 30214756005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	ND	250	71.5	04/04/17 12:57	
1,3,5-Trimethylbenzene	ug/kg	ND	250	84.0	04/04/17 12:57	
Benzene	ug/kg	ND	250	68.0	04/04/17 12:57	
Ethylbenzene	ug/kg	ND	250	50.5	04/04/17 12:57	
Isopropylbenzene (Cumene)	ug/kg	ND	250	86.5	04/04/17 12:57	
Methyl-tert-butyl ether	ug/kg	ND	250	122	04/04/17 12:57	
Naphthalene	ug/kg	ND	250	48.5	04/04/17 12:57	
Toluene	ug/kg	ND	250	78.0	04/04/17 12:57	
Xylene (Total)	ug/kg	ND	750	142	04/04/17 12:57	
1,2-Dichloroethane-d4 (S)	%	100	69-137		04/04/17 12:57	
4-Bromofluorobenzene (S)	%	100	65-146		04/04/17 12:57	
Dibromofluoromethane (S)	%	97	70-130		04/04/17 12:57	
Toluene-d8 (S)	%	97	68-135		04/04/17 12:57	

LABORATORY CONTROL SAMPLE: 1251997

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	20	19.3	96	79-125	
1,3,5-Trimethylbenzene	ug/kg	20	19.3	96	74-129	
Benzene	ug/kg	20	19.0	95	71-137	
Ethylbenzene	ug/kg	20	18.6	93	78-126	
Isopropylbenzene (Cumene)	ug/kg	20	19.0	95	78-133	
Methyl-tert-butyl ether	ug/kg	20	19.1	95	77-141	
Naphthalene	ug/kg	20	18.3	92	81-126	
Toluene	ug/kg	20	18.5	93	72-127	
Xylene (Total)	ug/kg	60	56.1	93	80-124	
1,2-Dichloroethane-d4 (S)	%			99	69-137	
4-Bromofluorobenzene (S)	%			101	65-146	
Dibromofluoromethane (S)	%			103	70-130	
Toluene-d8 (S)	%			99	68-135	

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QUALITY CONTROL DATA

Project: Russell City Store
Pace Project No.: 30214756

QC Batch: 254229 Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B Analysis Description: 8260B MSV UST-WATER
Associated Lab Samples: 30214756006

METHOD BLANK: 1251858 Matrix: Water
Associated Lab Samples: 30214756006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/L	ND	1.0	0.21	04/04/17 12:07	
1,3,5-Trimethylbenzene	ug/L	ND	1.0	0.40	04/04/17 12:07	
Benzene	ug/L	ND	1.0	0.35	04/04/17 12:07	
Ethylbenzene	ug/L	ND	1.0	0.21	04/04/17 12:07	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	0.25	04/04/17 12:07	
Methyl-tert-butyl ether	ug/L	ND	1.0	0.27	04/04/17 12:07	
Naphthalene	ug/L	ND	2.0	0.39	04/04/17 12:07	
Toluene	ug/L	ND	1.0	0.29	04/04/17 12:07	
Xylene (Total)	ug/L	ND	3.0	1.1	04/04/17 12:07	
1,2-Dichloroethane-d4 (S)	%	96	70-128		04/04/17 12:07	
4-Bromofluorobenzene (S)	%	97	78-117		04/04/17 12:07	
Dibromofluoromethane (S)	%	90	66-132		04/04/17 12:07	
Toluene-d8 (S)	%	95	59-140		04/04/17 12:07	

LABORATORY CONTROL SAMPLE: 1251859

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/L	20	21.0	105	78-116	
1,3,5-Trimethylbenzene	ug/L	20	20.8	104	77-114	
Benzene	ug/L	20	19.3	97	80-113	
Ethylbenzene	ug/L	20	20.4	102	80-115	
Isopropylbenzene (Cumene)	ug/L	20	20.5	102	78-114	
Methyl-tert-butyl ether	ug/L	20	19.4	97	82-126	
Naphthalene	ug/L	20	23.1	115	61-139	
Toluene	ug/L	20	19.0	95	82-116	
Xylene (Total)	ug/L	60	61.0	102	82-115	
1,2-Dichloroethane-d4 (S)	%			94	70-128	
4-Bromofluorobenzene (S)	%			100	78-117	
Dibromofluoromethane (S)	%			98	66-132	
Toluene-d8 (S)	%			99	59-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1251860 1251861

Parameter	Units	30214656001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
1,2,4-Trimethylbenzene	ug/L	ND	20	20	21.8	18.2	109	91	69-121	18	30
1,3,5-Trimethylbenzene	ug/L	ND	20	20	21.5	18.2	107	91	68-118	17	30
Benzene	ug/L	ND	20	20	21.6	18.0	108	90	63-123	18	30

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Date: 04/13/2017 04:30 PM

Page 12 of 18

8/19/2019 2:15:05 PM

QUALITY CONTROL DATA

Project: Russell City Store
Pace Project No.: 30214756

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:			1251860		1251861							
Parameter	Units	30214656001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ethylbenzene	ug/L	ND	20	20	20.5	17.4	103	87	70-120	17	30	
Isopropylbenzene (Cumene)	ug/L	ND	20	20	21.6	17.8	108	89	71-129	20	30	
Methyl-tert-butyl ether	ug/L	1.1	20	20	21.4	17.8	102	84	63-143	19	30	
Naphthalene	ug/L	ND	20	20	20.7	17.0	103	85	55-122	19	30	
Toluene	ug/L	ND	20	20	21.3	16.8	106	84	66-124	24	30	
Xylene (Total)	ug/L	ND	60	60	59.3	51.5	99	86	68-123	14	30	
1,2-Dichloroethane-d4 (S)	%						101	103	70-128			
4-Bromofluorobenzene (S)	%						104	96	78-117			
Dibromofluoromethane (S)	%						105	100	66-132			
Toluene-d8 (S)	%						99	97	59-140			

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Date: 04/13/2017 04:30 PM

Page 13 of 18

8/19/2019 2:15:06 PM

QUALITY CONTROL DATA

Project: Russell City Store
Pace Project No.: 30214756

QC Batch: 255119 Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 30214756001, 30214756002, 30214756003, 30214756004, 30214756005

SAMPLE DUPLICATE: 1256152

Parameter	Units	30215785001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	8.9	11.8	28	20	D6

SAMPLE DUPLICATE: 1256153

Parameter	Units	30215785002 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	11.5	12.5	8	20	

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Date: 04/13/2017 04:30 PM

Page 14 of 18

8/19/2019 2:15:06 PM

QUALIFIERS

Project: Russell City Store
Pace Project No.: 30214756

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.
ND - Not Detected at or above adjusted reporting limit.
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
MDL - Adjusted Method Detection Limit.
PQL - Practical Quantitation Limit.
RL - Reporting Limit.
S - Surrogate
1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.
Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.
LCS(D) - Laboratory Control Sample (Duplicate)
MS(D) - Matrix Spike (Duplicate)
DUP - Sample Duplicate
RPD - Relative Percent Difference
NC - Not Calculable.
SG - Silica Gel - Clean-Up
U - Indicates the compound was analyzed for, but not detected.
N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.
Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.
TNI - The NELAC Institute.

ANALYTE QUALIFIERS

D6 The precision between the sample and sample duplicate exceeded laboratory control limits.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Russell City Store
Pace Project No.: 30214756

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30214756001	SS1	EPA 5035A	254264	EPA 8260B	254351
30214756002	SS3	EPA 5035A	254264	EPA 8260B	254351
30214756003	SS8	EPA 5035A	254264	EPA 8260B	254351
30214756004	SS9	EPA 5035A	254264	EPA 8260B	254351
30214756005	SS11	EPA 5035A	254264	EPA 8260B	254351
30214756006	Trip Blank	EPA 8260B	254229		
30214756001	SS1	ASTM D2974-87	255119		
30214756002	SS3	ASTM D2974-87	255119		
30214756003	SS8	ASTM D2974-87	255119		
30214756004	SS9	ASTM D2974-87	255119		
30214756005	SS11	ASTM D2974-87	255119		

REPORT OF LABORATORY ANALYSIS

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Section A Required Client Information:		Section B Required Project Information:	
Company: ELIR	Report To: D. Birchard	Invoice Information: 30214756	
Address: 4250 Rt 6N	Copy To:	Attention: Tania Klemm	
Edinboro PA 16712		Company Name: ELR	
Email To: BirchardEnvironmental-Remediation, Inc		Address: same as A	
Phone: 717-221-1111	Purchase Order No: 3014-74	Pace Quote Reference:	
Fax:	Project Name: Russell City Store	Pace Project Manager:	
Requested Due Date/TAT: 5/24	Project Number:	Pace Profile #:	

Page: 1 of 1	2061617	
REGULATORY AGENCY:		
☒ NPDES	☐ GROUND WATER	☐ DRINKING WATER
☐ UST	☐ RCRA	☐ OTHER
Site Location	PA	STATE:

[illegible]

ORIGINAL						SAMPLER NAME AND SIGNATURE				Temp in °C	Received on (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
						PRINT Name of SAMPLER:							
						SIGNATURE of SAMPLER:							
<i>[Signature]</i>	3/30/17	3:50	Alynn K. Williams	B	3/11/17	0930	15					N	N

DATE Signed (MM/DD/YYYY): 03/29/17

Page 17 of 18

Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

Sample Condition Upon Receipt Pittsburgh

Pace Analytical

Client Name: ER+R

Project # 30214756

Handwritten initials

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Tracking #: 11818434283

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Thermometer Used Ce Type of Ice: Wet Blue None

Cooler Temperature Observed Temp 15 °C Correction Factor: +0.0 °C Final Temp: 1.5 °C

Temp should be above freezing to 6°C

Date and Initials of person examining contents: ARM 5/31/17

Comments:

	Yes	No	N/A	
Chain of Custody Present:	☒	☐	☐	1.
Chain of Custody Filled Out:	☒	☐	☐	2.
Chain of Custody Relinquished:	☒	☐	☐	3.
Sampler Name & Signature on COC:	☒	☐	☐	4.
Sample Labels match COC:	☒	☐	☐	5. Dry weight from 001 has no time on it
-Includes date/time/ID Matrix: <u>SL</u>				
Samples Arrived within Hold Time:	☒	☐	☐	6.
Short Hold Time Analysis (<72hr remaining):	☒	☐	☐	7.
Rush Turn Around Time Requested:	☒	☐	☐	8.
Sufficient Volume:	☒	☐	☐	9.
Correct Containers Used:	☒	☐	☐	10.
-Pace Containers Used:	☒	☐	☐	
Containers Intact:	☒	☐	☐	11.
Orthophosphate field filtered	☒	☐	☐	12.
Organic Samples checked for dechlorination:	☒	☐	☐	13.
Filtered volume received for Dissolved tests	☒	☐	☐	14.
All containers have been checked for preservation.	☒	☐	☐	15.
All containers needing preservation are found to be in compliance with EPA recommendation.	☒	☐	☐	
exceptions: VOA, coliform, TOC, O&G, Phenolics				
Initial when completed: <u>ARM</u>				Date/time of preservation
Lot # of added preservative				
Headspace in VOA Vials (>6mm):	☒	☐	☐	16.
Trip Blank Present:	☒	☐	☐	17.
Trip Blank Custody Seals Present	☒	☐	☐	
Rad Aqueous Samples Screened > 0.5 mrem/hr	☒	☐	☐	Initial when completed: _____ Date: _____

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

August 11, 2017

Mr. Dave Birchard
Environmental Remediation & Recovery, Inc.
4250 Route 6N
Edinboro, PA 16412

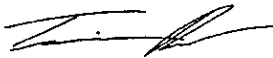
RE: Project: RUSSELL CITY STORE
Pace Project No.: 30226134

Dear Mr. Birchard:

Enclosed are the analytical results for sample(s) received by the laboratory on August 03, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Timothy Reed for
Penny Westrick
penny.westrick@pacelabs.com
724 850-5610
Project Manager

Enclosures

cc: Karann Holman, Environmental Remediation & Recovery,
Inc.



REPORT OF LABORATORY ANALYSIS

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Page 1 of 20

8/19/2019 2:15:08 PM

CERTIFICATIONS

Project: RUSSELL CITY STORE
Pace Project No.: 30226134

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235

Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: RUSSELL CITY STORE
Pace Project No.: 30226134

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30226134001	BH1 4-6'	Solid	07/31/17 10:00	08/03/17 09:55
30226134002	BH2 3-5'	Solid	07/31/17 11:00	08/03/17 09:55
30226134003	BH3 5-7'	Solid	07/31/17 15:30	08/03/17 09:55
30226134004	BH4 9-11'	Solid	08/01/17 12:00	08/03/17 09:55
30226134005	BH5 5-7'	Solid	08/01/17 13:15	08/03/17 09:55

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SAMPLE ANALYTE COUNT

Project: RUSSELL CITY STORE
Pace Project No.: 30226134

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30226134001	BH1 4-6'	EPA 8260B	JEW	13
		ASTM D2974-87	GLG	1
30226134002	BH2 3-5'	EPA 8260B	JEW	13
		ASTM D2974-87	GLG	1
30226134003	BH3 5-7'	EPA 8260B	JEW	13
		ASTM D2974-87	GLG	1
30226134004	BH4 9-11'	EPA 8260B	JEW	13
		ASTM D2974-87	GLG	1
30226134005	BH5 5-7'	EPA 8260B	JEW	13
		ASTM D2974-87	GLG	1

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: RUSSELL CITY STORE
Pace Project No.: 30226134

Method: EPA 8260B
Description: 8260B MSV
Client: Environmental Remediation and Recovery, Inc.
Date: August 11, 2017

General Information:

5 samples were analyzed for EPA 8260B. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 5035A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 267641

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: 267642

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: 267825

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: RUSSELL CITY STORE
Pace Project No.: 30226134

Method: EPA 8260B
Description: 8260B MSV
Client: Environmental Remediation and Recovery, Inc.
Date: August 11, 2017

Analyte Comments:

QC Batch: 267641

1c: A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

- BH1 4-6' (Lab ID: 30226134001)
 - 1,2,4-Trimethylbenzene
 - 1,3,5-Trimethylbenzene
 - Benzene
 - Ethylbenzene
 - Isopropylbenzene (Cumene)
 - Methyl-tert-butyl ether
 - Naphthalene
 - Toluene
- BH2 3-5' (Lab ID: 30226134002)
 - 1,2,4-Trimethylbenzene
 - 1,3,5-Trimethylbenzene
 - Benzene
 - Ethylbenzene
 - Isopropylbenzene (Cumene)
 - Methyl-tert-butyl ether
 - Naphthalene
 - Toluene
- BH3 5-7' (Lab ID: 30226134003)
 - 1,2,4-Trimethylbenzene
 - 1,3,5-Trimethylbenzene
 - Ethylbenzene
 - Isopropylbenzene (Cumene)
 - Methyl-tert-butyl ether
 - Naphthalene
 - Toluene

QC Batch: 267642

1c: A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

- BH4 9-11' (Lab ID: 30226134004)
 - 1,2,4-Trimethylbenzene
 - 1,3,5-Trimethylbenzene
 - Benzene
 - Ethylbenzene
 - Isopropylbenzene (Cumene)
 - Methyl-tert-butyl ether
 - Naphthalene
 - Toluene
- BH5 5-7' (Lab ID: 30226134005)
 - 1,2,4-Trimethylbenzene
 - 1,3,5-Trimethylbenzene
 - Benzene
 - Ethylbenzene

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: RUSSELL CITY STORE
Pace Project No.: 30226134

Method: EPA 8260B
Description: 8260B MSV
Client: Environmental Remediation and Recovery, Inc.
Date: August 11, 2017

Analyte Comments:

QC Batch: 267642

1c: A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

- BH5 5-7' (Lab ID: 30226134005)
 - Isopropylbenzene (Cumene)
 - Methyl-tert-butyl ether
 - Naphthalene
 - Toluene

QC Batch: 267825

1c: A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

- BH3 5-7' (Lab ID: 30226134003)
 - Benzene

This data package has been reviewed for quality and completeness and is approved for release.

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: RUSSELL CITY STORE

Pace Project No.: 30226134

Sample: BH1 4-6' Lab ID: 30226134001 Collected: 07/31/17 10:00 Received: 08/03/17 09:55 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Comments: • Trip blank not received with samples.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV Analytical Method: EPA 8260B Preparation Method: EPA 5035A									
Benzene	44.0	ug/kg	6.2	1.8	1	08/08/17 12:13	08/08/17 17:08	71-43-2	1c
Ethylbenzene	ND	ug/kg	6.2	1.9	1	08/08/17 12:13	08/08/17 17:08	100-41-4	1c
Isopropylbenzene (Cumene)	ND	ug/kg	6.2	1.8	1	08/08/17 12:13	08/08/17 17:08	98-82-8	1c
Methyl-tert-butyl ether	ND	ug/kg	6.2	0.98	1	08/08/17 12:13	08/08/17 17:08	1634-04-4	1c
Naphthalene	ND	ug/kg	6.2	2.8	1	08/08/17 12:13	08/08/17 17:08	91-20-3	1c
Toluene	34.5	ug/kg	6.2	1.8	1	08/08/17 12:13	08/08/17 17:08	108-88-3	1c
1,2,4-Trimethylbenzene	ND	ug/kg	6.2	1.6	1	08/08/17 12:13	08/08/17 17:08	95-63-6	1c
1,3,5-Trimethylbenzene	ND	ug/kg	6.2	1.7	1	08/08/17 12:13	08/08/17 17:08	108-67-8	1c
Xylene (Total)	ND	ug/kg	18.6	5.5	1	08/08/17 12:13	08/08/17 17:08	1330-20-7	
Surrogates									
Toluene-d8 (S)	95	%	68-135		1	08/08/17 12:13	08/08/17 17:08	2037-26-5	
4-Bromofluorobenzene (S)	97	%	65-146		1	08/08/17 12:13	08/08/17 17:08	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	69-137		1	08/08/17 12:13	08/08/17 17:08	17060-07-0	
Dibromofluoromethane (S)	104	%	70-130		1	08/08/17 12:13	08/08/17 17:08	1868-53-7	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	27.7	%	0.10	0.10	1		08/10/17 15:31		

REPORT OF LABORATORY ANALYSIS

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Date: 08/11/2017 04:31 PM

Page 8 of 20

8/19/2019 2:15:11 PM

ANALYTICAL RESULTS

Project: RUSSELL CITY STORE

Pace Project No.: 30226134

Sample: BH2 3-5' Lab ID: 30226134002 Collected: 07/31/17 11:00 Received: 08/03/17 09:55 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Comments: • Trip blank not received with samples.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV Analytical Method: EPA 8260B Preparation Method: EPA 5035A									
Benzene	201	ug/kg	5.1	1.5	1	08/08/17 12:13	08/08/17 17:35	71-43-2	1c
Ethylbenzene	6.2	ug/kg	5.1	1.6	1	08/08/17 12:13	08/08/17 17:35	100-41-4	1c
Isopropylbenzene (Cumene)	ND	ug/kg	5.1	1.5	1	08/08/17 12:13	08/08/17 17:35	98-82-8	1c
Methyl-tert-butyl ether	ND	ug/kg	5.1	0.81	1	08/08/17 12:13	08/08/17 17:35	1634-04-4	1c
Naphthalene	ND	ug/kg	5.1	2.3	1	08/08/17 12:13	08/08/17 17:35	91-20-3	1c
Toluene	45.2	ug/kg	5.1	1.5	1	08/08/17 12:13	08/08/17 17:35	108-88-3	1c
1,2,4-Trimethylbenzene	ND	ug/kg	5.1	1.3	1	08/08/17 12:13	08/08/17 17:35	95-63-6	1c
1,3,5-Trimethylbenzene	ND	ug/kg	5.1	1.4	1	08/08/17 12:13	08/08/17 17:35	108-67-8	1c
Xylene (Total)	22.6	ug/kg	15.3	4.5	1	08/08/17 12:13	08/08/17 17:35	1330-20-7	
Surrogates									
Toluene-d8 (S)	96	%	68-135		1	08/08/17 12:13	08/08/17 17:35	2037-26-5	
4-Bromofluorobenzene (S)	103	%	65-146		1	08/08/17 12:13	08/08/17 17:35	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	69-137		1	08/08/17 12:13	08/08/17 17:35	17060-07-0	
Dibromofluoromethane (S)	104	%	70-130		1	08/08/17 12:13	08/08/17 17:35	1868-53-7	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	14.9	%	0.10	0.10	1		08/10/17 15:31		

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ANALYTICAL RESULTS

Project: RUSSELL CITY STORE

Pace Project No.: 30226134

Sample: BH3 5-7' Lab ID: 30226134003 Collected: 07/31/17 15:30 Received: 08/03/17 09:55 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Comments: • Trip blank not received with samples.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV									
Analytical Method: EPA 8260B Preparation Method: EPA 5035A									
Benzene	1560	ug/kg	236	68.5	50	08/09/17 11:14	08/10/17 15:56	71-43-2	1c
Ethylbenzene	21.6	ug/kg	4.8	1.5	1	08/08/17 12:13	08/08/17 18:01	100-41-4	1c
Isopropylbenzene (Cumene)	ND	ug/kg	4.8	1.4	1	08/08/17 12:13	08/08/17 18:01	98-82-8	1c
Methyl-tert-butyl ether	ND	ug/kg	4.8	0.76	1	08/08/17 12:13	08/08/17 18:01	1634-04-4	1c
Naphthalene	ND	ug/kg	4.8	2.1	1	08/08/17 12:13	08/08/17 18:01	91-20-3	1c
Toluene	272	ug/kg	4.8	1.4	1	08/08/17 12:13	08/08/17 18:01	108-88-3	1c
1,2,4-Trimethylbenzene	11.0	ug/kg	4.8	1.3	1	08/08/17 12:13	08/08/17 18:01	95-63-6	1c
1,3,5-Trimethylbenzene	ND	ug/kg	4.8	1.3	1	08/08/17 12:13	08/08/17 18:01	108-67-8	1c
Xylene (Total)	91.5	ug/kg	14.4	4.2	1	08/08/17 12:13	08/08/17 18:01	1330-20-7	
Surrogates									
Toluene-d8 (S)	94	%	68-135		1	08/08/17 12:13	08/08/17 18:01	2037-26-5	
4-Bromofluorobenzene (S)	98	%	65-146		1	08/08/17 12:13	08/08/17 18:01	460-00-4	
1,2-Dichloroethane-d4 (S)	92	%	69-137		1	08/08/17 12:13	08/08/17 18:01	17060-07-0	
Dibromofluoromethane (S)	106	%	70-130		1	08/08/17 12:13	08/08/17 18:01	1868-53-7	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Percent Moisture	16.5	%	0.10	0.10	1		08/10/17 15:31		

REPORT OF LABORATORY ANALYSIS

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Date: 08/11/2017 04:31 PM

Page 10 of 20

8/19/2019 2:15:12 PM

ANALYTICAL RESULTS

Project: RUSSELL CITY STORE

Pace Project No.: 30226134

Sample: BH4 9-11' Lab ID: 30226134004 Collected: 08/01/17 12:00 Received: 08/03/17 09:55 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Comments: • Trip blank not received with samples.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV Analytical Method: EPA 8260B Preparation Method: EPA 5035A									
Benzene	ND	ug/kg	229	66.3	50	08/08/17 12:15	08/08/17 20:14	71-43-2	1c
Ethylbenzene	1190	ug/kg	229	70.0	50	08/08/17 12:15	08/08/17 20:14	100-41-4	1c
Isopropylbenzene (Cumene)	229	ug/kg	229	66.3	50	08/08/17 12:15	08/08/17 20:14	98-82-8	1c
Methyl-tert-butyl ether	ND	ug/kg	229	36.1	50	08/08/17 12:15	08/08/17 20:14	1634-04-4	1c
Naphthalene	1560	ug/kg	229	102	50	08/08/17 12:15	08/08/17 20:14	91-20-3	1c
Toluene	285	ug/kg	229	66.3	50	08/08/17 12:15	08/08/17 20:14	108-88-3	1c
1,2,4-Trimethylbenzene	7130	ug/kg	229	59.9	50	08/08/17 12:15	08/08/17 20:14	95-63-6	1c
1,3,5-Trimethylbenzene	1020	ug/kg	229	61.3	50	08/08/17 12:15	08/08/17 20:14	108-67-8	1c
Xylene (Total)	2930	ug/kg	686	201	50	08/08/17 12:15	08/08/17 20:14	1330-20-7	
Surrogates									
Toluene-d8 (S)	95	%	68-135		50	08/08/17 12:15	08/08/17 20:14	2037-26-5	
4-Bromofluorobenzene (S)	98	%	65-146		50	08/08/17 12:15	08/08/17 20:14	460-00-4	
1,2-Dichloroethane-d4 (S)	92	%	69-137		50	08/08/17 12:15	08/08/17 20:14	17060-07-0	
Dibromofluoromethane (S)	99	%	70-130		50	08/08/17 12:15	08/08/17 20:14	1868-53-7	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	6.1	%	0.10	0.10	1		08/10/17 15:31		

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Date: 08/11/2017 04:31 PM

Page 11 of 20

8/19/2019 2:15:14 PM

ANALYTICAL RESULTS

Project: RUSSELL CITY STORE
Pace Project No.: 30226134

Sample: BH5 5-7' Lab ID: 30226134005 Collected: 08/01/17 13:15 Received: 08/03/17 09:55 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Comments: • Trip blank not received with samples.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV Analytical Method: EPA 8260B Preparation Method: EPA 5035A									
Benzene	282	ug/kg	267	77.5	50	08/08/17 12:15	08/08/17 20:40	71-43-2	1c
Ethylbenzene	ND	ug/kg	267	81.8	50	08/08/17 12:15	08/08/17 20:40	100-41-4	1c
Isopropylbenzene (Cumene)	ND	ug/kg	267	77.5	50	08/08/17 12:15	08/08/17 20:40	98-82-8	1c
Methyl-tert-butyl ether	ND	ug/kg	267	42.2	50	08/08/17 12:15	08/08/17 20:40	1634-04-4	1c
Naphthalene	339	ug/kg	267	119	50	08/08/17 12:15	08/08/17 20:40	91-20-3	1c
Toluene	ND	ug/kg	267	77.5	50	08/08/17 12:15	08/08/17 20:40	108-88-3	1c
1,2,4-Trimethylbenzene	2750	ug/kg	267	70.0	50	08/08/17 12:15	08/08/17 20:40	95-63-6	1c
1,3,5-Trimethylbenzene	1080	ug/kg	267	71.6	50	08/08/17 12:15	08/08/17 20:40	108-67-8	1c
Xylene (Total)	ND	ug/kg	802	235	50	08/08/17 12:15	08/08/17 20:40	1330-20-7	
Surrogates									
Toluene-d8 (S)	99	%	68-135		50	08/08/17 12:15	08/08/17 20:40	2037-26-5	
4-Bromofluorobenzene (S)	97	%	65-146		50	08/08/17 12:15	08/08/17 20:40	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%	69-137		50	08/08/17 12:15	08/08/17 20:40	17060-07-0	
Dibromofluoromethane (S)	97	%	70-130		50	08/08/17 12:15	08/08/17 20:40	1868-53-7	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	7.9	%	0.10	0.10	1		08/10/17 15:32		

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Date: 08/11/2017 04:31 PM

Page 12 of 20

8/19/2019 2:15:14 PM

QUALITY CONTROL DATA

Project: RUSSELL CITY STORE
Pace Project No.: 30226134

QC Batch: 267641 Analysis Method: EPA 8260B
QC Batch Method: EPA 5035A Analysis Description: 8260B MSV UST-SOIL
Associated Lab Samples: 30226134001, 30226134002, 30226134003

METHOD BLANK: 1317467 Matrix: Solid
Associated Lab Samples: 30226134001, 30226134002, 30226134003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	ND	5.0	1.3	08/08/17 12:17	
1,3,5-Trimethylbenzene	ug/kg	ND	5.0	1.3	08/08/17 12:17	
Benzene	ug/kg	ND	5.0	1.4	08/08/17 12:17	
Ethylbenzene	ug/kg	ND	5.0	1.5	08/08/17 12:17	
Isopropylbenzene (Cumene)	ug/kg	ND	5.0	1.4	08/08/17 12:17	
Methyl-tert-butyl ether	ug/kg	ND	5.0	0.79	08/08/17 12:17	
Naphthalene	ug/kg	ND	5.0	2.2	08/08/17 12:17	
Toluene	ug/kg	ND	5.0	1.4	08/08/17 12:17	
Xylene (Total)	ug/kg	ND	15.0	4.4	08/08/17 12:17	
1,2-Dichloroethane-d4 (S)	%	92	69-137		08/08/17 12:17	
4-Bromofluorobenzene (S)	%	101	65-146		08/08/17 12:17	
Dibromofluoromethane (S)	%	100	70-130		08/08/17 12:17	
Toluene-d8 (S)	%	94	68-135		08/08/17 12:17	

LABORATORY CONTROL SAMPLE: 1317468

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	20	17.9	89	79-125	
1,3,5-Trimethylbenzene	ug/kg	20	18.0	90	74-129	
Benzene	ug/kg	20	18.8	94	71-137	
Ethylbenzene	ug/kg	20	18.9	94	78-126	
Isopropylbenzene (Cumene)	ug/kg	20	17.3	86	78-133	
Methyl-tert-butyl ether	ug/kg	20	19.9	100	77-141	
Naphthalene	ug/kg	20	18.0	90	81-126	
Toluene	ug/kg	20	17.6	88	72-127	
Xylene (Total)	ug/kg	60	56.5	94	80-124	
1,2-Dichloroethane-d4 (S)	%			91	69-137	
4-Bromofluorobenzene (S)	%			99	65-146	
Dibromofluoromethane (S)	%			100	70-130	
Toluene-d8 (S)	%			96	68-135	

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QUALITY CONTROL DATA

Project: RUSSELL CITY STORE
Pace Project No.: 30226134

QC Batch: 267642 Analysis Method: EPA 8260B
QC Batch Method: EPA 5035A Analysis Description: 8260B MSV UST-SOIL
Associated Lab Samples: 30226134004, 30226134005

METHOD BLANK: 1317469 Matrix: Solid
Associated Lab Samples: 30226134004, 30226134005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	ND	250	65.5	08/08/17 11:51	
1,3,5-Trimethylbenzene	ug/kg	ND	250	67.0	08/08/17 11:51	
Benzene	ug/kg	ND	250	72.5	08/08/17 11:51	
Ethylbenzene	ug/kg	ND	250	76.5	08/08/17 11:51	
Isopropylbenzene (Cumene)	ug/kg	ND	250	72.5	08/08/17 11:51	
Methyl-tert-butyl ether	ug/kg	ND	250	39.5	08/08/17 11:51	
Naphthalene	ug/kg	ND	250	111	08/08/17 11:51	
Toluene	ug/kg	ND	250	72.5	08/08/17 11:51	
Xylene (Total)	ug/kg	ND	750	220	08/08/17 11:51	
1,2-Dichloroethane-d4 (S)	%	93	69-137		08/08/17 11:51	
4-Bromofluorobenzene (S)	%	100	65-146		08/08/17 11:51	
Dibromofluoromethane (S)	%	99	70-130		08/08/17 11:51	
Toluene-d8 (S)	%	93	68-135		08/08/17 11:51	

LABORATORY CONTROL SAMPLE: 1317470

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	20	17.9	89	79-125	
1,3,5-Trimethylbenzene	ug/kg	20	18.0	90	74-129	
Benzene	ug/kg	20	18.8	94	71-137	
Ethylbenzene	ug/kg	20	18.9	94	78-126	
Isopropylbenzene (Cumene)	ug/kg	20	17.3	86	78-133	
Methyl-tert-butyl ether	ug/kg	20	19.9	100	77-141	
Naphthalene	ug/kg	20	18.0	90	81-126	
Toluene	ug/kg	20	17.6	88	72-127	
Xylene (Total)	ug/kg	60	56.5	94	80-124	
1,2-Dichloroethane-d4 (S)	%			91	69-137	
4-Bromofluorobenzene (S)	%			99	65-146	
Dibromofluoromethane (S)	%			100	70-130	
Toluene-d8 (S)	%			96	68-135	

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Date: 08/11/2017 04:31 PM

Page 14 of 20

8/19/2019 2:15:15 PM

QUALITY CONTROL DATA

Project: RUSSELL CITY STORE
Pace Project No.: 30226134

QC Batch: 267825 Analysis Method: EPA 8260B
QC Batch Method: EPA 5035A Analysis Description: 8260B MSV UST-SOIL
Associated Lab Samples: 30226134003

METHOD BLANK: 1318087 Matrix: Solid
Associated Lab Samples: 30226134003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Benzene	ug/kg	ND	250	72.5	08/10/17 09:46	
1,2-Dichloroethane-d4 (S)	%	88	69-137		08/10/17 09:46	
4-Bromofluorobenzene (S)	%	99	65-146		08/10/17 09:46	
Dibromofluoromethane (S)	%	91	70-130		08/10/17 09:46	
Toluene-d8 (S)	%	97	68-135		08/10/17 09:46	

LABORATORY CONTROL SAMPLE: 1318088

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/kg	20	17.8	89	71-137	
1,2-Dichloroethane-d4 (S)	%			85	69-137	
4-Bromofluorobenzene (S)	%			99	65-146	
Dibromofluoromethane (S)	%			94	70-130	
Toluene-d8 (S)	%			98	68-135	

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QUALITY CONTROL DATA

Project: RUSSELL CITY STORE
Pace Project No.: 30226134

QC Batch: 268023 Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 30226134001, 30226134002, 30226134003, 30226134004, 30226134005

SAMPLE DUPLICATE: 1318926

Parameter	Units	30226071001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	15.4	16.2	5	20	

SAMPLE DUPLICATE: 1318927

Parameter	Units	30226134001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	27.7	27.2	2	20	

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QUALIFIERS

Project: RUSSELL CITY STORE
Pace Project No.: 30226134

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.
ND - Not Detected at or above adjusted reporting limit.
TNTC - Too Numerous To Count
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
MDL - Adjusted Method Detection Limit.
PQL - Practical Quantitation Limit.
RL - Reporting Limit.
S - Surrogate
1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.
Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.
LCS(D) - Laboratory Control Sample (Duplicate)
MS(D) - Matrix Spike (Duplicate)
DUP - Sample Duplicate
RPD - Relative Percent Difference
NC - Not Calculable.
SG - Silica Gel - Clean-Up
U - Indicates the compound was analyzed for, but not detected.
N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.
Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.
TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 267641
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.
Batch: 267642
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.
Batch: 267825
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

1c A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: RUSSELL CITY STORE
Pace Project No.: 30226134

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30226134001	BH1 4-6'	EPA 5035A	267641	EPA 8260B	267664
30226134002	BH2 3-5'	EPA 5035A	267641	EPA 8260B	267664
30226134003	BH3 5-7'	EPA 5035A	267641	EPA 8260B	267664
30226134003	BH3 5-7'	EPA 5035A	267825	EPA 8260B	267846
30226134004	BH4 9-11'	EPA 5035A	267642	EPA 8260B	267665
30226134005	BH5 5-7'	EPA 5035A	267642	EPA 8260B	267665
30226134001	BH1 4-6'	ASTM D2974-87	268023		
30226134002	BH2 3-5'	ASTM D2974-87	268023		
30226134003	BH3 5-7'	ASTM D2974-87	268023		
30226134004	BH4 9-11'	ASTM D2974-87	268023		
30226134005	BH5 5-7'	ASTM D2974-87	268023		

REPORT OF LABORATORY ANALYSIS

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Sample Condition Upon Receipt Pittsburgh

Pace Analytical

Client Name:

ER+R

Project #

30226134 -

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other

Tracking #: 774792329201

Label	BLM
LIMS Login	ARM

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seal Intact: ☐ yes ☐ no

Thermometer Used 8 Type of Ice: ☒ Wet ☐ Blue ☐ None

Cooler Temperature Observed Temp 4.1 °C Correction Factor: +0.0 °C Final Temp: 4.1 °C

Temp should be above freezing to 6°C

Date and Initials of person examining contents: ARM 8/13/17

Comments:	Yes	No	N/A	
Chain of Custody Present:	/			1.
Chain of Custody Filled Out:	/			2.
Chain of Custody Relinquished:	/			3.
Sampler Name & Signature on COC:	/			4.
Sample Labels match COC:	/			5.
-Includes date/time/ID Matrix: SL				
Samples Arrived within Hold Time:	/			6.
Short Hold Time Analysis (<72hr remaining):		/		7.
Rush Turn Around Time Requested:		/		8.
Sufficient Volume:	/			9.
Correct Containers Used:	/			10.
-Pace Containers Used:	/			
Containers Intact:	/			11.
Orthophosphate field filtered			/	12.
Organic Samples checked for dechlorination:			/	13.
Filtered volume received for Dissolved tests			/	14.
All containers have been checked for preservation.			/	15.
All containers needing preservation are found to be in compliance with EPA recommendation.			/	
exceptions: VOA, coliform, TOC, O&G, Phenolics				
				Initial when completed ARM
				Date/time of preservation
				Lot # of added preservative
Headspace in VOA Vials (>6mm):			/	16.
Trip Blank Present:			/	17.
Trip Blank Custody Seals Present			/	
Rad Aqueous Samples Screened > 0.5 mrem/hr			/	Initial when completed:
				Date:

Client Notification/ Resolution:

Person Contacted: Date/Time: Contacted By:

Comments/ Resolution:

☐ A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

J:\QAQC\Master\Document Management\Sample Mgt\Sample Condition Upon Receipt Pittsburgh (C058-5 5 July 2017)

August 03, 2018

Mr. Dave Birchard
Environmental Remediation & Recovery, Inc.
4250 Route 6N
Edinboro, PA 16412

RE: Project: Russell City Store
Pace Project No.: 30259907

Dear Mr. Birchard:

Enclosed are the analytical results for sample(s) received by the laboratory on July 21, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Samantha Bayura
samantha.bayura@pacelabs.com
(724)850-5622
Project Manager

Enclosures

cc: Karann Holman, Environmental Remediation & Recovery,
Inc.



REPORT OF LABORATORY ANALYSIS

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Page 1 of 22

8/19/2019 2:15:18 PM

CERTIFICATIONS

Project: Russell City Store
Pace Project No.: 30259907

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991

Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: Russell City Store
Pace Project No.: 30259907

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30259907001	SB 6 / 5-6'	Solid	07/17/18 11:00	07/21/18 09:40
30259907002	SB 7 / 9-11'	Solid	07/17/18 13:30	07/21/18 09:40
30259907003	SB 9 / 11-12'	Solid	07/18/18 08:15	07/21/18 09:40
30259907004	SB 10 / 9-11'	Solid	07/18/18 10:00	07/21/18 09:40
30259907005	SB 11 / 6-8'	Solid	07/18/18 15:15	07/21/18 09:40
30259907006	SB 12 / 7-9'	Solid	07/18/18 15:45	07/21/18 09:40
30259907007	SB-13 / 12.5-15.0'	Solid	07/19/18 10:00	07/21/18 09:40
30259907008	SB-14 / 12.5-14.0'	Solid	07/19/18 11:30	07/21/18 09:40

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Russell City Store
Pace Project No.: 30259907

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30259907001	SB 6 / 5-6'	EPA 8260B	JEW	13
		ASTM D2974-87	AK1	1
30259907002	SB 7 / 9-11'	EPA 8260B	JEW	13
		ASTM D2974-87	AK1	1
30259907003	SB 9 / 11-12'	EPA 8260B	JEW	13
		ASTM D2974-87	AK1	1
30259907004	SB 10 / 9-11'	EPA 8260B	JEW	13
		ASTM D2974-87	AK1	1
30259907005	SB 11 / 6-8'	EPA 8260B	JEW	13
		ASTM D2974-87	AK1	1
30259907006	SB 12 / 7-9'	EPA 8260B	JEW	13
		ASTM D2974-87	AK1	1
30259907007	SB-13 / 12.5-15.0'	EPA 8260B	JEW	13
		ASTM D2974-87	AK1	1
30259907008	SB-14 / 12.5-14.0'	EPA 8260B	JEW	13
		ASTM D2974-87	AK1	1

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: Russell City Store
Pace Project No.: 30259907

Method: EPA 8260B
Description: 8260B MSV
Client: Environmental Remediation and Recovery, Inc.
Date: August 03, 2018

General Information:

8 samples were analyzed for EPA 8260B. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 5035A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

QC Batch: 307819

ST: Surrogate recovery was above laboratory control limits. Results may be biased high.

- SB 10 / 9-11' (Lab ID: 30259907004)
- Toluene-d8 (S)

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 307819

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: 307820

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: Russell City Store
Pace Project No.: 30259907

Method: EPA 8260B
Description: 8260B MSV
Client: Environmental Remediation and Recovery, Inc.
Date: August 03, 2018

Analyte Comments:

QC Batch: 307819

1c: A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

- SB 10 / 9-11' (Lab ID: 30259907004)
 - 1,2,4-Trimethylbenzene
 - 1,3,5-Trimethylbenzene
 - Benzene
 - Ethylbenzene
 - Isopropylbenzene (Cumene)
 - Methyl-tert-butyl ether
 - Naphthalene
 - Toluene
- SB 11 / 6-8' (Lab ID: 30259907005)
 - 1,2,4-Trimethylbenzene
 - 1,3,5-Trimethylbenzene
 - Benzene
 - Ethylbenzene
 - Isopropylbenzene (Cumene)
 - Methyl-tert-butyl ether
 - Naphthalene
 - Toluene
- SB 12 / 7-9' (Lab ID: 30259907006)
 - 1,2,4-Trimethylbenzene
 - 1,3,5-Trimethylbenzene
 - Benzene
 - Ethylbenzene
 - Isopropylbenzene (Cumene)
 - Methyl-tert-butyl ether
 - Naphthalene
 - Toluene
- SB 6 / 5-6' (Lab ID: 30259907001)
 - 1,2,4-Trimethylbenzene
 - 1,3,5-Trimethylbenzene
 - Benzene
 - Ethylbenzene
 - Isopropylbenzene (Cumene)
 - Methyl-tert-butyl ether
 - Naphthalene
 - Toluene
- SB 7 / 9-11' (Lab ID: 30259907002)
 - 1,2,4-Trimethylbenzene
 - 1,3,5-Trimethylbenzene
 - Benzene
 - Ethylbenzene
 - Isopropylbenzene (Cumene)
 - Methyl-tert-butyl ether

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: Russell City Store
Pace Project No.: 30259907

Method: EPA 8260B
Description: 8260B MSV
Client: Environmental Remediation and Recovery, Inc.
Date: August 03, 2018

Analyte Comments:

QC Batch: 307819

1c: A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

- SB 7 / 9-11' (Lab ID: 30259907002)
 - Naphthalene
 - Toluene
- SB-13 / 12.5-15.0' (Lab ID: 30259907007)
 - 1,2,4-Trimethylbenzene
 - 1,3,5-Trimethylbenzene
 - Benzene
 - Ethylbenzene
 - Isopropylbenzene (Cumene)
 - Methyl-tert-butyl ether
 - Naphthalene
 - Toluene
- SB-14 / 12.5-14.0' (Lab ID: 30259907008)
 - 1,2,4-Trimethylbenzene
 - 1,3,5-Trimethylbenzene
 - Benzene
 - Ethylbenzene
 - Isopropylbenzene (Cumene)
 - Methyl-tert-butyl ether
 - Naphthalene
 - Toluene

QC Batch: 307820

1c: A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

- SB 9 / 11-12' (Lab ID: 30259907003)
 - 1,2,4-Trimethylbenzene
 - 1,3,5-Trimethylbenzene
 - Benzene
 - Ethylbenzene
 - Isopropylbenzene (Cumene)
 - Methyl-tert-butyl ether
 - Naphthalene
 - Toluene

This data package has been reviewed for quality and completeness and is approved for release.

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Russell City Store
Pace Project No.: 30259907

Sample: SB 6 / 5-6' Lab ID: 30259907001 Collected: 07/17/18 11:00 Received: 07/21/18 09:40 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Comments: * Samples in this workorder were received in the laboratory without an associated trip blank.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV Analytical Method: EPA 8260B Preparation Method: EPA 5035A									
Benzene	47.8	ug/kg	3.2	0.94	1	07/31/18 13:21	07/31/18 17:15	71-43-2	1c
Ethylbenzene	49.4	ug/kg	3.2	0.99	1	07/31/18 13:21	07/31/18 17:15	100-41-4	1c
Isopropylbenzene (Cumene)	12.1	ug/kg	3.2	0.94	1	07/31/18 13:21	07/31/18 17:15	98-82-8	1c
Methyl-tert-butyl ether	ND	ug/kg	3.2	0.51	1	07/31/18 13:21	07/31/18 17:15	1634-04-4	1c
Naphthalene	31.8	ug/kg	3.2	1.4	1	07/31/18 13:21	07/31/18 17:15	91-20-3	1c
Toluene	121	ug/kg	3.2	0.94	1	07/31/18 13:21	07/31/18 17:15	108-88-3	1c
1,2,4-Trimethylbenzene	101	ug/kg	3.2	0.85	1	07/31/18 13:21	07/31/18 17:15	95-63-6	1c
1,3,5-Trimethylbenzene	27.5	ug/kg	3.2	0.87	1	07/31/18 13:21	07/31/18 17:15	108-67-8	1c
Xylene (Total)	295	ug/kg	9.7	2.9	1	07/31/18 13:21	07/31/18 17:15	1330-20-7	
Surrogates									
Toluene-d8 (S)	117	%	76-124		1	07/31/18 13:21	07/31/18 17:15	2037-26-5	
4-Bromofluorobenzene (S)	94	%	70-133		1	07/31/18 13:21	07/31/18 17:15	460-00-4	
1,2-Dichloroethane-d4 (S)	114	%	74-131		1	07/31/18 13:21	07/31/18 17:15	17060-07-0	
Dibromofluoromethane (S)	96	%	71-130		1	07/31/18 13:21	07/31/18 17:15	1868-53-7	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	17.0	%	0.10	0.10	1		08/02/18 08:52		

REPORT OF LABORATORY ANALYSIS

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Date: 08/03/2018 09:52 AM

Page 8 of 22

8/19/2019 2:16:52 PM

ANALYTICAL RESULTS

Project: Russell City Store
Pace Project No.: 30259907

Sample: SB 7 / 9-11' Lab ID: 30259907002 Collected: 07/17/18 13:30 Received: 07/21/18 09:40 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Comments: - Samples in this workorder were received in the laboratory without an associated trip blank.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV Analytical Method: EPA 8260B Preparation Method: EPA 5035A									
Benzene	ND	ug/kg	4.6	1.3	1	07/31/18 13:21	07/31/18 17:42	71-43-2	1c
Ethylbenzene	ND	ug/kg	4.6	1.4	1	07/31/18 13:21	07/31/18 17:42	100-41-4	1c
Isopropylbenzene (Cumene)	ND	ug/kg	4.6	1.3	1	07/31/18 13:21	07/31/18 17:42	98-82-8	1c
Methyl-tert-butyl ether	ND	ug/kg	4.6	0.73	1	07/31/18 13:21	07/31/18 17:42	1634-04-4	1c
Naphthalene	ND	ug/kg	4.6	2.0	1	07/31/18 13:21	07/31/18 17:42	91-20-3	1c
Toluene	ND	ug/kg	4.6	1.3	1	07/31/18 13:21	07/31/18 17:42	108-88-3	1c
1,2,4-Trimethylbenzene	ND	ug/kg	4.6	1.2	1	07/31/18 13:21	07/31/18 17:42	95-63-6	1c
1,3,5-Trimethylbenzene	ND	ug/kg	4.6	1.2	1	07/31/18 13:21	07/31/18 17:42	108-67-8	1c
Xylene (Total)	ND	ug/kg	13.8	4.0	1	07/31/18 13:21	07/31/18 17:42	1330-20-7	
Surrogates									
Toluene-d8 (S)	102	%	76-124		1	07/31/18 13:21	07/31/18 17:42	2037-26-5	
4-Bromofluorobenzene (S)	101	%	70-133		1	07/31/18 13:21	07/31/18 17:42	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	74-131		1	07/31/18 13:21	07/31/18 17:42	17060-07-0	
Dibromofluoromethane (S)	98	%	71-130		1	07/31/18 13:21	07/31/18 17:42	1868-53-7	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	7.1	%	0.10	0.10	1		08/02/18 08:52		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Russell City Store
Pace Project No.: 30259907

Sample: SB 9 / 11-12' Lab ID: 30259907003 Collected: 07/18/18 08:15 Received: 07/21/18 09:40 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Comments: • Samples in this workorder were received in the laboratory without an associated trip blank.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV									
Analytical Method: EPA 8260B Preparation Method: EPA 5035A									
Benzene	3520	ug/kg	244	70.7	50	07/31/18 13:16	07/31/18 20:47	71-43-2	1c
Ethylbenzene	6560	ug/kg	244	74.6	50	07/31/18 13:16	07/31/18 20:47	100-41-4	1c
Isopropylbenzene (Cumene)	843	ug/kg	244	70.7	50	07/31/18 13:16	07/31/18 20:47	98-82-8	1c
Methyl-tert-butyl ether	ND	ug/kg	244	38.5	50	07/31/18 13:16	07/31/18 20:47	1634-04-4	1c
Naphthalene	1690	ug/kg	244	108	50	07/31/18 13:16	07/31/18 20:47	91-20-3	1c
Toluene	265	ug/kg	244	70.7	50	07/31/18 13:16	07/31/18 20:47	108-88-3	1c
1,2,4-Trimethylbenzene	5300	ug/kg	244	63.9	50	07/31/18 13:16	07/31/18 20:47	95-63-6	1c
1,3,5-Trimethylbenzene	4750	ug/kg	244	65.4	50	07/31/18 13:16	07/31/18 20:47	108-67-8	1c
Xylene (Total)	9430	ug/kg	732	215	50	07/31/18 13:16	07/31/18 20:47	1330-20-7	
Surrogates									
Toluene-d8 (S)	96	%	76-124		50	07/31/18 13:16	07/31/18 20:47	2037-26-5	
4-Bromofluorobenzene (S)	98	%	70-133		50	07/31/18 13:16	07/31/18 20:47	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	74-131		50	07/31/18 13:16	07/31/18 20:47	17060-07-0	
Dibromofluoromethane (S)	94	%	71-130		50	07/31/18 13:16	07/31/18 20:47	1868-53-7	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Percent Moisture	17.3	%	0.10	0.10	1		08/02/18 08:52		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Russell City Store
Pace Project No.: 30259907

Sample: SB 10 / 9-11' Lab ID: 30259907004 Collected: 07/18/18 10:00 Received: 07/21/18 09:40 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Comments: * Samples in this workorder were received in the laboratory without an associated trip blank.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Preparation Method: EPA 5035A								
Benzene	7.0	ug/kg	4.4	1.3	1	07/31/18 13:21	07/31/18 18:35	71-43-2	1c
Ethylbenzene	86.3	ug/kg	4.4	1.3	1	07/31/18 13:21	07/31/18 18:35	100-41-4	1c
Isopropylbenzene (Cumene)	19.8	ug/kg	4.4	1.3	1	07/31/18 13:21	07/31/18 18:35	98-82-8	1c
Methyl-tert-butyl ether	ND	ug/kg	4.4	0.70	1	07/31/18 13:21	07/31/18 18:35	1634-04-4	1c
Naphthalene	15.0	ug/kg	4.4	2.0	1	07/31/18 13:21	07/31/18 18:35	91-20-3	1c
Toluene	4.7	ug/kg	4.4	1.3	1	07/31/18 13:21	07/31/18 18:35	108-88-3	1c
1,2,4-Trimethylbenzene	140	ug/kg	4.4	1.2	1	07/31/18 13:21	07/31/18 18:35	95-63-6	1c
1,3,5-Trimethylbenzene	59.8	ug/kg	4.4	1.2	1	07/31/18 13:21	07/31/18 18:35	108-67-8	1c
Xylene (Total)	210	ug/kg	13.2	3.9	1	07/31/18 13:21	07/31/18 18:35	1330-20-7	
Surrogates									
Toluene-d8 (S)	139	%	76-124		1	07/31/18 13:21	07/31/18 18:35	2037-26-5	ST
4-Bromofluorobenzene (S)	98	%	70-133		1	07/31/18 13:21	07/31/18 18:35	460-00-4	
1,2-Dichloroethane-d4 (S)	110	%	74-131		1	07/31/18 13:21	07/31/18 18:35	17060-07-0	
Dibromofluoromethane (S)	96	%	71-130		1	07/31/18 13:21	07/31/18 18:35	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	7.2	%	0.10	0.10	1		08/02/18 08:52		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Russell City Store
Pace Project No.: 30259907

Sample: SB 11 / 6-8 Lab ID: 30259907005 Collected: 07/18/18 15:15 Received: 07/21/18 09:40 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Comments: • Samples in this workorder were received in the laboratory without an associated trip blank.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	5.4	1.6	1	07/31/18 13:21	07/31/18 19:01	71-43-2	1c
Ethylbenzene	ND	ug/kg	5.4	1.7	1	07/31/18 13:21	07/31/18 19:01	100-41-4	1c
Isopropylbenzene (Cumene)	ND	ug/kg	5.4	1.6	1	07/31/18 13:21	07/31/18 19:01	98-82-8	1c
Methyl-tert-butyl ether	ND	ug/kg	5.4	0.86	1	07/31/18 13:21	07/31/18 19:01	1634-04-4	1c
Naphthalene	ND	ug/kg	5.4	2.4	1	07/31/18 13:21	07/31/18 19:01	91-20-3	1c
Toluene	ND	ug/kg	5.4	1.6	1	07/31/18 13:21	07/31/18 19:01	108-88-3	1c
1,2,4-Trimethylbenzene	ND	ug/kg	5.4	1.4	1	07/31/18 13:21	07/31/18 19:01	95-63-6	1c
1,3,5-Trimethylbenzene	ND	ug/kg	5.4	1.5	1	07/31/18 13:21	07/31/18 19:01	108-67-8	1c
Xylene (Total)	ND	ug/kg	16.3	4.8	1	07/31/18 13:21	07/31/18 19:01	1330-20-7	
Surrogates									
Toluene-d8 (S)	99	%	76-124		1	07/31/18 13:21	07/31/18 19:01	2037-26-5	
4-Bromofluorobenzene (S)	96	%	70-133		1	07/31/18 13:21	07/31/18 19:01	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	74-131		1	07/31/18 13:21	07/31/18 19:01	17060-07-0	
Dibromofluoromethane (S)	101	%	71-130		1	07/31/18 13:21	07/31/18 19:01	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	4.6	%	0.10	0.10	1		08/02/18 08:52		

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ANALYTICAL RESULTS

Project: Russell City Store

Pace Project No.: 30259907

Sample: SB 12 / 7-9' Lab ID: 30259907006 Collected: 07/18/18 15:45 Received: 07/21/18 09:40 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Comments: • Samples in this workorder were received in the laboratory without an associated trip blank.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV Analytical Method: EPA 8260B Preparation Method: EPA 5035A									
Benzene	ND	ug/kg	5.6	1.6	1	07/31/18 13:21	07/31/18 19:28	71-43-2	1c
Ethylbenzene	ND	ug/kg	5.6	1.7	1	07/31/18 13:21	07/31/18 19:28	100-41-4	1c
Isopropylbenzene (Cumene)	ND	ug/kg	5.6	1.6	1	07/31/18 13:21	07/31/18 19:28	98-82-8	1c
Methyl-tert-butyl ether	ND	ug/kg	5.6	0.89	1	07/31/18 13:21	07/31/18 19:28	1634-04-4	1c
Naphthalene	ND	ug/kg	5.6	2.5	1	07/31/18 13:21	07/31/18 19:28	91-20-3	1c
Toluene	ND	ug/kg	5.6	1.6	1	07/31/18 13:21	07/31/18 19:28	108-88-3	1c
1,2,4-Trimethylbenzene	ND	ug/kg	5.6	1.5	1	07/31/18 13:21	07/31/18 19:28	95-63-6	1c
1,3,5-Trimethylbenzene	ND	ug/kg	5.6	1.5	1	07/31/18 13:21	07/31/18 19:28	108-67-8	1c
Xylene (Total)	ND	ug/kg	16.9	4.9	1	07/31/18 13:21	07/31/18 19:28	1330-20-7	
Surrogates									
Toluene-d8 (S)	98	%	76-124		1	07/31/18 13:21	07/31/18 19:28	2037-26-5	
4-Bromofluorobenzene (S)	93	%	70-133		1	07/31/18 13:21	07/31/18 19:28	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	74-131		1	07/31/18 13:21	07/31/18 19:28	17060-07-0	
Dibromofluoromethane (S)	95	%	71-130		1	07/31/18 13:21	07/31/18 19:28	1868-53-7	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	11.5	%	0.10	0.10	1		08/02/18 08:52		

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ANALYTICAL RESULTS

Project: Russell City Store
Pace Project No.: 30259907

Sample: SB-13 / 12.5-15.0' Lab ID: 30259907007 Collected: 07/19/18 10:00 Received: 07/21/18 09:40 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Comments: • Samples in this workorder were received in the laboratory without an associated trip blank.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV									
Analytical Method: EPA 8260B Preparation Method: EPA 5035A									
Benzene	ND	ug/kg	4.6	1.3	1	07/31/18 13:21	07/31/18 19:54	71-43-2	1c
Ethylbenzene	ND	ug/kg	4.6	1.4	1	07/31/18 13:21	07/31/18 19:54	100-41-4	1c
Isopropylbenzene (Cumene)	ND	ug/kg	4.6	1.3	1	07/31/18 13:21	07/31/18 19:54	98-82-8	1c
Methyl-tert-butyl ether	ND	ug/kg	4.6	0.73	1	07/31/18 13:21	07/31/18 19:54	1634-04-4	1c
Naphthalene	ND	ug/kg	4.6	2.1	1	07/31/18 13:21	07/31/18 19:54	91-20-3	1c
Toluene	ND	ug/kg	4.6	1.3	1	07/31/18 13:21	07/31/18 19:54	108-88-3	1c
1,2,4-Trimethylbenzene	ND	ug/kg	4.6	1.2	1	07/31/18 13:21	07/31/18 19:54	95-63-6	1c
1,3,5-Trimethylbenzene	ND	ug/kg	4.6	1.2	1	07/31/18 13:21	07/31/18 19:54	108-67-8	1c
Xylene (Total)	ND	ug/kg	13.9	4.1	1	07/31/18 13:21	07/31/18 19:54	1330-20-7	
Surrogates									
Toluene-d8 (S)	98	%	76-124		1	07/31/18 13:21	07/31/18 19:54	2037-26-5	
4-Bromofluorobenzene (S)	98	%	70-133		1	07/31/18 13:21	07/31/18 19:54	460-00-4	
1,2-Dichloroethane-d4 (S)	111	%	74-131		1	07/31/18 13:21	07/31/18 19:54	17060-07-0	
Dibromofluoromethane (S)	96	%	71-130		1	07/31/18 13:21	07/31/18 19:54	1868-53-7	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Percent Moisture	5.2	%	0.10	0.10	1		08/02/18 08:52		

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ANALYTICAL RESULTS

Project: Russell City Store
Pace Project No.: 30259907

Sample: SB-14 / 12.5-14.0' Lab ID: 30259907008 Collected: 07/19/18 11:30 Received: 07/21/18 09:40 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Comments: * Samples in this workorder were received in the laboratory without an associated trip blank.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV Analytical Method: EPA 8260B Preparation Method: EPA 5035A									
Benzene	34.7	ug/kg	4.5	1.3	1	07/31/18 13:21	07/31/18 20:21	71-43-2	1c
Ethylbenzene	ND	ug/kg	4.5	1.4	1	07/31/18 13:21	07/31/18 20:21	100-41-4	1c
Isopropylbenzene (Cumene)	ND	ug/kg	4.5	1.3	1	07/31/18 13:21	07/31/18 20:21	98-82-8	1c
Methyl-tert-butyl ether	ND	ug/kg	4.5	0.71	1	07/31/18 13:21	07/31/18 20:21	1634-04-4	1c
Naphthalene	ND	ug/kg	4.5	2.0	1	07/31/18 13:21	07/31/18 20:21	91-20-3	1c
Toluene	ND	ug/kg	4.5	1.3	1	07/31/18 13:21	07/31/18 20:21	108-88-3	1c
1,2,4-Trimethylbenzene	ND	ug/kg	4.5	1.2	1	07/31/18 13:21	07/31/18 20:21	95-63-6	1c
1,3,5-Trimethylbenzene	ND	ug/kg	4.5	1.2	1	07/31/18 13:21	07/31/18 20:21	108-67-8	1c
Xylene (Total)	ND	ug/kg	13.5	4.0	1	07/31/18 13:21	07/31/18 20:21	1330-20-7	
Surrogates									
Toluene-d8 (S)	96	%	76-124		1	07/31/18 13:21	07/31/18 20:21	2037-26-5	
4-Bromofluorobenzene (S)	96	%	70-133		1	07/31/18 13:21	07/31/18 20:21	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	74-131		1	07/31/18 13:21	07/31/18 20:21	17060-07-0	
Dibromofluoromethane (S)	98	%	71-130		1	07/31/18 13:21	07/31/18 20:21	1868-53-7	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	4.3	%	0.10	0.10	1		08/02/18 08:52		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Russell City Store
Pace Project No.: 30259907

QC Batch: 307819 Analysis Method: EPA 8260B
QC Batch Method: EPA 5035A Analysis Description: 8260B MSV UST-SOIL
Associated Lab Samples: 30259907001, 30259907002, 30259907004, 30259907005, 30259907006, 30259907007, 30259907008

METHOD BLANK: 1504729 Matrix: Solid
Associated Lab Samples: 30259907001, 30259907002, 30259907004, 30259907005, 30259907006, 30259907007, 30259907008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	ND	5.0	1.3	07/31/18 13:25	
1,3,5-Trimethylbenzene	ug/kg	ND	5.0	1.3	07/31/18 13:25	
Benzene	ug/kg	ND	5.0	1.4	07/31/18 13:25	
Ethylbenzene	ug/kg	ND	5.0	1.5	07/31/18 13:25	
Isopropylbenzene (Cumene)	ug/kg	ND	5.0	1.4	07/31/18 13:25	
Methyl-tert-butyl ether	ug/kg	ND	5.0	0.79	07/31/18 13:25	
Naphthalene	ug/kg	ND	5.0	2.2	07/31/18 13:25	
Toluene	ug/kg	ND	5.0	1.4	07/31/18 13:25	
Xylene (Total)	ug/kg	ND	15.0	4.4	07/31/18 13:25	
1,2-Dichloroethane-d4 (S)	%	95	74-131		07/31/18 13:25	
4-Bromofluorobenzene (S)	%	100	70-133		07/31/18 13:25	
Dibromofluoromethane (S)	%	94	71-130		07/31/18 13:25	
Toluene-d8 (S)	%	98	76-124		07/31/18 13:25	

LABORATORY CONTROL SAMPLE: 1504730

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	20	20.3	102	70-130	
1,3,5-Trimethylbenzene	ug/kg	20	19.6	98	70-130	
Benzene	ug/kg	20	20.3	101	70-130	
Ethylbenzene	ug/kg	20	19.7	99	70-130	
Isopropylbenzene (Cumene)	ug/kg	20	19.1	96	70-130	
Methyl-tert-butyl ether	ug/kg	20	21.8	109	70-130	
Naphthalene	ug/kg	20	21.0	105	70-130	
Toluene	ug/kg	20	19.6	98	70-130	
Xylene (Total)	ug/kg	60	59.6	99	70-130	
1,2-Dichloroethane-d4 (S)	%			102	74-131	
4-Bromofluorobenzene (S)	%			92	70-133	
Dibromofluoromethane (S)	%			102	71-130	
Toluene-d8 (S)	%			101	76-124	

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Date: 08/03/2018 09:52 AM

Page 16 of 22

8/19/2019 2:16:56 PM

QUALITY CONTROL DATA

Project: Russell City Store
Pace Project No.: 30259907

QC Batch: 307820 Analysis Method: EPA 8260B
QC Batch Method: EPA 5035A Analysis Description: 8260B MSV UST-SOIL
Associated Lab Samples: 30259907003

METHOD BLANK: 1504733 Matrix: Solid
Associated Lab Samples: 30259907003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	ND	250	65.5	07/31/18 12:58	
1,3,5-Trimethylbenzene	ug/kg	ND	250	67.0	07/31/18 12:58	
Benzene	ug/kg	ND	250	72.5	07/31/18 12:58	
Ethylbenzene	ug/kg	ND	250	76.5	07/31/18 12:58	
Isopropylbenzene (Cumene)	ug/kg	ND	250	72.5	07/31/18 12:58	
Methyl-tert-butyl ether	ug/kg	ND	250	39.5	07/31/18 12:58	
Naphthalene	ug/kg	ND	250	111	07/31/18 12:58	
Toluene	ug/kg	ND	250	72.5	07/31/18 12:58	
Xylene (Total)	ug/kg	ND	750	220	07/31/18 12:58	
1,2-Dichloroethane-d4 (S)	%	100	74-131		07/31/18 12:58	
4-Bromofluorobenzene (S)	%	99	70-133		07/31/18 12:58	
Dibromofluoromethane (S)	%	98	71-130		07/31/18 12:58	
Toluene-d8 (S)	%	95	76-124		07/31/18 12:58	

LABORATORY CONTROL SAMPLE: 1504734

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	20	20.3	102	70-130	
1,3,5-Trimethylbenzene	ug/kg	20	19.6	98	70-130	
Benzene	ug/kg	20	20.3	101	70-130	
Ethylbenzene	ug/kg	20	19.7	99	70-130	
Isopropylbenzene (Cumene)	ug/kg	20	19.1	96	70-130	
Methyl-tert-butyl ether	ug/kg	20	21.8	109	70-130	
Naphthalene	ug/kg	20	21.0	105	70-130	
Toluene	ug/kg	20	19.6	98	70-130	
Xylene (Total)	ug/kg	60	59.6	99	70-130	
1,2-Dichloroethane-d4 (S)	%			102	74-131	
4-Bromofluorobenzene (S)	%			92	70-133	
Dibromofluoromethane (S)	%			102	71-130	
Toluene-d8 (S)	%			101	76-124	

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QUALITY CONTROL DATA

Project: Russell City Store
Pace Project No.: 30259907

QC Batch: 308134 Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 30259907001, 30259907002, 30259907003, 30259907004, 30259907005, 30259907006, 30259907007, 30259907008

SAMPLE DUPLICATE: 1506102

Parameter	Units	30259907001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	17.0	18.3	7	20	

SAMPLE DUPLICATE: 1506103

Parameter	Units	30259907002 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	7.1	7.0	1	20	

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Date: 08/03/2018 09:52 AM

Page 18 of 22

8/19/2019 2:16:58 PM

QUALIFIERS

Project: Russell City Store
Pace Project No.: 30259907

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.
ND - Not Detected at or above adjusted reporting limit.
TNTC - Too Numerous To Count
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
MDL - Adjusted Method Detection Limit.
PQL - Practical Quantitation Limit.
RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.
S - Surrogate
1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.
Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.
LCS(D) - Laboratory Control Sample (Duplicate)
MS(D) - Matrix Spike (Duplicate)
DUP - Sample Duplicate
RPD - Relative Percent Difference
NC - Not Calculable.
SG - Silica Gel - Clean-Up
U - Indicates the compound was analyzed for, but not detected.
N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.
Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.
TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 307819

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: 307820

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

1c A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.
ST Surrogate recovery was above laboratory control limits. Results may be biased high.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Russell City Store
Pace Project No.: 30259907

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30259907001	SB 6 / 5-6'	EPA 5035A	307819	EPA 8260B	307833
30259907002	SB 7 / 9-11'	EPA 5035A	307819	EPA 8260B	307833
30259907003	SB 9 / 11-12'	EPA 5035A	307820	EPA 8260B	307834
30259907004	SB 10 / 9-11'	EPA 5035A	307819	EPA 8260B	307833
30259907005	SB 11 / 6-8'	EPA 5035A	307819	EPA 8260B	307833
30259907006	SB 12 / 7-9'	EPA 5035A	307819	EPA 8260B	307833
30259907007	SB-13 / 12.5-15.0'	EPA 5035A	307819	EPA 8260B	307833
30259907008	SB-14 / 12.5-14.0'	EPA 5035A	307819	EPA 8260B	307833
30259907001	SB 6 / 5-6'	ASTM D2974-87	308134		
30259907002	SB 7 / 9-11'	ASTM D2974-87	308134		
30259907003	SB 9 / 11-12'	ASTM D2974-87	308134		
30259907004	SB 10 / 9-11'	ASTM D2974-87	308134		
30259907005	SB 11 / 6-8'	ASTM D2974-87	308134		
30259907006	SB 12 / 7-9'	ASTM D2974-87	308134		
30259907007	SB-13 / 12.5-15.0'	ASTM D2974-87	308134		
30259907008	SB-14 / 12.5-14.0'	ASTM D2974-87	308134		

REPORT OF LABORATORY ANALYSIS

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Section A Required Client Information		Section B Required Project Information		Section C Invoice Information	
Company: ER&R	Report To: K. Holman	Company Name: ER&R	Attention: Tania Klemm	Invoice Number: 30259907	Page: 1 of 1
Address: 4250 ROUTE 6N	Copy To:	Address: 4250 Route 6N, Edinboro, PA 16412			
Email To: KH	Purchase Order No.:				
Phone: 814-734-6411	Project Name: Russell City Store				
Requested Due Date/TAT: standard	Project Number: 2014.74				

Section D Required Client Information		Section E Valid Matrix Codes		Section F Requested Analysis Filtered (Y/N)		Section G Requested Analysis Filtered (Y/N)	
ITEM #	SAMPLE ID (A-Z 0-9 / -)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G-GRAB C-COMP)	DATE	TIME	DATE	TIME
1	SB 6 / 5-6'	SL	G	7/17/2018	11:00		
2	SB 7 / 9-11'	SL	G	7/17/2018	13:30		
3	SB 9 / 11-12'	SL	G	7/18/2018	8:15		
4	SB-10 / 9-11'	SL	G	7/18/2018	10:00		
5	SB-11 / 6-8'	SL	G	7/18/2018	15:15		
6	SB - 12 / 7-9'	SL	G	7/18/2018	15:45		
7	SB - 13 / 12.5-15.0'	SL	G	7/18/2018	16:00		
8	SB- 14 / 12.5-14.0'	SL	G	7/18/2018	17:30		
9							
10							
11							
12							
13							
14							

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	David Birchard	7/20/18	10:45	<i>[Signature]</i>	7/21/18	09403.2	Y N Y

SAMPLER NAME AND SIGNATURE		Temp in °C	Received on	Custody Sealed	Samples Intact
<i>[Signature]</i>					
PRINT Name of SAMPLER: David Birchard		DATE Signed (MM/DD/YYYY): 7/20/18			
SIGNATURE of SAMPLER:					

Pittsburgh Lab Sample Condition Upon Receipt

Face Analytical

Client Name:

ER+R

Project #

30259907

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other

Tracking #: 772764018880

Label HEM
LIMS Login HEM

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals Intact: ☐ yes ☐ no

Thermometer Used 9 Type of Ice: Wet Blue None

Cooler Temperature Observed Temp 3.2 °C Correction Factor: +0.0 °C Final Temp: 3.2 °C

Temp should be above freezing to 6°C

Comments:	Yes	No	N/A	pH paper Lot#	Date and Initials of person examining contents:
Chain of Custody Present:	☒	☐	☐	<u>N/A</u>	<u>HEM 7/21/18</u>
Chain of Custody Filled Out:	☒	☐	☐		
Chain of Custody Relinquished:	☒	☐	☐		
Sampler Name & Signature on COC:	☒	☐	☐		
Sample Labels match COC:	☒	☐	☐		
-Includes date/time/ID					
Matrix: <u>SL</u>					
Samples Arrived within Hold Time:	☒	☐	☐		
Short Hold Time Analysis (<72hr remaining):	☐	☒	☐		
Rush Turn Around Time Requested:	☐	☒	☐		
Sufficient Volume:	☒	☐	☐		
Correct Containers Used:	☒	☐	☐		
-Pace Containers Used:	☒	☐	☐		
Containers Intact:	☒	☐	☐		
Orthophosphate field filtered	☐	☐	☒		
Hex Cr Aqueous Compliance/NPDES sample field filtered	☐	☐	☒		
Organic Samples checked for dechlorination:	☐	☐	☒		
Filtered volume received for Dissolved tests	☐	☐	☒		
All containers have been checked for preservation.	☐	☐	☒		
All containers needing preservation are found to be in compliance with EPA recommendation.	☐	☐	☒		
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed <u>HEM</u>	Date/Time of preservation
				Lot # of added preservative	
Headspace in VOA Vials (>6mm):	☐	☒	☐		
Trip Blank Present:	☐	☒	☐		
Trip Blank Custody Seals Present	☐	☒	☐		
Rad Aqueous Samples Screened > 0.5 mrem/hr	☐	☐	☒	Initial when completed:	Date:

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

January 28, 2019

Mr. Dave Birchard
Environmental Remediation & Recovery, Inc.
4250 Route 6N
Edinboro, PA 16412

RE: Project: Russell City Store
Pace Project No.: 30277331

Dear Mr. Birchard:

Enclosed are the analytical results for sample(s) received by the laboratory on January 18, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Samantha Bayura
samantha.bayura@pacelabs.com
(724)850-5622
Project Manager

Enclosures

cc: Karann Holman, Environmental Remediation & Recovery,
Inc.



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: Russell City Store
Pace Project No.: 30277331

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991

Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: Russell City Store
Pace Project No.: 30277331

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30277331001	SB-15/5-7'	Solid	01/16/19 11:00	01/18/19 15:00
30277331002	SB-15/9-11'	Solid	01/16/19 11:30	01/18/19 15:00
30277331003	SB-16/5-7'	Solid	01/16/19 12:55	01/18/19 15:00
30277331004	SB-17/5-6'	Solid	01/16/19 13:40	01/18/19 15:00
30277331005	SB-17/15-16'	Solid	01/16/19 14:50	01/18/19 15:00
30277331006	Trip Blank	Water	01/16/19 00:01	01/18/19 15:00

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SAMPLE ANALYTE COUNT

Project: Russell City Store
Pace Project No.: 30277331

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30277331001	SB-15/5-7'	EPA 8260B	JEW	13
		ASTM D2974-87	AK1	1
30277331002	SB-15/9-11'	EPA 8260B	JEW	13
		ASTM D2974-87	AK1	1
30277331003	SB-16/5-7'	EPA 8260B	JEW	13
		ASTM D2974-87	AK1	1
30277331004	SB-17/5-6'	EPA 8260B	JEW	13
		ASTM D2974-87	AK1	1
30277331005	SB-17/15-16'	EPA 8260B	JEW	13
		ASTM D2974-87	AK1	1
30277331006	Trip Blank	EPA 8260B	JAS	13

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Russell City Store
Pace Project No.: 30277331

Sample: SB-15/5-7 Lab ID: 30277331001 Collected: 01/16/19 11:00 Received: 01/18/19 15:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV Analytical Method: EPA 8260B Preparation Method: EPA 5035A									
Benzene	ND	ug/kg	5.5	0.96	1	01/21/19 12:58	01/21/19 13:40	71-43-2	1c
Ethylbenzene	ND	ug/kg	5.5	1.2	1	01/21/19 12:58	01/21/19 13:40	100-41-4	1c
Isopropylbenzene (Cumene)	ND	ug/kg	5.5	1.3	1	01/21/19 12:58	01/21/19 13:40	98-82-8	1c
Methyl-tert-butyl ether	ND	ug/kg	5.5	0.74	1	01/21/19 12:58	01/21/19 13:40	1634-04-4	1c
Naphthalene	ND	ug/kg	5.5	1.0	1	01/21/19 12:58	01/21/19 13:40	91-20-3	1c
Toluene	ND	ug/kg	5.5	1.1	1	01/21/19 12:58	01/21/19 13:40	108-88-3	1c
1,2,4-Trimethylbenzene	ND	ug/kg	5.5	2.7	1	01/21/19 12:58	01/21/19 13:40	95-63-6	1c
1,3,5-Trimethylbenzene	ND	ug/kg	5.5	2.2	1	01/21/19 12:58	01/21/19 13:40	108-67-8	1c
Xylene (Total)	ND	ug/kg	16.5	3.5	1	01/21/19 12:58	01/21/19 13:40	1330-20-7	
Surrogates									
Toluene-d8 (S)	94	%	76-124		1	01/21/19 12:58	01/21/19 13:40	2037-26-5	
4-Bromofluorobenzene (S)	100	%	70-133		1	01/21/19 12:58	01/21/19 13:40	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	74-131		1	01/21/19 12:58	01/21/19 13:40	17060-07-0	
Dibromofluoromethane (S)	101	%	71-130		1	01/21/19 12:58	01/21/19 13:40	1868-53-7	

Percent Moisture

Analytical Method: ASTM D2974-87

Percent Moisture	14.9	%	0.10	0.10	1		01/24/19 14:12		
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REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Russell City Store
Pace Project No.: 30277331

Sample: SB-15/9-11' Lab ID: 30277331002 Collected: 01/16/19 11:30 Received: 01/18/19 15:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV Analytical Method: EPA 8260B Preparation Method: EPA 5035A									
Benzene	ND	ug/kg	5.1	0.89	1	01/21/19 12:58	01/21/19 14:06	71-43-2	1c
Ethylbenzene	ND	ug/kg	5.1	1.1	1	01/21/19 12:58	01/21/19 14:06	100-41-4	1c
Isopropylbenzene (Cumene)	ND	ug/kg	5.1	1.2	1	01/21/19 12:58	01/21/19 14:06	98-82-8	1c
Methyl-tert-butyl ether	ND	ug/kg	5.1	0.69	1	01/21/19 12:58	01/21/19 14:06	1634-04-4	1c
Naphthalene	ND	ug/kg	5.1	0.97	1	01/21/19 12:58	01/21/19 14:06	91-20-3	1c
Toluene	ND	ug/kg	5.1	1.0	1	01/21/19 12:58	01/21/19 14:06	108-88-3	1c
1,2,4-Trimethylbenzene	ND	ug/kg	5.1	2.5	1	01/21/19 12:58	01/21/19 14:06	95-63-6	1c
1,3,5-Trimethylbenzene	ND	ug/kg	5.1	2.1	1	01/21/19 12:58	01/21/19 14:06	108-67-8	1c
Xylene (Total)	ND	ug/kg	15.4	3.3	1	01/21/19 12:58	01/21/19 14:06	1330-20-7	
Surrogates									
Toluene-d8 (S)	97	%	76-124		1	01/21/19 12:58	01/21/19 14:06	2037-26-5	
4-Bromofluorobenzene (S)	101	%	70-133		1	01/21/19 12:58	01/21/19 14:06	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	74-131		1	01/21/19 12:58	01/21/19 14:06	17060-07-0	
Dibromofluoromethane (S)	100	%	71-130		1	01/21/19 12:58	01/21/19 14:06	1868-53-7	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	4.4	%	0.10	0.10	1		01/24/19 14:12		

REPORT OF LABORATORY ANALYSIS

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Date: 01/28/2019 12:51 PM

Page 6 of 19

8/19/2019 2:17:03 PM

ANALYTICAL RESULTS

Project: Russell City Store
Pace Project No.: 30277331

Sample: SB-16/5-7' Lab ID: 30277331003 Collected: 01/16/19 12:55 Received: 01/18/19 15:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV Analytical Method: EPA 8260B Preparation Method: EPA 5035A									
Benzene	ND	ug/kg	8.1	1.4	1	01/22/19 11:15	01/22/19 13:02	71-43-2	1c
Ethylbenzene	ND	ug/kg	8.1	1.7	1	01/22/19 11:15	01/22/19 13:02	100-41-4	1c
Isopropylbenzene (Cumene)	ND	ug/kg	8.1	1.9	1	01/22/19 11:15	01/22/19 13:02	98-82-8	1c
Methyl-tert-butyl ether	ND	ug/kg	8.1	1.1	1	01/22/19 11:15	01/22/19 13:02	1634-04-4	1c
Naphthalene	ND	ug/kg	8.1	1.5	1	01/22/19 11:15	01/22/19 13:02	91-20-3	1c
Toluene	ND	ug/kg	8.1	1.6	1	01/22/19 11:15	01/22/19 13:02	108-88-3	1c
1,2,4-Trimethylbenzene	ND	ug/kg	8.1	3.9	1	01/22/19 11:15	01/22/19 13:02	95-63-6	1c
1,3,5-Trimethylbenzene	ND	ug/kg	8.1	3.3	1	01/22/19 11:15	01/22/19 13:02	108-67-8	1c
Xylene (Total)	ND	ug/kg	24.3	5.1	1	01/22/19 11:15	01/22/19 13:02	1330-20-7	1c
Surrogates									
Toluene-d8 (S)	101	%	76-124		1	01/22/19 11:15	01/22/19 13:02	2037-26-5	
4-Bromofluorobenzene (S)	109	%	70-133		1	01/22/19 11:15	01/22/19 13:02	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%	74-131		1	01/22/19 11:15	01/22/19 13:02	17060-07-0	
Dibromofluoromethane (S)	100	%	71-130		1	01/22/19 11:15	01/22/19 13:02	1868-53-7	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	13.5	%	0.10	0.10	1		01/24/19 14:12		

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ANALYTICAL RESULTS

Project: Russell City Store
Pace Project No.: 30277331

Sample: SB-17/5-6' Lab ID: 30277331004 Collected: 01/16/19 13:40 Received: 01/18/19 15:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	5.0	0.87	1	01/21/19 12:58	01/21/19 14:59	71-43-2	1c
Ethylbenzene	6.4	ug/kg	5.0	1.1	1	01/21/19 12:58	01/21/19 14:59	100-41-4	1c
Isopropylbenzene (Cumene)	ND	ug/kg	5.0	1.2	1	01/21/19 12:58	01/21/19 14:59	98-82-8	1c
Methyl-tert-butyl ether	ND	ug/kg	5.0	0.67	1	01/21/19 12:58	01/21/19 14:59	1634-04-4	1c
Naphthalene	64.6	ug/kg	5.0	0.94	1	01/21/19 12:58	01/21/19 14:59	91-20-3	1c
Toluene	ND	ug/kg	5.0	0.99	1	01/21/19 12:58	01/21/19 14:59	108-88-3	1c
1,2,4-Trimethylbenzene	45.5	ug/kg	5.0	2.5	1	01/21/19 12:58	01/21/19 14:59	95-63-6	1c
1,3,5-Trimethylbenzene	36.9	ug/kg	5.0	2.0	1	01/21/19 12:58	01/21/19 14:59	108-67-8	1c
Xylene (Total)	ND	ug/kg	15.1	3.2	1	01/21/19 12:58	01/21/19 14:59	1330-20-7	
Surrogates									
Toluene-d8 (S)	97	%.	76-124		1	01/21/19 12:58	01/21/19 14:59	2037-26-5	
4-Bromofluorobenzene (S)	96	%.	70-133		1	01/21/19 12:58	01/21/19 14:59	460-00-4	
1,2-Dichloroethane-d4 (S)	110	%.	74-131		1	01/21/19 12:58	01/21/19 14:59	17060-07-0	
Dibromofluoromethane (S)	101	%.	71-130		1	01/21/19 12:58	01/21/19 14:59	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	8.2	%	0.10	0.10	1		01/24/19 14:13		

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Date: 01/28/2019 12:51 PM

Page 8 of 19

8/19/2019 2:17:04 PM

ANALYTICAL RESULTS

Project: Russell City Store
Pace Project No.: 30277331

Sample: SB-17/15-16' Lab ID: 30277331005 Collected: 01/16/19 14:50 Received: 01/18/19 15:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B Preparation Method: EPA 5035A								
Benzene	ND	ug/kg	4.7	0.82	1	01/21/19 12:58	01/21/19 15:25	71-43-2	1c
Ethylbenzene	ND	ug/kg	4.7	1.0	1	01/21/19 12:58	01/21/19 15:25	100-41-4	1c
Isopropylbenzene (Cumene)	ND	ug/kg	4.7	1.1	1	01/21/19 12:58	01/21/19 15:25	98-82-8	1c
Methyl-tert-butyl ether	ND	ug/kg	4.7	0.63	1	01/21/19 12:58	01/21/19 15:25	1634-04-4	1c
Naphthalene	ND	ug/kg	4.7	0.89	1	01/21/19 12:58	01/21/19 15:25	91-20-3	1c
Toluene	ND	ug/kg	4.7	0.93	1	01/21/19 12:58	01/21/19 15:25	108-88-3	1c
1,2,4-Trimethylbenzene	ND	ug/kg	4.7	2.3	1	01/21/19 12:58	01/21/19 15:25	95-63-6	1c
1,3,5-Trimethylbenzene	ND	ug/kg	4.7	1.9	1	01/21/19 12:58	01/21/19 15:25	108-67-8	1c
Xylene (Total)	ND	ug/kg	14.1	3.0	1	01/21/19 12:58	01/21/19 15:25	1330-20-7	
Surrogates									
Toluene-d8 (S)	98	%	76-124		1	01/21/19 12:58	01/21/19 15:25	2037-26-5	
4-Bromofluorobenzene (S)	100	%	70-133		1	01/21/19 12:58	01/21/19 15:25	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	74-131		1	01/21/19 12:58	01/21/19 15:25	17060-07-0	
Dibromofluoromethane (S)	98	%	71-130		1	01/21/19 12:58	01/21/19 15:25	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	9.0	%	0.10	0.10	1		01/24/19 14:13		

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ANALYTICAL RESULTS

Project: Russell City Store
Pace Project No.: 30277331

Sample: Trip Blank		Lab ID: 30277331006		Collected: 01/16/19 00:01		Received: 01/18/19 15:00		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV									
Analytical Method: EPA 8260B									
Benzene	ND	ug/L	1.0	0.24	1		01/24/19 13:26	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.31	1		01/24/19 13:26	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.24	1		01/24/19 13:26	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		01/24/19 13:26	1634-04-4	
Naphthalene	ND	ug/L	2.0	0.82	1		01/24/19 13:26	91-20-3	
Toluene	ND	ug/L	1.0	0.30	1		01/24/19 13:26	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.25	1		01/24/19 13:26	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.21	1		01/24/19 13:26	108-67-8	
Xylene (Total)	ND	ug/L	3.0	0.78	1		01/24/19 13:26	1330-20-7	
Surrogates									
Toluene-d8 (S)	99	%	80-120		1		01/24/19 13:26	2037-26-5	
4-Bromofluorobenzene (S)	105	%	79-129		1		01/24/19 13:26	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	80-120		1		01/24/19 13:26	17060-07-0	
Dibromofluoromethane (S)	101	%	80-120		1		01/24/19 13:26	1868-53-7	

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Date: 01/28/2019 12:51 PM

Page 10 of 19

8/19/2019 2:17:05 PM

QUALITY CONTROL DATA

Project: Russell City Store
Pace Project No.: 30277331

QC Batch: 327572 Analysis Method: EPA 8260B
QC Batch Method: EPA 5035A Analysis Description: 8260B MSV UST-SOIL
Associated Lab Samples: 30277331001, 30277331002, 30277331004, 30277331005

METHOD BLANK: 1594931 Matrix: Solid
Associated Lab Samples: 30277331001, 30277331002, 30277331004, 30277331005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	ND	5.0	2.4	01/21/19 13:13	
1,3,5-Trimethylbenzene	ug/kg	ND	5.0	2.0	01/21/19 13:13	
Benzene	ug/kg	ND	5.0	0.87	01/21/19 13:13	
Ethylbenzene	ug/kg	ND	5.0	1.1	01/21/19 13:13	
Isopropylbenzene (Cumene)	ug/kg	ND	5.0	1.2	01/21/19 13:13	
Methyl-tert-butyl ether	ug/kg	ND	5.0	0.67	01/21/19 13:13	
Naphthalene	ug/kg	ND	5.0	0.94	01/21/19 13:13	
Toluene	ug/kg	ND	5.0	0.99	01/21/19 13:13	
Xylene (Total)	ug/kg	ND	15.0	3.2	01/21/19 13:13	
1,2-Dichloroethane-d4 (S)	%	91	74-131		01/21/19 13:13	
4-Bromofluorobenzene (S)	%	100	70-133		01/21/19 13:13	
Dibromofluoromethane (S)	%	100	71-130		01/21/19 13:13	
Toluene-d8 (S)	%	95	76-124		01/21/19 13:13	

LABORATORY CONTROL SAMPLE: 1594932

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	20	19.5	97	70-130	
1,3,5-Trimethylbenzene	ug/kg	20	19.3	97	70-130	
Benzene	ug/kg	20	17.9	89	70-130	
Ethylbenzene	ug/kg	20	19.3	96	70-130	
Isopropylbenzene (Cumene)	ug/kg	20	18.7	94	70-130	
Methyl-tert-butyl ether	ug/kg	20	15.2	76	70-130	
Naphthalene	ug/kg	20	20.0	100	70-130	
Toluene	ug/kg	20	17.9	89	70-130	
Xylene (Total)	ug/kg	60	59.3	99	70-130	
1,2-Dichloroethane-d4 (S)	%			88	74-131	
4-Bromofluorobenzene (S)	%			101	70-133	
Dibromofluoromethane (S)	%			101	71-130	
Toluene-d8 (S)	%			99	76-124	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Russell City Store
Pace Project No.: 30277331

QC Batch: 327683 Analysis Method: EPA 8260B
QC Batch Method: EPA 5035A Analysis Description: 8260B MSV UST-SOIL
Associated Lab Samples: 30277331003

METHOD BLANK: 1595316 Matrix: Solid
Associated Lab Samples: 30277331003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	ND	5.0	2.4	01/22/19 12:36	
1,3,5-Trimethylbenzene	ug/kg	ND	5.0	2.0	01/22/19 12:36	
Benzene	ug/kg	ND	5.0	0.87	01/22/19 12:36	
Ethylbenzene	ug/kg	ND	5.0	1.1	01/22/19 12:36	
Isopropylbenzene (Cumene)	ug/kg	ND	5.0	1.2	01/22/19 12:36	
Methyl-tert-butyl ether	ug/kg	ND	5.0	0.67	01/22/19 12:36	
Naphthalene	ug/kg	ND	5.0	0.94	01/22/19 12:36	
Toluene	ug/kg	ND	5.0	0.99	01/22/19 12:36	
Xylene (Total)	ug/kg	ND	15.0	3.2	01/22/19 12:36	
1,2-Dichloroethane-d4 (S)	%	88	74-131		01/22/19 12:36	
4-Bromofluorobenzene (S)	%	100	70-133		01/22/19 12:36	
Dibromofluoromethane (S)	%	98	71-130		01/22/19 12:36	
Toluene-d8 (S)	%	99	76-124		01/22/19 12:36	

LABORATORY CONTROL SAMPLE: 1595317

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	20	21.9	110	70-130	
1,3,5-Trimethylbenzene	ug/kg	20	21.9	109	70-130	
Benzene	ug/kg	20	20.3	101	70-130	
Ethylbenzene	ug/kg	20	21.0	105	70-130	
Isopropylbenzene (Cumene)	ug/kg	20	22.1	111	70-130	
Methyl-tert-butyl ether	ug/kg	20	16.9	84	70-130	
Naphthalene	ug/kg	20	18.8	94	70-130	
Toluene	ug/kg	20	20.1	101	70-130	
Xylene (Total)	ug/kg	60	62.0	103	70-130	
1,2-Dichloroethane-d4 (S)	%			91	74-131	
4-Bromofluorobenzene (S)	%			100	70-133	
Dibromofluoromethane (S)	%			98	71-130	
Toluene-d8 (S)	%			99	76-124	

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REPORT OF LABORATORY ANALYSIS

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Date: 01/28/2019 12:51 PM

Page 12 of 19

8/19/2019 2:17:06 PM

QUALITY CONTROL DATA

Project: Russell City Store

Pace Project No.: 30277331

QC Batch:	327969	Analysis Method:	EPA 8260B
QC Batch Method:	EPA 8260B	Analysis Description:	8260B MSV UST-WATER
Associated Lab Samples:	30277331006		

METHOD BLANK: 1596448

Matrix: Water

Associated Lab Samples: 30277331006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/L	ND	1.0	0.25	01/24/19 12:59	
1,3,5-Trimethylbenzene	ug/L	ND	1.0	0.21	01/24/19 12:59	
Benzene	ug/L	ND	1.0	0.24	01/24/19 12:59	
Ethylbenzene	ug/L	ND	1.0	0.31	01/24/19 12:59	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	0.24	01/24/19 12:59	
Methyl-tert-butyl ether	ug/L	ND	1.0	0.23	01/24/19 12:59	
Naphthalene	ug/L	ND	2.0	0.82	01/24/19 12:59	
Toluene	ug/L	ND	1.0	0.30	01/24/19 12:59	
Xylene (Total)	ug/L	ND	3.0	0.78	01/24/19 12:59	
1,2-Dichloroethane-d4 (S)	%	112	80-120		01/24/19 12:59	
4-Bromofluorobenzene (S)	%	104	79-129		01/24/19 12:59	
Dibromofluoromethane (S)	%	102	80-120		01/24/19 12:59	
Toluene-d8 (S)	%	98	80-120		01/24/19 12:59	

LABORATORY CONTROL SAMPLE: 1596449

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/L	20	23.1	115	70-130	
1,3,5-Trimethylbenzene	ug/L	20	22.2	111	70-130	
Benzene	ug/L	20	17.9	89	70-130	
Ethylbenzene	ug/L	20	21.1	106	70-130	
Isopropylbenzene (Cumene)	ug/L	20	22.3	112	70-130	
Methyl-tert-butyl ether	ug/L	20	18.2	91	70-130	
Naphthalene	ug/L	20	24.7	123	70-130	
Toluene	ug/L	20	20.2	101	70-130	
Xylene (Total)	ug/L	60	62.9	105	70-130	
1,2-Dichloroethane-d4 (S)	%			108	80-120	
4-Bromofluorobenzene (S)	%			105	79-129	
Dibromofluoromethane (S)	%			98	80-120	
Toluene-d8 (S)	%			104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1596695 1596696

Parameter	Units	30277583003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
1,2,4-Trimethylbenzene	ug/L	ND	20	20	27.0	25.3	135	126	75-125	7	30 MH
1,3,5-Trimethylbenzene	ug/L	ND	20	20	24.6	24.3	123	121	76-121	1	30 MH
Benzene	ug/L	ND	20	20	20.2	20.1	101	100	67-121	1	30

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Date: 01/28/2019 12:51 PM

Page 13 of 19

8/19/2019 2:17:07 PM

QUALITY CONTROL DATA

Project: Russell City Store
Pace Project No.: 30277331

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1596695 1596696												
Parameter	Units	30277583003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
Ethylbenzene	ug/L	ND	20	20	24.0	23.4	120	117	70-127	3	30	
Isopropylbenzene (Cumene)	ug/L	ND	20	20	24.3	24.8	121	124	80-122	2	30	MH
Methyl-tert-butyl ether	ug/L	ND	20	20	17.3	17.9	87	89	79-135	3	30	
Naphthalene	ug/L	ND	20	20	28.9	25.5	144	128	62-131	12	30	MH
Toluene	ug/L	ND	20	20	21.4	21.8	107	109	77-125	1	30	
Xylene (Total)	ug/L	ND	60	60	72.5	69.7	121	116	69-128	4	30	
1,2-Dichloroethane-d4 (S)	%						110	106	80-120			
4-Bromofluorobenzene (S)	%						105	104	79-129			
Dibromofluoromethane (S)	%						103	104	80-120			
Toluene-d8 (S)	%						104	106	80-120			

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Date: 01/28/2019 12:51 PM

Page 14 of 19

8/19/2019 2:17:07 PM

QUALITY CONTROL DATA

Project: Russell City Store
Pace Project No.: 30277331

QC Batch: 327993 Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 30277331001, 30277331002, 30277331003, 30277331004, 30277331005

SAMPLE DUPLICATE: 1596586

Parameter	Units	30277589001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	25.4	23.7	7	20	

SAMPLE DUPLICATE: 1596587

Parameter	Units	30277590001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	15.4	13.2	15	20	

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: Russell City Store
Pace Project No.: 30277331

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.
ND - Not Detected at or above adjusted reporting limit.
TNTC - Too Numerous To Count
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
MDL - Adjusted Method Detection Limit.
PQL - Practical Quantitation Limit.
RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.
S - Surrogate
1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.
Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.
LCS(D) - Laboratory Control Sample (Duplicate)
MS(D) - Matrix Spike (Duplicate)
DUP - Sample Duplicate
RPD - Relative Percent Difference
NC - Not Calculable.
SG - Silica Gel - Clean-Up
U - Indicates the compound was analyzed for, but not detected.
N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.
Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.
TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 327572
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.
Batch: 327683
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

1c A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.
MH Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Russell City Store
Pace Project No.: 30277331

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30277331001	SB-15/5-7'	EPA 5035A	327572	EPA 8260B	327573
30277331002	SB-15/9-11'	EPA 5035A	327572	EPA 8260B	327573
30277331003	SB-16/5-7'	EPA 5035A	327683	EPA 8260B	327684
30277331004	SB-17/5-6'	EPA 5035A	327572	EPA 8260B	327573
30277331005	SB-17/15-16'	EPA 5035A	327572	EPA 8260B	327573
30277331006	Trip Blank	EPA 8260B	327969		
30277331001	SB-15/5-7'	ASTM D2974-87	327993		
30277331002	SB-15/9-11'	ASTM D2974-87	327993		
30277331003	SB-16/5-7'	ASTM D2974-87	327993		
30277331004	SB-17/5-6'	ASTM D2974-87	327993		
30277331005	SB-17/15-16'	ASTM D2974-87	327993		

REPORT OF LABORATORY ANALYSIS

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Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name:

ER+R

Project #

30277331

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☒ Pace Other

Tracking #:

Label 8B
LIMS Login 8B

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Thermometer Used 11 Type of Ice: ☒ Wet ☐ Blue ☐ None

Cooler Temperature Observed Temp 4.6 °C Correction Factor 0.2 °C Final Temp: 4.4 °C

Temp should be above freezing to 8°C

Comments:	Yes	No	N/A	pH paper Lot#	Date and Initials of person examining contents: <u>SA 1/18/11</u>
Chain of Custody Present:	☒	☐	☐		
Chain of Custody Filled Out:	☒	☐	☐		
Chain of Custody Relinquished:	☒	☐	☐		
Sampler Name & Signature on COC:	☒	☐	☐		
Sample Labels match COC:	☒	☐	☐		
-Includes date/time/ID					
Matrix: <u>WT</u>					
Samples Arrived within Hold Time:	☒	☐	☐		
Short Hold Time Analysis (<72hr remaining):	☐	☒	☐		
Rush Turn Around Time Requested:	☐	☒	☐		
Sufficient Volume:	☒	☐	☐		
Correct Containers Used:	☒	☐	☐		
-Pace Containers Used:	☒	☐	☐		
Containers Intact:	☒	☐	☐		
Orthophosphate field filtered	☐	☐	☒		
Hex Cr Aqueous Compliance/NPDES sample field filtered	☐	☐	☒		
Organic Samples checked for dechlorination:	☐	☐	☒		
Filtered volume received for Dissolved tests	☐	☐	☒		
All containers have been checked for preservation.	☐	☐	☒		
All containers needing preservation are found to be in compliance with EPA recommendation.	☐	☐	☒		
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed	Date/Time of preservation
				Lot # of added preservative	
Headspace in VOA Vials (>6mm):	☐	☐	☒		
Trip Blank Present:	☒	☐	☐		
Trip Blank Custody Seals Present	☒	☐	☐		
Rad Aqueous Samples Screened > 0.5 mrem/hr	☐	☐	☒	Initial when completed	Date:

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

J:\QAQC\Master\Document Management\Sample Mgt\Sample Condition Upon Receipt Pittsburgh (C056-7 16Feb2018)

Appendix K
Soil Disposal Documentation



NON-HAZARDOUS RESIDUAL WASTE MANIFEST

Dyne

85109
22.75

MANIFEST NO. McK 12666

GENERATOR

Name: Russel City Store (Ted Lutz) Phone No. 716-397-7555
Address: 1536 State Rt 66 DeYouny, PA 16728
Shipping Location: 1536 State Rt 66 DeYouny, PA Phone No. 716-397-7555
Address: _____

RESIDUAL WASTE CODE #	DESCRIPTION OF WASTE	QTY.	UNITS	CONTAINER NO.	TYPE
5629	Petroleum Contaminated Soil	20	Tons	1	Triaxle

Generator's Certification: I hereby certify that the waste material named above is not a hazardous waste as defined by 40 CFR Section 261, does not contain any free liquid as defined by applicable Federal regulations and that I am authorized to sign the manifest on behalf of the Generator.

Name (Printed): Nick Fischer Agent for Russel City Store Signature: [Signature] Shipment Date: 5/20/15

TRANSPORTER

TRANSPORTER NAME: Steve Dyne Excavating DRIVER NAME: Joe Krutzger
ADDRESS: 35113 Rt 66W VEHICLE LICENSE NO./STATE: USDOT 871088
Kane PA 16735
CONTACT PERSON: Steve Dyne
PHONE NO. 814 837 6990

DRIVER'S ACKNOWLEDGMENT OF RECEIPT:

I hereby certify that the waste material described above was picked up at the generator site on the date listed above.

Signature: [Signature] Date: 5/20/15

DRIVER'S ACKNOWLEDGMENTS OF DELIVERY:

I hereby certify that the above named material was delivered without incident directly from the generator to the McKean County Landfill and that only the waste described above is contained in this load.

Signature: [Signature] Date: 5/20/15

DISPOSAL FACILITY

SITE NAME: McKean County Landfill
19 Ness Lane
Kane, PA 16735

DISCREPANCY FOUND ON THE MANIFEST: _____ DISCREPANCY FORM ATTACHED: _____

I hereby certify that the waste material indicated above has been accepted for disposal at the McKean County Landfill and the information foregoing, to the best of my knowledge, is true and accurate.

Name of Authorized Agent: [Signature] Signature: [Signature] Date: 5/20/15

8/19/2019 2:17:11 PM



NON-HAZARDOUS RESIDUAL WASTE MANIFEST

85080
18.84MANIFEST NO. McK 12659

GENERATOR

Name: Russel City Store (Ted Lutz) Phone No. 716 397 7555Address: 1536 State Rt 66Shipping Location: Russel City Store (Ted Lutz) Phone No. 716 397 7555Address: 1536 State Rt 66

RESIDUAL WASTE CODE #	DESCRIPTION OF WASTE	QTY.	UNITS	CONTAINER NO.	TYPE
<u>5629</u>	<u>Petroleum Contaminated Soil</u>	<u>20</u>	<u>Tons</u>	<u>1</u>	<u>Triplet</u>

Generator's Certification: I hereby certify that the waste material named above is not a hazardous waste as defined by 40 CFR Section 261, does not contain any free liquid as defined by applicable Federal regulations and that I am authorized to sign the manifest on behalf of the Generator.

Name (Printed): Nick Riesler Agent for Signature: Nick Riesler Shipment Date: 5/20/15
Russel City Store

TRANSPORTER

TRANSPORTER NAME: Steve Dyne ExcavatingADDRESS: 3913 RT 66W
Lane PA 16735CONTACT PERSON: Steve DynePHONE NO. 814 437 6990DRIVER NAME: Joe KreitzerVEHICLE LICENSE NO./STATE: 6SDOT 8710888

DRIVER'S ACKNOWLEDGMENT OF RECEIPT:

I hereby certify that the waste material described above was picked up at the generator site on the date listed above.

Signature: Joe Kreitzer Date: 5/20/15

DRIVER'S ACKNOWLEDGMENTS OF DELIVERY:

I hereby certify that the above named material was delivered without incident directly from the generator to the McKean County Landfill and that only the waste described above is contained in this load.

Signature: Joe Kreitzer Date: 5/20/15

DISPOSAL FACILITY

SITE NAME: McKean County Landfill
19 Ness Lane
Kane, PA 16735

DISCREPANCY FOUND ON THE MANIFEST: _____ DISCREPANCY FORM ATTACHED: _____

I hereby certify that the waste material indicated above has been accepted for disposal at the McKean County Landfill and the information foregoing, to the best of my knowledge, is true and accurate.

Name of Authorized Agent: Jim Lutz Signature: Jim Lutz Date: 5/20/15

8/19/2019 2:17:13 PM

IS RESIDUAL WASTE MANIFEST

MANIFEST NO. McK 17102

GENERATOR

Name: Russell City Store Phone No. 716 397 7555

Address: 1536 State Route 66

Shipping Location: Highland Russell City Store Phone No. 716 397 7555

Address: 1536 State Route 66

RESIDUAL WASTE CODE #	DESCRIPTION OF WASTE	QTY.	UNITS	CONTAINER NO.	TYPE
<u>7980</u>	<u>Grease contaminated soil</u>	<u>1000</u>	<u>lbs</u>	<u>345</u>	

Generator's Certification: I hereby certify that the waste material named above is not a hazardous waste as defined by 40 CFR Section 261, does NOT contain any free liquid as defined by applicable Federal regulations and that I am authorized to sign the manifest on behalf of the Generator.

Name (Printed): Nick Fiesler Signature: Nick Fiesler (agent) Shipment Date: 3/29/17

TRANSPORTER

TRANSPORTER NAME: Fox & Sons Environmental

DRIVER NAME: DAVID T. MURPHY

ADDRESS: 223 North Main St
Clarendon PA 16313

VEHICLE LICENSE NO./STATE: 41 12204

CONTACT PERSON: Bob Hennessy

PHONE NO. 716 9379

DRIVER'S ACKNOWLEDGMENT OF RECEIPT:

I hereby certify that the waste material described above was picked up at the generator site on the date listed above.

DRIVER'S ACKNOWLEDGMENTS OF DELIVERY:

I hereby certify that the above named material was delivered without incident directly from the generator to the McKean County Landfill and that only the waste described above is contained in this load.

Signature: [Signature] Date: 3-29-17

Signature: [Signature] Date: 3-29-17

DISPOSAL FACILITY

SITE NAME: McKean County Landfill
19 Ness Lane
Kane, PA 16735

DISCREPANCY FOUND ON THE MANIFEST: _____ DISCREPANCY FORM ATTACHED: _____

I hereby certify that the waste material indicated above has been accepted for disposal at the McKean County Landfill and the information foregoing, to the best of my knowledge, is true and accurate.

Name of Authorized Agent: _____ Signature: [Signature] Date: 3/29/17

S RESIDUAL WASTE MANIFEST

MANIFEST NO. McK 1703

GENERATOR

Name: Russell City Store Phone No. 716 397 7855

Address: 1536 State Route 66

Shipping Location: Russell City Store Phone No. 716 397 7855

Address: 1536 State Route 66

RESIDUAL WASTE CODE #	DESCRIPTION OF WASTE	QTY.	UNITS	CONTAINER NO.	TYPE
7380	Gravel Contaminated Soil	100%			

Generator's Certification: I hereby certify that the waste material named above is not a hazardous waste as defined by 40 CFR Section 261, does NOT contain any free liquid as defined by applicable Federal regulations and that I am authorized to sign the manifest on behalf of the Generator.

Name (Printed): Nick Ficker Signature: [Signature] Shipment Date: 3/10/17

TRANSPORTER

TRANSPORTER NAME: Fox & Sons Excavating

DRIVER NAME: [Signature]

ADDRESS: 223 N MAW ST

VEHICLE LICENSE NO./STATE: AP 12207

CLARENDON, PA

CONTACT PERSON: Bob Hunsicker

PHONE NO. _____

DRIVER'S ACKNOWLEDGMENT OF RECEIPT:

I hereby certify that the waste material described above was picked up at the generator site on the date listed above.

Signature: [Signature] Date: 3-10-17

DRIVER'S ACKNOWLEDGMENTS OF DELIVERY:

I hereby certify that the above named material was delivered without incident directly from the generator to the McKean County Landfill and that only the waste described above is contained in this load.

Signature: [Signature] Date: 3-10-17

DISPOSAL FACILITY

SITE NAME: McKean County Landfill
19 Ness Lane
Kane, PA 16735

DISCREPANCY FOUND ON THE MANIFEST: _____ DISCREPANCY FORM ATTACHED: _____

I hereby certify that the waste material indicated above has been accepted for disposal at the McKean County Landfill and the information foregoing, to the best of my knowledge, is true and accurate.

Name of Authorized Agent: _____ Signature: [Signature] Date: 3/10/17



NON-HAZARDOUS RESIDUAL WASTE MANIFEST

MANIFEST NO. McK 170
1618GENERATOR

Name: Russell City Store Phone No. 716 397 1555
Address: 15 3/4 State Rt 166 Dr Young PA 16723
Shipping Location: Russell City Store Phone No. _____
Address: 15 3/4 State Rt 166

RESIDUAL WASTE CODE #	DESCRIPTION OF WASTE	QTY.	UNITS	CONTAINER NO.	TYPE
<u>7380</u>	<u>Gasoline impacted soil</u>	<u>1007.</u>		<u>2004</u>	

Generator's Certification: I hereby certify that the waste material named above is not a hazardous waste as defined by 40 CFR Section 261, does NOT contain any free liquid as defined by applicable Federal regulations and that I am authorized to sign the manifest on behalf of the Generator.

Name (Printed): Lyle Anthony Signature: [Signature] Shipment Date: 30 Oct 2017

TRANSPORTER

TRANSPORTER NAME: Frag & Sons DRIVER NAME: Lyle Anthony
ADDRESS: 223 N Main St VEHICLE LICENSE NO./STATE: AB63670-PA
Chesedown PA 16313
CONTACT PERSON: Bob Hennessey
PHONE NO. 714 726 9279

DRIVER'S ACKNOWLEDGMENT OF RECEIPT:

I hereby certify that the waste material described above was picked up at the generator site on the date listed above.

Signature: [Signature] Date: 30 Oct 2017

DRIVER'S ACKNOWLEDGMENTS OF DELIVERY:

I hereby certify that the above named material was delivered without incident directly from the generator to the McKean County Landfill and that only the waste described above is contained in this load.

Signature: [Signature] Date: 30 Oct 2017

DISPOSAL FACILITY

SITE NAME: McKean County Landfill
19 Ness Lane
Kane, PA 16735

DISCREPANCY FOUND ON THE MANIFEST: _____ DISCREPANCY FORM ATTACHED: _____

I hereby certify that the waste material indicated above has been accepted for disposal at the McKean County Landfill and the information foregoing, to the best of my knowledge, is true and accurate.

Name of Authorized Agent: _____ Signature: [Signature] Date: 10/31/17



NON- HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

497276

If waste is asbestos waste, all sections must be completed, otherwise only Sections I, II, III need completed.

Section I		GENERATOR	
Generator Name: <u>B. Russell City Store</u>		Generator Location: _____	
Address: <u>1536 S. 12. Ave</u>		Address: _____	
Phone No.: _____		Phone No.: _____	
		County <u>Elk</u>	

Description of Waste	Waste Code	Quantity (lbs., tons, or % of load)
1.		
2. <u>Virgin Textile - 1000</u>	<u>26022.5</u>	<u>11000</u>
3.		
4. <u>2100 + 25</u>		
5.		
6.		
7.		
8.		

Shipped in:

Rolloff X 20A
Drums _____
Truck _____
Other _____

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations: AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restriction, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261.

D. BIRCHFIELD - AGENT FOR GEN. 7/11/10
Generator Authorized Agent Name _____ Signature _____ Shipment Date _____

Section II		TRANSPORTER	
TRANSPORTER I		TRANSPORTER II	
Name: <u>Fox & Sons</u>		Name: _____	
Address: <u>223 N. Main St - 16313</u>		Address: _____	
Driver Name: <u>Lyk Anthony</u>		Driver Name: _____	
Phone No.: <u>214 726 9279</u>		Phone No.: _____	
Truck No.: <u>170</u>		Truck No.: _____	
Trailer No.: _____		Trailer No.: _____	
Vehicle License No/State: <u>PR 63670 - PA</u>		Vehicle License No/State: _____	
Driver Signature (Acknowledge Receipt of Materials) _____		Driver Signature (Acknowledge Receipt of Materials) _____	
Date: <u>26 Jul 2010</u>		Date: _____	

Section III		DESTINATION	
Site Information: <u>ADVANCED DISPOSAL</u>		Phone: (814) 265-1744	
<u>635 TONY ROAD, KERSEY, PA 15846</u>		Fax: (814) 265-8745	
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
Name of Authorized Agent _____		Signature or Initials _____	
Indicate any Discrepancies: _____		Date _____	

Total Truck
Net Weight
In Tons

Section IV		ASBESTOS	
------------	--	----------	--

Removal Contractor's Name: _____		Removal Contractor's Phone Number: _____	
Removal Contractor's Address: _____			
Special Handling Instructions and additional information: _____			
REMOVAL CONTRACTOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packaged, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and government regulations.			
Removal Contractor's Name and Title (Print/Type) _____		Removal Contractor's Signature _____	
		Date _____	

Name and Address of Responsible Agency: _____

☐ Friable ☐ Non-friable ☐ Both: %Friable _____ %Non-Friable _____

White-Original Blue-Disposal Office Copy Green-Return to Operator Canary-Generator Retain Pink-Return to Generator Gold-Transporter Retain

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NON- HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

494217

If waste is asbestos waste, all sections must be completed, otherwise only Sections I, II, III need completed

Section I

GENERATOR

Generator Name: Russell L. H. Co.
Address: 1531 12th St.
1st Floor, 2nd Floor

Generator Location: Russell L. H. Co.
Address: 1531 12th St.
1st Floor, 2nd Floor

Phone No.: _____

Phone No.: _____ County ELK

Description of Waste	Waste Code	Quantity (lbs., tons, or % of load)
1.		
2.		
3. <u>Asbestos</u>	<u>100-205</u>	<u>100%</u>
4.		
5.		
6.		
7.		
8.		

Shipped in:

Rolloff 12 Yds
Drums 0
Truck 0
Other _____

GENERATORS CERTIFICATION: I hereby certify that the above named material is not hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations: AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restriction, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261.

Generator Authorized Agent Name D. J. H. Co. Signature [Signature] Shipment Date 1-24-19

Section II

TRANSPORTER

TRANSPORTER I
Name: [Signature]
Address: 1531 12th St.
Driver Name [Signature]
Phone No. 714-712-7777
Truck No. 72 Trailer No. _____
Vehicle License No./State 9901-9 PA

TRANSPORTER II
Name: _____
Address: _____
Driver Name _____
Phone No. _____
Truck No. _____ Trailer No. _____
Vehicle License No./State _____

Driver Signature (Acknowledge Receipt of Materials)

Date

Driver Signature (Acknowledge Receipt of Materials)

Date

Section III

DESTINATION

Site Information: **ADVANCED DISPOSAL**
635 TOBY ROAD, KERSEY, PA 15846

Phone: (814) 265-1744
Fax: (814) 265-8745

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

Name of Authorized Agent

Signature or Initials

Date

Indicate any Discrepancies:

Total Truck
Net Weight
In Tons

Section IV

ASBESTOS

Removal Contractor's Name: _____ Removal Contractor's Phone Number: _____

Removal Contractor's Address: _____

Special Handling Instructions and additional information:

REMOVAL CONTRACTOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packaged, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and government regulations.

Removal Contractor's Name and Title (Print/Type)

Removal Contractor's Signature

Date

Name and Address of Responsible Agency:

☐ Friable ☐ Non-friable ☐ Both: %Friable _____ %Non-Friable _____

White- Original

Blue-Disposal Office Copy

Green-Return to Operator

Canary-Generator Retain

Pink-Return to Generator

Gold-Transporter Retain

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Appendix L
R/E Agreement



pennsylvania
DEPARTMENT OF TRANSPORTATION
www.dot.state.pa.us

RIGHT OF ENTRY AGREEMENT

Executed Date: 6-13-18
(Department will enter date)
Highland Township
Elk County
S.R. 0066

Agreement No.: 028802
Federal ID No: 471842535

THIS RIGHT OF ENTRY AGREEMENT is made by and between the Commonwealth of Pennsylvania, acting through the Department of Transportation (hereinafter "Department")

and

Matthew T. Corwin of Soggy Bottom, LLC (hereinafter "Applicant"),
a limited liability company doing business in Pennsylvania with its office at:
27083 Bayus Road, Albion, PA 16401

WITNESSETH:

WHEREAS, Applicant owns, or owned, or is otherwise responsible for property located along State Route (S.R.) 0066 in Highland Township, Elk County, where liquids, materials or other substances may have been released that may have impacted soil or groundwater.

WHEREAS, Applicant wishes to conduct an environmental investigation or remediation, which may include the installation of groundwater monitoring wells and/or other devices, to determine the nature and extent of any impacts to soil or groundwater and conduct periodic monitoring and sampling of the well(s); and,

WHEREAS, Applicant has provided the Department with a work plan for the activities planned to investigate or remediate the possible impacts to soil or groundwater; and

WHEREAS, Applicant has requested that the Department permit Applicant, its employees, agents, representatives and contractors to enter the State highway right-of-

way for the purpose of performing the environmental investigation and sampling activities; and,

WHEREAS, the Department requires that such use of the State highway right-of-way be subject to a written right of entry; and,

WHEREAS, the parties agree that, to the best of their current knowledge, the Department has done nothing to cause the possible impacts to soil or groundwater, has no liability for any damages caused by the possible impacts, and is allowing the use of the State highway right-of-way by Applicant because Applicant has no other reasonable means of access to investigate the possible impacts.

NOW, THEREFORE, in consideration of the mutual covenants contained herein, the parties, intending to be legally bound, agree as follows:

1. Recitals. The above recitals are incorporated into and made an integral part of this Agreement.

2. Right of Entry. The Department shall grant Applicant, its employees, agents, representatives, and contractors a right of entry to the State highway right-of-way consistent with the terms and conditions of this Agreement. The Department shall be notified at least forty-eight (48) hours before Applicant begins any work within the right-of-way, and Applicant, its employees, agents, representatives, or contractors shall not interfere with Department operations.

3. Work Plan. All work within the State highway right-of-way shall be performed in accordance with the work plan provided to the Department. The work plan may be amended only upon written consent of the Department. For purposes of this paragraph written consent of the Department may be provided by the District Executive or such other Department employee as designated by the District Executive.

4. Traffic. Applicant shall develop a maintenance and protection of traffic plan in accordance with 67 Pa. Code Chapter 212 and shall take all appropriate measures to protect traffic while working within the State highway right-of-way.

5. Device Maintenance. Applicant shall, at its sole cost and expense, design and maintain all monitoring wells or other devices installed in the State highway right-of-way so that they are not a traffic hazard, to the satisfaction of the Department.

6. Term. The right of entry granted by the Department pursuant to this Agreement shall run for an initial term of one (1) year, commencing upon the date Applicant begins using the State highway right-of-way, with two automatic renewals for an additional year each upon Applicant's written notice. This term may be extended further only by written consent of the Department upon Applicant's written request. For purposes of this paragraph written consent of the Department may be provided by the District Executive or such other Department employee as designated by the District Executive.

7. Compliance with Law. Applicant shall comply with all federal, state, and local laws, regulations, and ordinances in the conduct of its operations within the State highway right-of-way.

8. Documentation. Applicant shall provide any and all non-privileged documentation requested by the Department regarding the construction, operation or maintenance of any part of its environmental investigation, including but not limited to all documentation related to compliance with federal, state, and local laws, regulations, and ordinances within seven (7) days of the request by the Department. Applicant shall permit the Department representatives to oversee the environmental investigation within the State highway right-of-way.

9. Notices of Violation. If Applicant is notified by any federal, state, or local agency that it is not in full compliance with any federal, state, or local law, regulation, or ordinance, associated with the construction, operation or maintenance of any part of its environmental investigation, Applicant shall immediately correct any such violation or deficiency and shall cease all operations until Applicant is in full compliance. Applicant shall provide the Department with written notice of any such notification.

10. Laboratory Results. Applicant, at no cost to the Department, shall promptly provide the Department with copies of all laboratory results and reports compiled by its employees, agents, representatives, or contractors relating to the environmental investigation that show the condition of the soil and the groundwater beneath the State highway right-of-way, the extent of any impacts to the soil or groundwater, or that detail any activity performed by Applicant under this Agreement.

11. Costs. All costs incurred with regard to any activities conducted by Applicant, its employees, agents, representatives, and contractors pursuant to this Agreement shall be borne solely by Applicant without contribution by the Department.

12. Insurance and Indemnification. A. Applicant and its contractor shall provide the Department with a certificate of insurance evidencing coverage of injury, death, or property damage from any or all causes which may arise out of its presence on the State highway right-of-way in the minimum amounts of two-hundred-fifty-thousand dollars (\$250,000.00) per person and one-million dollars (\$1,000,000.00) per occurrence. The Commonwealth of Pennsylvania and the Department shall be named as additional insureds on these policies.

B. Applicant or its contractor shall provide the Department with a certificate of insurance evidencing coverage for any environmental and pollution damage which may arise out of its presence on the State highway right-of-way in the minimum amount of one million dollars (\$1,000,000.00). The Commonwealth of Pennsylvania and the Department shall be named as additional insureds on this policy.

C. Applicant shall fully indemnify the Commonwealth from any and all liability, loss, or damage that the Commonwealth, its officers, agents and employees may suffer as a result of any and all claims, demands, costs, or judgments of any type

made against the Commonwealth as a result of granting this Agreement, including, but not limited to, fines, penalties, claims, demands, costs, or judgments arising from the presence of Applicant, its contractor(s) and/or their officers, agents, and employees or others on the State highway right-of-way or any work or other actions taken by any of them pursuant to or in violation of this Agreement, or as a result of any failure of any of them to conform to all pertinent statutes, ordinances, regulations, or other requirements of any governmental authority in connection with this Agreement. This provision is intended to include claims, demands, costs or judgments resulting from a negligent act or omission of the Commonwealth, its officers, agents, and employees with respect to this Agreement or the subject thereof unless such negligent act or omission is solely attributable to the Commonwealth. Applicant waives any immunity from liability to the Commonwealth from damages, contribution or indemnity provided by Section 303 of the Worker's Compensation Act, Act of June 2, 1915, P.L. 736, as amended, 77 P.S. §481. This indemnification is not limited by, but is in addition to, the security and insurance obligations contained in this Agreement. IT IS THE INTENT OF THIS PROVISION TO ABSOLUTELY ABSOLVE AND PROTECT THE COMMONWEALTH, ITS OFFICERS, AGENTS, AND EMPLOYEES FROM ANY AND ALL LOSS BY REASON OF THIS AGREEMENT EXCEPT FOR THOSE ACTS OR OMISSIONS SOLELY ATTRIBUTABLE TO THE COMMONWEALTH.

D. Applicant agrees to defend (if requested) the Commonwealth, its officers, agents and employees, against any and all claims brought or actions filed against the Commonwealth, either as an original or an additional defendant, with respect to the subject of the indemnity contained herein, whether such fines, penalties, claims or actions are rightfully or wrongfully brought or filed. Applicant hereby waives any and all rights to join the Commonwealth as an additional defendant in any actions arising as a result of the grant of this Agreement.

E. Notwithstanding the foregoing provisions, Applicant agrees that the Department may, at its own expense, employ attorneys of its own selection to appear and defend any claims or actions on behalf of the Department.

F. Any insurance requirement imposed by this paragraph 12 may be satisfied by evidence of alternative coverage in a form acceptable to the Department. Applicant shall maintain, and cause its contractor to maintain, the insurance or alternative coverage required by this paragraph 12 until Applicant restores the State highway right-of-way pursuant to paragraph 15. Applicant and its contractor shall provide the Department with certificates of insurance evidencing continued coverage upon request.

13. Utilities. Applicant shall assume full responsibility for involved utility facilities as provided by Act of December 10, 1974 (P.L. 852, No. 287) (73 P.S. 176-182), as amended, concerning protection of the public health and safety by preventing excavation or demolition from damaging underground utility facilities.

14. Vehicles. Applicant shall be solely responsible for any vehicles left on the State highway right-of-way by Applicant, its employees, agents, representatives or contractors for any period of time during the term of this Agreement and shall be solely responsible for protecting said vehicles from any type of damage or theft.

15. Restoration of Right-of-Way. A. Upon termination of the right of entry granted by the Department pursuant to this Agreement and any extension thereof, Applicant shall restore the State highway right-of-way to its condition prior to entry, and shall ensure that any contamination and pollution is cleaned up in a manner satisfactory to the Pennsylvania Department of Environmental Protection.

B. If Applicant, its employees, agents, representatives, or contractors damage the State highway right-of-way (where damage means any change to the State highway right-of-way including but not limited to leaving any items on or in the State highway right-of-way, changing any contour of the State highway right-of-way, adding any material, pollutant, or contaminant to the State highway right-of-way by spillage, leaking or by any method), Applicant shall restore any affected portion of the State highway right-of-way to the condition in which Applicant found it at the commencement of Applicant's use of the State highway right-of-way within one (1) month after the termination of the right of entry granted by the Department pursuant to this Agreement. This requirement shall include closing, capping or otherwise removing any monitoring wells or other devices installed by Applicant from the State highway right-of-way in accordance with Pennsylvania Department of Environmental Protection regulations and guidance.

C. Applicant shall provide the Department with security in the amount of Five hundred dollars (\$500.00) in the form of a money order from the United States Postal Service, a certified check with no expiration date, an irrevocable letter of credit, or other security in a form acceptable to the Department, to guarantee compliance with this Agreement and proper restoration of the State highway right-of-way. This security shall remain in force for two (2) years after the Department's acknowledgement of restoration of the State highway right-of-way. Other security acceptable to the Department may include a written statement from the Underground Storage Tank Indemnification Fund that Applicant has a claim for the site that is eligible for reimbursement at 100% of eligible expenses.

16. Enforcement Expense. Applicant agrees to reimburse the Department for any necessary expenses, attorneys' fees, or costs incurred in the enforcement of any part of this Agreement within ninety (90) days after receiving written notice that the Department has incurred them.

17. Property of Others. This Agreement shall not be considered to be authorization to Applicant or its contractors to encroach on the property of others. If Applicant must enter upon land situated outside the Department's right-of-way that is owned by a third party, Applicant shall, at its own expense, secure any necessary

authorization, release, or right of entry. Applicant shall be required to provide evidence of permission to enter upon an abutting or adjoining property owner's land, if requested by the Department.

18. Right to Know Law. The Pennsylvania Right-to-Know Law, 65 P.S. §§ 67.101 – 3104, applies to this Agreement. Therefore, this Agreement is subject to, and the Applicant shall comply with, the clause entitled Contract Provisions – Right to Know Law 8-K-1532, attached as Exhibit "A" and made a part of this Agreement. As used in this Agreement, the term "Contractor" refers to the Applicant.

19. Amendments and Modifications. This Agreement constitutes the entire Agreement between the parties and may not be modified or amended except in writing, and the rights and obligations hereunder may not be transferred or assigned without the prior written consent of the parties hereto.

20. Titles Not Controlling. Titles of paragraphs are for reference only, and shall not be used to construe the language in this Agreement.

21. Assignment. This Agreement may not be assigned by the Applicant, either in whole or in part, without written consent of the Commonwealth.

22. Severability. The provisions of this Agreement shall be severable. If any phrase, clause, sentence or provision of this Agreement is declared to be contrary to the Constitution of Pennsylvania or of the United States or of the laws of the Commonwealth the applicability thereof to any government, agency, person or circumstance is held invalid, the validity of the remainder of this Agreement and the applicability thereof to any government, agency, person or circumstance shall not be affected thereby.

23. Applicable Law. This Agreement shall be interpreted and construed under the laws of the Commonwealth of Pennsylvania.

24. No Waiver. Any party may elect not to enforce its rights and remedies under this Agreement in the event of a breach by the other party or parties of any term or condition of this Agreement. In any event, the failure by any party to enforce its rights and remedies under this Agreement shall not be construed as a waiver of any subsequent breach of the same or any other term or condition of this Agreement.

25. Independence of the Parties. It is understood by and between the parties that nothing contained herein is intended or shall be construed to, in any respect, create or establish the relationship of partners between the Applicant and the Department, or as constituting the Department as the representative or general agent of the Applicant for any purpose whatsoever.

26. Third Party Beneficiary Rights. The parties to this Agreement understand that this Agreement does not create or intend to confer any rights in or on persons or entities not a party to this Agreement.

27. Notices. All notices and reports to the Department arising out of, or from, the provisions of this Agreement shall be in writing and given to the District Executive, or such other Department employee as designated by the District Executive, either by

regular mail, facsimile, e-mail or delivery in person at the address available on the Department website for the Engineering District in which the work is located. Notices and reports arising out of, or from, the provisions of this Agreement may be provided to Applicant through the Applicant's consultants or contractors, and receipt by such consultants or contractors shall be receipt by Applicant, unless Applicant notifies the Department otherwise.

28. Force Majeure. Neither party shall be liable for failure to perform under this Agreement if such failure to perform arises out of causes beyond the control and without the fault or negligence of the nonperforming party. Such causes may include, but are not limited to, acts of God or the public enemy, fires, floods, epidemics, quarantine restrictions, freight embargoes and unusually severe weather. This provision shall become effective only if the party failing to perform immediately notifies the other party of the extent and nature of the problem, limits delay in performance to that required by the event, and takes all reasonable steps to minimize delays. This provision shall not be effective unless the failure to perform is beyond the control and without the fault or negligence of the nonperforming party.

29. Integration and Merger. This Agreement, when executed, approved and delivered, shall constitute the final, complete and exclusive Agreement between the parties containing all the terms and conditions agreed on by the parties. All representations, understandings, promises and agreements pertaining to the subject matter of this Agreement made prior to or at the time this Agreement is executed are superseded by this Agreement unless specifically accepted by any other term or provision of this Agreement. There are no conditions precedent to the performance of this Agreement except as expressly set forth herein,

30. Effective Date. This Agreement shall not be valid, and no work shall commence, until it is fully executed and approved by both parties, the Office of General Counsel and the Office of Attorney General.

[THE REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the parties have executed this Agreement the date first above written.

ATTEST

BY

Name: DAVID BIRCHARD DATE 4/11/18
Title: PROCT REC

APPLICANT

BY

Name: Matthew T. Corwin DATE 4/19/18
Title: Sole Member

If a Corporation, the President or Vice-president must sign and the Secretary, Treasurer, Assistant Secretary or Assistant Treasurer must attest; if a sole proprietorship, only the owner must sign; if a partnership, only one partner need sign; if a limited partnership, only the general partner must sign. If a Municipality, Authority or other entity, please attach a resolution.

DO NOT WRITE BELOW THIS LINE - FOR COMMONWEALTH USE ONLY

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

BY

Name: David W. Matheson DATE 4/27/2018
Title: ADFM D-2

APPROVED AS TO LEGALITY AND FORM

BY

for Chief Counsel 5/14/2018 Date

BY

Deputy General Counsel 6/14/18 Date

BY 6/13/18 Date

Deputy Attorney General

FUNDS COMM'NT DOC. NO. _____
CERTIFIED FUNDS AVAILABLE
UNDER SAP NO. _____
SAP COST CENTER _____
ACCOUNT _____

BY

for Comptroller N/A Date

Exhibit A

Contract Provisions – Right to Know Law 8-K-1532

- a. The Pennsylvania Right-to-Know Law, 65 P.S. §§ 67.101-3104, ("RTKL") applies to this Contract. For the purpose of these provisions, the term "the Commonwealth" shall refer to the contracting Commonwealth agency.
- b. If the Commonwealth needs the Contractor's assistance in any matter arising out of the RTKL related to this Contract, it shall notify the Contractor using the legal contact information provided in this Contract. The Contractor, at any time, may designate a different contact for such purpose upon reasonable prior written notice to the Commonwealth.
- c. Upon written notification from the Commonwealth that it requires the Contractor's assistance in responding to a request under the RTKL for information related to this Contract that may be in the Contractor's possession, constituting, or alleged to constitute, a public record in accordance with the RTKL ("Requested Information"), the Contractor shall:
1. Provide the Commonwealth, within ten (10) calendar days after receipt of written notification, access to, and copies of, any document or information in the Contractor's possession arising out of this Contract that the Commonwealth reasonably believes is Requested Information and may be a public record under the RTKL; and
 2. Provide such other assistance as the Commonwealth may reasonably request, in order to comply with the RTKL with respect to this Contract.
- d. If the Contractor considers the Requested Information to include a request for a Trade Secret or Confidential Proprietary Information, as those terms are defined by the RTKL, or other information that the Contractor considers exempt from production under the RTKL, the Contractor must notify the Commonwealth and provide, within seven (7) calendar days of receiving the written notification, a written statement signed by a representative of the Contractor explaining why the requested material is exempt from public disclosure under the RTKL.
- e. The Commonwealth will rely upon the written statement from the Contractor in denying a RTKL request for the Requested Information unless the Commonwealth determines that the Requested Information is clearly not protected from disclosure under the RTKL. Should the Commonwealth determine that the Requested Information is clearly not exempt from disclosure, the Contractor shall provide the Requested Information within five (5) business days of receipt of written notification of the Commonwealth's determination.

f. If the Contractor fails to provide the Requested Information within the time period required by these provisions, the Contractor shall indemnify and hold the Commonwealth harmless for any damages, penalties, costs, detriment or harm that the Commonwealth may incur as a result of the Contractor's failure, including any statutory damages assessed against the Commonwealth.

g. The Commonwealth will reimburse the Contractor for any costs associated with complying with these provisions only to the extent allowed under the fee schedule established by the Office of Open Records or as otherwise provided by the RTKL if the fee schedule is inapplicable.

h. The Contractor may file a legal challenge to any Commonwealth decision to release a record to the public with the Office of Open Records, or in the Pennsylvania Courts, however, the Contractor shall indemnify the Commonwealth for any legal expenses incurred by the Commonwealth as a result of such a challenge and shall hold the Commonwealth harmless for any damages, penalties, costs, detriment or harm that the Commonwealth may incur as a result of the Contractor's failure, including any statutory damages assessed against the Commonwealth, regardless of the outcome of such legal challenge. As between the parties, the Contractor agrees to waive all rights or remedies that may be available to it as a result of the Commonwealth's disclosure of Requested Information pursuant to the RTKL.

i. The Contractor's duties relating to the RTKL are continuing duties that survive the expiration of this Contract and shall continue as long as the Contractor has Requested Information in its possession.

OPERATING AGREEMENT OF SOGGY BOTTOM, LLC

This Operating Agreement (the "Agreement") has been adopted by Matthew T. Corwin, as the sole member (the "Member") of Soggy Bottom, LLC, a Pennsylvania limited liability company (the "Company").

1. Purpose. The object and purpose of, and the nature of the business to be conducted and promoted by, the Company is engaging in any lawful act or activity for which limited liability company may be formed under the Pennsylvania Limited Liability Company Act, 15 Pa.C.S. §8901, et seq., as amended from time to time (the "Act"), and engaging in any and all lawful activities necessary or incidental to the foregoing.
2. Member. The name and address of the Member is:
Matthew T. Corwin, 27083 Bayus Road, Albion, PA 16401
3. Management.
 - (a) The business and affairs of the Company shall be managed by the Member. The Member, on behalf of the Company, shall have the power to do any and all acts necessary or convenient to, or for the furtherance of, the business and affairs of the Company.
 - (b) The Member may appoint by written resolution officers and agents of the Company to which the Member may delegate by written resolution whatever duties, responsibilities, and authority the Member may desire. Any officer or agent may be removed by the Member at any time by written resolution.
 - (c) If an officer of the Company is appointed by the Member and given a title that is used by officers of a business corporation, the Member shall be deemed to have delegated to the officer the duties, responsibilities, and authority that would be exercised by an officer of a business corporation with the same title, unless the Member provides otherwise by written resolution.
4. Title to Company Property. All real and personal property shall be acquired shall vest in the Company itself rather than in the Member.
5. Compensation of Member. The Member may be reimbursed for all expenses incurred in managing the Company and may, at the election of the Member, be entitled to compensation for management services rendered, in an amount to be determined from time to time by the Member.
6. Distributions. Distributions shall be made to the Member (in cash or in kind) at the times and in the aggregate amounts determined by the Member and as permitted by applicable law.
7. Elections. The Member may make any tax elections for the Company allowed under the Internal Revenue Code of 1986, as amended, or the tax laws of any state or other jurisdiction having taxing jurisdiction over the Company.
8. Assignability of Membership Interest. The economic interest of the Member in the Company is assignable, in whole or in part, either voluntarily or by operation of law.

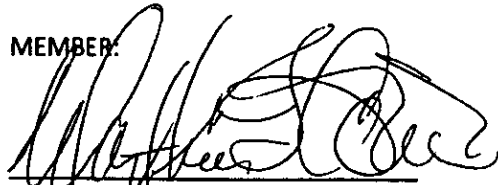
9. Admission of Additional Members. Additional members of the Company may be admitted to the Company at the direction of the Member. If a new operation agreement or an amendment and restatement of this Agreement is not executed by the members in connection with the admission of the first additional member, this Agreement shall terminate upon the date of the first additional member is admitted.
10. Liability of the Member. The Member shall not have any liability for the debts, obligations or liabilities of the Company or for the acts or omissions of any other member, officer, agent, or employee of the Company except to the extent provided in the Act. The failure of the Member to observe any formalities or requirements relating to the exercise of the powers of the Member or the management of the business and affairs of the Company under this Agreement or the Act shall not be grounds for imposing liability on the Member for liabilities of the Company.
11. Indemnification. The Company shall indemnify the Member and those authorized officers, agents, and employees of the Company identified in writing by the Member as entitled to be indemnified under this section for all costs, losses, liabilities and damages paid or accrued by the Member (as the Member or as an officer, agent, or employee) or any such officer, agent or employee in connection with the business of the Company, except to the extent prohibited by the laws of the Commonwealth of Pennsylvania. In addition, the Company may advance costs of defense of any proceeding to the Member or any such officer, agent, or employee upon receipt by the Company of an undertaking by or on behalf of such person to repay such amount if it shall ultimately be determined that the person is not entitled to be indemnified by the Company.
12. Dissolution.
 - (a) The Company shall dissolve, and its affairs shall be wound up, upon the first to occur of the following: (i) the written direction of the Member, or (ii) the entry of a decree of judicial dissolution under section 8972 of the Act. The death (or dissolution in the case of a member that is not a natural person), retirement, insanity, resignation, or bankruptcy of the Member or the occurrence of any other event that terminates the continued membership of the Member shall not cause a dissolution of the Company.
 - (b) Upon dissolution, the Company shall cease carrying on any and all business other than the winding up of the Company business, but the Company is not terminated and shall continue until the winding up of the affairs of the Company is completed and a certificate of dissolution has been filed pursuant to the Act. Upon the winding up of the Company, the Company's property shall be distributed (i) first to creditors, including the Member if the Member is a creditor, to the extent permitted by law, in satisfaction of the Company's liabilities; and (ii) then to the Member. Such distributions shall be in cash or property or partly in both, as determined by the Member.
13. Conflicts of Interest. Nothing in this Agreement shall be construed to limit the right of the Member to enter into any transaction that may be considered to be competitive with, or a business opportunity that may be beneficial to, the Company. The Member does not violate a duty or obligation to the Company merely because the conduct of the Member furthers the interests of the Member. The Member may lend money to and transact other business

with the Company. The rights and obligations of the Member upon lending money to or transacting business with the Company are the same as those of a person who is not the Member, subject to other applicable law. No transaction with the Company shall be void or voidable solely because the Member has a direct or indirect interest in this transaction.

14. Governing Law. This Agreement shall be governed by, and interpreted and enforced in accordance with, the substantive laws of the Commonwealth of Pennsylvania, without reference to the conflicts of law rules of that or any other jurisdiction.
15. Entire Agreement. This Agreement constitutes the entire agreement of the Member with respect to the subject matter hereof and supersedes all prior agreements, express or implied, oral or written, with respect thereto. The express terms of this Agreement control and supersede any course of performance or usage of trade inconsistent with any of the terms hereof.
16. Rights of Creditors and Third Parties. This Agreement is entered into by the Member solely to govern the operation of the Company. This Agreement is expressly not intended for the benefit of any creditors of the Company or any other person other than the heirs, personal representatives, successors and assigns of the Member. Except and only to the extent provided by applicable statute, no creditor or third party shall have any rights under this Agreement or any agreement between the Company and the Member, with respect to the subject matter hereof.

IN WITNESS WHEREOF, the undersigned, intending to be legally bound, has adopted this Operating Agreement on August 13, 2014, to be effective for all purposes as of the filing of the Certificate of Organization.

MEMBER:


Matthew T. Corwin

RIGHT OF ENTRY AGREEMENT ATTACHMENTS

Russell City Store
1536 State Route 66
Kane, Pennsylvania, 16735
PADEP Facility ID # 24-30431

Right of Entry Agreement - Work Plan

Site History

The site is located at the northeastern corner of the intersection formed by State Route 66 and Pine Camp Road in the Borough of DeYoung (Highland Twp.), Elk County, Pennsylvania. According to Elk County records the parcel (04-04-192-9741) is owned by Soggy Bottom, LLC. The parcel is 0.34 acres. The site was developed and has operated as a retail refueling and convenience store since the 1960's, referred to as Russell City Store.

Four tanks at the site were registered under PADEP Facility ID# 24-30431. Two USTs (001 and 002) were removed in 1998 by Harris Enterprises (Clarion, PA). Piping from USTs 003 and 004 was also removed and upgraded.

The confirmatory soil samples from the 1998 closure met standards/action levels for confirmatory samples collected at closure site assessments although obvious localized contamination was observed surrounding UST 001 and 002. Groundwater was not encountered. Approximately 5 tons of contaminated soils were excavated, staged onsite and landfarmed. Soil samples analyzed from the landfarmed soil were submitted in June 2000 and met statewide health standards. Remediated soils were reused onsite. PADEP issued Mr. Lutz a relief of liability under Act 2 for the incident.

Details for the tank system are provided below:

Tank Reg.#	Const.	Installation Date	Capacity	Substance	Removal Date
001	steel	Oct. 1969	3,000 gal.	gasoline	07/16/99
002	steel	Sept. 1976	2,000 gal.	gasoline	07/16/99
003	steel	05/01/87	2,000 gal.	gasoline	11/25/14
004	steel	05/01/87	1,000 gal	kerosene upgraded to gasoline 07/16/99	11/25/14

Nature of Current Release

USTs 003 and 004 were closed, by removal, on November 25, 2014. The two tanks were located on the northeastern corner of the site. The USTs were located with the long axis in the north-south direction perpendicular to State Route 66 with UST #004 (unleaded) being the easternmost of the USTs. The tanks and tank piping were removed without incident and obvious soil contamination was not encountered. The excavated soils were reused for backfill. The USTs were in very good condition upon removal.

Confirmatory soil samples were collected and analyzed as part of the closure site assessment. Samples were submitted for analysis of PADEP Short list parameters for unleaded gasoline. The samples collected from beneath and the east and west dispenser contained concentrations of 1,3,5 trimethylbenzene and 1,2,4 trimethylbenzene above PADEP Statewide Health Standards. A Notice of Reportable Release was submitted to the PADEP on December 22, 2014.

Scope of Work

Site characterization work at the site is being completed by Environmental Remediation & Recovery, Inc. (Edinboro, PA). ER&R shall comply with all federal, state, and local laws, regulations and ordinances in the conduct of its operations within the State highway right-of-way. A site specific Health and Safety Plan (HASP) will be developed prior to site work.

ER&R's scope of work includes installation of shallow soil borings to be installed at strategic locations both on- and off-site. Five drilling locations will be sited within the SR 66 right-of-way, pending the approval of a PADOT right-of-entry (R/E) agreement. Work will be complete by ER&R, Inc. Drilling equipment and support vehicles brought onto the right-of-way will be parked in an area that will ensure that it will not be a safety hazard or impede the traveling public or PennDOT operations. The parking area is depicted on Figure 1.

Prior to the drilling event, the Pennsylvania One-Call System will be activated in order to locate member underground utilities at the site. Additionally, drilling locations will be cleared to a minimum depth of four feet below grade (hand-clearing technique) in order prevent damage to any unknown or unmarked underground utilities.

Soil and groundwater (if encountered) samples will be collected during drilling activities. Soil samples will be field screened for the presence of volatile organic compounds (VOCs) using a portable photo-ionization detector. Based upon field screening results, one sample interval from each boring will be selected for laboratory analysis and field preserved using EPA Method 5035. Requested analytes will include the PADEP short list (new) of unleaded gasoline parameters. Drilling spoils generated during the subsurface investigation will be containerized and staged on-site pending waste characterization. Generated waste will not be stored on the right-of-way.

The five soil borings will be completed as monitoring wells in order to evaluate water quality in order to fully characterize the contaminant plume. The monitoring wells will be in a paved area of the right-of-way. Well construction will include 2-inch diameter PVC flush thread well screen/riser, silica sand pack, bentonite seal, grout and a traffic rated manhead. They will be completed using flush-mount construction.

Wells will not be installed in areas where they are likely to be damaged by routine maintenance. Wells will not be installed in areas where storm water puddles or storm water flow concentrates. Monitoring well casing references, soil boring locations and site features will be surveyed to a common datum by a PA licensed surveyor. A CAD base map will be prepared to document exact locations of the wells. Approximate drilling locations are depicted on Figure 1.

Monitoring wells will be developed to remove sediment and fines generated during drilling. Depth to groundwater measurements will be collected. Based upon current knowledge, no liquid waste is anticipated. Development and purge water will be treated with a portable granular activated carbon unit and discharged to the ground surface on-site. Generated waste water will not be treated or discharged in the right-of-way.

Monitoring wells will be purged and sampled on a quarterly basis. Samples will be collected in laboratory prepared bottleware and submitted for analysis of the PADEP short list (new) of unleaded gasoline parameters. The life expectancy of the monitoring wells in two years.

Work Completion

Upon termination of the Right of Entry Agreement and any extension thereof, ER&R shall restore the right-of-way to its condition prior to entry and shall ensure that any contamination and pollution is cleaned up in a manner satisfactory to the Department and the Pennsylvania Department of Environmental Protection.

In-place well abandonment will completed in accordance with procedures outlined in Pennsylvania's Groundwater Guidance Manual. Well casings/manheads will be removed and wells will be filled with a bentonite slurry from total depth to one half foot below grade and sealed with cement slurry to ground level. Completed well abandonment documentation will be submitted to the PA Geological Survey.

Right of Entry Agreement - Temporary Traffic Control Plan

A figure that properly depicts actual site conditions is attached as Figure 1. The project will only have one active work zone. Traffic control including signs, cones, etc. will be subcontracted.

Portable signs and sign supports will be utilized. Portable sign supports will be of a type approved by the Department and listed in Approved Construction Materials (Department Publication 35). Signs will not be mounted on existing utility poles or other structures.

Regulatory speed limits in the temporary traffic-control zone and in the area in advance of the work zone where traffic queues are anticipated will be established.

A regulatory speed limit up to 10 miles per hour below the normal speed limit will be established (the reduced regulatory speed limit is at least 25 miles per hour). Regulatory speed limits for temporary traffic control will be signed with either Speed Limit Signs (R2-1) or Work Area Speed Limit Signs (R2-2-2). Conflicting regulatory or warning signs will be removed, covered, folded or turned so that they are not readable or identifiable by oncoming traffic whenever the reduced regulatory speed limit is in effect.

Channelizing devices used to form a particular taper or a particular longitudinal line of devices will all be of a single type. Cones will only be used as a channelizing device for operations where work is in active progress. The minimum height of cones will be 28 inches.

Lane line and center line pavement markings will not be covered or destroyed by the scope of work. Temporary impact attenuators, ravel lane rumble strips, delineators, flashing warning lights are not necessary and will not be utilized.

Flaggers will follow the requirements of the MUTCD and shall wear a protective helmet. A Stop/ Slow Paddle (R21-10) will be utilized.

Operations will be kept as short as practical to avoid long stretches with no work activity, lane restrictions will be minimized and all traffic-control devices will be removed as soon as practical after the scope of work is complete.

Special signing required in 75 Pa.C.S. §§ 3326, 3365, 4309, 6123 and 6123.1 will be conducted in addition to the traffic-control devices required by the MUTCD and shall be installed since the work is stationary where the daily duration of the scope of work will be less than 12 hours and all traffic-control devices will be removed from the highway at the completion of the daily operation, including all advance warning signs.

A Headlights Sign (R22-1) shall be erected as the first sign on the approach to the work zone, generally at a distance of 250 to 1,000 feet prior to the first warning sign.

An Active Work Zone When Flashing Sign (W21-19) will be erected as close as practical to the beginning of the active work zone. The sign will not be erected within a transition or at a location where workers are put at risk. The signs shall be installed on temporary sign posts and a white Type B high-intensity flashing light will be attached to the upper portion of each sign. The light shall be activated only when workers are present and deactivated when workers are not anticipated during the next 60 minutes.

An End Active Work Zone Sign (W21-20), End Road Work Sign (G20-2a) or End Work Area Sign (G20-3) will be installed at the end of the active work zone.

KEY

- EXISTING MONITORING WELL
- PROPOSED MONITORING WELL

Figure 1 Site Detail Map

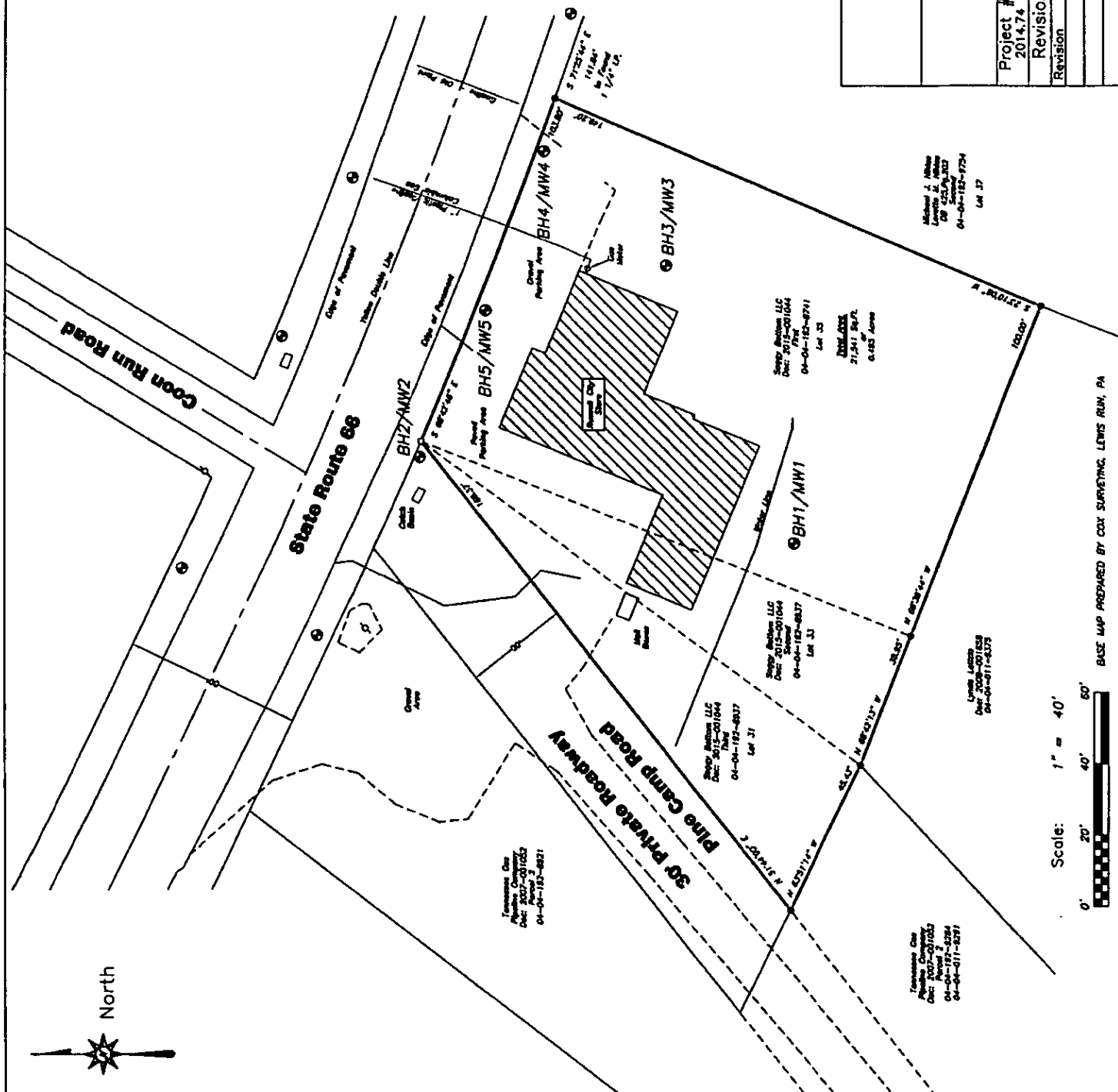
Russell City Store
1536 S.R. 66
Kane, Pennsylvania

Project #: 2014.74 Date: March 2018 Drawn By: KH
Revision History: Revised By: DJE

Revision: By: CAD File: See/Update/Log

ER&R, Inc.
Environmental Remediation & Recovery

4250 ROUTE 6N
EDINBURG, PENNSYLVANIA



Scale: 1" = 40'
0' 20' 40' 60'



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

04/19/2018

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Phone: (814) 833-5433 Fax: 814-838-6172
LOESEL-SCHAAF INSURANCE AGCY., INC.
3537 WEST 12TH STREET
ERIE PA 16505-3650

CONTACT NAME: Amy Bojarski

PHONE (A/C No. Ext): (814) 833-5433

FAX (A/C No.): 814-838-6172

E-MAIL: abojarski@lsinsure.com

ADDRESS:

INSURER(S) AFFORDING COVERAGE

NAIC #

INSURER A : Homeland Insurance Company of Delaware

14231

INSURER B : Cincinnati Insurance Company

10677

INSURER C : Cincinnati Indemnity

INSURER D :

INSURER E :

INSURER F :

INSURED
ENVIRONMENTAL REMEDIATION & RECOVERY, INC.
4250 ROUTE 6N
EDINBORO PA 16412

COVERAGES

CERTIFICATE NUMBER: 33746

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	GENERAL LIABILITY	X	X	793005222 0000	10/06/17	10/06/18	EACH OCCURRENCE \$ 1,000,000
	☒ COMMERCIAL GENERAL LIABILITY						DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 50,000
A	☐ CLAIMS-MADE ☒ OCCUR						MED. EXP (Any one person) \$ 10,000
	☒ Contractors Pollution						PERSONAL & ADV INJURY \$ 1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE \$ 2,000,000
	☐ POLICY ☐ PRO-JECT ☐ LOC						PRODUCTS - COM/OP AGG \$ 2,000,000
							\$
B	AUTOMOBILE LIABILITY			ENP 0135082	05/08/17	05/08/18	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000
	☐ ANY AUTO						BODILY INJURY (Per person) \$
	☐ ALL OWNED AUTOS ☒ SCHEDULED AUTOS						BODILY INJURY (Per accident) \$
	☒ HIRED AUTOS ☒ NON-OWNED AUTOS						PROPERTY DAMAGE (per accident) \$
							\$
A	UMBRELLA LIAB ☒ OCCUR	X	X	793005223 0000	10/06/17	10/06/18	EACH OCCURRENCE \$ 4,000,000
	☒ EXCESS LIAB ☐ CLAIMS-MADE						AGGREGATE \$ 4,000,000
	☐ DED ☐ RETENTION \$						\$
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY			EWC 0412441	01/18/18	01/18/19	☒ WC STATUTORY LIMITS ☐ OTHER \$
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? ☐ Y/N		N/A				E.L. EACH ACCIDENT \$ 1,000,000
	(Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE-EA EMPLOYEE \$ 1,000,000
							E.L. DISEASE-POLICY LIMIT \$ 1,000,000
A	Professional Liability (Claims Made)	X	X	793005222 0000	10/06/17	10/06/18	\$1,000,000 Each Occurrence
							\$2,000,000 Aggregate

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

CERTIFICATE HOLDER ADDED AS ADDITIONAL INSURED ONLY AS THEIR INTERESTS MAY APPEAR.

CERTIFICATE HOLDER

CANCELLATION

Soggy Bottom, LLC.
27083 Bayus Road
Albion, PA 16401

Attention: Matthew T. Corwin

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Amy B. Bojarski



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
03/05/2018

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3537 WEST 12TH STREET
ERIE PA 16505-3650

CONTACT NAME: Amy Bojarski
PHONE: (814) 833-5433 FAX: 814-838-6172
E-MAIL: abojarski@lsinsure.com
ADDRESS:

INSURED
ENVIRONMENTAL REMEDIATION & RECOVERY, INC.
4250 ROUTE 6N
EDINBORO PA 16412

INSURER(S) AFFORDING COVERAGE		NAIC #
INSURER A :	Homeland Insurance Company of Delaware	14231
INSURER B :	Cincinnati Insurance Company	10677
INSURER C :	Cincinnati Indemnity	
INSURER D :		
INSURER E :		
INSURER F :		

COVERAGES

CERTIFICATE NUMBER: 33382

REVISION NUMBER:

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INSR LTR	TYPE OF INSURANCE	ADDL INSR	CLMR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	GENERAL LIABILITY	X	X	793005222 0000	10/06/17	10/06/18	EACH OCCURRENCE	\$ 1,000,000
	☒ COMMERCIAL GENERAL LIABILITY						DAMAGE TO RENTED PREMISES (Ea occurrence)	\$ 50,000
A	☐ CLAIMS-MADE ☒ OCCUR						MED. EXP (Any one person)	\$ 10,000
	☒ Contractors Pollution						PERSONAL & ADV INJURY	\$ 1,000,000
	GENTL AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	\$ 2,000,000
	☐ POLICY ☐ PROJECT ☐ LOC						PRODUCTS - COM/OP AGG	\$ 2,000,000
B	AUTOMOBILE LIABILITY			ENP 0135082	05/08/17	05/08/18	COMBINED SINGLE LIMIT (Ea accident)	\$ 1,000,000
	☐ ANY AUTO						BODILY INJURY (Per person)	\$
	☐ ALL OWNED AUTOS ☒ SCHEDULED AUTOS						BODILY INJURY (Per accident)	\$
	☒ HIRED AUTOS ☒ NON-OWNED AUTOS						PROPERTY DAMAGE (per accident)	\$
	☐ UMBRELLA LIAB ☒ OCCUR	X	X	793005223 0000	10/06/17	10/06/18	EACH OCCURRENCE	\$ 4,000,000
	☒ EXCESS LIAB ☐ CLAIMS-MADE						AGGREGATE	\$ 4,000,000
	☐ DED ☐ RETENTION \$							\$
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY		X	EWC 0412441	01/18/18	01/18/19	☒ WC STATUTORY LIMITS ☐ OTHER	\$
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED?	☐ Y/N ☐ N/A					E.L. EACH ACCIDENT	\$ 1,000,000
	(Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE-EA EMPLOYEE	\$ 1,000,000
							E.L. DISEASE-POLICY LIMIT	\$ 1,000,000
A	Professional Liability (Claims Made)			793005222 0000	10/06/17	10/06/18	\$1,000,000	Each Occurrence
							\$2,000,000	Aggregate

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

Commonwealth of Pennsylvania and PennDOT are listed as Additional Insureds as their interests may appear.

CERTIFICATE HOLDER

PennDOT
Harrisburg, PA

Attention:

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Amy B. Bojarski



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
03/05/2018

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3537 WEST 12TH STREET
ERIE PA 16505-3650

CONTACT NAME: Amy Bojarski
PHONE (814) 833-5433 FAX 814-838-6172
E-MAIL: abojarski@sinsure.com
ADDRESS:

INSURED
ENVIRONMENTAL REMEDIATION & RECOVERY, INC.
4250 ROUTE 6N
EDINBORO PA 16412

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : Homeland Insurance Company of Delaware	14231
INSURER B : Cincinnati Insurance Company	10677
INSURER C : Cincinnati Indemnity	
INSURER D :	
INSURER E :	
INSURER F :	

COVERAGES

CERTIFICATE NUMBER: 33381

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADOL INSR	SUBR HYD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	GENERAL LIABILITY	X	X	793005222 0000	10/06/17	10/06/18	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 50,000 MED. EXP (Any one person) \$ 10,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COM/OP AGG \$ 2,000,000
A	☒ COMMERCIAL GENERAL LIABILITY ☐ CLAIMS-MADE ☒ OCCUR ☒ Contractors Pollution						
	GEN'L AGGREGATE LIMIT APPLIES PER: ☐ POLICY ☐ PRO-JECT ☐ LOC						
B	AUTOMOBILE LIABILITY			ENP 0135082	05/08/17	05/08/18	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (per accident) \$
	☐ ANY AUTO ☐ ALL OWNED AUTOS ☒ HIRED AUTOS ☒ SCHEDULED AUTOS ☒ NON-OWNED AUTOS						
A	UMBRELLA LIAB ☒ EXCESS LIAB	X	X	793005223 0000	10/06/17	10/06/18	EACH OCCURRENCE \$ 4,000,000 AGGREGATE \$ 4,000,000
	☐ DED ☐ RETENTION \$						
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/ MEMBER EXCLUDED? (Mandatory in IN) If yes, describe under DESCRIPTION OF OPERATIONS below		X	EWC 0412441	01/18/18	01/18/19	☒ WC STATUTORY LIMITS ☐ OTH ER \$ E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE-EA EMPLOYEE \$ 1,000,000 E.L. DISEASE-POLICY LIMIT \$ 1,000,000
A	Professional Liability (Claims Made)			793005222 0000	10/06/17	10/06/18	\$1,000,000 Each Occurrence \$2,000,000 Aggregate

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

Commonwealth of Pennsylvania and PennDOT are listed as Additional Insureds as their interests may appear.

CERTIFICATE HOLDER

Commonwealth of Pennsylvania
Harrisburg, PA

Attention:

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Amy B. Bojarski



POSTAL MONEY ORDER

Serial Number

24477704414

2018-03-07 16:17:00

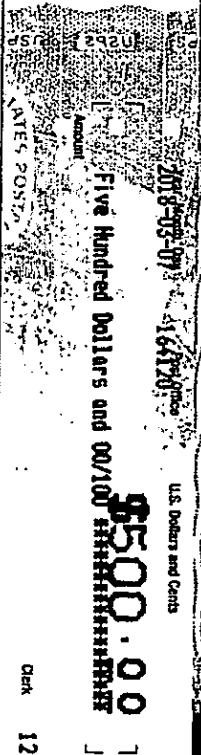
U.S. Dollars and Cents

Five Hundred Dollars and 00/100

5500.00

Pay to

PennDOT



Check 12

Address

76 PennDOT Dr.

EXRTE, Inc.

Clearfield, PA 16830

U.S. MAIL

4460 Route 6N, Edinboro PA

Memo

Right of Entry Application - Security Deposit

16412

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SEE REVERSE WARNING • NEGOTIABLE ONLY IN THE U.S. AND POSSESSIONS

00000080021

24477704414

Appendix M
Laboratory Certificates of Analysis – Groundwater

September 06, 2017

Mr. Dave Birchard
Environmental Remediation & Recovery, Inc.
4250 Route 6N
Edinboro, PA 16412

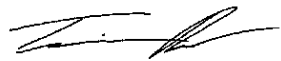
RE: Project: Russell City Store
Pace Project No.: 30228632

Dear Mr. Birchard:

Enclosed are the analytical results for sample(s) received by the laboratory on August 30, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Timothy Reed
timothy.reed@pacelabs.com
724-850-5614
Project Manager

Enclosures

cc: Karann Holman, Environmental Remediation & Recovery,
Inc.



REPORT OF LABORATORY ANALYSIS

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Page 1 of 20

8/19/2019 2:18:05 PM

CERTIFICATIONS

Project: Russell City Store
Pace Project No.: 30228632

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

L-A-B DOD-ELAP Accreditation #: L2417

Alabama Certification #: 41590

Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683

Georgia Certification #: C040

Guam Certification

Hawaii Certification

Idaho Certification

Illinois Certification

Indiana Certification

Iowa Certification #: 391

Kansas/TNI Certification #: E-10358

Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008

Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091

Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification

Missouri Certification #: 235

Montana Certification #: Cert 0082

Nebraska Certification #: NE-05-29-14

Nevada Certification #: PA014572015-1

New Hampshire/TNI Certification #: 2976

New Jersey/TNI Certification #: PA 051

New Mexico Certification #: PA01457

New York/TNI Certification #: 10888

North Carolina Certification #: 42706

North Dakota Certification #: R-190

Oregon/TNI Certification #: PA200002

Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457

Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN2867

Texas/TNI Certification #: T104704188-14-8

Utah/TNI Certification #: PA014572015-5

USDA Soil Permit #: P330-14-00213

Vermont Dept. of Health: ID# VT-0282

Virgin Island/PADEP Certification

Virginia/VELAP Certification #: 460198

Washington Certification #: C868

West Virginia DEP Certification #: 143

West Virginia DHHR Certification #: 9964C

Wisconsin Certification

Wyoming Certification #: 8TMS-L

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SAMPLE SUMMARY

Project: Russell City Store
Pace Project No.: 30228632

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30228632001	MW1	Water	08/28/17 11:05	08/30/17 09:50
30228632002	MW2	Water	08/28/17 11:10	08/30/17 09:50
30228632003	MW3	Water	08/28/17 11:07	08/30/17 09:50
30228632004	MW4	Water	08/28/17 11:15	08/30/17 09:50
30228632005	MW5	Water	08/28/17 11:15	08/30/17 09:50
30228632006	Trip Blank	Water	08/28/17 00:01	08/30/17 09:50

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SAMPLE ANALYTE COUNT

Project: Russell City Store
Pace Project No.: 30228632

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30228632001	MW1	EPA 8260B	JAS	13
30228632002	MW2	EPA 8260B	JAS	13
30228632003	MW3	EPA 8260B	JAS	13
30228632004	MW4	EPA 8260B	JAS	13
30228632005	MW5	EPA 8260B	JAS	13
30228632006	Trip Blank	EPA 8260B	JAS	13

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PROJECT NARRATIVE

Project: Russell City Store
Pace Project No.: 30228632

Method: EPA 8260B
Description: 8260B MSV
Client: Environmental Remediation and Recovery, Inc.
Date: September 06, 2017

General Information:

6 samples were analyzed for EPA 8260B. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: 270339

L1: Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.

- LCS (Lab ID: 1330258)
- Methyl-tert-butyl ether

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 270186

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30228659001

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MS (Lab ID: 1329827)
 - 1,2,4-Trimethylbenzene
 - 1,3,5-Trimethylbenzene
 - Naphthalene
- MSD (Lab ID: 1329828)
 - 1,2,4-Trimethylbenzene

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Page 5 of 20

8/19/2019 2:18:07 PM

PROJECT NARRATIVE

Project: Russell City Store
Pace Project No.: 30228632

Method: EPA 8260B
Description: 8260B MSV
Client: Environmental Remediation and Recovery, Inc.
Date: September 06, 2017

QC Batch: 270186

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30228659001

R1: RPD value was outside control limits.

- MSD (Lab ID: 1329828)
- Naphthalene

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Russell City Store
Pace Project No.: 30228632

Sample: MW1 Lab ID: 30228632001 Collected: 08/28/17 11:05 Received: 08/30/17 09:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV									
Analytical Method: EPA 8260B									
Benzene	ND	ug/L	1.0	0.35	1		08/31/17 17:58	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.21	1		08/31/17 17:58	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.25	1		08/31/17 17:58	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.27	1		08/31/17 17:58	1634-04-4	
Naphthalene	ND	ug/L	2.0	0.39	1		08/31/17 17:58	91-20-3	
Toluene	ND	ug/L	1.0	0.29	1		08/31/17 17:58	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.21	1		08/31/17 17:58	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.40	1		08/31/17 17:58	108-67-8	
Xylene (Total)	ND	ug/L	3.0	1.1	1		08/31/17 17:58	1330-20-7	
Surrogates									
Toluene-d8 (S)	99	%	80-120		1		08/31/17 17:58	2037-26-5	
4-Bromofluorobenzene (S)	100	%	79-129		1		08/31/17 17:58	460-00-4	
1,2-Dichloroethane-d4 (S)	116	%	80-120		1		08/31/17 17:58	17060-07-0	
Dibromofluoromethane (S)	104	%	80-120		1		08/31/17 17:58	1868-53-7	

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ANALYTICAL RESULTS

Project: Russell City Store
Pace Project No.: 30228632

Sample: MW2		Lab ID: 30228632002		Collected: 08/28/17 11:10		Received: 08/30/17 09:50		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV		Analytical Method: EPA 8260B							
Benzene	ND	ug/L	1.0	0.35	1		08/31/17 18:25	71-43-2	
Ethylbenzene	1.2	ug/L	1.0	0.21	1		08/31/17 18:25	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.25	1		08/31/17 18:25	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.27	1		08/31/17 18:25	1634-04-4	
Naphthalene	ND	ug/L	2.0	0.39	1		08/31/17 18:25	91-20-3	
Toluene	ND	ug/L	1.0	0.29	1		08/31/17 18:25	108-88-3	
1,2,4-Trimethylbenzene	1.4	ug/L	1.0	0.21	1		08/31/17 18:25	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.40	1		08/31/17 18:25	108-67-8	
Xylene (Total)	3.3	ug/L	3.0	1.1	1		08/31/17 18:25	1330-20-7	
Surrogates									
Toluene-d8 (S)	99	%	80-120		1		08/31/17 18:25	2037-26-5	
4-Bromofluorobenzene (S)	99	%	79-129		1		08/31/17 18:25	460-00-4	
1,2-Dichloroethane-d4 (S)	114	%	80-120		1		08/31/17 18:25	17060-07-0	
Dibromofluoromethane (S)	104	%	80-120		1		08/31/17 18:25	1868-53-7	

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Date: 09/06/2017 02:31 PM

Page 8 of 20

8/19/2019 2:18:09 PM

ANALYTICAL RESULTS

Project: Russell City Store
Pace Project No.: 30228632

Sample: MW3		Lab ID: 30228632003		Collected: 08/28/17 11:07		Received: 08/30/17 09:50		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV									
Analytical Method: EPA 8260B									
Benzene	188	ug/L	1.0	0.35	1		08/31/17 18:52	71-43-2	
Ethylbenzene	13.2	ug/L	1.0	0.21	1		08/31/17 18:52	100-41-4	
Isopropylbenzene (Cumene)	5.0	ug/L	1.0	0.25	1		08/31/17 18:52	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.27	1		08/31/17 18:52	1634-04-4	
Naphthalene	ND	ug/L	2.0	0.39	1		08/31/17 18:52	91-20-3	
Toluene	44.5	ug/L	1.0	0.29	1		08/31/17 18:52	108-88-3	
1,2,4-Trimethylbenzene	22.2	ug/L	1.0	0.21	1		08/31/17 18:52	95-63-6	
1,3,5-Trimethylbenzene	9.1	ug/L	1.0	0.40	1		08/31/17 18:52	108-67-8	
Xylene (Total)	32.3	ug/L	3.0	1.1	1		08/31/17 18:52	1330-20-7	
Surrogates									
Toluene-d8 (S)	101	%	80-120		1		08/31/17 18:52	2037-26-5	
4-Bromofluorobenzene (S)	102	%	79-129		1		08/31/17 18:52	460-00-4	
1,2-Dichloroethane-d4 (S)	108	%	80-120		1		08/31/17 18:52	17060-07-0	
Dibromofluoromethane (S)	105	%	80-120		1		08/31/17 18:52	1868-53-7	

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ANALYTICAL RESULTS

Project: Russell City Store
Pace Project No.: 30228632

Sample: MW4		Lab ID: 30228632004		Collected: 08/28/17 11:15		Received: 08/30/17 09:50		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV		Analytical Method: EPA 8260B							
Benzene	484	ug/L	10.0	3.5	10		09/01/17 18:19	71-43-2	
Ethylbenzene	1140	ug/L	10.0	2.1	10		09/01/17 18:19	100-41-4	
Isopropylbenzene (Cumene)	95.6	ug/L	1.0	0.25	1		08/31/17 19:19	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.27	1		08/31/17 19:19	1634-04-4	
Naphthalene	181	ug/L	2.0	0.39	1		08/31/17 19:19	91-20-3	
Toluene	214	ug/L	1.0	0.29	1		08/31/17 19:19	108-88-3	
1,2,4-Trimethylbenzene	1240	ug/L	10.0	2.1	10		09/01/17 18:19	95-63-6	
1,3,5-Trimethylbenzene	334	ug/L	1.0	0.40	1		08/31/17 19:19	108-67-8	
Xylene (Total)	2010	ug/L	30.0	10.7	10		09/01/17 18:19	1330-20-7	
Surrogates									
Toluene-d8 (S)	106	%	80-120		1		08/31/17 19:19	2037-26-5	
4-Bromofluorobenzene (S)	105	%	79-129		1		08/31/17 19:19	460-00-4	
1,2-Dichloroethane-d4 (S)	113	%	80-120		1		08/31/17 19:19	17060-07-0	
Dibromofluoromethane (S)	99	%	80-120		1		08/31/17 19:19	1868-53-7	

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Page 10 of 20

8/19/2019 2:18:09 PM

ANALYTICAL RESULTS

Project: Russell City Store
Pace Project No.: 30228632

Sample: MW5 Lab ID: 30228632005 Collected: 08/28/17 11:15 Received: 08/30/17 09:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV Analytical Method: EPA 8260B									
Benzene	2.9	ug/L	1.0	0.35	1		09/01/17 11:47	71-43-2	
Ethylbenzene	2.4	ug/L	1.0	0.21	1		09/01/17 11:47	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.25	1		09/01/17 11:47	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.27	1		09/01/17 11:47	1634-04-4	L1
Naphthalene	ND	ug/L	2.0	0.39	1		09/01/17 11:47	91-20-3	
Toluene	ND	ug/L	1.0	0.29	1		09/01/17 11:47	108-88-3	
1,2,4-Trimethylbenzene	4.6	ug/L	1.0	0.21	1		09/01/17 11:47	95-63-6	
1,3,5-Trimethylbenzene	2.4	ug/L	1.0	0.40	1		09/01/17 11:47	108-67-8	
Xylene (Total)	5.6	ug/L	3.0	1.1	1		09/01/17 11:47	1330-20-7	
Surrogates									
Toluene-d8 (S)	99	%	80-120		1		09/01/17 11:47	2037-26-5	
4-Bromofluorobenzene (S)	99	%	79-129		1		09/01/17 11:47	460-00-4	
1,2-Dichloroethane-d4 (S)	114	%	80-120		1		09/01/17 11:47	17060-07-0	
Dibromofluoromethane (S)	104	%	80-120		1		09/01/17 11:47	1868-53-7	

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ANALYTICAL RESULTS

Project: Russell City Store
Pace Project No.: 30228632

Sample: Trip Blank Lab ID: 30228632006 Collected: 08/28/17 00:01 Received: 08/30/17 09:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV									
Analytical Method: EPA 8260B									
Benzene	ND	ug/L	1.0	0.35	1		08/31/17 12:29	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.21	1		08/31/17 12:29	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.25	1		08/31/17 12:29	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.27	1		08/31/17 12:29	1634-04-4	
Naphthalene	ND	ug/L	2.0	0.39	1		08/31/17 12:29	91-20-3	
Toluene	ND	ug/L	1.0	0.29	1		08/31/17 12:29	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.21	1		08/31/17 12:29	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.40	1		08/31/17 12:29	108-67-8	
Xylene (Total)	ND	ug/L	3.0	1.1	1		08/31/17 12:29	1330-20-7	
Surrogates									
Toluene-d8 (S)	98	%	80-120		1		08/31/17 12:29	2037-26-5	
4-Bromofluorobenzene (S)	101	%	79-129		1		08/31/17 12:29	460-00-4	
1,2-Dichloroethane-d4 (S)	113	%	80-120		1		08/31/17 12:29	17060-07-0	
Dibromofluoromethane (S)	103	%	80-120		1		08/31/17 12:29	1868-53-7	

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Date: 09/06/2017 02:31 PM

Page 12 of 20

8/19/2019 2:18:11 PM

QUALITY CONTROL DATA

Project: Russell City Store
Pace Project No.: 30228632

QC Batch: 270186 Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B Analysis Description: 8260B MSV UST-WATER
Associated Lab Samples: 30228632001, 30228632002, 30228632003, 30228632004, 30228632006

METHOD BLANK: 1329523 Matrix: Water
Associated Lab Samples: 30228632001, 30228632002, 30228632003, 30228632004, 30228632006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/L	ND	1.0	0.21	08/31/17 11:35	
1,3,5-Trimethylbenzene	ug/L	ND	1.0	0.40	08/31/17 11:35	
Benzene	ug/L	ND	1.0	0.35	08/31/17 11:35	
Ethylbenzene	ug/L	ND	1.0	0.21	08/31/17 11:35	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	0.25	08/31/17 11:35	
Methyl-tert-butyl ether	ug/L	ND	1.0	0.27	08/31/17 11:35	
Naphthalene	ug/L	ND	2.0	0.39	08/31/17 11:35	
Toluene	ug/L	ND	1.0	0.29	08/31/17 11:35	
Xylene (Total)	ug/L	ND	3.0	1.1	08/31/17 11:35	
1,2-Dichloroethane-d4 (S)	%	112	80-120		08/31/17 11:35	
4-Bromofluorobenzene (S)	%	97	79-129		08/31/17 11:35	
Dibromofluoromethane (S)	%	102	80-120		08/31/17 11:35	
Toluene-d8 (S)	%	100	80-120		08/31/17 11:35	

LABORATORY CONTROL SAMPLE: 1329524

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/L	20	21.7	109	70-130	
1,3,5-Trimethylbenzene	ug/L	20	21.7	109	70-130	
Benzene	ug/L	20	20.4	102	70-130	
Ethylbenzene	ug/L	20	20.6	103	70-130	
Isopropylbenzene (Cumene)	ug/L	20	21.8	109	70-130	
Methyl-tert-butyl ether	ug/L	20	24.6	123	70-130	
Naphthalene	ug/L	20	23.5	117	70-130	
Toluene	ug/L	20	21.2	106	70-130	
Xylene (Total)	ug/L	60	63.3	106	70-130	
1,2-Dichloroethane-d4 (S)	%			105	80-120	
4-Bromofluorobenzene (S)	%			102	79-129	
Dibromofluoromethane (S)	%			104	80-120	
Toluene-d8 (S)	%			99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1329827 1329828

Parameter	Units	30228659001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
1,2,4-Trimethylbenzene	ug/L	ND	20	20	35.6	26.2	178	131	75-125	30	MH
1,3,5-Trimethylbenzene	ug/L	ND	20	20	26.6	22.3	133	112	76-121	17	MH
Benzene	ug/L	ND	20	20	23.2	21.9	116	110	67-121	6	

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REPORT OF LABORATORY ANALYSIS

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Date: 09/06/2017 02:31 PM

Page 13 of 20

8/19/2019 2:18:11 PM

QUALITY CONTROL DATA

Project: Russell City Store
Pace Project No.: 30228632

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1329827 1329828												
Parameter	Units	30228659001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
Ethylbenzene	ug/L	ND	20	20	23.8	21.0	119	105	70-127	13	30	
Isopropylbenzene (Cumene)	ug/L	ND	20	20	24.4	22.4	122	112	80-122	8	30	
Methyl-tert-butyl ether	ug/L	ND	20	20	25.9	24.2	130	121	79-135	7	30	
Naphthalene	ug/L	ND	20	20	36.3	25.2	182	126	62-131	36	30	MH,R1
Toluene	ug/L	ND	20	20	23.8	22.4	119	112	77-125	6	30	
Xylene (Total)	ug/L	ND	60	60	74.9	67.4	125	112	69-128	11	30	
1,2-Dichloroethane-d4 (S)	%						109	106	80-120			
4-Bromofluorobenzene (S)	%						103	99	79-129			
Dibromofluoromethane (S)	%						108	107	80-120			
Toluene-d8 (S)	%						99	101	80-120			

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REPORT OF LABORATORY ANALYSIS

Date: 09/06/2017 02:31 PM

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Page 14 of 20

8/19/2019 2:18:11 PM

QUALITY CONTROL DATA

Project: Russell City Store
Pace Project No.: 30228632

QC Batch: 270339 Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B Analysis Description: 8260B MSV UST-WATER
Associated Lab Samples: 30228632005

METHOD BLANK: 1330257 Matrix: Water
Associated Lab Samples: 30228632005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/L	ND	1.0	0.21	09/01/17 11:21	
1,3,5-Trimethylbenzene	ug/L	ND	1.0	0.40	09/01/17 11:21	
Benzene	ug/L	ND	1.0	0.35	09/01/17 11:21	
Ethylbenzene	ug/L	ND	1.0	0.21	09/01/17 11:21	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	0.25	09/01/17 11:21	
Methyl-tert-butyl ether	ug/L	ND	1.0	0.27	09/01/17 11:21	
Naphthalene	ug/L	ND	2.0	0.39	09/01/17 11:21	
Toluene	ug/L	ND	1.0	0.29	09/01/17 11:21	
Xylene (Total)	ug/L	ND	3.0	1.1	09/01/17 11:21	
1,2-Dichloroethane-d4 (S)	%	119	80-120		09/01/17 11:21	
4-Bromofluorobenzene (S)	%	98	79-129		09/01/17 11:21	
Dibromofluoromethane (S)	%	106	80-120		09/01/17 11:21	
Toluene-d8 (S)	%	97	80-120		09/01/17 11:21	

LABORATORY CONTROL SAMPLE: 1330258

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/L	20	20.9	104	70-130	
1,3,5-Trimethylbenzene	ug/L	20	21.3	106	70-130	
Benzene	ug/L	20	21.3	107	70-130	
Ethylbenzene	ug/L	20	21.0	105	70-130	
Isopropylbenzene (Cumene)	ug/L	20	20.8	104	70-130	
Methyl-tert-butyl ether	ug/L	20	27.2	136	70-130 L1	
Naphthalene	ug/L	20	21.1	105	70-130	
Toluene	ug/L	20	20.9	105	70-130	
Xylene (Total)	ug/L	60	64.7	108	70-130	
1,2-Dichloroethane-d4 (S)	%			111	80-120	
4-Bromofluorobenzene (S)	%			94	79-129	
Dibromofluoromethane (S)	%			104	80-120	
Toluene-d8 (S)	%			100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1330259 1330260

Parameter	Units	30228646001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
1,2,4-Trimethylbenzene	ug/L	ND	20	20	22.4	23.2	112	116	75-125	3	30
1,3,5-Trimethylbenzene	ug/L	ND	20	20	20.9	22.7	104	114	76-121	8	30
Benzene	ug/L	ND	20	20	22.2	24.1	111	121	67-121	8	30

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Date: 09/06/2017 02:31 PM

Page 15 of 20

8/19/2019 2:18:12 PM

QUALITY CONTROL DATA

Project: Russell City Store
Pace Project No.: 30228632

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1330259 1330260												
Parameter	Units	30228646001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
Ethylbenzene	ug/L	ND	20	20	21.6	22.8	108	114	70-127	5	30	
Isopropylbenzene (Cumene)	ug/L	ND	20	20	21.2	23.5	106	117	80-122	10	30	
Methyl-tert-butyl ether	ug/L	ND	20	20	22.3	20.8	112	104	79-135	7	30	
Naphthalene	ug/L	ND	20	20	21.4	22.7	107	114	62-131	6	30	
Toluene	ug/L	ND	20	20	21.6	23.6	108	118	77-125	9	30	
Xylene (Total)	ug/L	ND	60	60	64.7	70.9	108	118	69-128	9	30	
1,2-Dichloroethane-d4 (S)	%						106	113	80-120			
4-Bromofluorobenzene (S)	%						102	99	79-129			
Dibromofluoromethane (S)	%						102	104	80-120			
Toluene-d8 (S)	%						99	99	80-120			

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REPORT OF LABORATORY ANALYSIS

Date: 09/06/2017 02:31 PM

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Page 16 of 20

8/19/2019 2:18:12 PM

QUALIFIERS

Project: Russell City Store
Pace Project No.: 30228632

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.
ND - Not Detected at or above adjusted reporting limit.
TNTC - Too Numerous To Count
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
MDL - Adjusted Method Detection Limit.
PQL - Practical Quantitation Limit.
RL - Reporting Limit.
S - Surrogate
1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.
Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.
LCS(D) - Laboratory Control Sample (Duplicate)
MS(D) - Matrix Spike (Duplicate)
DUP - Sample Duplicate
RPD - Relative Percent Difference
NC - Not Calculable.
SG - Silica Gel - Clean-Up
U - Indicates the compound was analyzed for, but not detected.
N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.
Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.
TNI - The NELAC Institute.

ANALYTE QUALIFIERS

L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.
MH	Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.
R1	RPD value was outside control limits.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Russell City Store
Pace Project No.: 30228632

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30228632001	MW1	EPA 8260B	270186		
30228632002	MW2	EPA 8260B	270186		
30228632003	MW3	EPA 8260B	270186		
30228632004	MW4	EPA 8260B	270186		
30228632005	MW5	EPA 8260B	270339		
30228632006	Trip Blank	EPA 8260B	270186		

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Date: 09/06/2017 02:31 PM

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Page 18 of 20

8/19/2019 2:18:13 PM

Pittsburgh Lab Sample Condition Upon Receipt



Client Name: ER & R

Project # 30228632

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Tracking #: 770133079232

Label	<u>AML</u>
LIMS Login	<u>BLM</u>

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Thermometer Used 7 Type of Ice: ☒ Wet ☐ Blue ☐ None

Cooler Temperature Observed Temp 5.3 °C Correction Factor: -0.2 °C Final Temp: 5.1 °C

Temp should be above freezing to 6°C

Date and initials of person examining contents: ML 8-30-17

Comments:

	Yes	No	N/A	
Chain of Custody Present:	☒	☐	☐	1.
Chain of Custody Filled Out:	☒	☐	☐	2.
Chain of Custody Relinquished:	☒	☐	☐	3.
Sampler Name & Signature on COC:	☒	☐	☐	4.
Sample Labels match COC:	☒	☐	☐	5.
-Includes date/time/ID Matrix: <u>WF</u>				
Samples Arrived within Hold Time:	☒	☐	☐	6.
Short Hold Time Analysis (<72hr remaining):	☒	☐	☐	7.
Rush Turn Around Time Requested:	☒	☐	☐	8.
Sufficient Volume:	☒	☐	☐	9.
Correct Containers Used:	☒	☐	☐	10.
-Pace Containers Used:	☒	☐	☐	
Containers Intact:	☒	☐	☐	11.
Orthophosphate field filtered	☒	☐	☒	12.
Hex Cr Aqueous Compliance/NPDES sample field filtered	☒	☐	☒	13.
Organic Samples checked for dechlorination:	☒	☐	☒	14.
Filtered volume received for Dissolved tests	☒	☐	☒	15.
All containers have been checked for preservation.	☒	☐	☒	16.
All containers needing preservation are found to be in compliance with EPA recommendation.	☒	☐	☒	
exceptions: ☒ VOA coliform, TOC, O&G, Phenolics				Initial when completed <u>ML</u> Date/time of preservation
				Lot # of added preservative
Headspace in VOA Vials (>6mm):	☒	☐	☐	17.
Trip Blank Present:	☒	☐	☐	18.
Trip Blank Custody Seals Present	☒	☐	☐	
Rad Aqueous Samples Screened > 0.5 mrem/hr	☒	☐	☐	Initial when completed: Date:

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

November 22, 2017

Mr. Dave Birchard
Environmental Remediation & Recovery, Inc.
4250 Route 6N
Edinboro, PA 16412

RE: Project: Russell City Store
Pace Project No.: 30236344

Dear Mr. Birchard:

Enclosed are the analytical results for sample(s) received by the laboratory on November 16, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Samantha Bayura
samantha.bayura@pacelabs.com
(724)850-5622
Project Manager

Enclosures

cc: Karann Holman, Environmental Remediation & Recovery,
Inc.



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: Russell City Store
Pace Project No.: 30236344

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235

Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: Russell City Store
Pace Project No.: 30236344

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30236344001	MW-2	Water	11/14/17 10:12	11/16/17 10:00
30236344002	MW-3	Water	11/14/17 10:20	11/16/17 10:00
30236344003	MW-4	Water	11/14/17 10:03	11/16/17 10:00
30236344004	MW-5	Water	11/14/17 10:35	11/16/17 10:00

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SAMPLE ANALYTE COUNT

Project: Russell City Store
Pace Project No.: 30236344

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30236344001	MW-2	EPA 8260B	JAS	13
30236344002	MW-3	EPA 8260B	JAS	13
30236344003	MW-4	EPA 8260B	JAS	13
30236344004	MW-5	EPA 8260B	JAS	13

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Russell City Store
Pace Project No.: 30236344

Sample: MW-2		Lab ID: 30236344001		Collected: 11/14/17 10:12		Received: 11/16/17 10:00		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV									
Analytical Method: EPA 8260B									
Benzene	1.4	ug/L	1.0	0.35	1		11/20/17 13:36	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.21	1		11/20/17 13:36	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.25	1		11/20/17 13:36	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.27	1		11/20/17 13:36	1634-04-4	
Naphthalene	ND	ug/L	2.0	0.39	1		11/20/17 13:36	91-20-3	
Toluene	ND	ug/L	1.0	0.29	1		11/20/17 13:36	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.21	1		11/20/17 13:36	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.40	1		11/20/17 13:36	108-67-8	
Xylene (Total)	ND	ug/L	3.0	1.1	1		11/20/17 13:36	1330-20-7	
Surrogates									
Toluene-d8 (S)	91	%	80-120		1		11/20/17 13:36	2037-26-5	
4-Bromofluorobenzene (S)	97	%	79-129		1		11/20/17 13:36	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	80-120		1		11/20/17 13:36	17060-07-0	
Dibromofluoromethane (S)	103	%	80-120		1		11/20/17 13:36	1868-53-7	

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ANALYTICAL RESULTS

Project: Russell City Store
Pace Project No.: 30236344

Sample: MW-3		Lab ID: 30236344002		Collected: 11/14/17 10:20		Received: 11/16/17 10:00		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV		Analytical Method: EPA 8260B							
Benzene	79.8	ug/L	1.0	0.35	1		11/20/17 20:22	71-43-2	
Ethylbenzene	15.0	ug/L	1.0	0.21	1		11/20/17 20:22	100-41-4	
Isopropylbenzene (Cumene)	16.4	ug/L	1.0	0.25	1		11/20/17 20:22	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.27	1		11/20/17 20:22	1634-04-4	
Naphthalene	6.5	ug/L	2.0	0.39	1		11/20/17 20:22	91-20-3	
Toluene	2.0	ug/L	1.0	0.29	1		11/20/17 20:22	108-88-3	
1,2,4-Trimethylbenzene	30.2	ug/L	1.0	0.21	1		11/20/17 20:22	95-63-6	
1,3,5-Trimethylbenzene	30.4	ug/L	1.0	0.40	1		11/20/17 20:22	108-67-8	
Xylene (Total)	6.2	ug/L	3.0	1.1	1		11/20/17 20:22	1330-20-7	
Surrogates									
Toluene-d8 (S)	93	%	80-120		1		11/20/17 20:22	2037-26-5	
4-Bromofluorobenzene (S)	100	%	79-129		1		11/20/17 20:22	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		1		11/20/17 20:22	17060-07-0	
Dibromofluoromethane (S)	97	%	80-120		1		11/20/17 20:22	1868-53-7	

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Date: 11/22/2017 04:08 PM

Page 6 of 14

8/19/2019 2:18:17 PM

ANALYTICAL RESULTS

Project: Russell City Store
Pace Project No.: 30236344

Sample: MW-4		Lab ID: 30236344003		Collected: 11/14/17 10:03		Received: 11/16/17 10:00		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV									
Analytical Method: EPA 8260B									
Benzene	296	ug/L	1.0	0.35	1		11/20/17 20:49	71-43-2	
Ethylbenzene	2940	ug/L	50.0	10.6	50		11/20/17 21:16	100-41-4	
Isopropylbenzene (Cumene)	114	ug/L	1.0	0.25	1		11/20/17 20:49	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.27	1		11/20/17 20:49	1634-04-4	
Naphthalene	151	ug/L	2.0	0.39	1		11/20/17 20:49	91-20-3	
Toluene	202	ug/L	1.0	0.29	1		11/20/17 20:49	108-88-3	
1,2,4-Trimethylbenzene	9210	ug/L	50.0	10.6	50		11/20/17 21:16	95-63-6	
1,3,5-Trimethylbenzene	3020	ug/L	50.0	19.8	50		11/20/17 21:16	108-67-8	
Xylene (Total)	6230	ug/L	150	53.6	50		11/20/17 21:16	1330-20-7	
Surrogates									
Toluene-d8 (S)	100	%	80-120		1		11/20/17 20:49	2037-26-5	
4-Bromofluorobenzene (S)	100	%	79-129		1		11/20/17 20:49	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	80-120		1		11/20/17 20:49	17060-07-0	
Dibromofluoromethane (S)	89	%	80-120		1		11/20/17 20:49	1868-53-7	

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ANALYTICAL RESULTS

Project: Russell City Store
Pace Project No.: 30236344

Sample: MW-5 Lab ID: 30236344004 Collected: 11/14/17 10:35 Received: 11/16/17 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV									
Analytical Method: EPA 8260B									
Benzene	18.5	ug/L	1.0	0.35	1		11/20/17 19:55	71-43-2	
Ethylbenzene	33.5	ug/L	1.0	0.21	1		11/20/17 19:55	100-41-4	
Isopropylbenzene (Cumene)	8.0	ug/L	1.0	0.25	1		11/20/17 19:55	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.27	1		11/20/17 19:55	1634-04-4	
Naphthalene	5.5	ug/L	2.0	0.39	1		11/20/17 19:55	91-20-3	
Toluene	3.3	ug/L	1.0	0.29	1		11/20/17 19:55	108-88-3	
1,2,4-Trimethylbenzene	171	ug/L	1.0	0.21	1		11/20/17 19:55	95-63-6	
1,3,5-Trimethylbenzene	74.1	ug/L	1.0	0.40	1		11/20/17 19:55	108-67-8	
Xylene (Total)	84.9	ug/L	3.0	1.1	1		11/20/17 19:55	1330-20-7	
Surrogates									
Toluene-d8 (S)	94	%	80-120		1		11/20/17 19:55	2037-26-5	
4-Bromofluorobenzene (S)	97	%	79-129		1		11/20/17 19:55	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	80-120		1		11/20/17 19:55	17060-07-0	
Dibromofluoromethane (S)	97	%	80-120		1		11/20/17 19:55	1868-53-7	

REPORT OF LABORATORY ANALYSIS

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Date: 11/22/2017 04:08 PM

Page 8 of 14

8/19/2019 2:18:18 PM

QUALITY CONTROL DATA

Project: Russell City Store
Pace Project No.: 30236344

QC Batch: 279729 Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B Analysis Description: 8260B MSV UST-WATER
Associated Lab Samples: 30236344001, 30236344002, 30236344003, 30236344004

METHOD BLANK: 1374044 Matrix: Water
Associated Lab Samples: 30236344001, 30236344002, 30236344003, 30236344004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/L	ND	1.0	0.21	11/20/17 12:14	
1,3,5-Trimethylbenzene	ug/L	ND	1.0	0.40	11/20/17 12:14	
Benzene	ug/L	ND	1.0	0.35	11/20/17 12:14	
Ethylbenzene	ug/L	ND	1.0	0.21	11/20/17 12:14	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	0.25	11/20/17 12:14	
Methyl-tert-butyl ether	ug/L	ND	1.0	0.27	11/20/17 12:14	
Naphthalene	ug/L	ND	2.0	0.39	11/20/17 12:14	
Toluene	ug/L	ND	1.0	0.29	11/20/17 12:14	
Xylene (Total)	ug/L	ND	3.0	1.1	11/20/17 12:14	
1,2-Dichloroethane-d4 (S)	%	104	80-120		11/20/17 12:14	
4-Bromofluorobenzene (S)	%	99	79-129		11/20/17 12:14	
Dibromofluoromethane (S)	%	102	80-120		11/20/17 12:14	
Toluene-d8 (S)	%	93	80-120		11/20/17 12:14	

LABORATORY CONTROL SAMPLE: 1374045

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/L	20	19.2	96	70-130	
1,3,5-Trimethylbenzene	ug/L	20	19.3	96	70-130	
Benzene	ug/L	20	18.7	93	70-130	
Ethylbenzene	ug/L	20	18.9	95	70-130	
Isopropylbenzene (Cumene)	ug/L	20	19.5	97	70-130	
Methyl-tert-butyl ether	ug/L	20	19.9	99	70-130	
Naphthalene	ug/L	20	19.0	95	70-130	
Toluene	ug/L	20	19.1	95	70-130	
Xylene (Total)	ug/L	60	56.5	94	70-130	
1,2-Dichloroethane-d4 (S)	%			104	80-120	
4-Bromofluorobenzene (S)	%			101	79-129	
Dibromofluoromethane (S)	%			102	80-120	
Toluene-d8 (S)	%			94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1374059 1374060

Parameter	Units	30236356001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
1,2,4-Trimethylbenzene	ug/L	ND	20	20	19.8	18.9	99	94	75-125	4	30
1,3,5-Trimethylbenzene	ug/L	ND	20	20	18.9	19.2	94	96	76-121	2	30
Benzene	ug/L	ND	20	20	18.4	18.6	92	93	67-121	1	30

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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Date: 11/22/2017 04:08 PM

Page 9 of 14

8/19/2019 2:18:19 PM

QUALITY CONTROL DATA

Project: Russell City Store
Pace Project No.: 30236344

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1374059 1374060

Parameter	Units	30236356001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
Ethylbenzene	ug/L	ND	20	20	18.7	18.1	93	91	70-127	3	30	
Isopropylbenzene (Cumene)	ug/L	ND	20	20	19.2	19.6	96	98	80-122	2	30	
Methyl-tert-butyl ether	ug/L	ND	20	20	19.0	18.1	95	90	79-135	5	30	
Naphthalene	ug/L	ND	20	20	17.7	18.1	89	91	62-131	2	30	
Toluene	ug/L	ND	20	20	18.9	18.6	94	93	77-125	1	30	
Xylene (Total)	ug/L	ND	60	60	56.0	54.5	93	91	69-128	3	30	
1,2-Dichloroethane-d4 (S)	%						99	101	80-120			
4-Bromofluorobenzene (S)	%						99	101	79-129			
Dibromofluoromethane (S)	%						109	102	80-120			
Toluene-d8 (S)	%						93	94	80-120			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Date: 11/22/2017 04:08 PM

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Page 10 of 14

8/19/2019 2:18:19 PM

QUALIFIERS

Project: Russell City Store
Pace Project No.: 30236344

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Russell City Store
Pace Project No.: 30236344

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30236344001	MW-2	EPA 8260B	279729		
30236344002	MW-3	EPA 8260B	279729		
30236344003	MW-4	EPA 8260B	279729		
30236344004	MW-5	EPA 8260B	279729		

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The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

...late charges of 1.5% per month for any invoices not paid within 30 days.

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: ER+R

Project #

30236344

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Tracking #: 790740962595

Label	<u>ML</u>
LIMS Login	<u>731</u>

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals Intact: ☐ yes ☐ no

Thermometer Used 8 Type of Ice: Wet Blue None

Cooler Temperature Observed Temp 1.7 °C Correction Factor: 0.0 °C Final Temp: 1.7 °C

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 7/11/13

Comments:

	Yes	No	N/A	
Chain of Custody Present:	☒	☐	☐	1.
Chain of Custody Filled Out:	☒	☐	☐	2.
Chain of Custody Relinquished:	☒	☐	☐	3.
Sampler Name & Signature on COC:	☒	☐	☐	4.
Sample Labels match COC:	☒	☐	☐	5.
-Includes date/time/ID Matrix: <u>WT</u>				
Samples Arrived within Hold Time:	☒	☐	☐	6.
Short Hold Time Analysis (<72hr remaining):	☒	☐	☐	7.
Rush Turn Around Time Requested:	☒	☐	☐	8.
Sufficient Volume:	☒	☐	☐	9.
Correct Containers Used:	☒	☐	☐	10.
-Pace Containers Used:	☒	☐	☐	
Containers Intact:	☒	☐	☐	11.
Orthophosphate field filtered	☐	☐	☒	12.
Hex Cr Aqueous Compliance/NPDES sample field filtered	☐	☐	☒	13.
Organic Samples checked for dechlorination:	☐	☐	☒	14.
Filtered volume received for Dissolved tests	☐	☐	☒	15.
All containers have been checked for preservation.	☐	☐	☒	16.
All containers needing preservation are found to be in compliance with EPA recommendation.	☐	☐	☒	
exceptions: <u>VOA, coliform, TOC, O&G, Phenolics</u>				
				Initial when completed <u>ru</u> Date/time of preservation
				Lot # of added preservative
Headspace in VOA Vials (>6mm):	☐	☒	☐	17.
Trip Blank Present:	☐	☒	☐	18.
Trip Blank Custody Seals Present	☐	☐	☒	
Rad Aqueous Samples Screened > 0.5 mrem/hr	☐	☐	☒	Initial when completed: Date:

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)
 *PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

August 28, 2018

Mr. Dave Birchard
Environmental Remediation & Recovery, Inc.
4250 Route 6N
Edinboro, PA 16412

RE: Project: Russell City Store
Pace Project No.: 30262701

Dear Mr. Birchard:

Enclosed are the analytical results for sample(s) received by the laboratory on August 18, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Samantha Bayura
samantha.bayura@pacelabs.com
(724)850-5622
Project Manager

Enclosures

cc: Karann Holman, Environmental Remediation & Recovery,
Inc.



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Page 1 of 26

8/19/2019 2:18:22 PM

CERTIFICATIONS

Project: Russell City Store
Pace Project No.: 30262701

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991

Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

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SAMPLE SUMMARY

Project: Russell City Store
Pace Project No.: 30262701

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30262701001	MW1	Water	08/16/18 12:05	08/18/18 10:30
30262701002	MW2	Water	08/16/18 12:45	08/18/18 10:30
30262701003	MW3	Water	08/16/18 11:20	08/18/18 10:30
30262701004	MW4	Water	08/16/18 12:40	08/18/18 10:30
30262701005	MW5	Water	08/16/18 12:48	08/18/18 10:30
30262701006	MW6	Water	08/16/18 12:17	08/18/18 10:30
30262701007	MW7	Water	08/16/18 12:25	08/18/18 10:30
30262701008	MW9	Water	08/16/18 12:00	08/18/18 10:30
30262701009	MW10	Water	08/16/18 12:20	08/18/18 10:30
30262701010	MW11	Water	08/16/18 12:10	08/18/18 10:30
30262701011	MW12	Water	08/16/18 12:30	08/18/18 10:30
30262701012	MW13	Water	08/16/18 11:50	08/18/18 10:30
30262701013	MW14	Water	08/16/18 12:15	08/18/18 10:30
30262701014	Trip Blank	Water	08/16/18 00:01	08/18/18 10:30

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SAMPLE ANALYTE COUNT

Project: Russell City Store
Pace Project No.: 30262701

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30262701001	MW1	EPA 8260B	LEL	13
30262701002	MW2	EPA 8260B	LEL	13
30262701003	MW3	EPA 8260B	LEL	13
30262701004	MW4	EPA 8260B	LEL	13
30262701005	MW5	EPA 8260B	LEL	13
30262701006	MW6	EPA 8260B	LEL	13
30262701007	MW7	EPA 8260B	LEL	13
30262701008	MW9	EPA 8260B	LEL	13
30262701009	MW10	EPA 8260B	LEL	13
30262701010	MW11	EPA 8260B	LEL	13
30262701011	MW12	EPA 8260B	LEL	13
30262701012	MW13	EPA 8260B	LEL	13
30262701013	MW14	EPA 8260B	LEL	13
30262701014	Trip Blank	EPA 8260B	LEL	13

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PROJECT NARRATIVE

Project: Russell City Store
Pace Project No.: 30262701

Method: EPA 8260B
Description: 8260B MSV
Client: Environmental Remediation and Recovery, Inc.
Date: August 28, 2018

General Information:

14 samples were analyzed for EPA 8260B. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 310818

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30262701001

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MSD (Lab ID: 1518431)
- Toluene

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Russell City Store
Pace Project No.: 30262701

Sample: MW1		Lab ID: 30262701001		Collected: 08/16/18 12:05		Received: 08/18/18 10:30		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV		Analytical Method: EPA 8260B							
Benzene	ND	ug/L	1.0	0.24	1		08/24/18 13:09	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.31	1		08/24/18 13:09	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.24	1		08/24/18 13:09	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		08/24/18 13:09	1634-04-4	
Naphthalene	ND	ug/L	2.0	0.82	1		08/24/18 13:09	91-20-3	
Toluene	ND	ug/L	1.0	0.30	1		08/24/18 13:09	108-88-3	ML
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.25	1		08/24/18 13:09	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.21	1		08/24/18 13:09	108-67-8	
Xylene (Total)	ND	ug/L	3.0	0.78	1		08/24/18 13:09	1330-20-7	
Surrogates									
Toluene-d8 (S)	96	%.	80-120		1		08/24/18 13:09	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	79-129		1		08/24/18 13:09	460-00-4	
1,2-Dichloroethane-d4 (S)	92	%.	80-120		1		08/24/18 13:09	17060-07-0	
Dibromofluoromethane (S)	96	%.	80-120		1		08/24/18 13:09	1868-53-7	

REPORT OF LABORATORY ANALYSIS

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Page 6 of 26

8/19/2019 2:18:25 PM

ANALYTICAL RESULTS

Project: Russell City Store
Pace Project No.: 30262701

Sample: MW2 Lab ID: 30262701002 Collected: 08/16/18 12:45 Received: 08/18/18 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV Analytical Method: EPA 8260B									
Benzene	1.6	ug/L	1.0	0.24	1		08/24/18 16:06	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.31	1		08/24/18 16:06	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.24	1		08/24/18 16:06	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		08/24/18 16:06	1634-04-4	
Naphthalene	ND	ug/L	2.0	0.82	1		08/24/18 16:06	91-20-3	
Toluene	ND	ug/L	1.0	0.30	1		08/24/18 16:06	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.25	1		08/24/18 16:06	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.21	1		08/24/18 16:06	108-67-8	
Xylene (Total)	ND	ug/L	3.0	0.78	1		08/24/18 16:06	1330-20-7	
Surrogates									
Toluene-d8 (S)	98	%	80-120		1		08/24/18 16:06	2037-26-5	
4-Bromofluorobenzene (S)	103	%	79-129		1		08/24/18 16:06	460-00-4	
1,2-Dichloroethane-d4 (S)	95	%	80-120		1		08/24/18 16:06	17060-07-0	
Dibromofluoromethane (S)	100	%	80-120		1		08/24/18 16:06	1868-53-7	

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ANALYTICAL RESULTS

Project: Russell City Store
Pace Project No.: 30262701

Sample: MW3 Lab ID: 30262701003 Collected: 08/16/18 11:20 Received: 08/18/18 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV Analytical Method: EPA 8260B									
Benzene	71.8	ug/L	1.0	0.24	1		08/24/18 16:31	71-43-2	
Ethylbenzene	7.9	ug/L	1.0	0.31	1		08/24/18 16:31	100-41-4	
Isopropylbenzene (Cumene)	5.1	ug/L	1.0	0.24	1		08/24/18 16:31	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		08/24/18 16:31	1634-04-4	
Naphthalene	ND	ug/L	2.0	0.82	1		08/24/18 16:31	91-20-3	
Toluene	ND	ug/L	1.0	0.30	1		08/24/18 16:31	108-88-3	
1,2,4-Trimethylbenzene	21.0	ug/L	1.0	0.25	1		08/24/18 16:31	95-63-6	
1,3,5-Trimethylbenzene	6.0	ug/L	1.0	0.21	1		08/24/18 16:31	108-67-8	
Xylene (Total)	ND	ug/L	3.0	0.78	1		08/24/18 16:31	1330-20-7	
Surrogates									
Toluene-d8 (S)	100	%	80-120		1		08/24/18 16:31	2037-26-5	
4-Bromofluorobenzene (S)	97	%	79-129		1		08/24/18 16:31	460-00-4	
1,2-Dichloroethane-d4 (S)	95	%	80-120		1		08/24/18 16:31	17060-07-0	
Dibromofluoromethane (S)	95	%	80-120		1		08/24/18 16:31	1868-53-7	

REPORT OF LABORATORY ANALYSIS

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Date: 08/28/2018 03:02 PM

Page 8 of 26

8/19/2019 2:18:25 PM

ANALYTICAL RESULTS

Project: Russell City Store
Pace Project No.: 30262701

Sample: MW4		Lab ID: 30262701004		Collected: 08/16/18 12:40		Received: 08/18/18 10:30		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV									
Analytical Method: EPA 8260B									
Benzene	432	ug/L	10.0	2.4	10		08/24/18 19:53	71-43-2	
Ethylbenzene	1520	ug/L	10.0	3.1	10		08/24/18 19:53	100-41-4	
Isopropylbenzene (Cumene)	98.7	ug/L	1.0	0.24	1		08/24/18 19:28	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		08/24/18 19:28	1634-04-4	
Naphthalene	189	ug/L	2.0	0.82	1		08/24/18 19:28	91-20-3	
Toluene	274	ug/L	1.0	0.30	1		08/24/18 19:28	108-88-3	
1,2,4-Trimethylbenzene	1530	ug/L	10.0	2.5	10		08/24/18 19:53	95-63-6	
1,3,5-Trimethylbenzene	411	ug/L	10.0	2.1	10		08/24/18 19:53	108-67-8	
Xylene (Total)	2860	ug/L	30.0	7.8	10		08/24/18 19:53	1330-20-7	
Surrogates									
Toluene-d8 (S)	110	%	80-120		1		08/24/18 19:28	2037-26-5	
4-Bromofluorobenzene (S)	107	%	79-129		1		08/24/18 19:28	460-00-4	
1,2-Dichloroethane-d4 (S)	93	%	80-120		1		08/24/18 19:28	17060-07-0	
Dibromofluoromethane (S)	93	%	80-120		1		08/24/18 19:28	1868-53-7	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Russell City Store
Pace Project No.: 30262701

Sample: MW5 Lab ID: 30262701005 Collected: 08/16/18 12:48 Received: 08/18/18 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV Analytical Method: EPA 8260B									
Benzene	ND	ug/L	1.0	0.24	1		08/24/18 16:57	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.31	1		08/24/18 16:57	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.24	1		08/24/18 16:57	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		08/24/18 16:57	1634-04-4	
Naphthalene	ND	ug/L	2.0	0.82	1		08/24/18 16:57	91-20-3	
Toluene	ND	ug/L	1.0	0.30	1		08/24/18 16:57	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.25	1		08/24/18 16:57	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.21	1		08/24/18 16:57	108-67-8	
Xylene (Total)	ND	ug/L	3.0	0.78	1		08/24/18 16:57	1330-20-7	
Surrogates									
Toluene-d8 (S)	97	%	80-120		1		08/24/18 16:57	2037-26-5	
4-Bromofluorobenzene (S)	98	%	79-129		1		08/24/18 16:57	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	80-120		1		08/24/18 16:57	17060-07-0	
Dibromofluoromethane (S)	102	%	80-120		1		08/24/18 16:57	1868-53-7	

REPORT OF LABORATORY ANALYSIS

Date: 08/28/2018 03:02 PM

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Page 10 of 26

8/19/2019 2:18:27 PM

ANALYTICAL RESULTS

Project: Russell City Store
Pace Project No.: 30262701

Sample: MW6 Lab ID: 30262701006 Collected: 08/16/18 12:17 Received: 08/18/18 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV									
Analytical Method: EPA 8260B									
Benzene	98.5	ug/L	1.0	0.24	1		08/24/18 17:22	71-43-2	
Ethylbenzene	20.3	ug/L	1.0	0.31	1		08/24/18 17:22	100-41-4	
Isopropylbenzene (Cumene)	2.4	ug/L	1.0	0.24	1		08/24/18 17:22	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		08/24/18 17:22	1634-04-4	
Naphthalene	ND	ug/L	2.0	0.82	1		08/24/18 17:22	91-20-3	
Toluene	1.5	ug/L	1.0	0.30	1		08/24/18 17:22	108-88-3	
1,2,4-Trimethylbenzene	6.5	ug/L	1.0	0.25	1		08/24/18 17:22	95-63-6	
1,3,5-Trimethylbenzene	4.3	ug/L	1.0	0.21	1		08/24/18 17:22	108-67-8	
Xylene (Total)	10.1	ug/L	3.0	0.78	1		08/24/18 17:22	1330-20-7	
Surrogates									
Toluene-d8 (S)	98	%	80-120		1		08/24/18 17:22	2037-26-5	
4-Bromofluorobenzene (S)	98	%	79-129		1		08/24/18 17:22	460-00-4	
1,2-Dichloroethane-d4 (S)	91	%	80-120		1		08/24/18 17:22	17060-07-0	
Dibromofluoromethane (S)	91	%	80-120		1		08/24/18 17:22	1868-53-7	

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ANALYTICAL RESULTS

Project: Russell City Store
Pace Project No.: 30262701

Sample: MW7 Lab ID: 30262701007 Collected: 08/16/18 12:25 Received: 08/18/18 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV		Analytical Method: EPA 8260B							
Benzene	115	ug/L	1.0	0.24	1		08/24/18 14:00	71-43-2	
Ethylbenzene	381	ug/L	1.0	0.31	1		08/24/18 14:00	100-41-4	
Isopropylbenzene (Cumene)	55.9	ug/L	1.0	0.24	1		08/24/18 14:00	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		08/24/18 14:00	1634-04-4	
Naphthalene	101	ug/L	2.0	0.82	1		08/24/18 14:00	91-20-3	
Toluene	79.5	ug/L	1.0	0.30	1		08/24/18 14:00	108-88-3	
1,2,4-Trimethylbenzene	426	ug/L	5.0	1.2	5		08/27/18 21:27	95-63-6	
1,3,5-Trimethylbenzene	177	ug/L	1.0	0.21	1		08/24/18 14:00	108-67-8	
Xylene (Total)	310	ug/L	3.0	0.78	1		08/24/18 14:00	1330-20-7	
Surrogates									
Toluene-d8 (S)	111	%	80-120		1		08/24/18 14:00	2037-26-5	
4-Bromofluorobenzene (S)	100	%	79-129		1		08/24/18 14:00	460-00-4	
1,2-Dichloroethane-d4 (S)	94	%	80-120		1		08/24/18 14:00	17060-07-0	
Dibromofluoromethane (S)	92	%	80-120		1		08/24/18 14:00	1868-53-7	

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Date: 08/28/2018 03:02 PM

Page 12 of 26

8/19/2019 2:18:27 PM

ANALYTICAL RESULTS

Project: Russell City Store
Pace Project No.: 30262701

Sample: MW9		Lab ID: 30262701008		Collected: 08/16/18 12:00		Received: 08/18/18 10:30		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV									
Analytical Method: EPA 8260B									
Benzene	ND	ug/L	1.0	0.24	1		08/24/18 17:47	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.31	1		08/24/18 17:47	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.24	1		08/24/18 17:47	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		08/24/18 17:47	1634-04-4	
Naphthalene	ND	ug/L	2.0	0.82	1		08/24/18 17:47	91-20-3	
Toluene	ND	ug/L	1.0	0.30	1		08/24/18 17:47	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.25	1		08/24/18 17:47	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.21	1		08/24/18 17:47	108-67-8	
Xylene (Total)	ND	ug/L	3.0	0.78	1		08/24/18 17:47	1330-20-7	
Surrogates									
Toluene-d8 (S)	101	%	80-120		1		08/24/18 17:47	2037-26-5	
4-Bromofluorobenzene (S)	103	%	79-129		1		08/24/18 17:47	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	80-120		1		08/24/18 17:47	17060-07-0	
Dibromofluoromethane (S)	100	%	80-120		1		08/24/18 17:47	1868-53-7	

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ANALYTICAL RESULTS

Project: Russell City Store
Pace Project No.: 30262701

Sample: MW10 Lab ID: 30262701009 Collected: 08/16/18 12:20 Received: 08/18/18 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV Analytical Method: EPA 8260B									
Benzene	ND	ug/L	1.0	0.24	1		08/24/18 18:12	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.31	1		08/24/18 18:12	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.24	1		08/24/18 18:12	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		08/24/18 18:12	1634-04-4	
Naphthalene	ND	ug/L	2.0	0.82	1		08/24/18 18:12	91-20-3	
Toluene	ND	ug/L	1.0	0.30	1		08/24/18 18:12	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.25	1		08/24/18 18:12	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.21	1		08/24/18 18:12	108-67-8	
Xylene (Total)	ND	ug/L	3.0	0.78	1		08/24/18 18:12	1330-20-7	
Surrogates									
Toluene-d8 (S)	97	%	80-120		1		08/24/18 18:12	2037-26-5	
4-Bromofluorobenzene (S)	95	%	79-129		1		08/24/18 18:12	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	80-120		1		08/24/18 18:12	17060-07-0	
Dibromofluoromethane (S)	101	%	80-120		1		08/24/18 18:12	1868-53-7	

REPORT OF LABORATORY ANALYSIS

Date: 08/28/2018 03:02 PM

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Page 14 of 26

8/19/2019 2:18:28 PM

ANALYTICAL RESULTS

Project: Russell City Store

Pace Project No.: 30262701

Sample: MW11		Lab ID: 30262701010		Collected: 08/16/18 12:10		Received: 08/18/18 10:30		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV									
Analytical Method: EPA 8260B									
Benzene	ND	ug/L	1.0	0.24	1		08/24/18 14:25	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.31	1		08/24/18 14:25	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.24	1		08/24/18 14:25	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		08/24/18 14:25	1634-04-4	
Naphthalene	ND	ug/L	2.0	0.82	1		08/24/18 14:25	91-20-3	
Toluene	ND	ug/L	1.0	0.30	1		08/24/18 14:25	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.25	1		08/24/18 14:25	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.21	1		08/24/18 14:25	108-67-8	
Xylene (Total)	ND	ug/L	3.0	0.78	1		08/24/18 14:25	1330-20-7	
Surrogates									
Toluene-d8 (S)	98	%	80-120		1		08/24/18 14:25	2037-26-5	
4-Bromofluorobenzene (S)	101	%	79-129		1		08/24/18 14:25	460-00-4	
1,2-Dichloroethane-d4 (S)	94	%	80-120		1		08/24/18 14:25	17060-07-0	
Dibromofluoromethane (S)	97	%	80-120		1		08/24/18 14:25	1868-53-7	

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Date: 08/28/2018 03:02 PM

Page 15 of 26

8/19/2019 2:18:29 PM

ANALYTICAL RESULTS

Project: Russell City Store
Pace Project No.: 30262701

Sample: MW12		Lab ID: 30262701011		Collected: 08/16/18 12:30		Received: 08/18/18 10:30		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV		Analytical Method: EPA 8260B							
Benzene	ND	ug/L	1.0	0.24	1		08/24/18 14:50	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.31	1		08/24/18 14:50	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.24	1		08/24/18 14:50	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		08/24/18 14:50	1634-04-4	
Naphthalene	ND	ug/L	2.0	0.82	1		08/24/18 14:50	91-20-3	
Toluene	ND	ug/L	1.0	0.30	1		08/24/18 14:50	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.25	1		08/24/18 14:50	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.21	1		08/24/18 14:50	108-67-8	
Xylene (Total)	ND	ug/L	3.0	0.78	1		08/24/18 14:50	1330-20-7	
Surrogates									
Toluene-d8 (S)	95	%	80-120		1		08/24/18 14:50	2037-26-5	
4-Bromofluorobenzene (S)	100	%	79-129		1		08/24/18 14:50	460-00-4	
1,2-Dichloroethane-d4 (S)	94	%	80-120		1		08/24/18 14:50	17060-07-0	
Dibromofluoromethane (S)	98	%	80-120		1		08/24/18 14:50	1868-53-7	

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Date: 08/28/2018 03:02 PM

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Page 16 of 26

8/19/2019 2:18:29 PM

ANALYTICAL RESULTS

Project: Russell City Store

Pace Project No.: 30262701

Sample: MW13		Lab ID: 30262701012		Collected: 08/16/18 11:50		Received: 08/18/18 10:30		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV									
Analytical Method: EPA 8260B									
Benzene	ND	ug/L	1.0	0.24	1		08/24/18 15:15	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.31	1		08/24/18 15:15	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.24	1		08/24/18 15:15	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		08/24/18 15:15	1634-04-4	
Naphthalene	ND	ug/L	2.0	0.82	1		08/24/18 15:15	91-20-3	
Toluene	ND	ug/L	1.0	0.30	1		08/24/18 15:15	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.25	1		08/24/18 15:15	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.21	1		08/24/18 15:15	108-67-8	
Xylene (Total)	ND	ug/L	3.0	0.78	1		08/24/18 15:15	1330-20-7	
Surrogates									
Toluene-d8 (S)	99	%	80-120		1		08/24/18 15:15	2037-26-5	
4-Bromofluorobenzene (S)	99	%	79-129		1		08/24/18 15:15	460-00-4	
1,2-Dichloroethane-d4 (S)	94	%	80-120		1		08/24/18 15:15	17060-07-0	
Dibromofluoromethane (S)	93	%	80-120		1		08/24/18 15:15	1868-53-7	

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Date: 08/28/2018 03:02 PM

Page 17 of 26

8/19/2019 2:18:30 PM

ANALYTICAL RESULTS

Project: Russell City Store
Pace Project No.: 30262701

Sample: MW14 Lab ID: 30262701013 Collected: 08/16/18 12:15 Received: 08/18/18 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV									
Analytical Method: EPA 8260B									
Benzene	18.7	ug/L	1.0	0.24	1		08/24/18 15:41	71-43-2	
Ethylbenzene	2.6	ug/L	1.0	0.31	1		08/24/18 15:41	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.24	1		08/24/18 15:41	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		08/24/18 15:41	1634-04-4	
Naphthalene	ND	ug/L	2.0	0.82	1		08/24/18 15:41	91-20-3	
Toluene	ND	ug/L	1.0	0.30	1		08/24/18 15:41	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.25	1		08/24/18 15:41	95-63-6	
1,3,5-Trimethylbenzene	5.2	ug/L	1.0	0.21	1		08/24/18 15:41	108-67-8	
Xylene (Total)	ND	ug/L	3.0	0.78	1		08/24/18 15:41	1330-20-7	
Surrogates									
Toluene-d8 (S)	98	%	80-120		1		08/24/18 15:41	2037-26-5	
4-Bromofluorobenzene (S)	100	%	79-129		1		08/24/18 15:41	460-00-4	
1,2-Dichloroethane-d4 (S)	95	%	80-120		1		08/24/18 15:41	17060-07-0	
Dibromofluoromethane (S)	98	%	80-120		1		08/24/18 15:41	1868-53-7	

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Date: 08/28/2018 03:02 PM

Page 18 of 26

8/19/2019 2:18:30 PM

ANALYTICAL RESULTS

Project: Russell City Store
Pace Project No.: 30262701

Sample: Trip Blank		Lab ID: 30262701014		Collected: 08/16/18 00:01		Received: 08/18/18 10:30		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV									
Analytical Method: EPA 8260B									
Benzene	ND	ug/L	1.0	0.24	1		08/24/18 12:44	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.31	1		08/24/18 12:44	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.24	1		08/24/18 12:44	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		08/24/18 12:44	1634-04-4	
Naphthalene	ND	ug/L	2.0	0.82	1		08/24/18 12:44	91-20-3	
Toluene	ND	ug/L	1.0	0.30	1		08/24/18 12:44	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.25	1		08/24/18 12:44	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.21	1		08/24/18 12:44	108-67-8	
Xylene (Total)	ND	ug/L	3.0	0.78	1		08/24/18 12:44	1330-20-7	
Surrogates									
Toluene-d8 (S)	98	%	80-120		1		08/24/18 12:44	2037-26-5	
4-Bromofluorobenzene (S)	102	%	79-129		1		08/24/18 12:44	460-00-4	
1,2-Dichloroethane-d4 (S)	92	%	80-120		1		08/24/18 12:44	17060-07-0	
Dibromofluoromethane (S)	96	%	80-120		1		08/24/18 12:44	1868-53-7	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Russell City Store
Pace Project No.: 30262701

QC Batch: 310818 Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B Analysis Description: 8260B MSV UST-WATER
Associated Lab Samples: 30262701001, 30262701002, 30262701003, 30262701004, 30262701005, 30262701006, 30262701007, 30262701008, 30262701009, 30262701010, 30262701011, 30262701012, 30262701013, 30262701014

METHOD BLANK: 1518428 Matrix: Water
Associated Lab Samples: 30262701001, 30262701002, 30262701003, 30262701004, 30262701005, 30262701006, 30262701007, 30262701008, 30262701009, 30262701010, 30262701011, 30262701012, 30262701013, 30262701014

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/L	ND	1.0	0.25	08/24/18 12:19	
1,3,5-Trimethylbenzene	ug/L	ND	1.0	0.21	08/24/18 12:19	
Benzene	ug/L	ND	1.0	0.24	08/24/18 12:19	
Ethylbenzene	ug/L	ND	1.0	0.31	08/24/18 12:19	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	0.24	08/24/18 12:19	
Methyl-tert-butyl ether	ug/L	ND	1.0	0.23	08/24/18 12:19	
Naphthalene	ug/L	ND	2.0	0.82	08/24/18 12:19	
Toluene	ug/L	ND	1.0	0.30	08/24/18 12:19	
Xylene (Total)	ug/L	ND	3.0	0.78	08/24/18 12:19	
1,2-Dichloroethane-d4 (S)	%	92	80-120		08/24/18 12:19	
4-Bromofluorobenzene (S)	%	98	79-129		08/24/18 12:19	
Dibromofluoromethane (S)	%	97	80-120		08/24/18 12:19	
Toluene-d8 (S)	%	96	80-120		08/24/18 12:19	

LABORATORY CONTROL SAMPLE: 1518429

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/L	20	21.1	106	70-130	
1,3,5-Trimethylbenzene	ug/L	20	20.4	102	70-130	
Benzene	ug/L	20	16.1	80	70-130	
Ethylbenzene	ug/L	20	20.8	104	70-130	
Isopropylbenzene (Cumene)	ug/L	20	20.9	105	70-130	
Methyl-tert-butyl ether	ug/L	20	20.6	103	70-130	
Naphthalene	ug/L	20	22.9	114	70-130	
Toluene	ug/L	20	17.7	89	70-130	
Xylene (Total)	ug/L	60	62.9	105	70-130	
1,2-Dichloroethane-d4 (S)	%			88	80-120	
4-Bromofluorobenzene (S)	%			99	79-129	
Dibromofluoromethane (S)	%			95	80-120	
Toluene-d8 (S)	%			101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1518430 1518431

Parameter	Units	30262701001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
1,2,4-Trimethylbenzene	ug/L	ND	20	20	18.2	17.8	91	89	75-125	3	30
1,3,5-Trimethylbenzene	ug/L	ND	20	20	17.7	17.0	89	85	76-121	4	30

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REPORT OF LABORATORY ANALYSIS

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Page 20 of 26

8/19/2019 2:18:31 PM

QUALITY CONTROL DATA

Project: Russell City Store
Pace Project No.: 30262701

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1518430 1518431												
Parameter	Units	30262701001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Max RPD	Qual
Benzene	ug/L	ND	20	20	14.4	13.7	72	69	67-121	4	30	
Ethylbenzene	ug/L	ND	20	20	17.8	17.2	89	86	70-127	4	30	
Isopropylbenzene (Cumene)	ug/L	ND	20	20	18.6	18.0	93	90	80-122	3	30	
Methyl-tert-butyl ether	ug/L	ND	20	20	16.0	16.8	80	84	79-135	5	30	
Naphthalene	ug/L	ND	20	20	18.7	18.0	94	90	62-131	4	30	
Toluene	ug/L	ND	20	20	15.5	15.2	77	76	77-125	2	30	ML
Xylene (Total)	ug/L	ND	60	60	54.7	53.4	91	89	69-128	2	30	
1,2-Dichloroethane-d4 (S)	%						88	86	80-120			
4-Bromofluorobenzene (S)	%						99	100	79-129			
Dibromofluoromethane (S)	%						95	97	80-120			
Toluene-d8 (S)	%						96	100	80-120			

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: Russell City Store
Pace Project No.: 30262701

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

ML Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

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Date: 08/28/2018 03:02 PM

Page 22 of 26

8/19/2019 2:18:32 PM

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Russell City Store

Pace Project No.: 30262701

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30262701001	MW1	EPA 8260B	310818		
30262701002	MW2	EPA 8260B	310818		
30262701003	MW3	EPA 8260B	310818		
30262701004	MW4	EPA 8260B	310818		
30262701005	MW5	EPA 8260B	310818		
30262701006	MW6	EPA 8260B	310818		
30262701007	MW7	EPA 8260B	310818		
30262701008	MW9	EPA 8260B	310818		
30262701009	MW10	EPA 8260B	310818		
30262701010	MW11	EPA 8260B	310818		
30262701011	MW12	EPA 8260B	310818		
30262701012	MW13	EPA 8260B	310818		
30262701013	MW14	EPA 8260B	310818		
30262701014	Trip Blank	EPA 8260B	310818		

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The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company: <u>ELL</u>		Report To:		Attention:	
Address: <u>4250 RT 6N</u>		Copy To:		Company Name:	
Phone: <u>916-412-1141</u>		Purchase Order No.: <u>2014.74</u>		Address:	
Fax:		Project Name: <u>Contry Russell city store</u>		Price Quote Reference:	
Requested Due Date/TAT: <u>std</u>		Project Number: <u>2014.74</u>		Price Project Manager:	
				Price Profile #:	
Page: <u>1</u> of <u>2</u>		REGULATORY AGENCY		☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER ☒ UST ☐ RCRA ☐ OTHER	
2118012		Site Location		STATE: <u>PA</u>	

[illegible]

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	Temp In °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	<i>[Signature]</i>	8/17/18	2:00	Alyssa B. Muchoney	8/18/18	10:30	13	Y	N	Y
				<i>[Signature]</i>						

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: *Mick Gessler*

SIGNATURE of SAMPLER: *[Signature]*

DATE Signed (MM/DD/YYYY): 8/17/18

Page 25 of 2

F-ALL-Q-020rev.07, 15-May-2007

Pittsburgh Lab Sample Condition Upon Receipt

Face Analytical

Client Name:

ER+R

Project #

30262701

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other

Tracking #: 773003017904

Label	AKM
LIMS Login	JHL

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals Intact: ☐ yes ☒ no

Thermometer Used 10 Type of Ice: Wet Blue None

Cooler Temperature Observed Temp 1.2 °C Correction Factor: 10.1 °C Final Temp: 1.3 °C

Temp should be above freezing to 6°C

Comments:	Yes	No	N/A	pH paper Lot#	Date and Initials of person examining contents:
Chain of Custody Present:	/			N/A	AKM 8/18/18
Chain of Custody Filled Out:	/				
Chain of Custody Relinquished:	/				
Sampler Name & Signature on COC:	/				
Sample Labels match COC:	/				
-Includes date/time/ID Matrix: WT					
Samples Arrived within Hold Time:	/				
Short Hold Time Analysis (<72hr remaining):		/			
Rush Turn Around Time Requested:	/				
Sufficient Volume:	/				
Correct Containers Used:	/				
-Pace Containers Used:	/				
Containers Intact:	/				
Orthophosphate field filtered			/		
Hex Cr Aqueous Compliance/NPDES sample field filtered			/		
Organic Samples checked for dechlorination:			/		
Filtered volume received for Dissolved tests			/		
All containers have been checked for preservation.			/		
All containers needing preservation are found to be in compliance with EPA recommendation.			/		
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed: AKM	Date/time of preservation:
				Lot # of added preservative:	
Headspace in VOA Vials (>6mm):	/				
Trip Blank Present:	/				
Trip Blank Custody Seals Present	/				
Rad Aqueous Samples Screened > 0.5 mrem/hr	/			Initial when completed:	Date:

Client Notification/ Resolution:

Person Contacted: Date/Time: Contacted By:

Comments/ Resolution:

☐ A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

J:\QAQC\Master\Document Management\Sample Mgt\Sample Condition Upon Receipt Pittsburgh (C056-7 18Feb2018)

September 12, 2018

Mr. Dave Birchard
Environmental Remediation & Recovery, Inc.
4250 Route 6N
Edinboro, PA 16412

RE: Project: 2014.74 Russell City Store
Pace Project No.: 30263893

Dear Mr. Birchard:

Enclosed are the analytical results for sample(s) received by the laboratory on August 31, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Samantha Bayura
samantha.bayura@pacelabs.com
(724)850-5622
Project Manager

Enclosures

cc: Karann Holman, Environmental Remediation & Recovery,
Inc.



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: 2014.74 Russell City Store
Pace Project No.: 30263893

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991

Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: 2014.74 Russell City Store
Pace Project No.: 30263893

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30263893001	MW 8	Water	08/29/18 13:15	08/31/18 10:00

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SAMPLE ANALYTE COUNT

Project: 2014.74 Russell City Store
Pace Project No.: 30263893

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30263893001	MW 8	EPA 8260B	JAS	13

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 2014.74 Russell City Store

Pace Project No.: 30263893

Sample: MW 8 Lab ID: 30263893001 Collected: 08/29/18 13:15 Received: 08/31/18 10:00 Matrix: Water

Comments: • Samples in this workorder were received in the laboratory without an associated trip blank.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV	Analytical Method: EPA 8260B								
Benzene	ND	ug/L	1.0	0.24	1		09/10/18 18:50	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.31	1		09/10/18 18:50	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.24	1		09/10/18 18:50	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		09/10/18 18:50	1634-04-4	
Naphthalene	ND	ug/L	2.0	0.82	1		09/10/18 18:50	91-20-3	
Toluene	ND	ug/L	1.0	0.30	1		09/10/18 18:50	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.25	1		09/10/18 18:50	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.21	1		09/10/18 18:50	108-67-8	
Xylene (Total)	ND	ug/L	3.0	0.78	1		09/10/18 18:50	1330-20-7	
Surrogates									
Toluene-d8 (S)	92	%	80-120		1		09/10/18 18:50	2037-26-5	
4-Bromofluorobenzene (S)	103	%	79-129		1		09/10/18 18:50	460-00-4	
1,2-Dichloroethane-d4 (S)	113	%	80-120		1		09/10/18 18:50	17060-07-0	
Dibromofluoromethane (S)	105	%	80-120		1		09/10/18 18:50	1868-53-7	

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QUALITY CONTROL DATA

Project: 2014.74 Russell City Store
Pace Project No.: 30263893

QC Batch: 312356 Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B Analysis Description: 8260B MSV UST-WATER
Associated Lab Samples: 30263893001

METHOD BLANK: 1525379 Matrix: Water
Associated Lab Samples: 30263893001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/L	ND	1.0	0.25	09/10/18 12:32	
1,3,5-Trimethylbenzene	ug/L	ND	1.0	0.21	09/10/18 12:32	
Benzene	ug/L	ND	1.0	0.24	09/10/18 12:32	
Ethylbenzene	ug/L	ND	1.0	0.31	09/10/18 12:32	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	0.24	09/10/18 12:32	
Methyl-tert-butyl ether	ug/L	ND	1.0	0.23	09/10/18 12:32	
Naphthalene	ug/L	ND	2.0	0.82	09/10/18 12:32	
Toluene	ug/L	ND	1.0	0.30	09/10/18 12:32	
Xylene (Total)	ug/L	ND	3.0	0.78	09/10/18 12:32	
1,2-Dichloroethane-d4 (S)	%	100	80-120		09/10/18 12:32	
4-Bromofluorobenzene (S)	%	98	79-129		09/10/18 12:32	
Dibromofluoromethane (S)	%	96	80-120		09/10/18 12:32	
Toluene-d8 (S)	%	99	80-120		09/10/18 12:32	

LABORATORY CONTROL SAMPLE: 1525380

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/L	20	20.6	103	70-130	
1,3,5-Trimethylbenzene	ug/L	20	20.3	102	70-130	
Benzene	ug/L	20	21.7	108	70-130	
Ethylbenzene	ug/L	20	21.7	109	70-130	
Isopropylbenzene (Cumene)	ug/L	20	20.6	103	70-130	
Methyl-tert-butyl ether	ug/L	20	19.1	96	70-130	
Naphthalene	ug/L	20	19.9	99	70-130	
Toluene	ug/L	20	20.6	103	70-130	
Xylene (Total)	ug/L	60	63.8	106	70-130	
1,2-Dichloroethane-d4 (S)	%			105	80-120	
4-Bromofluorobenzene (S)	%			100	79-129	
Dibromofluoromethane (S)	%			101	80-120	
Toluene-d8 (S)	%			101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1525606 1525607

Parameter	Units	30263846001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
1,2,4-Trimethylbenzene	ug/L	ND	20	20	19.4	19.0	97	95	75-125	2	30
1,3,5-Trimethylbenzene	ug/L	ND	20	20	20.3	18.8	101	94	76-121	8	30
Benzene	ug/L	ND	20	20	21.6	21.0	108	105	67-121	3	30

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REPORT OF LABORATORY ANALYSIS

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Page 6 of 11

8/19/2019 2:18:37 PM

QUALITY CONTROL DATA

Project: 2014.74 Russell City Store
Pace Project No.: 30263893

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1525606 1525607												
Parameter	Units	30263846001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
Ethylbenzene	ug/L	ND	20	20	20.3	20.5	101	103	70-127	1	30	
Isopropylbenzene (Cumene)	ug/L	ND	20	20	19.9	19.2	100	96	80-122	4	30	
Methyl-tert-butyl ether	ug/L	ND	20	20	20.4	19.7	100	97	79-135	4	30	
Naphthalene	ug/L	ND	20	20	17.2	16.8	86	84	62-131	2	30	
Toluene	ug/L	ND	20	20	20.7	20.3	104	102	77-125	2	30	
Xylene (Total)	ug/L	ND	60	60	60.1	60.0	100	100	69-128	0	30	
1,2-Dichloroethane-d4 (S)	%						115	117	80-120			
4-Bromofluorobenzene (S)	%						100	92	79-129			
Dibromofluoromethane (S)	%						104	107	80-120			
Toluene-d8 (S)	%						97	95	80-120			

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REPORT OF LABORATORY ANALYSIS

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Date: 09/12/2018 07:40 AM

Page 7 of 11

8/19/2019 2:18:37 PM

QUALIFIERS

Project: 2014.74 Russell City Store
Pace Project No.: 30263893

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

REPORT OF LABORATORY ANALYSIS

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Date: 09/12/2018 07:40 AM

Page 8 of 11

8/19/2019 2:18:38 PM

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 2014.74 Russell City Store

Pace Project No.: 30263893

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30263893001	MW 8	EPA 8260B	312356		

REPORT OF LABORATORY ANALYSIS

Date: 09/12/2018 07:40 AM

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Page 9 of 11

8/19/2019 2:18:39 PM



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30263893

IN-OF-CUSTODY / Analytical Request Document

In-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

 30263893		Section C Invoice Information:	
Section A Required Client Information:		Section B Required Project Information:	
Company:	ELR	Report To:	D. Birchard
Address:	4250 RT	Copy To:	
	Elkhart PA 16412		
Email To:	D. Birchard	Purchase Order No.:	2014.74
Phone:		Project Name:	Russell City Store
Fax:		Project Number:	2014.74
Requested Due Date/TAT:		5/4	
Attention: <u>Tania Klemm</u> Company Name: <u>ELR</u> Address: <u>4250 RT WY</u> Pace Quote Reference: Pace Project Manager: Pace Profile #:		REGULATORY AGENCY ☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER ☒ UST ☐ RCRA ☐ OTHER Site Location: <u>PA</u> STATE:	
Page: <u>1</u> of <u>1</u> 2263857			

[illegible]

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER:

DATE Signed

QUESTION

Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Pittsburgh Lab Sample Condition Upon Receipt

Face Analytical

Client Name:

CRIR

Project #

30263893

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other

Tracking #: 773099704689

Label	MJS
LIMS Login	JS

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Thermometer Used 7 Type of Ice: ☒ Blue ☐ None

Cooler Temperature Observed Temp 5.8 °C Correction Factor: -0.1 °C Final Temp: 5.7 °C

Temp should be above freezing to 6°C

pH paper Lot#	N/A	Date and Initials of person examining contents:	MJS 8/31/19
---------------	-----	---	-------------

Comments:	Yes	No	N/A	
Chain of Custody Present:	/			1.
Chain of Custody Filled Out:	/			2.
Chain of Custody Relinquished:	/			3.
Sampler Name & Signature on COC:	/			4.
Sample Labels match COC:	/			5.
-Includes date/time/ID Matrix: W				
Samples Arrived within Hold Time:	/			6.
Short Hold Time Analysis (<72hr remaining):		/		7.
Rush Turn Around Time Requested:		/		8.
Sufficient Volume:	/			9.
Correct Containers Used:	/			10.
-Pace Containers Used:	/			
Containers Intact:	/			11.
Orthophosphate field filtered			/	12.
Hex Cr Aqueous Compliance/NPDES sample field filtered			/	13.
Organic Samples checked for dechlorination:			/	14.
Filtered volume received for Dissolved tests			/	15.
All containers have been checked for preservation.			/	16.
All containers needing preservation are found to be in compliance with EPA recommendation.			/	
exceptions: VOA coliform, TOC, O&G, Phenolics				
				Initial when completed MJS Date/time of preservation
				Lot # of added preservative
Headspace in VOA Vials (>6mm):		/		17.
Trip Blank Present:			/	18.
Trip Blank Custody Seals Present			/	
Rad Aqueous Samples Screened > 0.5 mrem/hr			/	Initial when completed Date:

Client Notification/ Resolution:

Person Contacted: Date/Time: Contacted By:

Comments/ Resolution:

☐ A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

October 19, 2018

Mr. Dave Birchard
Environmental Remediation & Recovery, Inc.
4250 Route 6N
Edinboro, PA 16412

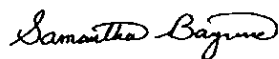
RE: Project: Russell City Store
Pace Project No.: 30268536

Dear Mr. Birchard:

Enclosed are the analytical results for sample(s) received by the laboratory on October 17, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Samantha Bayura
samantha.bayura@pacelabs.com
(724)850-5622
Project Manager

Enclosures

cc: Karann Holman, Environmental Remediation & Recovery,
Inc.



REPORT OF LABORATORY ANALYSIS

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Page 1 of 26

8/19/2019 2:18:41 PM

CERTIFICATIONS

Project: Russell City Store
Pace Project No.: 30268536

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417

Alabama Certification #: 41590

Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification #: PA01547

Connecticut Certification #: PH-0694

Delaware Certification

EPA Region 4 DW Rad

Florida/TNI Certification #: E87683

Georgia Certification #: C040

Guam Certification

Hawaii Certification

Idaho Certification

Illinois Certification

Indiana Certification

Iowa Certification #: 391

Kansas/TNI Certification #: E-10358

Kentucky Certification #: KY90133

KY WW Permit #: KY0098221

KY WW Permit #: KY0000221

Louisiana DHH/TNI Certification #: LA180012

Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: 2017020

Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification #: 9991

Missouri Certification #: 235

Montana Certification #: Cert0082

Nebraska Certification #: NE-OS-29-14

Nevada Certification #: PA014572018-1

New Hampshire/TNI Certification #: 297617

New Jersey/TNI Certification #: PA051

New Mexico Certification #: PA01457

New York/TNI Certification #: 10888

North Carolina Certification #: 42706

North Dakota Certification #: R-190

Ohio EPA Rad Approval: #41249

Oregon/TNI Certification #: PA200002-010

Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457

Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: 02867

Texas/TNI Certification #: T104704188-17-3

Utah/TNI Certification #: PA014572017-9

USDA Soil Permit #: P330-17-00091

Vermont Dept. of Health: ID# VT-0282

Virgin Island/PADEP Certification

Virginia/VELAP Certification #: 9526

Washington Certification #: C868

West Virginia DEP Certification #: 143

West Virginia DHHR Certification #: 9964C

Wisconsin Approve List for Rad

Wyoming Certification #: 8TMS-L

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SAMPLE SUMMARY

Project: Russell City Store
Pace Project No.: 30268536

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30268536001	MW1	Water	10/12/18 11:50	10/17/18 10:00
30268536002	MW2	Water	10/12/18 12:25	10/17/18 10:00
30268536003	MW3	Water	10/12/18 11:30	10/17/18 10:00
30268536004	MW4	Water	10/12/18 12:40	10/17/18 10:00
30268536005	MW5	Water	10/12/18 12:45	10/17/18 10:00
30268536006	MW6	Water	10/12/18 12:35	10/17/18 10:00
30268536007	MW7	Water	10/12/18 12:10	10/17/18 10:00
30268536008	MW8	Water	10/12/18 12:20	10/17/18 10:00
30268536009	MW9	Water	10/12/18 12:00	10/17/18 10:00
30268536010	MW10	Water	10/12/18 10:45	10/17/18 10:00
30268536011	MW11	Water	10/12/18 12:15	10/17/18 10:00
30268536012	MW12	Water	10/12/18 11:50	10/17/18 10:00
30268536013	MW13	Water	10/12/18 11:40	10/17/18 10:00
30268536014	MW14	Water	10/12/18 12:00	10/17/18 10:00
30268536015	Trip Blank	Water	10/12/18 00:00	10/17/18 10:00

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SAMPLE ANALYTE COUNT

Project: Russell City Store
Pace Project No.: 30268536

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30268536001	MW1	EPA 8260B	MAK	13
30268536002	MW2	EPA 8260B	MAK	13
30268536003	MW3	EPA 8260B	MAK	13
30268536004	MW4	EPA 8260B	MAK	13
30268536005	MW5	EPA 8260B	MAK	13
30268536006	MW6	EPA 8260B	MAK	13
30268536007	MW7	EPA 8260B	MAK	13
30268536008	MW8	EPA 8260B	MAK	13
30268536009	MW9	EPA 8260B	MAK	13
30268536010	MW10	EPA 8260B	MAK	13
30268536011	MW11	EPA 8260B	MAK	13
30268536012	MW12	EPA 8260B	MAK	13
30268536013	MW13	EPA 8260B	MAK	13
30268536014	MW14	EPA 8260B	MAK	13
30268536015	Trip Blank	EPA 8260B	MAK	13

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Russell City Store
Pace Project No.: 30268536

Sample: MW1 Lab ID: 30268536001 Collected: 10/12/18 11:50 Received: 10/17/18 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV Analytical Method: EPA 8260B									
Benzene	ND	ug/L	1.0	0.24	1		10/18/18 22:22	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.31	1		10/18/18 22:22	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.24	1		10/18/18 22:22	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		10/18/18 22:22	1634-04-4	
Naphthalene	ND	ug/L	2.0	0.82	1		10/18/18 22:22	91-20-3	
Toluene	ND	ug/L	1.0	0.30	1		10/18/18 22:22	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.25	1		10/18/18 22:22	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.21	1		10/18/18 22:22	108-67-8	
Xylene (Total)	ND	ug/L	3.0	0.78	1		10/18/18 22:22	1330-20-7	
Surrogates									
Toluene-d8 (S)	94	%	80-120		1		10/18/18 22:22	2037-26-5	
4-Bromofluorobenzene (S)	100	%	79-129		1		10/18/18 22:22	460-00-4	
1,2-Dichloroethane-d4 (S)	107	%	80-120		1		10/18/18 22:22	17060-07-0	
Dibromofluoromethane (S)	103	%	80-120		1		10/18/18 22:22	1868-53-7	

REPORT OF LABORATORY ANALYSIS

Date: 10/19/2018 04:29 PM

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Page 5 of 26

8/19/2019 2:18:43 PM

ANALYTICAL RESULTS

Project: Russell City Store
Pace Project No.: 30268536

Sample: MW2		Lab ID: 30268536002		Collected: 10/12/18 12:25		Received: 10/17/18 10:00		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV		Analytical Method: EPA 8260B							
Benzene	1.2	ug/L	1.0	0.24	1		10/18/18 22:46	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.31	1		10/18/18 22:46	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.24	1		10/18/18 22:46	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		10/18/18 22:46	1634-04-4	
Naphthalene	ND	ug/L	2.0	0.82	1		10/18/18 22:46	91-20-3	
Toluene	ND	ug/L	1.0	0.30	1		10/18/18 22:46	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.25	1		10/18/18 22:46	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.21	1		10/18/18 22:46	108-67-8	
Xylene (Total)	ND	ug/L	3.0	0.78	1		10/18/18 22:46	1330-20-7	
Surrogates									
Toluene-d8 (S)	93	%	80-120		1		10/18/18 22:46	2037-26-5	
4-Bromofluorobenzene (S)	98	%	79-129		1		10/18/18 22:46	460-00-4	
1,2-Dichloroethane-d4 (S)	107	%	80-120		1		10/18/18 22:46	17060-07-0	
Dibromofluoromethane (S)	101	%	80-120		1		10/18/18 22:46	1868-53-7	

REPORT OF LABORATORY ANALYSIS

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Date: 10/19/2018 04:29 PM

Page 6 of 26

8/19/2019 2:18:43 PM

ANALYTICAL RESULTS

Project: Russell City Store
Pace Project No.: 30268536

Sample: MW3		Lab ID: 30268536003		Collected: 10/12/18 11:30		Received: 10/17/18 10:00		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV									
Analytical Method: EPA 8260B									
Benzene	107	ug/L	1.0	0.24	1		10/18/18 23:11	71-43-2	
Ethylbenzene	2.9	ug/L	1.0	0.31	1		10/18/18 23:11	100-41-4	
Isopropylbenzene (Cumene)	12.2	ug/L	1.0	0.24	1		10/18/18 23:11	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		10/18/18 23:11	1634-04-4	
Naphthalene	3.1	ug/L	2.0	0.82	1		10/18/18 23:11	91-20-3	
Toluene	ND	ug/L	1.0	0.30	1		10/18/18 23:11	108-88-3	
1,2,4-Trimethylbenzene	39.2	ug/L	1.0	0.25	1		10/18/18 23:11	95-63-6	
1,3,5-Trimethylbenzene	10.3	ug/L	1.0	0.21	1		10/18/18 23:11	108-67-8	
Xylene (Total)	ND	ug/L	3.0	0.78	1		10/18/18 23:11	1330-20-7	
Surrogates									
Toluene-d8 (S)	95	%.	80-120		1		10/18/18 23:11	2037-26-5	
4-Bromofluorobenzene (S)	98	%.	79-129		1		10/18/18 23:11	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%.	80-120		1		10/18/18 23:11	17060-07-0	
Dibromofluoromethane (S)	94	%.	80-120		1		10/18/18 23:11	1868-53-7	

REPORT OF LABORATORY ANALYSIS

Date: 10/19/2018 04:29 PM

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Page 7 of 26

8/19/2019 2:18:44 PM

ANALYTICAL RESULTS

Project: Russell City Store
Pace Project No.: 30268536

Sample: MW4		Lab ID: 30268536004		Collected: 10/12/18 12:40		Received: 10/17/18 10:00		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV									
Analytical Method: EPA 8260B									
Benzene	364	ug/L	20.0	4.8	20		10/19/18 00:00	71-43-2	
Ethylbenzene	1260	ug/L	20.0	6.2	20		10/19/18 00:00	100-41-4	
Isopropylbenzene (Cumene)	130	ug/L	1.0	0.24	1		10/18/18 23:35	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		10/18/18 23:35	1634-04-4	
Naphthalene	312	ug/L	2.0	0.82	1		10/18/18 23:35	91-20-3	
Toluene	228	ug/L	1.0	0.30	1		10/18/18 23:35	108-88-3	
1,2,4-Trimethylbenzene	2390	ug/L	20.0	5.0	20		10/19/18 00:00	95-63-6	
1,3,5-Trimethylbenzene	651	ug/L	20.0	4.2	20		10/19/18 00:00	108-67-8	
Xylene (Total)	2640	ug/L	60.0	15.6	20		10/19/18 00:00	1330-20-7	
Surrogates									
Toluene-d8 (S)	102	%	80-120		1		10/18/18 23:35	2037-26-5	
4-Bromofluorobenzene (S)	100	%	79-129		1		10/18/18 23:35	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	80-120		1		10/18/18 23:35	17060-07-0	
Dibromofluoromethane (S)	92	%	80-120		1		10/18/18 23:35	1868-53-7	

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Date: 10/19/2018 04:29 PM

Page 8 of 26

8/19/2019 2:18:44 PM

ANALYTICAL RESULTS

Project: Russell City Store
Pace Project No.: 30268536

Sample: MW5 Lab ID: 30268536005 Collected: 10/12/18 12:45 Received: 10/17/18 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV									
Analytical Method: EPA 8260B									
Benzene	ND	ug/L	1.0	0.24	1		10/19/18 00:24	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.31	1		10/19/18 00:24	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.24	1		10/19/18 00:24	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		10/19/18 00:24	1634-04-4	
Naphthalene	ND	ug/L	2.0	0.82	1		10/19/18 00:24	91-20-3	
Toluene	ND	ug/L	1.0	0.30	1		10/19/18 00:24	108-88-3	
1,2,4-Trimethylbenzene	2.4	ug/L	1.0	0.25	1		10/19/18 00:24	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.21	1		10/19/18 00:24	108-67-8	
Xylene (Total)	ND	ug/L	3.0	0.78	1		10/19/18 00:24	1330-20-7	
Surrogates									
Toluene-d8 (S)	93	%	80-120		1		10/19/18 00:24	2037-26-5	
4-Bromofluorobenzene (S)	99	%	79-129		1		10/19/18 00:24	460-00-4	
1,2-Dichloroethane-d4 (S)	107	%	80-120		1		10/19/18 00:24	17060-07-0	
Dibromofluoromethane (S)	105	%	80-120		1		10/19/18 00:24	1868-53-7	

REPORT OF LABORATORY ANALYSIS

Date: 10/19/2018 04:29 PM

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Page 9 of 26

8/19/2019 2:18:45 PM

ANALYTICAL RESULTS

Project: Russell City Store
Pace Project No.: 30268536

Sample: MW6 Lab ID: 30268536006 Collected: 10/12/18 12:35 Received: 10/17/18 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV Analytical Method: EPA 8260B									
Benzene	187	ug/L	1.0	0.24	1		10/19/18 00:48	71-43-2	
Ethylbenzene	35.5	ug/L	1.0	0.31	1		10/19/18 00:48	100-41-4	
Isopropylbenzene (Cumene)	5.7	ug/L	1.0	0.24	1		10/19/18 00:48	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		10/19/18 00:48	1634-04-4	
Naphthalene	2.6	ug/L	2.0	0.82	1		10/19/18 00:48	91-20-3	
Toluene	1.0	ug/L	1.0	0.30	1		10/19/18 00:48	108-88-3	
1,2,4-Trimethylbenzene	15.9	ug/L	1.0	0.25	1		10/19/18 00:48	95-63-6	
1,3,5-Trimethylbenzene	13.1	ug/L	1.0	0.21	1		10/19/18 00:48	108-67-8	
Xylene (Total)	16.9	ug/L	3.0	0.78	1		10/19/18 00:48	1330-20-7	
Surrogates									
Toluene-d8 (S)	95	%	80-120		1		10/19/18 00:48	2037-26-5	
4-Bromofluorobenzene (S)	99	%	79-129		1		10/19/18 00:48	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		10/19/18 00:48	17060-07-0	
Dibromofluoromethane (S)	98	%	80-120		1		10/19/18 00:48	1868-53-7	

REPORT OF LABORATORY ANALYSIS

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Date: 10/19/2018 04:29 PM

Page 10 of 26

8/19/2019 2:18:45 PM

ANALYTICAL RESULTS

Project: Russell City Store
Pace Project No.: 30268536

Sample: MW7		Lab ID: 30268536007		Collected: 10/12/18 12:10		Received: 10/17/18 10:00		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV									
Analytical Method: EPA 8260B									
Benzene	100	ug/L	1.0	0.24	1		10/19/18 01:13	71-43-2	
Ethylbenzene	292	ug/L	1.0	0.31	1		10/19/18 01:13	100-41-4	
Isopropylbenzene (Cumene)	51.7	ug/L	1.0	0.24	1		10/19/18 01:13	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		10/19/18 01:13	1634-04-4	
Naphthalene	82.1	ug/L	2.0	0.82	1		10/19/18 01:13	91-20-3	
Toluene	61.4	ug/L	1.0	0.30	1		10/19/18 01:13	108-88-3	
1,2,4-Trimethylbenzene	343	ug/L	1.0	0.25	1		10/19/18 01:13	95-63-6	
1,3,5-Trimethylbenzene	143	ug/L	1.0	0.21	1		10/19/18 01:13	108-67-8	
Xylene (Total)	192	ug/L	3.0	0.78	1		10/19/18 01:13	1330-20-7	
Surrogates									
Toluene-d8 (S)	101	%	80-120		1		10/19/18 01:13	2037-26-5	
4-Bromofluorobenzene (S)	100	%	79-129		1		10/19/18 01:13	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	80-120		1		10/19/18 01:13	17060-07-0	
Dibromofluoromethane (S)	87	%	80-120		1		10/19/18 01:13	1868-53-7	

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ANALYTICAL RESULTS

Project: Russell City Store
Pace Project No.: 30268536

Sample: MW8 Lab ID: 30268536008 Collected: 10/12/18 12:20 Received: 10/17/18 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV Analytical Method: EPA 8260B									
Benzene	ND	ug/L	1.0	0.24	1		10/19/18 02:02	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.31	1		10/19/18 02:02	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.24	1		10/19/18 02:02	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		10/19/18 02:02	1634-04-4	
Naphthalene	ND	ug/L	2.0	0.82	1		10/19/18 02:02	91-20-3	
Toluene	ND	ug/L	1.0	0.30	1		10/19/18 02:02	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.25	1		10/19/18 02:02	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.21	1		10/19/18 02:02	108-67-8	
Xylene (Total)	ND	ug/L	3.0	0.78	1		10/19/18 02:02	1330-20-7	
Surrogates									
Toluene-d8 (S)	93	%	80-120		1		10/19/18 02:02	2037-26-5	
4-Bromofluorobenzene (S)	96	%	79-129		1		10/19/18 02:02	460-00-4	
1,2-Dichloroethane-d4 (S)	110	%	80-120		1		10/19/18 02:02	17060-07-0	
Dibromofluoromethane (S)	104	%	80-120		1		10/19/18 02:02	1868-53-7	

REPORT OF LABORATORY ANALYSIS

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Date: 10/19/2018 04:29 PM

Page 12 of 26

8/19/2019 2:18:46 PM

ANALYTICAL RESULTS

Project: Russell City Store
Pace Project No.: 30268536

Sample: MW9		Lab ID: 30268536009		Collected: 10/12/18 12:00		Received: 10/17/18 10:00		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV									
Analytical Method: EPA 8260B									
Benzene	ND	ug/L	1.0	0.24	1		10/19/18 02:27	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.31	1		10/19/18 02:27	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.24	1		10/19/18 02:27	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		10/19/18 02:27	1634-04-4	
Naphthalene	ND	ug/L	2.0	0.82	1		10/19/18 02:27	91-20-3	
Toluene	ND	ug/L	1.0	0.30	1		10/19/18 02:27	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.25	1		10/19/18 02:27	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.21	1		10/19/18 02:27	108-67-8	
Xylene (Total)	ND	ug/L	3.0	0.78	1		10/19/18 02:27	1330-20-7	
Surrogates									
Toluene-d8 (S)	92	%	80-120		1		10/19/18 02:27	2037-26-5	
4-Bromofluorobenzene (S)	96	%	79-129		1		10/19/18 02:27	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	80-120		1		10/19/18 02:27	17060-07-0	
Dibromofluoromethane (S)	97	%	80-120		1		10/19/18 02:27	1868-53-7	

REPORT OF LABORATORY ANALYSIS

Date: 10/19/2018 04:29 PM

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Page 13 of 26

8/19/2019 2:32:43 PM

ANALYTICAL RESULTS

Project: Russell City Store

Pace Project No.: 30268536

Sample: MW10 Lab ID: 30268536010 Collected: 10/12/18 10:45 Received: 10/17/18 10:00 Matrix: Water

Comments: • Sample collection time on containers does not match COC.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV									
Analytical Method: EPA 8260B									
Benzene	ND	ug/L	1.0	0.24	1		10/19/18 02:51	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.31	1		10/19/18 02:51	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.24	1		10/19/18 02:51	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		10/19/18 02:51	1634-04-4	
Naphthalene	ND	ug/L	2.0	0.82	1		10/19/18 02:51	91-20-3	
Toluene	ND	ug/L	1.0	0.30	1		10/19/18 02:51	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.25	1		10/19/18 02:51	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.21	1		10/19/18 02:51	108-67-8	
Xylene (Total)	ND	ug/L	3.0	0.78	1		10/19/18 02:51	1330-20-7	
Surrogates									
Toluene-d8 (S)	93	%	80-120		1		10/19/18 02:51	2037-26-5	
4-Bromofluorobenzene (S)	97	%	79-129		1		10/19/18 02:51	460-00-4	
1,2-Dichloroethane-d4 (S)	108	%	80-120		1		10/19/18 02:51	17060-07-0	
Dibromofluoromethane (S)	99	%	80-120		1		10/19/18 02:51	1868-53-7	

REPORT OF LABORATORY ANALYSIS

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Date: 10/19/2018 04:29 PM

Page 14 of 26

8/19/2019 2:32:43 PM

ANALYTICAL RESULTS

Project: Russell City Store
Pace Project No.: 30268536

Sample: MW11		Lab ID: 30268536011		Collected: 10/12/18 12:15		Received: 10/17/18 10:00		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV									
Analytical Method: EPA 8260B									
Benzene	ND	ug/L	1.0	0.24	1		10/19/18 03:16	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.31	1		10/19/18 03:16	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.24	1		10/19/18 03:16	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		10/19/18 03:16	1634-04-4	
Naphthalene	ND	ug/L	2.0	0.82	1		10/19/18 03:16	91-20-3	
Toluene	ND	ug/L	1.0	0.30	1		10/19/18 03:16	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.25	1		10/19/18 03:16	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.21	1		10/19/18 03:16	108-67-8	
Xylene (Total)	ND	ug/L	3.0	0.78	1		10/19/18 03:16	1330-20-7	
Surrogates									
Toluene-d8 (S)	92	%	80-120		1		10/19/18 03:16	2037-26-5	
4-Bromofluorobenzene (S)	98	%	79-129		1		10/19/18 03:16	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	80-120		1		10/19/18 03:16	17060-07-0	
Dibromofluoromethane (S)	102	%	80-120		1		10/19/18 03:16	1868-53-7	

REPORT OF LABORATORY ANALYSIS

Date: 10/19/2018 04:29 PM

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Page 15 of 26

8/19/2019 2:32:44 PM

ANALYTICAL RESULTS

Project: Russell City Store
Pace Project No.: 30268536

Sample: MW12 Lab ID: 30268536012 Collected: 10/12/18 11:50 Received: 10/17/18 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV									
Analytical Method: EPA 8260B									
Benzene	ND	ug/L	1.0	0.24	1		10/19/18 03:40	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.31	1		10/19/18 03:40	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.24	1		10/19/18 03:40	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		10/19/18 03:40	1634-04-4	
Naphthalene	ND	ug/L	2.0	0.82	1		10/19/18 03:40	91-20-3	
Toluene	ND	ug/L	1.0	0.30	1		10/19/18 03:40	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.25	1		10/19/18 03:40	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.21	1		10/19/18 03:40	108-67-8	
Xylene (Total)	ND	ug/L	3.0	0.78	1		10/19/18 03:40	1330-20-7	
Surrogates									
Toluene-d8 (S)	92	%	80-120		1		10/19/18 03:40	2037-26-5	
4-Bromofluorobenzene (S)	99	%	79-129		1		10/19/18 03:40	460-00-4	
1,2-Dichloroethane-d4 (S)	111	%	80-120		1		10/19/18 03:40	17060-07-0	
Dibromofluoromethane (S)	104	%	80-120		1		10/19/18 03:40	1868-53-7	

REPORT OF LABORATORY ANALYSIS

Date: 10/19/2018 04:29 PM

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Page 16 of 26

8/19/2019 2:32:45 PM

ANALYTICAL RESULTS

Project: Russell City Store
Pace Project No.: 30268536

Sample: MW13		Lab ID: 30268536013		Collected: 10/12/18 11:40		Received: 10/17/18 10:00		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV									
Analytical Method: EPA 8260B									
Benzene	ND	ug/L	1.0	0.24	1		10/19/18 04:05	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.31	1		10/19/18 04:05	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.24	1		10/19/18 04:05	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		10/19/18 04:05	1634-04-4	
Naphthalene	ND	ug/L	2.0	0.82	1		10/19/18 04:05	91-20-3	
Toluene	ND	ug/L	1.0	0.30	1		10/19/18 04:05	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.25	1		10/19/18 04:05	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.21	1		10/19/18 04:05	108-67-8	
Xylene (Total)	ND	ug/L	3.0	0.78	1		10/19/18 04:05	1330-20-7	
Surrogates									
Toluene-d8 (S)	92	%	80-120		1		10/19/18 04:05	2037-26-5	
4-Bromofluorobenzene (S)	99	%	79-129		1		10/19/18 04:05	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	80-120		1		10/19/18 04:05	17060-07-0	
Dibromofluoromethane (S)	102	%	80-120		1		10/19/18 04:05	1868-53-7	

REPORT OF LABORATORY ANALYSIS

Date: 10/19/2018 04:29 PM

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Page 17 of 26

8/19/2019 2:32:45 PM

ANALYTICAL RESULTS

Project: Russell City Store
Pace Project No.: 30268536

Sample: MW14		Lab ID: 30268536014		Collected: 10/12/18 12:00		Received: 10/17/18 10:00		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV		Analytical Method: EPA 8260B							
Benzene	7.3	ug/L	1.0	0.24	1		10/19/18 04:29	71-43-2	
Ethylbenzene	3.3	ug/L	1.0	0.31	1		10/19/18 04:29	100-41-4	
Isopropylbenzene (Cumene)	6.1	ug/L	1.0	0.24	1		10/19/18 04:29	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		10/19/18 04:29	1634-04-4	
Naphthalene	ND	ug/L	2.0	0.82	1		10/19/18 04:29	91-20-3	
Toluene	ND	ug/L	1.0	0.30	1		10/19/18 04:29	108-88-3	
1,2,4-Trimethylbenzene	1.5	ug/L	1.0	0.25	1		10/19/18 04:29	95-63-6	
1,3,5-Trimethylbenzene	4.1	ug/L	1.0	0.21	1		10/19/18 04:29	108-67-8	
Xylene (Total)	ND	ug/L	3.0	0.78	1		10/19/18 04:29	1330-20-7	
Surrogates									
Toluene-d8 (S)	97	%.	80-120		1		10/19/18 04:29	2037-26-5	
4-Bromofluorobenzene (S)	98	%.	79-129		1		10/19/18 04:29	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%.	80-120		1		10/19/18 04:29	17060-07-0	
Dibromofluoromethane (S)	95	%.	80-120		1		10/19/18 04:29	1868-53-7	

REPORT OF LABORATORY ANALYSIS

Date: 10/19/2018 04:29 PM

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Page 18 of 26

8/19/2019 2:32:45 PM

ANALYTICAL RESULTS

Project: Russell City Store
Pace Project No.: 30268536

Sample: Trip Blank Lab ID: 30268536015 Collected: 10/12/18 00:00 Received: 10/17/18 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV									
Analytical Method: EPA 8260B									
Benzene	ND	ug/L	1.0	0.24	1		10/19/18 04:54	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.31	1		10/19/18 04:54	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.24	1		10/19/18 04:54	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		10/19/18 04:54	1634-04-4	
Naphthalene	ND	ug/L	2.0	0.82	1		10/19/18 04:54	91-20-3	
Toluene	ND	ug/L	1.0	0.30	1		10/19/18 04:54	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.25	1		10/19/18 04:54	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.21	1		10/19/18 04:54	108-67-8	
Xylene (Total)	ND	ug/L	3.0	0.78	1		10/19/18 04:54	1330-20-7	
Surrogates									
Toluene-d8 (S)	91	%	80-120		1		10/19/18 04:54	2037-26-5	
4-Bromofluorobenzene (S)	97	%	79-129		1		10/19/18 04:54	460-00-4	
1,2-Dichloroethane-d4 (S)	107	%	80-120		1		10/19/18 04:54	17060-07-0	
Dibromofluoromethane (S)	105	%	80-120		1		10/19/18 04:54	1868-53-7	

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QUALITY CONTROL DATA

Project: Russell City Store
Pace Project No.: 30268536

QC Batch: 317242 Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B Analysis Description: 8260B MSV UST-WATER
Associated Lab Samples: 30268536001, 30268536002, 30268536003, 30268536004, 30268536005, 30268536006, 30268536007, 30268536008, 30268536009, 30268536010, 30268536011, 30268536012, 30268536013, 30268536014, 30268536015

METHOD BLANK: 1547686 Matrix: Water
Associated Lab Samples: 30268536001, 30268536002, 30268536003, 30268536004, 30268536005, 30268536006, 30268536007, 30268536008, 30268536009, 30268536010, 30268536011, 30268536012, 30268536013, 30268536014, 30268536015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/L	ND	1.0	0.25	10/18/18 21:58	
1,3,5-Trimethylbenzene	ug/L	ND	1.0	0.21	10/18/18 21:58	
Benzene	ug/L	ND	1.0	0.24	10/18/18 21:58	
Ethylbenzene	ug/L	ND	1.0	0.31	10/18/18 21:58	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	0.24	10/18/18 21:58	
Methyl-tert-butyl ether	ug/L	ND	1.0	0.23	10/18/18 21:58	
Naphthalene	ug/L	ND	2.0	0.82	10/18/18 21:58	
Toluene	ug/L	ND	1.0	0.30	10/18/18 21:58	
Xylene (Total)	ug/L	ND	3.0	0.78	10/18/18 21:58	
1,2-Dichloroethane-d4 (S)	%	111	80-120		10/18/18 21:58	
4-Bromofluorobenzene (S)	%	100	79-129		10/18/18 21:58	
Dibromofluoromethane (S)	%	106	80-120		10/18/18 21:58	
Toluene-d8 (S)	%	92	80-120		10/18/18 21:58	

LABORATORY CONTROL SAMPLE: 1547687

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/L	20	18.5	93	70-130	
1,3,5-Trimethylbenzene	ug/L	20	18.4	92	70-130	
Benzene	ug/L	20	19.3	96	70-130	
Ethylbenzene	ug/L	20	18.6	93	70-130	
Isopropylbenzene (Cumene)	ug/L	20	18.7	93	70-130	
Methyl-tert-butyl ether	ug/L	20	17.3	86	70-130	
Naphthalene	ug/L	20	19.3	96	70-130	
Toluene	ug/L	20	18.5	92	70-130	
Xylene (Total)	ug/L	60	57.3	96	70-130	
1,2-Dichloroethane-d4 (S)	%			99	80-120	
4-Bromofluorobenzene (S)	%			99	79-129	
Dibromofluoromethane (S)	%			95	80-120	
Toluene-d8 (S)	%			96	80-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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Date: 10/19/2018 04:29 PM

Page 20 of 26

8/19/2019 2:32:47 PM

QUALITY CONTROL DATA

Project: Russell City Store
Pace Project No.: 30268536

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1547997 1547998												
Parameter	Units	30268458001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Max RPD	Qual
1,2,4-Trimethylbenzene	ug/L	ND	20	20	20.2	19.3	101	97	75-125	4	30	
1,3,5-Trimethylbenzene	ug/L	ND	20	20	20.4	18.8	102	94	76-121	8	30	
Benzene	ug/L	ND	20	20	21.3	20.1	106	101	67-121	5	30	
Ethylbenzene	ug/L	ND	20	20	20.3	19.1	102	95	70-127	6	30	
Isopropylbenzene (Cumene)	ug/L	ND	20	20	20.7	19.6	104	98	80-122	6	30	
Methyl-tert-butyl ether	ug/L	ND	20	20	17.7	16.8	89	84	79-135	5	30	
Naphthalene	ug/L	ND	20	20	18.5	18.5	93	93	62-131	0	30	
Toluene	ug/L	ND	20	20	20.6	19.5	103	98	77-125	5	30	
Xylene (Total)	ug/L	ND	60	60	61.9	59.0	103	98	69-128	5	30	
1,2-Dichloroethane-d4 (S)	%						100	98	80-120			
4-Bromofluorobenzene (S)	%						98	99	79-129			
Dibromofluoromethane (S)	%						98	98	80-120			
Toluene-d8 (S)	%						95	96	80-120			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: Russell City Store
Pace Project No.: 30268536

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Russell City Store
Pace Project No.: 30268536

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30268536001	MW1	EPA 8260B	317242		
30268536002	MW2	EPA 8260B	317242		
30268536003	MW3	EPA 8260B	317242		
30268536004	MW4	EPA 8260B	317242		
30268536005	MW5	EPA 8260B	317242		
30268536006	MW6	EPA 8260B	317242		
30268536007	MW7	EPA 8260B	317242		
30268536008	MW8	EPA 8260B	317242		
30268536009	MW9	EPA 8260B	317242		
30268536010	MW10	EPA 8260B	317242		
30268536011	MW11	EPA 8260B	317242		
30268536012	MW12	EPA 8260B	317242		
30268536013	MW13	EPA 8260B	317242		
30268536014	MW14	EPA 8260B	317242		
30268536015	Trip Blank	EPA 8260B	317242		

REPORT OF LABORATORY ANALYSIS

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Pittsburgh Lab Sample Condition Upon Receipt



Client Name: ER & R

Project # 30268536

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other

Tracking #: 773 48463 0090

Label	<u>MMH</u>
LIMS Login	<u>MMH</u>

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☒ no

Thermometer Used 10 Type of Ice: ☒ Wet ☐ Blue ☐ None

Cooler Temperature Observed Temp 2.7 °C Correction Factor: 0.0 °C Final Temp: 2.7 °C

Temp should be above freezing to 6°C

Comments:	Yes	No	N/A	pH paper Lot#	Date and Initials of person examining contents:
Chain of Custody Present:	☒	☐	☐	<u>N/A</u>	<u>ET 10-17-18</u>
Chain of Custody Filled Out:	☒	☐	☐		
Chain of Custody Relinquished:	☒	☐	☐		
Sampler Name & Signature on COC:	☒	☐	☐		
Sample Labels match COC:	☒	☐	☐		
-Includes date/time/ID	☒	☐	☐		
Matrix: <u>WT</u>					
Samples Arrived within Hold Time:	☒	☐	☐		
Short Hold Time Analysis (<72hr remaining):	☒	☐	☐		
Rush Turn Around Time Requested:	☒	☐	☐		
Sufficient Volume:	☒	☐	☐		
Correct Containers Used:	☒	☐	☐		
-Pace Containers Used:	☒	☐	☐		
Containers Intact:	☒	☐	☐		
Orthophosphate field filtered	☒	☐	☐		
Hex Cr Aqueous Compliance/NPDES sample field filtered	☒	☐	☐		
Organic Samples checked for dechlorination:	☒	☐	☐		
Filtered volume received for Dissolved tests	☒	☐	☐		
All containers have been checked for preservation.	☒	☐	☐		
All containers needing preservation are found to be in compliance with EPA recommendation.	☒	☐	☐		
exceptions: <u>VOA</u> , coliform, TOC, O&G, Phenolics				Initial when completed <u>ET</u>	Date/time of preservation
				Lot # of added preservative	
Headspace in VOA Vials (>8mm):	☒	☐	☐		
Trip Blank Present:	☒	☐	☐		
Trip Blank Custody Seals Present	☒	☐	☐		
Rad Aqueous Samples Screened > 0.5 mrem/hr	☒	☐	☐	Initial when completed:	Date:

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)
 *PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

March 19, 2019

Mr. Dave Birchard
Environmental Remediation & Recovery, Inc.
4250 Route 6N
Edinboro, PA 16412

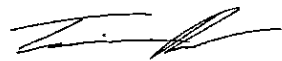
RE: Project: Russell City
Pace Project No.: 30282341

Dear Mr. Birchard:

Enclosed are the analytical results for sample(s) received by the laboratory on March 05, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Timothy Reed
timothy.reed@pacelabs.com
724-850-5614
Project Manager

Enclosures

cc: Karann Holman, Environmental Remediation & Recovery,
Inc.



REPORT OF LABORATORY ANALYSIS

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Page 1 of 21

8/19/2019 2:32:50 PM

CERTIFICATIONS

Project: Russell City
Pace Project No.: 30282341

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY VVW Permit #: KY0098221
KY VVW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991

Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: Russell City
Pace Project No.: 30282341

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30282341001	MW2	Water	03/01/19 11:40	03/05/19 10:00
30282341002	MW4	Water	03/01/19 11:50	03/05/19 10:00
30282341003	MW5	Water	03/01/19 12:00	03/05/19 10:00
30282341004	MW9	Water	03/01/19 11:15	03/05/19 10:00
30282341005	MW11	Water	03/01/19 10:50	03/05/19 10:00
30282341006	MW12	Water	03/01/19 11:25	03/05/19 10:00
30282341007	MW15	Water	03/01/19 11:30	03/05/19 10:00
30282341008	MW16	Water	03/01/19 12:00	03/05/19 10:00
30282341009	MW17	Water	03/01/19 11:35	03/05/19 10:00
30282341010	Trip Blank	Water	03/01/19 00:01	03/05/19 10:00
30282341011	MW10	Water	03/01/19 10:50	03/05/19 10:00

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Page 3 of 21

8/19/2019 2:32:51 PM

SAMPLE ANALYTE COUNT

Project: Russell City
Pace Project No.: 30282341

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30282341001	MW2	EPA 8260B	JAS	13
30282341002	MW4	EPA 8260B	JAS	13
30282341003	MW5	EPA 8260B	JAS	13
30282341004	MW9	EPA 8260B	JAS	13
30282341005	MW11	EPA 8260B	JAS	13
30282341006	MW12	EPA 8260B	JAS	13
30282341007	MW15	EPA 8260B	JAS	13
30282341008	MW16	EPA 8260B	JAS	13
30282341009	MW17	EPA 8260B	JAS	13
30282341011	MW10	EPA 8260B	JAS	13

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: Russell City
Pace Project No.: 30282341

Method: EPA 8260B
Description: 8260B MSV
Client: Environmental Remediation and Recovery, Inc.
Date: March 19, 2019

General Information:

10 samples were analyzed for EPA 8260B. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Russell City
Pace Project No.: 30282341

Sample: MW2 Lab ID: 30282341001 Collected: 03/01/19 11:40 Received: 03/05/19 10:00 Matrix: Water

Comments: • The trip blank was placed on hold as per the client.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV Analytical Method: EPA 8260B									
Benzene	ND	ug/L	1.0	0.24	1		03/14/19 04:00	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.31	1		03/14/19 04:00	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.24	1		03/14/19 04:00	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		03/14/19 04:00	1634-04-4	
Naphthalene	ND	ug/L	2.0	0.82	1		03/14/19 04:00	91-20-3	
Toluene	ND	ug/L	1.0	0.30	1		03/14/19 04:00	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.25	1		03/14/19 04:00	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.21	1		03/14/19 04:00	108-67-8	
Xylene (Total)	ND	ug/L	3.0	0.78	1		03/14/19 04:00	1330-20-7	
Surrogates									
Toluene-d8 (S)	100	%	80-120		1		03/14/19 04:00	2037-26-5	
4-Bromofluorobenzene (S)	106	%	78-122		1		03/14/19 04:00	460-00-4	
1,2-Dichloroethane-d4 (S)	111	%	80-120		1		03/14/19 04:00	17060-07-0	
Dibromofluoromethane (S)	102	%	80-120		1		03/14/19 04:00	1868-53-7	

REPORT OF LABORATORY ANALYSIS

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Date: 03/19/2019 03:40 PM

Page 6 of 21

8/19/2019 2:32:53 PM

ANALYTICAL RESULTS

Project: Russell City

Pace Project No.: 30282341

Sample: MW4 Lab ID: 30282341002 Collected: 03/01/19 11:50 Received: 03/05/19 10:00 Matrix: Water

Comments: • The trip blank was placed on hold as per the client.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV Analytical Method: EPA 8260B									
Benzene	489	ug/L	20.0	4.8	20		03/14/19 08:40	71-43-2	
Ethylbenzene	1860	ug/L	20.0	6.2	20		03/14/19 08:40	100-41-4	
Isopropylbenzene (Cumene)	116	ug/L	1.0	0.24	1		03/14/19 08:13	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		03/14/19 08:13	1634-04-4	
Naphthalene	203	ug/L	2.0	0.82	1		03/14/19 08:13	91-20-3	
Toluene	147	ug/L	1.0	0.30	1		03/14/19 08:13	108-88-3	
1,2,4-Trimethylbenzene	3940	ug/L	20.0	5.0	20		03/14/19 08:40	95-63-6	
1,3,5-Trimethylbenzene	1150	ug/L	20.0	4.2	20		03/14/19 08:40	108-67-8	
Xylene (Total)	2950	ug/L	60.0	15.6	20		03/14/19 08:40	1330-20-7	
Surrogates									
Toluene-d8 (S)	106	%	80-120		1		03/14/19 08:13	2037-26-5	
4-Bromofluorobenzene (S)	104	%	78-122		1		03/14/19 08:13	460-00-4	
1,2-Dichloroethane-d4 (S)	114	%	80-120		1		03/14/19 08:13	17060-07-0	
Dibromofluoromethane (S)	99	%	80-120		1		03/14/19 08:13	1868-53-7	

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Date: 03/19/2019 03:40 PM

Page 7 of 21

8/19/2019 2:32:53 PM

ANALYTICAL RESULTS

Project: Russell City
Pace Project No.: 30282341

Sample: MW5 Lab ID: 30282341003 Collected: 03/01/19 12:00 Received: 03/05/19 10:00 Matrix: Water

Comments: • The trip blank was placed on hold as per the client.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV									
Analytical Method: EPA 8260B									
Benzene	ND	ug/L	1.0	0.24	1		03/14/19 04:27	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.31	1		03/14/19 04:27	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.24	1		03/14/19 04:27	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		03/14/19 04:27	1634-04-4	
Naphthalene	ND	ug/L	2.0	0.82	1		03/14/19 04:27	91-20-3	
Toluene	ND	ug/L	1.0	0.30	1		03/14/19 04:27	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.25	1		03/14/19 04:27	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.21	1		03/14/19 04:27	108-67-8	
Xylene (Total)	ND	ug/L	3.0	0.78	1		03/14/19 04:27	1330-20-7	
Surrogates									
Toluene-d8 (S)	98	%.	80-120		1		03/14/19 04:27	2037-26-5	
4-Bromofluorobenzene (S)	104	%.	78-122		1		03/14/19 04:27	460-00-4	
1,2-Dichloroethane-d4 (S)	109	%.	80-120		1		03/14/19 04:27	17060-07-0	
Dibromofluoromethane (S)	96	%.	80-120		1		03/14/19 04:27	1868-53-7	

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Date: 03/19/2019 03:40 PM

Page 8 of 21

8/19/2019 2:32:53 PM

ANALYTICAL RESULTS

Project: Russell City
Pace Project No.: 30282341

Sample: MW9 Lab ID: 30282341004 Collected: 03/01/19 11:15 Received: 03/05/19 10:00 Matrix: Water

Comments: • The trip blank was placed on hold as per the client.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV Analytical Method: EPA 8260B									
Benzene	ND	ug/L	1.0	0.24	1		03/14/19 07:46	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.31	1		03/14/19 07:46	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.24	1		03/14/19 07:46	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		03/14/19 07:46	1634-04-4	
Naphthalene	ND	ug/L	2.0	0.82	1		03/14/19 07:46	91-20-3	
Toluene	ND	ug/L	1.0	0.30	1		03/14/19 07:46	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.25	1		03/14/19 07:46	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.21	1		03/14/19 07:46	108-67-8	
Xylene (Total)	ND	ug/L	3.0	0.78	1		03/14/19 07:46	1330-20-7	
Surrogates									
Toluene-d8 (S)	95	%	80-120		1		03/14/19 07:46	2037-26-5	
4-Bromofluorobenzene (S)	103	%	78-122		1		03/14/19 07:46	460-00-4	
1,2-Dichloroethane-d4 (S)	107	%	80-120		1		03/14/19 07:46	17060-07-0	
Dibromofluoromethane (S)	103	%	80-120		1		03/14/19 07:46	1868-53-7	

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ANALYTICAL RESULTS

Project: Russell City
Pace Project No.: 30282341

Sample: MW11 Lab ID: 30282341005 Collected: 03/01/19 10:50 Received: 03/05/19 10:00 Matrix: Water

Comments: • The collection time on the sample bottle was 1125
• The trip blank was placed on hold as per the client.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV									
Analytical Method: EPA 8260B									
Benzene	ND	ug/L	1.0	0.24	1		03/14/19 04:54	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.31	1		03/14/19 04:54	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.24	1		03/14/19 04:54	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		03/14/19 04:54	1634-04-4	
Naphthalene	ND	ug/L	2.0	0.82	1		03/14/19 04:54	91-20-3	
Toluene	ND	ug/L	1.0	0.30	1		03/14/19 04:54	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.25	1		03/14/19 04:54	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.21	1		03/14/19 04:54	108-67-8	
Xylene (Total)	ND	ug/L	3.0	0.78	1		03/14/19 04:54	1330-20-7	
Surrogates									
Toluene-d8 (S)	99	%	80-120		1		03/14/19 04:54	2037-26-5	
4-Bromofluorobenzene (S)	106	%	78-122		1		03/14/19 04:54	460-00-4	
1,2-Dichloroethane-d4 (S)	111	%	80-120		1		03/14/19 04:54	17060-07-0	
Dibromofluoromethane (S)	96	%	80-120		1		03/14/19 04:54	1868-53-7	

REPORT OF LABORATORY ANALYSIS

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Date: 03/19/2019 03:40 PM

Page 10 of 21

8/19/2019 2:32:54 PM

ANALYTICAL RESULTS

Project: Russell City
Pace Project No.: 30282341

Sample: MW12 Lab ID: 30282341006 Collected: 03/01/19 11:25 Received: 03/05/19 10:00 Matrix: Water

Comments: • The collection time on bottle is 1130

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV									
Analytical Method: EPA 8260B									
Benzene	ND	ug/L	1.0	0.24	1		03/14/19 05:21	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.31	1		03/14/19 05:21	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.24	1		03/14/19 05:21	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		03/14/19 05:21	1634-04-4	
Naphthalene	ND	ug/L	2.0	0.82	1		03/14/19 05:21	91-20-3	
Toluene	ND	ug/L	1.0	0.30	1		03/14/19 05:21	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.25	1		03/14/19 05:21	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.21	1		03/14/19 05:21	108-67-8	
Xylene (Total)	ND	ug/L	3.0	0.78	1		03/14/19 05:21	1330-20-7	
Surrogates									
Toluene-d8 (S)	99	%	80-120		1		03/14/19 05:21	2037-26-5	
4-Bromofluorobenzene (S)	107	%	78-122		1		03/14/19 05:21	460-00-4	
1,2-Dichloroethane-d4 (S)	111	%	80-120		1		03/14/19 05:21	17060-07-0	
Dibromofluoromethane (S)	100	%	80-120		1		03/14/19 05:21	1868-53-7	

REPORT OF LABORATORY ANALYSIS

Date: 03/19/2019 03:40 PM

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Page 11 of 21

8/19/2019 2:32:55 PM

ANALYTICAL RESULTS

Project: Russell City
Pace Project No.: 30282341

Sample: MW15 Lab ID: 30282341007 Collected: 03/01/19 11:30 Received: 03/05/19 10:00 Matrix: Water

Comments: • The collection time on the sample bottle was 1110.
• The trip blank was placed on hold as per the client.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV Analytical Method: EPA 8260B									
Benzene	ND	ug/L	1.0	0.24	1		03/14/19 05:48	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.31	1		03/14/19 05:48	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.24	1		03/14/19 05:48	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		03/14/19 05:48	1634-04-4	
Naphthalene	ND	ug/L	2.0	0.82	1		03/14/19 05:48	91-20-3	
Toluene	ND	ug/L	1.0	0.30	1		03/14/19 05:48	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.25	1		03/14/19 05:48	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.21	1		03/14/19 05:48	108-67-8	
Xylene (Total)	ND	ug/L	3.0	0.78	1		03/14/19 05:48	1330-20-7	
Surrogates									
Toluene-d8 (S)	96	%	80-120		1		03/14/19 05:48	2037-26-5	
4-Bromofluorobenzene (S)	100	%	78-122		1		03/14/19 05:48	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	80-120		1		03/14/19 05:48	17060-07-0	
Dibromofluoromethane (S)	101	%	80-120		1		03/14/19 05:48	1868-53-7	

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Date: 03/19/2019 03:40 PM

Page 12 of 21

8/19/2019 2:32:55 PM

ANALYTICAL RESULTS

Project: Russell City
Pace Project No.: 30282341

Sample: MW16 **Lab ID: 30282341008** Collected: 03/01/19 12:00 Received: 03/05/19 10:00 Matrix: Water

Comments: • The trip blank was placed on hold as per the client.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV Analytical Method: EPA 8260B									
Benzene	ND	ug/L	1.0	0.24	1		03/14/19 06:14	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.31	1		03/14/19 06:14	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.24	1		03/14/19 06:14	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		03/14/19 06:14	1634-04-4	
Naphthalene	ND	ug/L	2.0	0.82	1		03/14/19 06:14	91-20-3	
Toluene	ND	ug/L	1.0	0.30	1		03/14/19 06:14	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.25	1		03/14/19 06:14	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.21	1		03/14/19 06:14	108-67-8	
Xylene (Total)	ND	ug/L	3.0	0.78	1		03/14/19 06:14	1330-20-7	
Surrogates									
Toluene-d8 (S)	101	%	80-120		1		03/14/19 06:14	2037-26-5	
4-Bromofluorobenzene (S)	104	%	78-122		1		03/14/19 06:14	460-00-4	
1,2-Dichloroethane-d4 (S)	110	%	80-120		1		03/14/19 06:14	17060-07-0	
Dibromofluoromethane (S)	98	%	80-120		1		03/14/19 06:14	1868-53-7	

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ANALYTICAL RESULTS

Project: Russell City
Pace Project No.: 30282341

Sample: **MW17** Lab ID: **30282341009** Collected: 03/01/19 11:35 Received: 03/05/19 10:00 Matrix: Water

Comments: • The trip blank was placed on hold as per the client.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV Analytical Method: EPA 8260B									
Benzene	ND	ug/L	1.0	0.24	1		03/14/19 06:41	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.31	1		03/14/19 06:41	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.24	1		03/14/19 06:41	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		03/14/19 06:41	1634-04-4	
Naphthalene	ND	ug/L	2.0	0.82	1		03/14/19 06:41	91-20-3	
Toluene	ND	ug/L	1.0	0.30	1		03/14/19 06:41	108-88-3	
1,2,4-Trimethylbenzene	1.1	ug/L	1.0	0.25	1		03/14/19 06:41	95-63-6	
1,3,5-Trimethylbenzene	1.4	ug/L	1.0	0.21	1		03/14/19 06:41	108-67-8	
Xylene (Total)	ND	ug/L	3.0	0.78	1		03/14/19 06:41	1330-20-7	
Surrogates									
Toluene-d8 (S)	99	%	80-120		1		03/14/19 06:41	2037-26-5	
4-Bromofluorobenzene (S)	100	%	78-122		1		03/14/19 06:41	460-00-4	
1,2-Dichloroethane-d4 (S)	110	%	80-120		1		03/14/19 06:41	17060-07-0	
Dibromofluoromethane (S)	98	%	80-120		1		03/14/19 06:41	1868-53-7	

REPORT OF LABORATORY ANALYSIS

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Date: 03/19/2019 03:40 PM

Page 14 of 21

8/19/2019 2:32:57 PM

ANALYTICAL RESULTS

Project: Russell City
Pace Project No.: 30282341

Sample: MW10 Lab ID: 30282341011 Collected: 03/01/19 10:50 Received: 03/05/19 10:00 Matrix: Water

Comments: • The trip blank was placed on hold as per the client.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV Analytical Method: EPA 8260B									
Benzene	ND	ug/L	1.0	0.24	1		03/14/19 07:08	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.31	1		03/14/19 07:08	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.24	1		03/14/19 07:08	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		03/14/19 07:08	1634-04-4	
Naphthalene	ND	ug/L	2.0	0.82	1		03/14/19 07:08	91-20-3	
Toluene	ND	ug/L	1.0	0.30	1		03/14/19 07:08	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.25	1		03/14/19 07:08	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.21	1		03/14/19 07:08	108-67-8	
Xylene (Total)	ND	ug/L	3.0	0.78	1		03/14/19 07:08	1330-20-7	
Surrogates									
Toluene-d8 (S)	95	%	80-120		1		03/14/19 07:08	2037-26-5	
4-Bromofluorobenzene (S)	106	%	78-122		1		03/14/19 07:08	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	80-120		1		03/14/19 07:08	17060-07-0	
Dibromofluoromethane (S)	100	%	80-120		1		03/14/19 07:08	1868-53-7	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Russell City
Pace Project No.: 30282341

QC Batch: 333457 Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B Analysis Description: 8260B MSV UST-WATER
Associated Lab Samples: 30282341001, 30282341002, 30282341003, 30282341004, 30282341005, 30282341006, 30282341007, 30282341008, 30282341009, 30282341011

METHOD BLANK: 1622554 Matrix: Water
Associated Lab Samples: 30282341001, 30282341002, 30282341003, 30282341004, 30282341005, 30282341006, 30282341007, 30282341008, 30282341009, 30282341011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/L	ND	1.0	0.25	03/13/19 23:31	
1,3,5-Trimethylbenzene	ug/L	ND	1.0	0.21	03/13/19 23:31	
Benzene	ug/L	ND	1.0	0.24	03/13/19 23:31	
Ethylbenzene	ug/L	ND	1.0	0.31	03/13/19 23:31	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	0.24	03/13/19 23:31	
Methyl-tert-butyl ether	ug/L	ND	1.0	0.23	03/13/19 23:31	
Naphthalene	ug/L	ND	2.0	0.82	03/13/19 23:31	
Toluene	ug/L	ND	1.0	0.30	03/13/19 23:31	
Xylene (Total)	ug/L	ND	3.0	0.78	03/13/19 23:31	
1,2-Dichloroethane-d4 (S)	%	108	80-120		03/13/19 23:31	
4-Bromofluorobenzene (S)	%	105	78-122		03/13/19 23:31	
Dibromofluoromethane (S)	%	102	80-120		03/13/19 23:31	
Toluene-d8 (S)	%	95	80-120		03/13/19 23:31	

LABORATORY CONTROL SAMPLE: 1622555

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/L	20	18.4	92	70-130	
1,3,5-Trimethylbenzene	ug/L	20	17.7	89	70-130	
Benzene	ug/L	20	17.7	89	70-130	
Ethylbenzene	ug/L	20	17.7	88	70-130	
Isopropylbenzene (Cumene)	ug/L	20	18.4	92	70-130	
Methyl-tert-butyl ether	ug/L	20	21.0	105	70-130	
Naphthalene	ug/L	20	19.3	97	69-135	
Toluene	ug/L	20	17.7	89	70-130	
Xylene (Total)	ug/L	60	52.2	87	70-130	
1,2-Dichloroethane-d4 (S)	%			106	80-120	
4-Bromofluorobenzene (S)	%			106	78-122	
Dibromofluoromethane (S)	%			103	80-120	
Toluene-d8 (S)	%			103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1623300 1623301

Parameter	Units	30282953001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
1,2,4-Trimethylbenzene	ug/L	ND	20	20	24.2	21.2	121	106	70-130	13	30
1,3,5-Trimethylbenzene	ug/L	ND	20	20	21.3	20.2	106	101	70-130	5	30

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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Date: 03/19/2019 03:40 PM

Page 16 of 21

8/19/2019 2:32:57 PM

QUALITY CONTROL DATA

Project: Russell City
Pace Project No.: 30282341

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1623300 1623301												
Parameter	Units	30282953001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
Benzene	ug/L	ND	20	20	21.1	20.8	106	104	67-119	2	30	
Ethylbenzene	ug/L	ND	20	20	21.6	21.4	108	107	69-127	1	30	
Isopropylbenzene (Cumene)	ug/L	ND	20	20	21.7	20.3	108	102	70-130	6	30	
Methyl-tert-butyl ether	ug/L	ND	20	20	18.9	18.9	95	94	70-130	0	30	
Naphthalene	ug/L	ND	20	20	21.4	19.8	107	99	60-136	8	30	
Toluene	ug/L	ND	20	20	21.0	20.0	105	100	70-130	5	30	
Xylene (Total)	ug/L	ND	60	60	62.2	61.2	104	102	69-128	2	30	
1,2-Dichloroethane-d4 (S)	%						108	108	80-120			
4-Bromofluorobenzene (S)	%						100	101	78-122			
Dibromofluoromethane (S)	%						107	105	80-120			
Toluene-d8 (S)	%						99	96	80-120			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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Date: 03/19/2019 03:40 PM

Page 17 of 21

8/19/2019 2:32:58 PM

QUALIFIERS

Project: Russell City
Pace Project No.: 30282341

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Russell City
Pace Project No.: 30282341

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30282341001	MW2	EPA 8260B	333457		
30282341002	MW4	EPA 8260B	333457		
30282341003	MW5	EPA 8260B	333457		
30282341004	MW9	EPA 8260B	333457		
30282341005	MW11	EPA 8260B	333457		
30282341006	MW12	EPA 8260B	333457		
30282341007	MW15	EPA 8260B	333457		
30282341008	MW16	EPA 8260B	333457		
30282341009	MW17	EPA 8260B	333457		
30282341011	MW10	EPA 8260B	333457		

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company: ERRE	Report To: K. Helman	Company Name:		Attention:	
Address: 4250 Route 6N	Copy To:	Address:		REGULATORY AGENCY	
Email To: RH	Purchase Order No.: 2014-74	Pace Quote Reference:		☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER	
Phone: 214-741-6411	Project Name: Russell City	Pace Project Manager:		☒ UST ☐ RCRA ☐ OTHER	
Requested Due Date/TAT: See	Project Number: 2014-74	Pace Profile #:		Site Location: PA	
				STATE:	

Section D Required Client Information		Section E Requested Analysis Filtered (Y/N)	
Matrix Codes MATRIX CODE Drinking Water DW Water WT Waste Water WW Product P Solid Solid Oil OL Wipe WP Air TS Tissue TS Other OT		Preservatives HNO ₃ H ₂ SO ₄ Unpreserved HCl NaOH Na ₂ S ₂ O ₃ Methanol Other	
SAMPLE ID (A-Z, 0-9 / -) Sample IDs MUST BE UNIQUE		Analysis Test	
Matrix Code (see valid codes to left)		Y/N	
SAMPLE TYPE (G-GRAB C-COMP)		Y/N	
COLLECTED			
COMPOSITE START	COMPOSITE END/GRAB		
DATE	TIME		
SAMPLE TEMP AT COLLECTION			
# OF CONTAINERS			
Pace Project No./ Lab I.D.			

Section F Additional Comments		Section G Relinquished By / Affiliation		Section H Accepted By / Affiliation		Section I Sample Conditions	
DATE		DATE		DATE		DATE	
TIME		TIME		TIME		TIME	
RECEIVED BY		RECEIVED BY		RECEIVED BY		RECEIVED BY	
SIGNATURE		SIGNATURE		SIGNATURE		SIGNATURE	
PRINT NAME OF SAMPLER		PRINT NAME OF SAMPLER		PRINT NAME OF SAMPLER		PRINT NAME OF SAMPLER	
DATE SIGNED (MM/DD/YYYY)		DATE SIGNED (MM/DD/YYYY)		DATE SIGNED (MM/DD/YYYY)		DATE SIGNED (MM/DD/YYYY)	
TEMP IN °C		TEMP IN °C		TEMP IN °C		TEMP IN °C	
SEALING COOLER		SEALING COOLER		SEALING COOLER		SEALING COOLER	
CUSTODY (Y/N)		CUSTODY (Y/N)		CUSTODY (Y/N)		CUSTODY (Y/N)	
SAMPLES INTACT		SAMPLES INTACT		SAMPLES INTACT		SAMPLES INTACT	

Pittsburgh Lab Sample Condition Upon Receipt

Face Analytical

Client Name:

ERL

Project# 30282341

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other

Tracking #: 77461274 2599

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals Intact: ☐ yes ☒ no

Thermometer Used 9 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 2.1 °C Correction Factor: 40.1 °C Final Temp: 2-2 °C

Temp should be above freezing to 6°C

Comments:	Yes	No	N/A	pH paper Lot#	Date and Initials of person examining contents:
Chain of Custody Present:	☒	☐	☐	N/A	ET 3-5-19
Chain of Custody Filled Out:	☒	☐	☐		
Chain of Custody Relinquished:	☒	☐	☐		
Sampler Name & Signature on COC:	☒	☐	☐		
Sample Labels match COC:	☒	☐	☐		See comments
-Includes date/time/ID	☒	☐	☐		
Matrix:					WT
Samples Arrived within Hold Time:	☒	☐	☐		
Short Hold Time Analysis (<72hr remaining):	☒	☐	☐		
Rush Turn Around Time Requested:	☒	☐	☐		
Sufficient Volume:	☒	☐	☐		
Correct Containers Used:	☒	☐	☐		
-Pace Containers Used:	☒	☐	☐		
Containers Intact:	☒	☐	☐		
Orthophosphate field filtered	☒	☐	☐		
Hex Cr Aqueous Compliance/NPDES sample field filtered	☒	☐	☐		
Organic Samples checked for dechlorination:	☒	☐	☐		
Filtered volume received for Dissolved tests	☒	☐	☐		
All containers have been checked for preservation.	☒	☐	☐		
All containers needing preservation are found to be in compliance with EPA recommendation.	☒	☐	☐		
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed ET	Date/time of preservation
				Lot # of added preservative	
Headspace in VOA Vials (>6mm):	☒	☐	☐		
Trip Blank Present:	☒	☐	☐		
Trip Blank Custody Seals Present	☒	☐	☐		
Rad Aqueous Samples Screened > 0.5 mrem/hr	☒	☐	☐	Initial when completed	Date:

Client Notification/ Resolution:

Person Contacted: Date/Time: Contacted By:

Comments/ Resolution: Sample #11 has a time of 1125; MW12 has a time of 1130, MW15 has a time of 1110, Extra sample received with an ID of MW10 date 3-1-19 time 1050

☐ A check in this box indicates that additional information has been stored in reports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

June 04, 2019

Mr. Dave Birchard
Environmental Remediation & Recovery, Inc.
4250 Route 6N
Edinboro, PA 16412

RE: Project: Russell City
Pace Project No.: 30295429

Dear Mr. Birchard:

Enclosed are the analytical results for sample(s) received by the laboratory on May 21, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Samantha Bayura
samantha.bayura@pacelabs.com
(724)850-5622
Project Manager

Enclosures

cc: Karann Holman, Environmental Remediation & Recovery,
Inc.



REPORT OF LABORATORY ANALYSIS

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Page 1 of 29

8/19/2019 2:33:01 PM

CERTIFICATIONS

Project: Russell City
Pace Project No.: 30295429

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417

Alabama Certification #: 41590

Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification #: PA01547

Connecticut Certification #: PH-0694

Delaware Certification

EPA Region 4 DW Rad

Florida/TNI Certification #: E87683

Georgia Certification #: C040

Florida: Cert E871149 SEKS WET

Guam Certification

Hawaii Certification

Idaho Certification

Illinois Certification

Indiana Certification

Iowa Certification #: 391

Kansas/TNI Certification #: E-10358

Kentucky Certification #: KY90133

KY WW Permit #: KY0098221

KY WW Permit #: KY0000221

Louisiana DHH/TNI Certification #: LA180012

Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: 2017020

Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification #: 9991

Missouri Certification #: 235

Montana Certification #: Cert0082

Nebraska Certification #: NE-OS-29-14

Nevada Certification #: PA014572018-1

New Hampshire/TNI Certification #: 297617

New Jersey/TNI Certification #: PA051

New Mexico Certification #: PA01457

New York/TNI Certification #: 10888

North Carolina Certification #: 42706

North Dakota Certification #: R-190

Ohio EPA Rad Approval: #41249

Oregon/TNI Certification #: PA200002-010

Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457

Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: 02867

Texas/TNI Certification #: T104704188-17-3

Utah/TNI Certification #: PA014572017-9

USDA Soil Permit #: P330-17-00091

Vermont Dept. of Health: ID# VT-0282

Virgin Island/PADEP Certification

Virginia/VELAP Certification #: 9526

Washington Certification #: C868

West Virginia DEP Certification #: 143

West Virginia DHHR Certification #: 9964C

Wisconsin Approve List for Rad

Wyoming Certification #: 8TMS-L

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SAMPLE SUMMARY

Project: Russell City
Pace Project No.: 30295429

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30295429001	MW-1	Water	05/17/19 10:20	05/21/19 09:30
30295429002	MW-2	Water	05/17/19 11:45	05/21/19 09:30
30295429003	MW-3	Water	05/17/19 12:25	05/21/19 09:30
30295429004	MW-4	Water	05/17/19 12:20	05/21/19 09:30
30295429005	MW-5	Water	05/17/19 12:00	05/21/19 09:30
30295429006	MW-6	Water	05/17/19 11:15	05/21/19 09:30
30295429007	MW-7	Water	05/17/19 11:58	05/21/19 09:30
30295429008	MW-8	Water	05/17/19 12:10	05/21/19 09:30
30295429009	MW-9	Water	05/17/19 10:35	05/21/19 09:30
30295429010	MW-10	Water	05/17/19 11:00	05/21/19 09:30
30295429011	MW-11	Water	05/17/19 10:52	05/21/19 09:30
30295429012	MW-12	Water	05/17/19 11:18	05/21/19 09:30
30295429013	MW-13	Water	05/17/19 10:10	05/21/19 09:30
30295429014	MW-14	Water	05/17/19 12:45	05/21/19 09:30
30295429015	MW-15	Water	05/17/19 11:30	05/21/19 09:30
30295429016	MW-16	Water	05/17/19 11:00	05/21/19 09:30
30295429017	MW-17	Water	05/17/19 11:44	05/21/19 09:30
30295429018	Trip Blank	Water	05/17/19 00:01	05/21/19 09:30

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SAMPLE ANALYTE COUNT

Project: Russell City
Pace Project No.: 30295429

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30295429001	MW-1	EPA 8260B	LEL	13
30295429002	MW-2	EPA 8260B	LEL	13
30295429003	MW-3	EPA 8260B	LEL	13
30295429004	MW-4	EPA 8260B	LEL	13
30295429005	MW-5	EPA 8260B	LEL	13
30295429006	MW-6	EPA 8260B	LEL	13
30295429007	MW-7	EPA 8260B	LEL	13
30295429008	MW-8	EPA 8260B	LEL	13
30295429009	MW-9	EPA 8260B	LEL	13
30295429010	MW-10	EPA 8260B	LEL	13
30295429011	MW-11	EPA 8260B	LEL	13
30295429012	MW-12	EPA 8260B	LEL	13
30295429013	MW-13	EPA 8260B	LEL	13
30295429014	MW-14	EPA 8260B	LEL	13
30295429015	MW-15	EPA 8260B	LEL	13
30295429016	MW-16	EPA 8260B	LEL	13
30295429017	MW-17	EPA 8260B	LEL	13
30295429018	Trip Blank	EPA 8260B	LEL	13

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PROJECT NARRATIVE

Project: Russell City
Pace Project No.: 30295429

Method: EPA 8260B
Description: 8260B MSV
Client: Environmental Remediation and Recovery, Inc.
Date: June 04, 2019

General Information:

18 samples were analyzed for EPA 8260B. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Russell City
Pace Project No.: 30295429

Sample: MW-1		Lab ID: 30295429001		Collected: 05/17/19 10:20		Received: 05/21/19 09:30		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV									
Analytical Method: EPA 8260B									
Benzene	ND	ug/L	1.0	0.24	1		05/23/19 16:17	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.31	1		05/23/19 16:17	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.24	1		05/23/19 16:17	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		05/23/19 16:17	1634-04-4	
Naphthalene	ND	ug/L	2.0	0.82	1		05/23/19 16:17	91-20-3	
Toluene	ND	ug/L	1.0	0.30	1		05/23/19 16:17	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.25	1		05/23/19 16:17	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.21	1		05/23/19 16:17	108-67-8	
Xylene (Total)	ND	ug/L	3.0	0.78	1		05/23/19 16:17	1330-20-7	
Surrogates									
Toluene-d8 (S)	97	%	80-120		1		05/23/19 16:17	2037-26-5	
4-Bromofluorobenzene (S)	102	%	78-122		1		05/23/19 16:17	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	80-120		1		05/23/19 16:17	17060-07-0	
Dibromofluoromethane (S)	95	%	80-120		1		05/23/19 16:17	1868-53-7	

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ANALYTICAL RESULTS

Project: Russell City
Pace Project No.: 30295429

Sample: MW-2 Lab ID: 30295429002 Collected: 05/17/19 11:45 Received: 05/21/19 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV									
Analytical Method: EPA 8260B									
Benzene	ND	ug/L	1.0	0.24	1		05/23/19 17:08	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.31	1		05/23/19 17:08	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.24	1		05/23/19 17:08	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		05/23/19 17:08	1634-04-4	
Naphthalene	ND	ug/L	2.0	0.82	1		05/23/19 17:08	91-20-3	
Toluene	ND	ug/L	1.0	0.30	1		05/23/19 17:08	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.25	1		05/23/19 17:08	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.21	1		05/23/19 17:08	108-67-8	
Xylene (Total)	ND	ug/L	3.0	0.78	1		05/23/19 17:08	1330-20-7	
Surrogates									
Toluene-d8 (S)	99	%	80-120		1		05/23/19 17:08	2037-26-5	
4-Bromofluorobenzene (S)	101	%	78-122		1		05/23/19 17:08	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	80-120		1		05/23/19 17:08	17060-07-0	
Dibromofluoromethane (S)	98	%	80-120		1		05/23/19 17:08	1868-53-7	

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ANALYTICAL RESULTS

Project: Russell City
Pace Project No.: 30295429

Sample: MW-3 Lab ID: 30295429003 Collected: 05/17/19 12:25 Received: 05/21/19 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV									
Analytical Method: EPA 8260B									
Benzene	131	ug/L	1.0	0.24	1		05/23/19 22:12	71-43-2	
Ethylbenzene	2.9	ug/L	1.0	0.31	1		05/23/19 22:12	100-41-4	
Isopropylbenzene (Cumene)	15.7	ug/L	1.0	0.24	1		05/23/19 22:12	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		05/23/19 22:12	1634-04-4	
Naphthalene	3.2	ug/L	2.0	0.82	1		05/23/19 22:12	91-20-3	
Toluene	ND	ug/L	1.0	0.30	1		05/23/19 22:12	108-88-3	
1,2,4-Trimethylbenzene	43.9	ug/L	1.0	0.25	1		05/23/19 22:12	95-63-6	
1,3,5-Trimethylbenzene	8.3	ug/L	1.0	0.21	1		05/23/19 22:12	108-67-8	
Xylene (Total)	ND	ug/L	3.0	0.78	1		05/23/19 22:12	1330-20-7	
Surrogates									
Toluene-d8 (S)	99	%	80-120		1		05/23/19 22:12	2037-26-5	
4-Bromofluorobenzene (S)	101	%	78-122		1		05/23/19 22:12	460-00-4	
1,2-Dichloroethane-d4 (S)	95	%	80-120		1		05/23/19 22:12	17060-07-0	
Dibromofluoromethane (S)	94	%	80-120		1		05/23/19 22:12	1868-53-7	

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Page 8 of 29

8/19/2019 2:33:05 PM

ANALYTICAL RESULTS

Project: Russell City
Pace Project No.: 30295429

Sample: MW-4 Lab ID: 30295429004 Collected: 05/17/19 12:20 Received: 05/21/19 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV									
Analytical Method: EPA 8260B									
Benzene	470	ug/L	20.0	4.8	20		05/23/19 23:52	71-43-2	
Ethylbenzene	1140	ug/L	20.0	6.2	20		05/23/19 23:52	100-41-4	
Isopropylbenzene (Cumene)	103	ug/L	1.0	0.24	1		05/23/19 23:27	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		05/23/19 23:27	1634-04-4	
Naphthalene	183	ug/L	2.0	0.82	1		05/23/19 23:27	91-20-3	
Toluene	232	ug/L	1.0	0.30	1		05/23/19 23:27	108-88-3	
1,2,4-Trimethylbenzene	1330	ug/L	20.0	5.0	20		05/23/19 23:52	95-63-6	
1,3,5-Trimethylbenzene	350	ug/L	1.0	0.21	1		05/23/19 23:27	108-67-8	
Xylene (Total)	1590	ug/L	60.0	15.6	20		05/23/19 23:52	1330-20-7	
Surrogates									
Toluene-d8 (S)	105	%	80-120		1		05/23/19 23:27	2037-26-5	
4-Bromofluorobenzene (S)	101	%	78-122		1		05/23/19 23:27	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%	80-120		1		05/23/19 23:27	17060-07-0	
Dibromofluoromethane (S)	95	%	80-120		1		05/23/19 23:27	1868-53-7	

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ANALYTICAL RESULTS

Project: Russell City
Pace Project No.: 30295429

Sample: MW-5		Lab ID: 30295429005		Collected: 05/17/19 12:00		Received: 05/21/19 09:30		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV									
Analytical Method: EPA 8260B									
Benzene	ND	ug/L	1.0	0.24	1		05/23/19 17:33	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.31	1		05/23/19 17:33	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.24	1		05/23/19 17:33	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		05/23/19 17:33	1634-04-4	
Naphthalene	ND	ug/L	2.0	0.82	1		05/23/19 17:33	91-20-3	
Toluene	ND	ug/L	1.0	0.30	1		05/23/19 17:33	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.25	1		05/23/19 17:33	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.21	1		05/23/19 17:33	108-67-8	
Xylene (Total)	ND	ug/L	3.0	0.78	1		05/23/19 17:33	1330-20-7	
Surrogates									
Toluene-d8 (S)	97	%	80-120		1		05/23/19 17:33	2037-26-5	
4-Bromofluorobenzene (S)	99	%	78-122		1		05/23/19 17:33	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	80-120		1		05/23/19 17:33	17060-07-0	
Dibromofluoromethane (S)	94	%	80-120		1		05/23/19 17:33	1868-53-7	

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Page 10 of 29

8/19/2019 2:33:05 PM

ANALYTICAL RESULTS

Project: Russell City
Pace Project No.: 30295429

Sample: MW-6 Lab ID: 30295429006 Collected: 05/17/19 11:15 Received: 05/21/19 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV									
Analytical Method: EPA 8260B									
Benzene	ND	ug/L	1.0	0.24	1		05/23/19 22:37	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.31	1		05/23/19 22:37	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.24	1		05/23/19 22:37	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		05/23/19 22:37	1634-04-4	
Naphthalene	ND	ug/L	2.0	0.82	1		05/23/19 22:37	91-20-3	
Toluene	ND	ug/L	1.0	0.30	1		05/23/19 22:37	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.25	1		05/23/19 22:37	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.21	1		05/23/19 22:37	108-67-8	
Xylene (Total)	ND	ug/L	3.0	0.78	1		05/23/19 22:37	1330-20-7	
Surrogates									
Toluene-d8 (S)	97	%	80-120		1		05/23/19 22:37	2037-26-5	
4-Bromofluorobenzene (S)	101	%	78-122		1		05/23/19 22:37	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	80-120		1		05/23/19 22:37	17060-07-0	
Dibromofluoromethane (S)	97	%	80-120		1		05/23/19 22:37	1868-53-7	

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ANALYTICAL RESULTS

Project: Russell City
Pace Project No.: 30295429

Sample: MW-7		Lab ID: 30295429007		Collected: 05/17/19 11:58		Received: 05/21/19 09:30		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV									
Analytical Method: EPA 8260B									
Benzene	88.0	ug/L	1.0	0.24	1		05/23/19 23:02	71-43-2	
Ethylbenzene	235	ug/L	1.0	0.31	1		05/23/19 23:02	100-41-4	
Isopropylbenzene (Cumene)	46.4	ug/L	1.0	0.24	1		05/23/19 23:02	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		05/23/19 23:02	1634-04-4	
Naphthalene	66.3	ug/L	2.0	0.82	1		05/23/19 23:02	91-20-3	
Toluene	37.7	ug/L	1.0	0.30	1		05/23/19 23:02	108-88-3	
1,2,4-Trimethylbenzene	223	ug/L	1.0	0.25	1		05/23/19 23:02	95-63-6	
1,3,5-Trimethylbenzene	90.2	ug/L	1.0	0.21	1		05/23/19 23:02	108-67-8	
Xylene (Total)	124	ug/L	3.0	0.78	1		05/23/19 23:02	1330-20-7	
Surrogates									
Toluene-d8 (S)	110	%	80-120		1		05/23/19 23:02	2037-26-5	
4-Bromofluorobenzene (S)	100	%	78-122		1		05/23/19 23:02	460-00-4	
1,2-Dichloroethane-d4 (S)	92	%	80-120		1		05/23/19 23:02	17060-07-0	
Dibromofluoromethane (S)	89	%	80-120		1		05/23/19 23:02	1868-53-7	

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ANALYTICAL RESULTS

Project: Russell City
Pace Project No.: 30295429

Sample: MW-8 Lab ID: 30295429008 Collected: 05/17/19 12:10 Received: 05/21/19 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV									
Analytical Method: EPA 8260B									
Benzene	ND	ug/L	1.0	0.24	1		05/23/19 17:59	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.31	1		05/23/19 17:59	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.24	1		05/23/19 17:59	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		05/23/19 17:59	1634-04-4	
Naphthalene	ND	ug/L	2.0	0.82	1		05/23/19 17:59	91-20-3	
Toluene	ND	ug/L	1.0	0.30	1		05/23/19 17:59	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.25	1		05/23/19 17:59	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.21	1		05/23/19 17:59	108-67-8	
Xylene (Total)	ND	ug/L	3.0	0.78	1		05/23/19 17:59	1330-20-7	
Surrogates									
Toluene-d8 (S)	95	%	80-120		1		05/23/19 17:59	2037-26-5	
4-Bromofluorobenzene (S)	100	%	78-122		1		05/23/19 17:59	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	80-120		1		05/23/19 17:59	17060-07-0	
Dibromofluoromethane (S)	96	%	80-120		1		05/23/19 17:59	1868-53-7	

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ANALYTICAL RESULTS

Project: Russell City
Pace Project No.: 30295429

Sample: MW-9 Lab ID: 30295429009 Collected: 05/17/19 10:35 Received: 05/21/19 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV									
Analytical Method: EPA 8260B									
Benzene	ND	ug/L	1.0	0.24	1		05/23/19 18:24	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.31	1		05/23/19 18:24	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.24	1		05/23/19 18:24	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		05/23/19 18:24	1634-04-4	
Naphthalene	ND	ug/L	2.0	0.82	1		05/23/19 18:24	91-20-3	
Toluene	ND	ug/L	1.0	0.30	1		05/23/19 18:24	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.25	1		05/23/19 18:24	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.21	1		05/23/19 18:24	108-67-8	
Xylene (Total)	ND	ug/L	3.0	0.78	1		05/23/19 18:24	1330-20-7	
Surrogates									
Toluene-d8 (S)	96	%	80-120		1		05/23/19 18:24	2037-26-5	
4-Bromofluorobenzene (S)	103	%	78-122		1		05/23/19 18:24	460-00-4	
1,2-Dichloroethane-d4 (S)	93	%	80-120		1		05/23/19 18:24	17060-07-0	
Dibromofluoromethane (S)	93	%	80-120		1		05/23/19 18:24	1868-53-7	

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Date: 06/04/2019 11:48 AM

Page 14 of 29

8/19/2019 2:33:07 PM

ANALYTICAL RESULTS

Project: Russell City
Pace Project No.: 30295429

Sample: MW-10 Lab ID: 30295429010 Collected: 05/17/19 11:00 Received: 05/21/19 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV									
Analytical Method: EPA 8260B									
Benzene	ND	ug/L	1.0	0.24	1		05/23/19 18:50	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.31	1		05/23/19 18:50	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.24	1		05/23/19 18:50	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		05/23/19 18:50	1634-04-4	
Naphthalene	ND	ug/L	2.0	0.82	1		05/23/19 18:50	91-20-3	
Toluene	ND	ug/L	1.0	0.30	1		05/23/19 18:50	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.25	1		05/23/19 18:50	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.21	1		05/23/19 18:50	108-67-8	
Xylene (Total)	ND	ug/L	3.0	0.78	1		05/23/19 18:50	1330-20-7	
Surrogates									
Toluene-d8 (S)	97	%	80-120		1		05/23/19 18:50	2037-26-5	
4-Bromofluorobenzene (S)	98	%	78-122		1		05/23/19 18:50	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%	80-120		1		05/23/19 18:50	17060-07-0	
Dibromofluoromethane (S)	95	%	80-120		1		05/23/19 18:50	1868-53-7	

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ANALYTICAL RESULTS

Project: Russell City
Pace Project No.: 30295429

Sample: MW-11		Lab ID: 30295429011		Collected: 05/17/19 10:52		Received: 05/21/19 09:30		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV		Analytical Method: EPA 8260B							
Benzene	ND	ug/L	1.0	0.24	1		05/23/19 19:15	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.31	1		05/23/19 19:15	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.24	1		05/23/19 19:15	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		05/23/19 19:15	1634-04-4	
Naphthalene	ND	ug/L	2.0	0.82	1		05/23/19 19:15	91-20-3	
Toluene	ND	ug/L	1.0	0.30	1		05/23/19 19:15	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.25	1		05/23/19 19:15	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.21	1		05/23/19 19:15	108-67-8	
Xylene (Total)	ND	ug/L	3.0	0.78	1		05/23/19 19:15	1330-20-7	
Surrogates									
Toluene-d8 (S)	97	%	80-120		1		05/23/19 19:15	2037-26-5	
4-Bromofluorobenzene (S)	100	%	78-122		1		05/23/19 19:15	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	80-120		1		05/23/19 19:15	17060-07-0	
Dibromofluoromethane (S)	94	%	80-120		1		05/23/19 19:15	1868-53-7	

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Date: 06/04/2019 11:48 AM

Page 16 of 29

8/19/2019 2:33:09 PM

ANALYTICAL RESULTS

Project: Russell City
Pace Project No.: 30295429

Sample: MW-12 Lab ID: 30295429012 Collected: 05/17/19 11:18 Received: 05/21/19 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV									
Analytical Method: EPA 8260B									
Benzene	ND	ug/L	1.0	0.24	1		05/23/19 19:40	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.31	1		05/23/19 19:40	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.24	1		05/23/19 19:40	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		05/23/19 19:40	1634-04-4	
Naphthalene	ND	ug/L	2.0	0.82	1		05/23/19 19:40	91-20-3	
Toluene	ND	ug/L	1.0	0.30	1		05/23/19 19:40	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.25	1		05/23/19 19:40	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.21	1		05/23/19 19:40	108-67-8	
Xylene (Total)	ND	ug/L	3.0	0.78	1		05/23/19 19:40	1330-20-7	
Surrogates									
Toluene-d8 (S)	97	%	80-120		1		05/23/19 19:40	2037-26-5	
4-Bromofluorobenzene (S)	102	%	78-122		1		05/23/19 19:40	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%	80-120		1		05/23/19 19:40	17060-07-0	
Dibromofluoromethane (S)	94	%	80-120		1		05/23/19 19:40	1868-53-7	

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ANALYTICAL RESULTS

Project: Russell City
Pace Project No.: 30295429

Sample: MW-13		Lab ID: 30295429013		Collected: 05/17/19 10:10		Received: 05/21/19 09:30		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV									
Analytical Method: EPA 8260B									
Benzene	ND	ug/L	1.0	0.24	1		05/23/19 20:06	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.31	1		05/23/19 20:06	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.24	1		05/23/19 20:06	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		05/23/19 20:06	1634-04-4	
Naphthalene	ND	ug/L	2.0	0.82	1		05/23/19 20:06	91-20-3	
Toluene	ND	ug/L	1.0	0.30	1		05/23/19 20:06	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.25	1		05/23/19 20:06	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.21	1		05/23/19 20:06	108-67-8	
Xylene (Total)	ND	ug/L	3.0	0.78	1		05/23/19 20:06	1330-20-7	
Surrogates									
Toluene-d8 (S)	98	%	80-120		1		05/23/19 20:06	2037-26-5	
4-Bromofluorobenzene (S)	101	%	78-122		1		05/23/19 20:06	460-00-4	
1,2-Dichloroethane-d4 (S)	95	%	80-120		1		05/23/19 20:06	17060-07-0	
Dibromofluoromethane (S)	97	%	80-120		1		05/23/19 20:06	1868-53-7	

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Date: 06/04/2019 11:48 AM

Page 18 of 29

8/19/2019 2:33:09 PM

ANALYTICAL RESULTS

Project: Russell City
Pace Project No.: 30295429

Sample: MW-14 Lab ID: 30295429014 Collected: 05/17/19 12:45 Received: 05/21/19 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV									
Analytical Method: EPA 8260B									
Benzene	1.2	ug/L	1.0	0.24	1		05/23/19 21:47	71-43-2	
Ethylbenzene	1.8	ug/L	1.0	0.31	1		05/23/19 21:47	100-41-4	
Isopropylbenzene (Cumene)	3.6	ug/L	1.0	0.24	1		05/23/19 21:47	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		05/23/19 21:47	1634-04-4	
Naphthalene	ND	ug/L	2.0	0.82	1		05/23/19 21:47	91-20-3	
Toluene	ND	ug/L	1.0	0.30	1		05/23/19 21:47	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.25	1		05/23/19 21:47	95-63-6	
1,3,5-Trimethylbenzene	1.7	ug/L	1.0	0.21	1		05/23/19 21:47	108-67-8	
Xylene (Total)	ND	ug/L	3.0	0.78	1		05/23/19 21:47	1330-20-7	
Surrogates									
Toluene-d8 (S)	99	%	80-120		1		05/23/19 21:47	2037-26-5	
4-Bromofluorobenzene (S)	98	%	78-122		1		05/23/19 21:47	460-00-4	
1,2-Dichloroethane-d4 (S)	91	%	80-120		1		05/23/19 21:47	17060-07-0	
Dibromofluoromethane (S)	98	%	80-120		1		05/23/19 21:47	1868-53-7	

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Page 19 of 29

8/19/2019 2:33:10 PM

ANALYTICAL RESULTS

Project: Russell City
Pace Project No.: 30295429

Sample: MW-15		Lab ID: 30295429015		Collected: 05/17/19 11:30		Received: 05/21/19 09:30		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV									
Analytical Method: EPA 8260B									
Benzene	ND	ug/L	1.0	0.24	1		05/23/19 20:31	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.31	1		05/23/19 20:31	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.24	1		05/23/19 20:31	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		05/23/19 20:31	1634-04-4	
Naphthalene	ND	ug/L	2.0	0.82	1		05/23/19 20:31	91-20-3	
Toluene	ND	ug/L	1.0	0.30	1		05/23/19 20:31	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.25	1		05/23/19 20:31	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.21	1		05/23/19 20:31	108-67-8	
Xylene (Total)	ND	ug/L	3.0	0.78	1		05/23/19 20:31	1330-20-7	
Surrogates									
Toluene-d8 (S)	94	%.	80-120		1		05/23/19 20:31	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	78-122		1		05/23/19 20:31	460-00-4	
1,2-Dichloroethane-d4 (S)	94	%.	80-120		1		05/23/19 20:31	17060-07-0	
Dibromofluoromethane (S)	95	%.	80-120		1		05/23/19 20:31	1868-53-7	

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ANALYTICAL RESULTS

Project: Russell City
Pace Project No.: 30295429

Sample: MW-16		Lab ID: 30295429016		Collected: 05/17/19 11:00		Received: 05/21/19 09:30		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV									
Analytical Method: EPA 8260B									
Benzene	ND	ug/L	1.0	0.24	1		05/23/19 20:56	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.31	1		05/23/19 20:56	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.24	1		05/23/19 20:56	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		05/23/19 20:56	1634-04-4	
Naphthalene	ND	ug/L	2.0	0.82	1		05/23/19 20:56	91-20-3	
Toluene	ND	ug/L	1.0	0.30	1		05/23/19 20:56	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.25	1		05/23/19 20:56	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.21	1		05/23/19 20:56	108-67-8	
Xylene (Total)	ND	ug/L	3.0	0.78	1		05/23/19 20:56	1330-20-7	
Surrogates									
Toluene-d8 (S)	97	%	80-120		1		05/23/19 20:56	2037-26-5	
4-Bromofluorobenzene (S)	103	%	78-122		1		05/23/19 20:56	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	80-120		1		05/23/19 20:56	17060-07-0	
Dibromofluoromethane (S)	93	%	80-120		1		05/23/19 20:56	1868-53-7	

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Page 21 of 29

8/19/2019 2:33:11 PM

ANALYTICAL RESULTS

Project: Russell City
Pace Project No.: 30295429

Sample: MW-17 Lab ID: 30295429017 Collected: 05/17/19 11:44 Received: 05/21/19 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV									
Analytical Method: EPA 8260B									
Benzene	ND	ug/L	1.0	0.24	1		05/23/19 21:22	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.31	1		05/23/19 21:22	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.24	1		05/23/19 21:22	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		05/23/19 21:22	1634-04-4	
Naphthalene	ND	ug/L	2.0	0.82	1		05/23/19 21:22	91-20-3	
Toluene	ND	ug/L	1.0	0.30	1		05/23/19 21:22	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.25	1		05/23/19 21:22	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.21	1		05/23/19 21:22	108-67-8	
Xylene (Total)	ND	ug/L	3.0	0.78	1		05/23/19 21:22	1330-20-7	
Surrogates									
Toluene-d8 (S)	99	%	80-120		1		05/23/19 21:22	2037-26-5	
4-Bromofluorobenzene (S)	104	%	78-122		1		05/23/19 21:22	460-00-4	
1,2-Dichloroethane-d4 (S)	95	%	80-120		1		05/23/19 21:22	17060-07-0	
Dibromofluoromethane (S)	94	%	80-120		1		05/23/19 21:22	1868-53-7	

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Date: 06/04/2019 11:48 AM

Page 22 of 29

8/19/2019 2:33:11 PM

ANALYTICAL RESULTS

Project: Russell City
Pace Project No.: 30295429

Sample: Trip Blank		Lab ID: 30295429018		Collected: 05/17/19 00:01		Received: 05/21/19 09:30		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV									
Analytical Method: EPA 8260B									
Benzene	ND	ug/L	1.0	0.24	1		05/23/19 16:43	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.31	1		05/23/19 16:43	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.24	1		05/23/19 16:43	98-82-8	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.23	1		05/23/19 16:43	1634-04-4	
Naphthalene	ND	ug/L	2.0	0.82	1		05/23/19 16:43	91-20-3	
Toluene	ND	ug/L	1.0	0.30	1		05/23/19 16:43	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.25	1		05/23/19 16:43	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.21	1		05/23/19 16:43	108-67-8	
Xylene (Total)	ND	ug/L	3.0	0.78	1		05/23/19 16:43	1330-20-7	
Surrogates									
Toluene-d8 (S)	95	%.	80-120		1		05/23/19 16:43	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	78-122		1		05/23/19 16:43	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%.	80-120		1		05/23/19 16:43	17060-07-0	
Dibromofluoromethane (S)	95	%.	80-120		1		05/23/19 16:43	1868-53-7	

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QUALITY CONTROL DATA

Project: Russell City
Pace Project No.: 30295429

QC Batch: 344016 Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B Analysis Description: 8260B MSV UST-WATER
Associated Lab Samples: 30295429001, 30295429002, 30295429003, 30295429004, 30295429005, 30295429006, 30295429007,
30295429008, 30295429009, 30295429010, 30295429011, 30295429012, 30295429013, 30295429014,
30295429015, 30295429016, 30295429017, 30295429018

METHOD BLANK: 1673889 Matrix: Water
Associated Lab Samples: 30295429001, 30295429002, 30295429003, 30295429004, 30295429005, 30295429006, 30295429007,
30295429008, 30295429009, 30295429010, 30295429011, 30295429012, 30295429013, 30295429014,
30295429015, 30295429016, 30295429017, 30295429018

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/L	ND	1.0	0.25	05/23/19 15:52	
1,3,5-Trimethylbenzene	ug/L	ND	1.0	0.21	05/23/19 15:52	
Benzene	ug/L	ND	1.0	0.24	05/23/19 15:52	
Ethylbenzene	ug/L	ND	1.0	0.31	05/23/19 15:52	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	0.24	05/23/19 15:52	
Methyl-tert-butyl ether	ug/L	ND	1.0	0.23	05/23/19 15:52	
Naphthalene	ug/L	ND	2.0	0.82	05/23/19 15:52	
Toluene	ug/L	ND	1.0	0.30	05/23/19 15:52	
Xylene (Total)	ug/L	ND	3.0	0.78	05/23/19 15:52	
1,2-Dichloroethane-d4 (S)	%	100	80-120		05/23/19 15:52	
4-Bromofluorobenzene (S)	%	101	78-122		05/23/19 15:52	
Dibromofluoromethane (S)	%	99	80-120		05/23/19 15:52	
Toluene-d8 (S)	%	97	80-120		05/23/19 15:52	

LABORATORY CONTROL SAMPLE: 1673890

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/L	20	23.0	115	70-130	
1,3,5-Trimethylbenzene	ug/L	20	23.2	116	70-130	
Benzene	ug/L	20	18.9	94	70-130	
Ethylbenzene	ug/L	20	21.6	108	70-130	
Isopropylbenzene (Cumene)	ug/L	20	23.1	115	70-130	
Methyl-tert-butyl ether	ug/L	20	20.6	103	70-130	
Naphthalene	ug/L	20	25.9	129	69-135	
Toluene	ug/L	20	20.4	102	70-130	
Xylene (Total)	ug/L	60	64.0	107	70-130	
1,2-Dichloroethane-d4 (S)	%			93	80-120	
4-Bromofluorobenzene (S)	%			99	78-122	
Dibromofluoromethane (S)	%			96	80-120	
Toluene-d8 (S)	%			99	80-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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Date: 06/04/2019 11:48 AM

Page 24 of 29

8/19/2019 2:33:13 PM

QUALITY CONTROL DATA

Project: Russell City
Pace Project No.: 30295429

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1673891 1673892												
Parameter	Units	30295429001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
1,2,4-Trimethylbenzene	ug/L	ND	20	20	18.7	17.3	93	86	70-130	8	30	
1,3,5-Trimethylbenzene	ug/L	ND	20	20	19.1	17.6	95	88	70-130	8	30	
Benzene	ug/L	ND	20	20	18.0	17.1	90	85	67-119	5	30	
Ethylbenzene	ug/L	ND	20	20	18.2	17.1	91	85	69-127	6	30	
Isopropylbenzene (Cumene)	ug/L	ND	20	20	19.9	18.5	99	92	70-130	7	30	
Methyl-tert-butyl ether	ug/L	ND	20	20	19.7	19.9	98	100	70-130	1	30	
Naphthalene	ug/L	ND	20	20	18.1	16.8	90	84	60-136	7	30	
Toluene	ug/L	ND	20	20	17.7	16.4	88	82	70-130	8	30	
Xylene (Total)	ug/L	ND	60	60	54.9	51.1	92	85	69-128	7	30	
1,2-Dichloroethane-d4 (S)	%						93	95	80-120			
4-Bromofluorobenzene (S)	%						100	100	78-122			
Dibromofluoromethane (S)	%						94	99	80-120			
Toluene-d8 (S)	%						97	99	80-120			

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: Russell City
Pace Project No.: 30295429

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Russell City
Pace Project No.: 30295429

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30295429001	MW-1	EPA 8260B	344016		
30295429002	MW-2	EPA 8260B	344016		
30295429003	MW-3	EPA 8260B	344016		
30295429004	MW-4	EPA 8260B	344016		
30295429005	MW-5	EPA 8260B	344016		
30295429006	MW-6	EPA 8260B	344016		
30295429007	MW-7	EPA 8260B	344016		
30295429008	MW-8	EPA 8260B	344016		
30295429009	MW-9	EPA 8260B	344016		
30295429010	MW-10	EPA 8260B	344016		
30295429011	MW-11	EPA 8260B	344016		
30295429012	MW-12	EPA 8260B	344016		
30295429013	MW-13	EPA 8260B	344016		
30295429014	MW-14	EPA 8260B	344016		
30295429015	MW-15	EPA 8260B	344016		
30295429016	MW-16	EPA 8260B	344016		
30295429017	MW-17	EPA 8260B	344016		
30295429018	Trip Blank	EPA 8260B	344016		

REPORT OF LABORATORY ANALYSIS

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WO# : 30295429

LAB USE

CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

Billing Information:

Company: **ER+R**

Address: **4250 Route 6N Edinboro PA 16742**

Report To: **K. Holman** Email To: **K. Holman**

Copy To: Site Collection Info/Address:

Customer Project Name/Number: **Russell City / 2014-74**

State: **PA** County/City: **PA** Time Zone Collected: **[] PT [] MT [] CT [] ET**

Phone: **814-734-6411** Site/Facility ID #: **Russell City**

Email: **Karann Holman**

Collected By (print): **Karann Holman** Purchase Order #: **2014-74**

Collected By (signature): **[Signature]** Turnaround Date Required: **Standard**

Sample Disposal: **[X] Dispose as appropriate [] Return**

Field Filtered (if applicable): **[X] Yes [] No**

Analysis: **[] Yes [] No**

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID

Matrix *

Comp / Grab

Collected (or Composite Start) Date Time

Composite End Date Time

Res # of Ctns

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: **(Wet) Blue Dry None**

Packing Material Used: **Bubble wrap**

Radchem sample(s) screened (<5000 ppm): **Y N NA**

Received by/Company: (Signature) **[Signature]** Date/Time: **5/20/19 3:00**

Received by/Company: (Signature) **[Signature]** Date/Time: **5/20/19 3:00**

Received by/Company: (Signature) **[Signature]** Date/Time: **5/20/19 3:00**

Received by/Company: (Signature) **[Signature]** Date/Time: **5/20/19 3:00**

Received by/Company: (Signature) **[Signature]** Date/Time: **5/20/19 3:00**

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Received by/Company: (Signature) **[Signature]** Date/Time: **5/20/19 3:00**

Received by/Company: (Signature) **[Signature]** Date/Time: **5/20/19 3:00**

Container Preservative Type **

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other

Analyses

Lab Profile/Line:

Lab Sample Receipt Checklist:

Custody Seals Present/Intact: **Y NA**

Custody Signatures Present: **Y NA**

Collector Signatures Present: **Y NA**

Bottles Intact: **Y NA**

Correct Bottles: **Y NA**

Sufficient Volume: **Y NA**

Samples Received on Ice: **Y NA**

VOA - Headspace Acceptable: **Y NA**

USDA Regulated Solids: **Y NA**

Samples in Holding Time: **Y NA**

Residual Chlorine Present: **Y NA**

Cl Strips: **Y NA**

Sample pH Acceptable: **Y NA**

pH Strips: **Y NA**

Sulfide Present: **Y NA**

Lead Acetate Strips: **Y NA**

LAB USE ONLY: **Y NA**

Lab Sample # / Comments: **021 022 023 024 025 026 027 028 029 030**

Lab Sample Temperature Info:

Temp Blank Received: **1.30 NA**

Therm ID#: **1.30 NA**

Cooler 1 Temp Upon Receipt: **1.30 NA**

Cooler 1 Therm Corr Factor: **1.30 NA**

Cooler 1 Corrected Temp: **1.30 NA**

Comments: **05/20/19 QRS**

Temp Blank Received: **1.30 NA**

Therm ID#: **1.30 NA**

Cooler 1 Temp Upon Receipt: **1.30 NA**

Cooler 1 Therm Corr Factor: **1.30 NA**

Cooler 1 Corrected Temp: **1.30 NA**

Comments: **05/20/19 QRS**

Temp Blank Received: **1.30 NA**

Therm ID#: **1.30 NA**

Cooler 1 Temp Upon Receipt: **1.30 NA**

Cooler 1 Therm Corr Factor: **1.30 NA**

Cooler 1 Corrected Temp: **1.30 NA**

Comments: **05/20/19 QRS**

CHAIN-OF-CUSTODY Analytical Request Document

Company: ERH Address: 4250 Route 6N Edinboro PA 16742 Report To: KH Copy To: KH

Customer Project Name/Number: Russell City 12014-74 Site/Facility ID #: 814-734-6411

State: PA County/City: PA' Compliance Monitoring? Yes No DW PWS ID #: 2014-74 DW Location Code: Standard

Turnaround Date Required: Rush: Same Day 12 Day 3 Day 4 Day 5 Day

Sample Disposal: Dispose as appropriate Return Archive: Hold:

Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Time	Res CI	# of Cns
MW11	GW	4	5/17/19	10:52		
MW12				11:12		
MW13				10:10		
MW14				12:45		
MW15				11:36		
MW16				11:00		
MW17				11:44		

Customer Remarks / Special Conditions / Possible Hazards: Type of Ice Used: Wet Blue Dry None Packing Material Used: Bubble wrap Radchem sample(s) screened (<500 cpm): Y N NA

Relinquished by/Company: (Signature) Date/Time: 5/20/19 3:00 Received by/Company: (Signature) Date/Time: 5/20/19 09:30

Relinquished by/Company: (Signature) Date/Time: Received by/Company: (Signature) Date/Time: Received by/Company: (Signature) Date/Time:

LAB USE ONLY - Affix Workorder/Login Label Here or List Pace Workorder Number or MTIL Log-in Number Here

Container Preservative Type **

Lab Project Manager:

Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other

ALL SHADED AREAS are for LAB USE ONLY

Lab Sample Receipt Checklist:

Custody Seals Present/Intact	Y N NA
Custody Signatures Present	Y N NA
Collector Signatures Present	Y N NA
Bottles Intact	Y N NA
Correct Bottles	Y N NA
Sufficient Volume	Y N NA
Samples Received on Ice	Y N NA
VOA - Headspace Acceptable	Y N NA
USDA Regulated Soils	Y N NA
Samples in Holding Time	Y N NA
Residual Chlorine Present	Y N NA
CL Strips	Y N NA
Sample PB Acceptable	Y N NA
PR Strips	Y N NA
Sulfide Present	Y N NA
Lead Acetate Strips	Y N NA

LAB USE ONLY: Lab Sample # / Comments: 011 012 013 014 015 016 017 018 019

Lab Profile/Line: Lab Sample Receipt Checklist: Custody Seals Present/Intact Y N NA Custody Signatures Present Y N NA Collector Signatures Present Y N NA Bottles Intact Y N NA Correct Bottles Y N NA Sufficient Volume Y N NA Samples Received on Ice Y N NA VOA - Headspace Acceptable Y N NA USDA Regulated Soils Y N NA Samples in Holding Time Y N NA Residual Chlorine Present Y N NA CL Strips Y N NA Sample PB Acceptable Y N NA PR Strips Y N NA Sulfide Present Y N NA Lead Acetate Strips Y N NA LAB USE ONLY: Lab Sample # / Comments: 011 012 013 014 015 016 017 018 019

Lab Sample Temperature Info: Temp Blank Received: 18.0°C Therm ID#: 18.0°C Cooler 1 Temp Upon Receipt: 18.0°C Cooler 1 Therm Corr. Factor: 0.0°C Cooler 1 Corrected Temp: 18.0°C Comments: 05/20/19 09:30

Temp Blank Received: Y N NA MeOH: TSP: Other: Non Conformance(s): YES / NO Page: of:

Appendix N
Laboratory Certificates of Analysis – Soil Vapor

October 31, 2018

Mr. Dave Birchard
Environmental Remediation & Recovery, Inc.
4250 Route 6N
Edinboro, PA 16412

RE: Project: Russell Cay St
Pace Project No.: 30269335

Dear Mr. Birchard:

Enclosed are the analytical results for sample(s) received by the laboratory on October 23, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Samantha Bayura
samantha.bayura@pacelabs.com
(724)850-5622
Project Manager

Enclosures

cc: Karann Holman, Environmental Remediation & Recovery, Inc.



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: Russell Cay St
Pace Project No.: 30269335

Minnesota Certification IDs

1700 Elm Street SE, Minneapolis, MN 55414-2485
A2LA Certification #: 2926.01
Alabama Certification #: 40770
Alaska Contaminated Sites Certification #: 17-009
Alaska DW Certification #: MN00064
Arizona Certification #: AZ0014
Arkansas DW Certification #: MN00064
Arkansas WW Certification #: 88-0680
California Certification #: 2929
CNMI Saipan Certification #: MP0003
Colorado Certification #: MN00064
Connecticut Certification #: PH-0256
EPA Region 8+Wyoming DW Certification #: via MN 027-053-137
Florida Certification #: E87605
Georgia Certification #: 959
Guam EPA Certification #: MN00064
Hawaii Certification #: MN00064
Idaho Certification #: MN00064
Illinois Certification #: 200011
Indiana Certification #: C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky DW Certification #: 90062
Kentucky WW Certification #: 90062
Louisiana DEQ Certification #: 03086
Louisiana DW Certification #: MN00064
Maine Certification #: MN00064
Maryland Certification #: 322
Massachusetts Certification #: M-MN064
Michigan Certification #: 9909

Minnesota Certification #: 027-053-137
Minnesota Dept of Ag Certification #: via MN 027-053-137
Minnesota Petrofund Certification #: 1240
Mississippi Certification #: MN00064
Montana Certification #: CERT0092
Nebraska Certification #: NE-OS-18-06
Nevada Certification #: MN00064
New Hampshire Certification #: 2081
New Jersey Certification #: MN002
New York Certification #: 11647
North Carolina DW Certification #: 27700
North Carolina WW Certification #: 530
North Dakota Certification #: R-036
Ohio DW Certification #: 41244
Ohio VAP Certification #: CL101
Oklahoma Certification #: 9507
Oregon NwTPH Certification #: MN300001
Oregon Secondary Certification #: MN200001
Pennsylvania Certification #: 68-00563
Puerto Rico Certification #: MN00064
South Carolina Certification #: 74003001
Tennessee Certification #: TN02818
Texas Certification #: T104704192
Utah Certification #: MN00064
Virginia Certification #: 460163
Washington Certification #: C486
West Virginia DW Certification #: 9952 C
West Virginia DEP Certification #: 382
Wisconsin Certification #: 999407970
Wyoming UST Certification #: via A2LA 2926.01

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: Russell Cay St
Pace Project No.: 30269335

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30269335001	VP-1	Air	10/17/18 12:20	10/23/18 11:20

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SAMPLE ANALYTE COUNT

Project: Russell Cay St
Pace Project No.: 30269335

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30269335001	VP-1	TO-15	AFV	9	PASI-M

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Russell Cay St
Pace Project No.: 30269335

Sample: VP-1 Lab ID: 30269335001 Collected: 10/17/18 12:20 Received: 10/23/18 11:20 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR		Analytical Method: TO-15							
Benzene	ND	ug/m3	0.94	0.44	2.88		10/27/18 01:40	71-43-2	
Ethylbenzene	ND	ug/m3	2.5	0.88	2.88		10/27/18 01:40	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/m3	7.2	1.1	2.88		10/27/18 01:40	98-82-8	
Methyl-tert-butyl ether	ND	ug/m3	10.5	1.9	2.88		10/27/18 01:40	1634-04-4	
Naphthalene	ND	ug/m3	7.7	3.8	2.88		10/27/18 01:40	91-20-3	
Toluene	60.2	ug/m3	2.2	1.0	2.88		10/27/18 01:40	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/m3	2.9	1.3	2.88		10/27/18 01:40	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	2.9	1.1	2.88		10/27/18 01:40	108-67-8	
Xylene (Total)	ND	ug/m3	7.6	2.0	2.88		10/27/18 01:40	1330-20-7	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Russell Cay St
Pace Project No.: 30269335

QC Batch: 571803 Analysis Method: TO-15
QC Batch Method: TO-15 Analysis Description: TO15 MSV AIR Low Level
Associated Lab Samples: 30269335001

METHOD BLANK: 3102307 Matrix: Air
Associated Lab Samples: 30269335001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/m3	ND	1.0	0.45	10/26/18 11:34	
1,3,5-Trimethylbenzene	ug/m3	ND	1.0	0.40	10/26/18 11:34	
Benzene	ug/m3	ND	0.32	0.15	10/26/18 11:34	
Ethylbenzene	ug/m3	ND	0.88	0.30	10/26/18 11:34	
Isopropylbenzene (Cumene)	ug/m3	ND	2.5	0.38	10/26/18 11:34	
Methyl-tert-butyl ether	ug/m3	ND	3.7	0.66	10/26/18 11:34	
Naphthalene	ug/m3	ND	2.7	1.3	10/26/18 11:34	
Toluene	ug/m3	ND	0.77	0.35	10/26/18 11:34	
Xylene (Total)	ug/m3	ND	2.6	0.70	10/26/18 11:34	

LABORATORY CONTROL SAMPLE: 3102308

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/m3	50	57.0	114	70-137	
1,3,5-Trimethylbenzene	ug/m3	50	57.3	115	70-133	
Benzene	ug/m3	32.5	35.5	109	70-134	
Ethylbenzene	ug/m3	44.1	49.5	112	70-133	
Isopropylbenzene (Cumene)	ug/m3	50	56.1	112	70-133	
Methyl-tert-butyl ether	ug/m3	36.6	39.0	106	70-132	
Naphthalene	ug/m3	53.3	58.8	110	55-136	
Toluene	ug/m3	38.3	42.6	111	70-130	
Xylene (Total)	ug/m3	132	148	111	70-138	

SAMPLE DUPLICATE: 3104082

Parameter	Units	10452881001 Result	Dup Result	RPD	Max RPD	Qualifiers
1,2,4-Trimethylbenzene	ug/m3	<0.70	ND		25	
1,3,5-Trimethylbenzene	ug/m3	<0.62	ND		25	
Benzene	ug/m3	<0.24	ND		25	
Ethylbenzene	ug/m3	<0.47	ND		25	
Isopropylbenzene (Cumene)	ug/m3	<0.59	ND		25	
Methyl-tert-butyl ether	ug/m3	<1.0	ND		25	
Naphthalene	ug/m3	<2.0	ND		25	
Toluene	ug/m3	<0.54	.62J		25	
Xylene (Total)	ug/m3	<1.1	ND		25	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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Date: 10/31/2018 03:11 PM

Page 6 of 11

8/19/2019 2:33:22 PM

QUALITY CONTROL DATA

Project: Russell Cay St
Pace Project No.: 30269335

SAMPLE DUPLICATE: 3104098

Parameter	Units	10452881002 Result	Dup Result	RPD	Max RPD	Qualifiers
1,2,4-Trimethylbenzene	ug/m3	1.5	1.3J		25	
1,3,5-Trimethylbenzene	ug/m3	<0.57	ND		25	
Benzene	ug/m3	2.1	1.9	6	25	
Ethylbenzene	ug/m3	3.7	3.6	3	25	
Isopropylbenzene (Cumene)	ug/m3	0.86J	.78J		25	
Methyl-tert-butyl ether	ug/m3	<0.95	ND		25	
Naphthalene	ug/m3	11.2	10.6	5	25	
Toluene	ug/m3	16.7	16.4	2	25	
Xylene (Total)	ug/m3	7.1	6.5	9	25	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: Russell Cay St
Pace Project No.: 30269335

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.
ND - Not Detected at or above adjusted reporting limit.
TNTC - Too Numerous To Count
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
MDL - Adjusted Method Detection Limit.
PQL - Practical Quantitation Limit.
RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.
S - Surrogate
1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.
Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.
LCS(D) - Laboratory Control Sample (Duplicate)
MS(D) - Matrix Spike (Duplicate)
DUP - Sample Duplicate
RPD - Relative Percent Difference
NC - Not Calculable.
SG - Silica Gel - Clean-Up
U - Indicates the compound was analyzed for, but not detected.
N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.
Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.
TNI - The NELAC Institute.

LABORATORIES

PASI-M Pace Analytical Services - Minneapolis

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Russell Cay St
Pace Project No.: 30269335

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30269335001	VP-1	TO-15	571803		

REPORT OF LABORATORY ANALYSIS

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30269335

AIR: CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information: Company: <u>PACE INC</u> Address: <u>4250 ROUTE 60N</u> Email To: <u>Edinboro, PA 16412</u> Phone: <u>8147346477</u> Requested Due Date (AI): <u>4756</u>		Section B Required Project Information: Report To: <u>K. Holman</u> Copy To: Purchase Order No.: <u>201474</u> Project Name: <u>ELISEL CITY ST.</u> Project Number: <u>2014-74</u>		Section C Invoice Information: Attention: <u>T. Kluem</u> Company Name: <u>ERR</u> Address: Piece Quote Reference: Piece Project Manager/Sales Rep: Piece Profile #: <u>13565</u>		34027 Page: 1 of 1			
Section D Required Client Information AIR SAMPLE ID Sample IDs MUST BE UNIQUE		COLLECTED MEDIA CODE PID Reading (Client only) MEDIA CODE DATE TIME DATE TIME		Flow Control Number Summa Can Number Canister Pressure (Initial Field - In Hg) Canister Pressure (Final Field - In Hg)		Method: TO-15 Short Lead BTEX TO-15 Short Lead VOCs TO-15 Full Lead VOCs TO-14 TO-15M (Methane) TO-15 BTEX TO-15 Fixed Gas (%) PM10			
Vials Media Codes MEDIA CODE Tedlar Bag 1 Liter Summa Can 6 Liter Summa Can Low Volume Puff High Volume Puff Other PW10		DATE TIME DATE TIME		DATE TIME DATE TIME		DATE TIME DATE TIME			
1 2 3 4 5 6 7 8 9 10 11 12		10/17/10 08:15 10/17/10 12:20 10/17/10 12:20 10/17/10 12:20 10/17/10 12:20 10/17/10 12:20 10/17/10 12:20 10/17/10 12:20 10/17/10 12:20 10/17/10 12:20 10/17/10 12:20 10/17/10 12:20		10/17/10 08:15 10/17/10 12:20 10/17/10 12:20 10/17/10 12:20 10/17/10 12:20 10/17/10 12:20 10/17/10 12:20 10/17/10 12:20 10/17/10 12:20 10/17/10 12:20 10/17/10 12:20 10/17/10 12:20		10/17/10 08:15 10/17/10 12:20 10/17/10 12:20 10/17/10 12:20 10/17/10 12:20 10/17/10 12:20 10/17/10 12:20 10/17/10 12:20 10/17/10 12:20 10/17/10 12:20 10/17/10 12:20 10/17/10 12:20		10/17/10 08:15 10/17/10 12:20 10/17/10 12:20 10/17/10 12:20 10/17/10 12:20 10/17/10 12:20 10/17/10 12:20 10/17/10 12:20 10/17/10 12:20 10/17/10 12:20 10/17/10 12:20 10/17/10 12:20	
Comments:		RELINQUISHED BY / AFFILIATION DATE TIME		ACCEPTED BY / AFFILIATION DATE TIME		SAMPLE CONDITIONS Temp In °C Received on Ice Sealed Cooler Custody Samples Intact			
ORIGINAL		SAMPLER NAME AND SIGNATURE PRINT Name of SAMPLER: SIGNATURE of SAMPLER:		DATE Signed (MM/DD/YY) 10/18/10		10/18/10			

Air Sample Condition Upon Receipt	Client Name: ER+R	Project #: 	
Courier: ☒ Fed Ex ☐ UPS ☐ Speedee ☐ Client ☐ Commercial ☐ Pace ☐ Other: _____			
Tracking Number: <u>7735 2007 0408</u>			
Custody Seal on Cooler/Box Present? ☐ Yes ☒ No Seals Intact? ☐ Yes ☒ No Optional: Proj. Due Date: _____ Proj. Name: _____			
Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☒ Foam ☐ None ☐ Tin Can ☐ Other: _____ Temp Blank rec: ☐ Yes ☒ No			
Temp. (TO17 and TO13 samples only) (°C): <u>X</u> Corrected Temp (°C): <u>X</u> Thermom. Used: ☐ G87A9170600254 ☐ G87A9155100842			
Temp should be above freezing to 6°C Correction Factor: <u>X</u> Date & Initials of Person Examining Contents: <u>10-23-18 JA</u>			
Type of Ice Received ☐ Blue ☐ Wet ☒ None			

Question	Yes	No	Comments
Chain of Custody Present?	☒	☐	1.
Chain of Custody Filled Out?	☒	☐	2.
Chain of Custody Relinquished?	☒	☐	3.
Sampler Name and/or Signature on COC?	☒	☐	4.
Samples Arrived within Hold Time?	☒	☐	5.
Short Hold Time Analysis (<72 hr)?	☐	☒	6.
Rush Turn Around Time Requested?	☐	☒	7.
Sufficient Volume?	☒	☐	8.
Correct Containers Used?	☒	☐	9.
Pace Containers Used?	☒	☐	
Containers Intact?	☒	☐	10.
Media: ☒ Air Can ☐ Airbag ☐ Filter ☐ TDT ☐ Passive			11. Individually Certified Cans Y ☒ (list which samples)
Is sufficient information available to reconcile samples to the COC?	☒	☐	12.

Samples Received:					Pressure Gauge # 10AIR35				
Canisters					Canisters				
Sample Number	Can ID	Flow Controller	Initial Pressure	Final Pressure	Sample Number	Can ID	Flow Controller	Initial Pressure	Final Pressure
VP-1	0820	0600	-16	+5					

CLIENT NOTIFICATION/RESOLUTION

Person Contacted: _____ Date/Time: _____

Field Data Required? ☐ Yes ☐ No

Comments/Resolution: _____

Project Manager Review: _____ Date: _____

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DENR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)