#### SITE CHARACTERIZATION REPORT FORMER ROSEMERGY'S STORE/GARAGE USTIF CLAIM NUMBER: 2011-0082(S) 1623 ROUTE 590, LACKAWAXEN TWP., PIKE CO., PENNSYLVANIA

**FOR** 

LOCHGEN, LP 731 WELCOME LAKE ROAD HAWLEY, PENNSYLVANIA 18428

August 7, 2014

**Project Number: 11-17788-01** 

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11-17788-01

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Former Rosemergy's Store/Garage USTIF Claim No. 2011-0082(S) Lackawaxen Twp., Pike Co., Pennsylvania

# EXECUTIVE SUMMARY SITE CHARACTERIZATION REPORT FORMER ROSEMERGY'S STORE/GARAGE USTIF CLAIM NO. 2011-0082(S) 1623 STATE ROUTE 590 LACKAWAXEN TWP., PIKE CO., PENNSYLVANIA

The following is an Executive Summary of the Site Characterization, as presented in the body of this report that was conducted by Converse Consultants (Converse). Please refer to the appropriate sections of the report for a complete discussion of these issues. In the event of a conflict between this Executive Summary and the report, or an omission in the Executive Summary, the report shall prevail.

Converse Consultants (Converse), on behalf of Lochgen, LP (Lochgen), submits this Site Characterization Report (SCR) to document site characterization activities that were conducted at the former Rosemergy's Store/Garage located at 1623 State Route 590 in Hawley (Lackawaxen Twp.), Pike County, Pennsylvania (Property). The Property is currently operated as a retail motor fuel distribution and convenience store. The site characterization is being conducted to further assess a release of petroleum product (unleaded gasoline) that was identified in July 2011 from a regulated underground storage tank (UST) system at the Property and comply with the requirements of 25 Pennsylvania Code Chapter 245 (§245).

Site characterization included the following primary tasks:

- 1. Completion of a Site-Specific Health and Safety Plan.
- 2. Completion of a Receptor Survey for the area surrounding the Property.
- 3. Completion of a private utility markout and other measures to assess utility locations and depths beneath the property.
- 4. Negotiation of site access to off-property locations
- 5. Collection of water samples from potable supply wells located on adjacent properties.
- 6. Assessment of the soil vapor to indoor air pathway via soil vapor sampling and indoor air sampling.
- 7. Completion of a Soil Sample Collection Program using a Geoprobe Direct-Push soil sampling system. Twenty (20) soil borings (soil borings SB-8 through SB-27) were completed at the Property to assess the levels of residual petroleum constituents in soil.
- Installation and development of sixteen (16) groundwater monitoring wells (monitoring well MW-1 through MW-16) at the site to assess the extent of the impacted groundwater plume. The groundwater monitoring wells were installed

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Former Rosemergy's Store/Garage USTIF Claim No. 2011-0082(S) Lackawaxen Twp., Pike Co., Pennsylvania

- to depths of approximately 15 feet below grade (fbg) and were screened across the water table that was encountered during drilling.
- 9. Completion of multiple rounds of groundwater sample collection from the monitoring wells. At least two rounds of groundwater sample collection were collected from each monitoring well.
- 10. Completion of two (2) rounds of sample collection from the nearest on-lot supply wells located on adjacent properties.
- 11. Review of previously completed studies at the site.
- 12. Aquifer testing and development of an updated site conceptual model.
- 13. Compilation and submission of this Site Characterization Report (SCR).

#### **SELECTED STANDARDS**

SOIL - Nonresidential medium specific (NRMSC) Statewide Health Standard (SHS) GROUNDWATER - Residential MSC SHS

#### **SETTING**

The site is located approximately 1,200 feet south of Little Teedyuskung Lake. The lake drains into West Falls Creek which passes approximately 1,100 feet northeast of the site. West Falls Creek flows southeast to the Lackawaxen River. The site is located approximately 2,200 feet northeast and northwest, respectively, of two (2) small creeks that drain south into the Lackawaxen River. The Lackawaxen River is located approximately 7,500 feet south of the site and flows from west to east (towards the Delaware River). No surface water body is present within the boundaries of the Property. Use of properties in the immediate area of the Site consists primarily of residential use.

<u>RECEPTORS</u> - Converse performed a door-to-door survey and site reconnaissance of the Property and vicinity to identify potential receptors. With the exception of the residential supply well on the adjacent property to the south and potential receptors based on site use (employees, visitors, and construction workers), no potential receptor was identified during the site reconnaissance. The nearest surface water body is located approximately 1200 feet from the Property. The site building and nearest off-Property residence do not have basements.

 $\underline{SOIL\ VAPOR}$  - No compound exceeded the residential MSC<sub>SG</sub> (RMSC<sub>SG</sub>) or nonresidential MSC<sub>SG</sub> (NRMSC<sub>SG</sub>) in the soil gas samples (2 rounds) collected from the two (2) soil vapor points VP-1 and VP-2 that were installed between the release area and the convenience store building.

INDOOR AIR - An assessment of indoor air was completed at the nearest residential

structure to the southeast. Samples were collected inside the structure and outside the structure (ambient air). Gasoline constituents were detected in the indoor air sample but were not present at levels that exceed the RMSC SHSs for indoor air that are published by PADEP. A second round of indoor air sample collection is planned for winter 2015 to provide data during the winter season.

#### **GROUNDWATER**

Multiple rounds of groundwater sample collection and analysis have been conducted to characterize groundwater during the course of the site characterization phase. As discussed previously, additional groundwater monitoring wells were added in phases to address data gaps. Groundwater sample collection events were conducted on the following dates:

May 8, 2012 June 7, 2012 November 8, 2013 December 11, 2013 February 4, 2014 (MW-10 through MW-12 only) March 7, 2014 April 29, 2014 (MW-13 through MW-16 only) June 12, 2014

The laboratory results indicate that petroleum constituents in the groundwater are present beneath the Property and the adjacent Woodloch property at levels that exceed the RMSC SHSs. UST closure data and the analytical data indicate that the petroleum product released at the site was unleaded gasoline. The highest levels of gasoline constituents have been detected in monitoring wells west of the former leaking UST system consistent with the local direction of groundwater flow indicated by water level data.

As previously discussed, the principal direction of contaminant transport beneath the site is to the west. Groundwater level data and the observed distribution of contaminants also indicate a component of flow to the southeast. The impacted groundwater plume has not migrated to the west or southeast beyond the current monitoring well network at levels that exceed the RMSC SHSs.

Insufficient rounds of quarterly groundwater sample collection have been completed to provide a meaningful analysis of groundwater trends. However, groundwater sample collection events for the central area of the impacted groundwater plume date back to May of 2012. Historical data for the core of plume indicate stable contaminant concentrations in monitoring wells MW-1 and MW-4, a general decline in concentrations in monitoring wells MW-2 and MW-7, and a post-construction increase in concentrations in monitoring wells MW-3 and MW-5.

<u>SOIL</u> - In general, the highest levels of petroleum constituents in each soil boring were detected at the soil/groundwater interface. In general, the highest levels of petroleum constituents in soil were detected in borings west (downgradient) of the former UST excavation. No residual source area is indicated to be present in the unsaturated zone.

#### SITE CONCEPTUAL MODEL - Current data for the Site indicate:

- 1. Field data indicate that unconsolidated deposits are laterally extensive and serve as an aquifer beneath the Site.
- 2. The primary surface water discharge boundary in the area of the Site is the Lackawaxen River and its tributaries.
- 3. No distinct confining unit was evident in the subsurface that was evaluated by this study.
- 4. The overburden consists of a poorly stratified mixture of silty sands and silts, with varying amounts of gravel, and occasional clayey horizons. Bedrock was not encountered during site characterization activities that investigated to a depth of approximately 21 feet below grade.
- 5. The water table is indicated to be shallow and located just below the depth of utilities at the Site. Although data indicates that the distribution of contaminants is consistent with groundwater flow predicted from contour maps, utilities could potentially serve as preferential pathways during periods of high water levels.
- 6. Groundwater mounding within the unconsolidated overburden occurs at the eastern end of the former UST area.
- 7. Although groundwater is shallow, experience with open holes and excavations indicate that very little water is available in the shallow overburden. Measurements of aquifer properties indicate very slow groundwater transport velocities.

Impacted groundwater extends to the west and southeast of the former UST system at levels that exceed the RMSC SHSs. Although data is insufficient to assess constituent concentration trends, no potential source of additional petroleum hydrocarbons has been identified in the area of the impacted groundwater plume. Based on the age of the release, the lack of an active source, and the slow predicted transport velocities predicted for groundwater, the plume would be expected to be stable or shrinking. Recent increases in contaminant concentrations in monitoring wells MW-3 and MW-5 are expected to be temporary increases due to disturbance of the site during construction of the new store.

A qualitative analysis of fate and transport indicates limited mobility of constituents beyond the current contaminant distribution. As the current monitoring well array is sufficient to detect expansion of the plume before the plume reaches downgradient Lackawaxen Twp., Pike Co., Pennsylvania

receptors, it is our opinion that quantitative analysis of fate and transport is not required at this point in time.

#### PLANNED ACTIVITIES

- Screening of remedial alternatives and submission of a Remedial Action Plan.
- Quarterly Groundwater Monitoring and Reporting.
- A second indoor air sampling event during the winter of 2015.
- Construction activities have caused an increase in gasoline constituents in monitoring wells MW-3 and MW-5 that are located near off-property monitoring wells and the off-property residential supply wells. A groundwater extraction event will be proposed to USTIF to address the increase in contaminant concentrations and preclude additional off-property movement of the petroleum constituents.
- Quantitative fate and transport analysis, if required.

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## SITE CHARACTERIZATION REPORT FORMER ROSEMERGY'S STORE FACILITY ID #52-01926 1623 ROUTE 590 LACKAWAXEN TWP., PIKE CO., PENNSYLVANIA

#### 1.0 INTRODUCTION

Converse Consultants (Converse), on behalf of Lochgen, LP. (Lochgen), submits this Site Characterization Report (SCR) to document site characterization activities that were conducted at the former Rosemergy's convenient store located at 1623 State Route 590 in Hawley (Lackawaxen Twp.), Pike County, Pennsylvania (Property). The site characterization is being conducted to further assess a release of petroleum product (unleaded gasoline) that was identified in July 2011 from a regulated underground storage tank (UST) system at the Property. Appendix A: Figure 1 presents the location of the Property relative to area roads and features.

The scope of work for site characterization activities completed by Converse and others was prepared in coordination with USTIF. Ultimately, the site characterization activities were conducted to: 1) assess the lateral extent of petroleum constituents in soil and groundwater that resulted from the release of product from a former underground storage tank (UST) system at the Property; 2) comply with the requirements of 25 Pennsylvania Code Chapter 245 (§245). Subchapter D: Corrective Action Process for Owners and Operators of Storage Tanks and Storage Tank Facilities and Other Responsible Parties; and 3) collect data to facilitate attainment of one (1) or more of the remediation standards that are promulgated in and to comply with the requirements of 25 Pennsylvania Code Chapter 250 (§250): Administration of the Land Recycling Program.

The site characterization included the following primary tasks:

- Completion of a Site-Specific Health and Safety Plan.
- 2. Completion of a Receptor Survey for the area surrounding the Property.
- 3. Completion of a private utility markout and other measures to assess utility locations and depths beneath the property.
- Negotiation of site access to off-property locations

- 5. Collection of water samples from potable supply wells located on adjacent properties.
- 6. Assessment of the soil vapor to indoor air pathway via soil vapor sampling and indoor air sampling.
- 7. Completion of a Soil Sample Collection Program using a Geoprobe Direct-Push soil sampling system. Twenty (20) soil borings (soil borings SB-8 through SB-27) were completed at the Property to assess the levels of residual petroleum constituents in soil.
- 8. Installation and development of sixteen (16) groundwater monitoring wells (monitoring well MW-1 through MW-16) at the site to assess the extent of the impacted groundwater plume. The groundwater monitoring wells were installed to depths of approximately 15 feet below grade (fbg) and were screened across the water table that was encountered during drilling.
- Completion of multiple rounds of groundwater sample collection from the monitoring wells. At least two rounds of groundwater sample collection were collected from each monitoring well.
- 10. Completion of two (2) rounds of sample collection from the nearest on-lot supply wells located on adjacent properties.
- 11. Review of previously completed studies at the site.
- 12. Aquifer testing and development of an updated site conceptual model.
- 13. Compilation and submission of this Site Characterization Report (SCR).

#### 2.0 DOCUMENTATION AND ADMINISTRATIVE SUMMARY

#### 2.1 PRIMARY CONTACTS

#### **Responsible Party**

Lochgen LP 731 Welcome Lake Road Hawley, Pennsylvania 18428 (570) 685-8061 Primary Contact: Mr. George Korb

#### **USTIF/ICF Contact**

ICF International 4000 Vine Street Middletown, Pennsylvania 17057 (570) 586-2617 Primary Contact: Ms. Linda Melvin

#### Consultant

Converse Consultants 2738 West College Avenue State College, Pennsylvania 16801 (814) 234-3223 Primary Contact: David W. Swetland, P.G.

#### Pennsylvania Department of Environmental Protection (PADEP) Staff Contact

PADEP – Northeast Region 2 Public Square Wilkes Barre, Pennsylvania 15222 (570) 830-3028 Primary Contact: Ms. Rebecca Albert

#### 2.2 SITE USE DESIGNATION

For the purpose of this submission, a "Property" is defined as a parcel of land that is defined by metes and bounds that are set forth in the deed for that land and is the originating property of the constituents of concern (COC) that are assessed by the Site Characterization and addressed during Remedial Action. As presented in §250.1, a Site is defined as "the extent of contamination originating within the property boundaries and all areas in close proximity to the contamination necessary for the implementation of remediation activities to be conducted under the act". More

than one (1) Site can be located within the boundaries of a property and a Site can extend beyond the boundaries of a property.

One (1) Site was identified during the Site Characterization. The Site extends beyond the boundary of the Property and includes soil and groundwater that are circumscribed by the monitoring wells and UST area at the Site.

Appendix A: Figure 2 presents cultural features that are located on and the general area of the Site. The Property has historically been utilized to service, store, and fuel vehicles. An active UST system that includes a fuel island with canopy and USTs that store unleaded gasoline is currently located at the Property. The current use of the Property meets the definition of a Nonresidential Property as promulgated in *Act 2 of 1995: Pennsylvania Land Recycling and Environmental Remediation Standards Act (Act 2), Section103.* The use of properties that are adjacent to the Site consists primarily of commercial, residential, and undeveloped land. The current use of surrounding properties meet the definition of nonresidential and residential property as promulgated in *Act 2, Section 103.* The probable future use of the Property and adjacent properties may be for either Residential or Nonresidential purposes.

Constituent concentrations in the soil were evaluated with respect to the Nonresidential Medium Specific Concentration (NRMSC) Statewide Health Standards (SHSs) that are promulgated in §250; Subchapter C. Constituent concentrations in groundwater were evaluated with respect to the Residential Medium Specific Concentration (RMSC) Statewide Health Standards (SHSs) that are promulgated in §250; Subchapter C.

§250.302(a) and 407(a) stipulate that the point of compliance (POC) "is the property boundary that existed at the time the contamination was discovered". Data indicate that compounds of concern (COCs) extend beyond the downgradient POC at concentrations greater than the RMSC SHS.

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#### 2.3 SELECTED STANDARD

§245.310(a)(26) requires the identification of the remediation standard that has or will be attained. Act 2 requires that the attainment of one (1) or a combination of three (3) cleanup standards be demonstrated by scientifically recognized principles, standards, and procedures. The cleanup standards include the Background Standard (BGS), the Statewide Health Standard (SHS), and the Site Specific Standard (SSS). §250 promulgates cleanup criteria for three (3) specific media: soil not in the zone of groundwater saturation (unsaturated soil); soil in the zone of groundwater saturation (saturated soil); and groundwater. Act 2 also requires that the Remediator notify PADEP which standard(s) will be used to demonstrate attainment.

Attainment of the following remediation standards at the Site is currently anticipated: SOIL - Nonresidential medium specific (NRMSC) Statewide Health Standard (SHS) GROUNDWATER - Residential MSC SHS

### 2.4 DEED ACKNOWLEDGEMENT AND UNIFORM ENVIRONMENTAL COVENANT ACT

Act 2: Section 303(g) requires that "persons attaining and demonstrating compliance with the Statewide Health Standard considering residential exposure factors for a regulated substance shall not be subject to the deed acknowledgment requirements of" the sections of Pennsylvania Law (P.L.) specified in Act 2: Section 303(g), but "the deed acknowledgment requirements shall apply where nonresidential exposure factors were used to comply with the Statewide health standard". Act 2: Section 304(m) requires that "persons attaining and demonstrating compliance with the site-specific standard for a regulated substance shall be subject to the deed acknowledgment requirements of" the sections of Pennsylvania Law (P.L.) that are specified in Act 2: Section 304(m). A deed acknowledgment is not currently anticipated for the Property that is the subject of this Report.

The Pennsylvania Uniform Environmental Covenants Act (UECA: Act 68 of 2007) requires a covenant on the real property if an engineering control or institutional control is necessary to demonstrate attainment of an Act 2 standard. Engineering controls can

include, but are not limited to, slurry walls, liner systems, caps, leachate collection systems, and groundwater recovery trenches. Institutional controls are measures taken to limit or prohibit certain activities that may interfere with the integrity of a remedial action or result in exposure to regulated substances at a property. The covenant can act as the deed acknowledgement. At this point in time the use of covenants is not anticipated for the Site.

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#### 2.5 RELEASE REPORTING

#### 2.5.1 Submissions to PADEP

§245.305(a) requires that 'the owner or operator of storage tanks and storage tank facilities shall notify the appropriate regional office of the Department as soon as practicable, but not later than 24 hours, after the confirmation of a reportable release" and §245.305(c) requires that "the notice required by subsection (a) shall be by telephone". A release of product was identified at the Property in July 2011. Based on documentation provided by Bluestone Environmental, PADEP was notified of the release from the UST system.

§245.305(d) requires that "within 15 days of the notice required by subsection (a), the owner or operator shall provide written notification to the Department and to each municipality in which the reportable release occurred, and each municipality where the release has impacted environmental media or water supplies, buildings or sewer or other utility lines". No information on municipal notification was provided to Converse. Based on documentation provided by Bluestone Environmental, PADEP was notified of the release from the UST system. Converse will notify the municipality of the release.

§245.305(e) requires that "the owner or operator shall provide written notification to the Department and 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 (d). Written notification under this subsection shall be made within 15 days of the discovery of the new impact". The impacts assessed in this report are considered to be the result of the reported

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release. No new impact was identified during the characterization activities

discussed in this report.

2.5.2 Submissions to the Municipality

As presented in Section 2.5.1, municipal notification requirements are specified in

§245.305(d) and (e). Lackawaxen Township, Pike County, Pennsylvania is the

municipality in which the release occurred and where impacted media have been

identified. Converse will notify the municipality of the release.

2.6 COMMUNITY INVOLVEMENT

§245 does not require the development or implementation of a community

involvement plan.

2.7 FEDERAL, STATE, AND LOCAL PERMITS OR APPROVALS

To the best of our knowledge, PADEP approval of this Site Characterization Report is

the only Federal, State, or Local permit or approval that is necessary at this point in

time.

2.8 ADDITIONAL NOTIFICATION AND COMMUNICATIONS

No additional notification to a public or private entity was made.

2.9 OFF-PROPERTY ACCESS AGREEMENTS

§250.410(c) requires that "when a person proposes a remedy that relies on access to

properties owned by third parties, for remediation or monitoring, documentation of

cooperation or agreement shall be submitted as part of the cleanup plan".

Documentation of off-Property access is included in Appendix G.

2.10 AQUIFER USE DETERMINATION

The aquifer beneath and in the area of the Property is considered to be used and

currently planned for use (§250.403(b)) and to contain less than 2,500 milligrams per

liter (mg/l) of total dissolved solids.

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#### 2.11 AFFECTED OR DIMINISHED WATER SUPPLY

Act 32 of 1989: Storage Tank and Spill Prevention Act (Act 32) and §245.307 require that any responsible party who affects or diminishes a water supply as a result of a release must restore or replace the affected or diminished water supply at no cost to the owner of the supply.

No affected or diminished water supply was identified during the course of the investigation that is documented in this Report.

#### 2.12 PREVIOUSLY SUBMITTED REPORTS AND PADEP RESPONSES

#### **2.12.1 General**

The following documents were provided to Converse, were previously submitted to PADEP, and are incorporated herein by reference. Copies of PADEP documents that were submitted in response are also listed below, if available.

#### 2.12.2 Previous Reports, Approval Requests, and Notifications

- 1. Work Plan, Additional Supplemental Site Characterization, Former Rosemergy's Convenient Store, 1623 Route 590, Hawley, Pennsylvania, dated September, 25, 2013, prepared by Converse Consultants.
- 2. SCR Submittal Date Extension Request, USTIF Claim Number: 2011-0082(S), Rosemergy's Convenience Store, Hawley, Pennsylvania, dated March 13, 2014, prepared by Converse Consultants.
- 3. SCR Submittal Date Extension Request (update), USTIF Claim Number: 2011-0082(S), Rosemergy's Convenience Store, Hawley, Pennsylvania, dated March 13, 2014, prepared by Converse Consultants.

#### 2.12.3 PADEP Correspondence

No major correspondence.

#### 2.13 FIELD ACTIVITY CHRONOLOGY

The Site Characterization field activities were completed during the period of March 2012 through June 2014. The events and activities of this Site Characterization are summarized in the following chronology of events:

Site Characterization Report
Former Rosemergy's Store/Garage

Lackawaxen Twp., Pike Co., Pennsylvania

<u>Date</u> <u>Field Activity</u>

March 2012 : Soil borings and installation of monitoring wells MW-1

through MW-6.

May 2012: Complete round of groundwater samples.

June 2012: Complete round of groundwater samples.

October 2013: Installation of groundwater monitoring wells MW-7 through

MVV-9, MVV-1R, and MVV-12.

November 2013: Groundwater sample collection event.

December 2013: Groundwater sample collection event including nearest

residential supply wells.

January 2014: Installation of groundwater monitoring wells MW-10 and

MW-11.

February 2014: Groundwater sample collection event from new wells and

nearest residential supply wells. Collection of soil vapor

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samples.

March 2014: Complete round of groundwater samples. Collection of soil

vapor samples.

April 2014: Installation of groundwater monitoring wells MW-13 through

MW-16.

May 2014: Groundwater sample collection event from newly installed

monitoring wells.

June 2014: Groundwater sample collection event from all monitoring

wells. Collection of one round of indoor air assessment

samples.

#### 3.0 PROPERTY DESCRIPTION

#### 3.1 SITE LOCATION

The Former Rosemergy's Store/Garage consists of one parcel of land that occupies approximately 1.8 acres of land at 1623 Route 590, Lackawaxen Twp., Pike County, Pennsylvania. The Property is located along the north side of Hamlin Highway (PA 590) approximately 600 feet east of the intersection of Hamlin Highway and Woodloch Drive (N41° 30′ 05.49″, W75° 05′ 49.05″). Appendix A: Figure 1 presents the location of the Property relative to area roads and features.

#### 3.2 PROPERTY SETTING

Although the site is relatively flat, hills are located northeast and west of the site. The Narrowsburg USGS topographic quadrangle map indicates that the site is located at an elevation of approximately 1290 feet above mean sea level. With respect to topography, the site is located near the saddle point that separates surface flow to the north towards Little Teedyuskung Lake from surface flow to the southeast and east towards creeks that drain into the Lackawaxen River.

The site is located approximately 1,200 feet south of Little Teedyuskung Lake. The lake drains into West Falls Creek which passes approximately 1,100 feet northeast of the site. West Falls Creek flows southeast to the Lackawaxen River. The site is located approximately 2,200 feet northeast and northwest, respectively, of two (2) small creeks that drain south into the Lackawaxen River. The Lackawaxen River is located approximately 7,500 feet south of the site and flows from west to east (towards the Delaware River). No surface water body is present within the boundaries of the Property.

Use of properties in the immediate area of the Site consists primarily of residential use.

#### 3.3 PROPERTY DESCRIPTION AND OPERATIONS

Appendix A: Figure 2 presents cultural features and the boundaries of the Property. The Property is currently owned by Lochgen, LP. The Property is currently operated as a retail motor fuel distribution and convenience store. The active UST systems that

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are used to store and dispense unleaded gasoline at the Property are shown on Figure 2.

The Property is generally flat and is covered with pavement (concrete or asphalt). The area of the former release is covered by pavement. One slab on grade building is located at the Property. The Property and surrounding areas are served by public water and public sewers, however not all residences are hooked up to the public systems.

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## 4.0 SUMMARY OF PREVIOUS INVESTIGATIONS AND INTERIM REMEDIAL ACTIVITIES

#### 4.1 GENERAL

The site began as an automotive repair station with retail gasoline sales around 1965. The site was operated as both an automotive repair station and retail gasoline station until April 2000, by Mr. Robert Rosemergy, Jr. At that time, the Rosemergy Estate took ownership of the property, until February 2002, when Ms. Hoadley and her brother, Charles Rosemergy became heirs of the Estate. The facility was out-of-service from April 2000 until February 2002. In February 2002, retail gasoline sales resumed at the site. A convenience store was added in October 2002. The retail gasoline sales continued until March 2010.

Prior to UST closure activities in 2011, there were two (2) 2,000-gallon single wall STIP-3 underground storage tanks (USTs) used to store gasoline. There was also a 1,000-gallon single wall STIP-3 UST used to store on-road diesel fuel. The three (3) tanks were installed in April 1988 and upgraded to Pennsylvania Department of Environmental Protection (PADEP) Storage Tank Requirements in December 1998 by Fowler Oil Company. The product transfer lines were single wall steel construction, with the European style suction pumps located in the dispensing units. During the upgrade in 1998, a TLS-300 Veeder-Root Monitoring System was installed, and connected to each of the three (3) tanks, with each tank having its own monitoring probe. Also at that time, overfill protection and spill buckets were installed at each tank. The overfill protection was in the form of an audible alarm located on the front of the building.

#### 4.2 PHASE II ESA

The release of petroleum product to the environment was first identified during a limited Phase II Environmental Assessment (Phase II) of the property on June 28th, 2011. The Phase II was being conducted as part of a property transaction by Bluestone Environmental for Woodloch Real Estate (Woodloch). Locations, boring logs and analytical data from the Phase II ESA are included as Exhibit C of the 2012 Bluestone Work Plan (a copy of which is provided with this report). The contents of this Section of the report are from the referenced Work Plan.

On June 28, 2011, Bluestone mobilized to the site with a Geoprobe unit to conduct a limited Phase II assessment of the property. Three (3) soil borings were placed around the tank system and pump island. The first boring was placed approximately 6-feet off the southeastern side of the pump island. The first sample sleeve showed a potential release of petroleum fuel at 4-feet below grade. Screening of the soil sample sleeve with a Photo lonization Detector (PID) indicated that the highest PID reading (approximately 1,800 units) was observed at the 4-foot interval. A sample for laboratory analysis was collected at 4-feet below grade. The last several inches of the 0 to 4 foot sample encountered shallow ground water. A solid 4-foot rod was dropped down to 8-feet below grade and a 1" piece of slotted screen was dropped down the boring and left in place for 30 minutes. After 30 minutes, a grab sample of the groundwater was removed with a ½" bailer. The water had a very strong petroleum odor. The laboratory results confirmed that the groundwater was impacted by petroleum constituents.

A second boring was placed approximately 75 feet east of the pump island. The second boring was completed at a depth of 8-feet below grade. Continuous screening of the soil with the PID indicated the highest PID response (35 units) at approximately 4-feet below. A soil sample for laboratory analysis was collected at 4-feet below grade.

The third boring was placed approximately 20-feet southwest of the pump island. The third boring was completed at a depth of 12-feet below grade. Continuous screening of the soil indicated the highest PID response was at approximately 8-feet below grade. A soil sample for laboratory analysis was collected from the third boring at 8-feet below grade.

The samples were placed on ice and sent to Fairway Laboratories, Inc. (Fairway) for analysis. Bluestone received the analytical data from Fairway on July 5, 2011. The soil and groundwater analytical data confirmed a release of petroleum to the soils and groundwater at the property.

#### 4.3 UST SYSTEMS CLOSURE

On September 12, 2011, the three underground storage tanks (USTS) were removed from the Former Rosemergy's Store/Garage. The tank systems were closed by

excavation and removal of the USTs and components. Site assessment results during UST closure identified "obvious, extensive contamination." A copy of the submitted UST closure report can be found in Exhibit B of *2012 Bluestone Work Plan*.

As expected, Tank 001 was a 2,000 gallon capacity containing unleaded gasoline; Tank 002 was a 2,000 gallon capacity containing unleaded gasoline, and Tank 003 was a 1000 gallon containing diesel fuel. An amended "Storage Tanks Registration/Permitting Application Form" was submitted by Bluestone to PADEP on October 14, 2011.

Prior to removal, all useable liquids were removed by FCC Environmental of Wilmington, Delaware. A total of 1247 gallons of gasoline and diesel fuel was disposed of off-site. All liquids and sludges were removed during the on-site cleaning process. The bottoms were drummed, secured, and stored on site. The waste material was disposed of by Cycle-Chem, Inc. Lewisberry, PA. The USTS associated with the removal were recycled at Mike's Scrap yard, Scranton, PA. Disposal receipts are included in the closure report.

Based on the tank handling information, all three tanks were inspected. All three USTS were identified as in good to excellent condition. The associated underground piping was removed and was also in good condition.

Site assessment information generated during the removal and closure process indicated evidence of soil contamination throughout the excavation area. The heaviest contamination and highest field PID readings were identified directly below the pump island. The island contained three dispensers. The heaviest soil contamination appeared to be under the center pump dispenser, Dispenser #2. Dispenser #2 was connected to unleaded gasoline tank 002. The likely source of the release was the dispenser or piping connections under the dispenser. The leak appeared to be a slow release (chronic problem) that occurred over a multiple year period. There were no containment sumps under the dispensing units.

Approximately 100± tons of soil was removed from under the pump islands. The soil was stockpiled on polyethylene sheeting for off-site disposal.

Groundwater was encountered at a depth of 9 to 10 feet below ground surface in the UST excavation. The water that accumulated within the tank excavation pit had a visible petroleum sheen.

#### 4.4 ADDITIONAL HISTORICAL DOCUMENTS

#### 4.4.1 Previous Phase II ESA

A Phase II assessment was conducted in April 1996 by F.X. Browne for Woodloch as part of a potential property transaction. As a follow up to the F.X. Browne report, Hydrotech Inc. was hired by Mr. Ralph Westgate of Fowler Oil Company to complete an additional investigation around the results found in the F. X. Browne report. At this time, there is limited information on the work completed by Hydrotech, Inc. Copies of the site diagram, along with groundwater sample results are included in Exhibit A - Attachment F of the 2012 Bluestone Work Plan. Also, additional soil samples were collected by Hydrotech, Inc. on July 5, 1996. A copy of the F. X. Browne report, Hydrotech Site Maps and the sample results from the samples collected on July 5, 1996 can be found in Exhibit A - Attachment F of the 2012 Bluestone Work Plan.

#### 4.4.2 Utility Line Excavation

In December of 2002, Aqua PA (local water company) was installing a domestic water line on the southern side of PA Route 590. During excavation activities for the water line, suspected contaminated soil was encountered and excavation activities were stopped. PADEP was notified and Mr. Tom Coar responded to the site. A copy of Mr. Coar's report can be found in Exhibit A - Attachment D of the 2012 Bluestone Work Plan. Austin James Associates, Inc. responded to the site on March 11, 2003 to collect soil samples in an effort to investigate the suspected release encountered by Aqua PA. A copy of the sample results can be found in Exhibit A - Attachment D of the 2012 Bluestone Work. At that time, there was no further work completed at the site, and the sample results did not confirm a release from the property.

#### 4.5 INTERIM REMEDIAL MEASURES

As previously documented, soil removal was completed as part of the UST closures activities. No additional interim remedial measures have been completed to date.

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#### 5.0 GENERAL PROPERTY GEOLOGY

The Facility is located in the Glaciated Low Plateau Section of the Appalachian Plateaus Physiographic Province of Pennsylvania. The Pennsylvania Department of Environmental Resources, Bureau of Topographic and Geologic Survey, *Geologic Map of Pennsylvania*, 1981 indicates that the bedrock that underlies the Facility consists of Devonian-age, Long Run and Walcksville Members (Dclw) of the Catskill Formation. The Long Run and Walcksville Members (Dclw) of the Catskill Formation (undivided) consist of cyclic sequences of gray to grayish-red to greenish-gray sandstone, siltstone, and claystone in fining upward cycles. No outcrop was observed in the immediate vicinity of the Site. Consistent with regional structure, bedrock is expected to strike roughly northeast-southwest with gentle dips of bedding to the southeast and northwest.

The area of the Site was covered by the Wisconsinan Glaciation. Approximately 50 percent of the ground surface is estimated to be covered by gray to grayish red sandy till. The layer of till is reported to vary from thin to thick. The till is reported to be draped over bedrock and is not expected to have been reworked into glacial landforms.

Soil borings were completed during site characterization activities. Borings indicate that unconsolidated deposits that consist mainly of a mix of silty sands and silts with varying amounts of gravel (some of which could be described as till) are located beneath the site to the maximum depth of the soil borings that was 21 feet below grade. Appendix D presents boring logs that detail the material that was penetrated during the soil borings. Bedrock was not encountered in the soil borings.

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#### 6.0 GENERAL PROPERTY HYDROGEOLOGY

#### 6.1 GENERAL

Field and published data indicate that aquifers are present in the unconsolidated deposits (water table aquifer) and in the bedrock beneath the Property. The site characterization activities indicate that the unconsolidated overburden beneath the Property has been impacted by the release of gasoline. Appendix A: Figure 2 presents the locations of the monitoring wells.

With respect to topography, the site is located near the saddle point that separates surface flow to the north towards Little Teedyuskung Lake from surface flow to the southeast and east towards creeks that drain into the Lackawaxen River.

The depth to groundwater in monitoring wells that are completed within the unconsolidated overburden ranges from approximately 0.5 feet to 13 feet below grade.

#### 6.2 RELATIVE ELEVATION SURVEY

Kiley Associates, LLC of Lakeville, Pennsylvania, a Pennsylvania licensed surveyor, completed the survey to provide the data necessary to assess the direction of groundwater flow in the water table aquifer at and in the area of the Property. The survey provided elevations of the top of casing and a reliable horizontal location of each well. The location and top of casing (TOC) elevation for each well was measured relative to the 1983 North American Datum (NAD83) using the State Plane Coordinate System. The TOC elevations and the measured groundwater levels in each well were then used to calculate groundwater elevations at each data point. Appendix B: Table 1 presents a tabulated summary of the elevation survey data, depth to water data, and calculated groundwater relative elevation data.

#### 6.3 DEPTHS TO WATER

#### 6.3.1 General

In the absence of nearby pumping wells, observed changes in the water level elevation is generally the result of seasonal fluctuations in groundwater levels as affected, primarily, by precipitation and infiltration. The thickness of the water table aquifer unit beneath the Property is at least 10 feet.

Data indicate that the water table may be at elevations equal to or higher than the maximum depth below grade of cultural features such as basements and utility trenches. These data indicate that cultural features are a potential, preferential pathway for groundwater movement. In particular, water levels on the south side of Route 590 are at elevations that could be impact or be impacted by utility trenches.

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Current overburden (water table) groundwater elevation data suggest an area of groundwater mounding adjacent to monitoring well MW-5 that is located within the former UST excavation. This is a common feature of backfilled excavations. The majority of the Site is currently covered with relatively impermeable asphalt and/or concrete.

Groundwater levels were measured in the overburden monitoring wells at the Site at depths that ranged from approximately 0.5 feet to 13 feet below grade (location dependent) during the periods of May 2012 to June 2014. A maximum change of approximately 5.5 feet in the depth to the water table at individual monitoring well locations was measured during these periods.

#### 6.4 DIRECTION OF GROUNDWATER FLOW

#### 6.4.1 Lateral Groundwater Flow

Groundwater elevation data indicate that flow within unconsolidated overburden across the Site is anomalously to the west (away from the major streams and rivers). Appendix A: Figure 5A through 5D present Groundwater Elevation Contour Maps for the unconsolidated overburden that depict the calculated groundwater relative elevations at the monitoring wells for the four (4) most recent full sample collection events. Appendix B: Table 1 presents a tabulated summary of the relative elevation survey data, depth to water data, and calculated groundwater relative elevation data.

#### **6.4.2 Vertical Groundwater Flow**

The petroleum impact was encountered at the top of the groundwater table in the unconsolidated overburden aquifer. Soil screening data indicates that levels of contamination decrease beneath the groundwater smear zone. As vertical

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movement of the impacted groundwater is not indicated for the Site, no quantitative evaluation of vertical groundwater movement was conducted.

#### 6.5 HYDRAULIC GRADIENT

The hydraulic gradient was calculated using data presented on the groundwater contour maps in Appendix A and the groundwater elevation data presented in Appendix B. The distance between monitoring wells MW-5 and MW-7 was measured on the contour map and the calculated groundwater elevation (based on field measured groundwater levels) at each well was used to calculate the hydraulic gradient.

The table below presents measured distances and calculated gradients for the three (3) dates when Site groundwater levels were recorded by Converse. Hydraulic gradient (I) = Hydraulic Head Difference ( $\Delta$ H)/Distance.

HYDRAULIC GRADIENTS				
Date	MW-5 Groundwater Elev. (ft)	MW-7 Groundwater Elev. (ft)	Approximate Distance (ft)	Hydraulic Gradient (I)
11/8/13	1291.54	1286.10	101	0.054
12/11/13	1294.94	1285.99	101	0.089
6/12/14	1294.71	1290.85	101	0.038
Average				0.060

#### 6.6 BAIL/SLUG TESTS

On February 4, 2014 rising head slug/bail tests were performed by Converse personnel on newly installed monitoring wells MW-1R, and MW-8 through MW-12. Monitoring well MW-7 does not contain a sufficient groundwater column to perform a rising head slug/bail test. All slug/bail tests were performed using a 1-inch diameter Whale® (or similar) submersible pump. Water levels within the wells were continuously monitored during the pumping tests utilizing Schlumberger Water Services Diver® pressure transducers with self-contained data loggers. A hand water level probe was used to take manual water level readings and a portable granular activated carbon unit was used to treat water pumped from contaminated wells.

The rising head slug/bail test consisted of pumping the well dry (where applicable) and recording (logging) the aquifer's recovery back to near static groundwater levels. A transducer was set to record a data point every one (1) second and then lowered into the bottom of the well. The pump was introduced and the groundwater was pumped from the well until most or all of the water was evacuated from the well. Once the groundwater level in the monitoring well had nearly recovered, the transducer was pulled and the data was downloaded onto a field laptop computer. Barometric (atmospheric) pressure was collected just prior and immediately after each test.

Data from the pumping tests was analyzed with Waterloo Hydrogeologic Inc. (now Schlumberger Water Services) Aquifer Test Pro 3.5 groundwater software using the Bouwer & Rice solution method. The analysis method was chosen based on performing the analysis on an unconfined overburden aquifer. Barometric pressure was subtracted (barometric pressure correction) from the pressure recorded by the transducer within the well before the data was entered into the software.

Analysis data plots for the slug/bail tests are included in Appendix H of this report. The slug/bail test data indicate a range of hydraulic conductivities for the tested monitoring wells that varies over approximately three orders of magnitude. The calculated hydraulic conductivity for the overburden aquifer at the Property ranges from 0.00343 to 0.107 feet per day (ft/day).

The slug/bail tests indicate the flowing hydraulic conductivities for the tested monitoring wells:

TABLE 6.6 HYDRAULIC CONDUCTIVITY TABLE				
WELL ID	TYPE OF TEST	K (FT/DAY)*		
MW-1R	Rising Head	3,43E-3		
MVV-8	Rising Head	1,07E-1		
MVV-9	Rising Head	3.14E-2		
MW-10	Rising Head	3.06E-2		
MVV-1	Rising Head	2.97E-2		

TABLE 6.6 HYDRAULIC CONDUCTIVITY TABLE			
MW-12	Rising Head	1.47E-2	

<sup>\*</sup> Calculated using the Bouwer & Rice method.

For the purpose of this assessment a value of 1.0E-2 will utilized. This value is higher than the median value and should provide a more conservative estimate of contaminant transport. Note that "true" in-situ hydraulic conductivity can vary by as much as one order of magnitude from a hydraulic conductivity calculated from a slug/bail test analysis.

All purge water was treated with a portable granular activated carbon unit prior to being discharged to the ground surface.

#### 6.7 GROUNDWATER SEEPAGE VELOCITY

Groundwater seepage velocity (V<sub>s</sub>) is calculated using the equation:

 $V_s$  (feet per year [ft/yr]) = (K x I)/Ne) x 365 days per year

where:

K = hydraulic conductivity (ft/day)I = hydraulic gradient (foot/foot)Ne = effective porosity

and:

K = 1.0x10<sup>-2</sup> ft/day (see Section 6.6) I = 0.060 (see Section 6.5) Ne = 0.2 (based on descriptions of soil)

#### Then:

 $V_s = (1.0x10^{-2} \text{ ft/day x } 0.060)/0.2 = 4.09x10^{-2} \text{ ft/day x } 365 \text{ days/yr} = 1.1 \text{ ft/yr (theoretical)}.$ 

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#### 6.8 GROUNDWATER EXTRACTION

The area of the Site is served by private supply wells. None of the private supply wells is anticipated to influence groundwater flow beneath the site. Please see Section 3.8 of the Converse Work Plan and Section 7.4.7 of this report on supply well sample collection and results for additional information.

#### 7.0 SITE CHARACTERIZATION ACTIVITIES

#### 7.1 GENERAL

The Site Characterization field activities included the following primary tasks:

- 1. Completion of a Site-Specific Health and Safety Plan.
- 2. Completion of a Sensitive Receptor Survey for the area surrounding the Property.
- 3. Collection of water samples from potable supply wells located on adjacent properties.
- 4. Assessment of the soil vapor to indoor air pathway via soil vapor sampling and indoor air sampling.
- 5. Completion of a Soil Sample Collection Program using a Geoprobe Direct-Push soil sampling system. Twenty (20) soil borings (soil borings SB-8 through SB-27) were completed at the Property to assess the levels of residual petroleum constituents in soil.
- 6. Installation and development of sixteen (16) groundwater monitoring wells (monitoring well MVV-1 through MVV-16) at the site to assess the extent of the impacted groundwater plume. The groundwater monitoring wells were installed to depths of approximately 15 feet below grade (fbg) and were screened across the water table that was encountered during drilling.
- 7. Completion of multiple rounds of groundwater sample collection from the monitoring wells. At least two rounds of groundwater sample collection were collected from each monitoring well.
- 8. Completion of two (2) rounds of sample collection from the nearest on-lot supply wells located on adjacent properties.

Appendix A: Figure 2 presents the groundwater monitoring well locations. Appendix A Figure 3 presents the locations of soil borings. Appendix A: Figure 4 presents the location of vapor monitoring points and indoor air samples. Odyssey Environmental of Harrisburg, Pennsylvania provided the drilling installation services for the soil borings, soil vapor points, and monitoring wells. The initial soil borings, monitoring wells, and soil borings were supervised by Bluestone Environmental. Subsequent field activities were directed and supervised by Converse personnel.

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#### 7.2 HEALTH AND SAFETY PLAN

A site specific Health & Safety Plan that complies with Occupational Safety and Health Administration (OSHA) 29 CFR Part 1910.120 was completed prior to the initiation of field activities and was utilized at the Property during all field activities.

#### 7.3 SENSITIVE RECEPTOR SURVEY

#### 7.3.1 General

A receptor survey was performed to identify receptors (current and future) that may be exposed to the contaminant release. The receptor survey for the Property included the following components:

- Review of Pennsylvania Ground Water Information System (PaGWIS) data base for the Site vicinity.
- Review of local water use information.
- · A PNDI search for the Property.
- Reconnaissance of the Site vicinity.

#### 7.3.2 PAGWIS Database Summary

A search for groundwater wells was performed utilizing the Pennsylvania Ground Water Information System (PAGWIS) database for the Property and surrounding 0.5 mile radius. The PAGWIS website states "Well record data in PAGWIS come from various sources (US Geological Survey, PA Dept. of Environmental Protection, Susquehanna River Basin Commission, PA Dept. of Agriculture), but the vast majority is from well records submitted to the Pennsylvania Geological Survey by water well drillers. Well records submitted by drillers have been added to the database at various times over the years, starting in 1969." Those data are summarized below.

- Public Supply Wells The PAGWIS database identified two public water supply wells within 0.5 miles of the Property. The wells are owned by Woodloch and are located south of the site at a distance that is not anticipated to be potentially impacted by the plume.
- Domestic Supply Wells The PAGWIS identified no domestic supply well within a 0.5 mile radius of the Property. Known on-lot supply well locations are discussed in a subsequent section.
- Agriculture Wells The PAGWIS database identified no agricultural well within a 0.5 mile radius of the Property.
- 4. Industrial Wells The PAGWIS database identified no industrial supply well within a

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0.5 mile radius of the Property.

- 5. Geothermal Wells The PAGWIS database identified no geothermal wells within a 0.5 mile radius of the Property.
- 6. Groundwater Monitoring Wells The PAGWIS identified twenty five (26) groundwater monitoring/extraction wells within a 0.5 mile radius of the Property. These wells are all associated with the current ongoing environmental assessment and remediation of the Site.

#### 7.3.3 Groundwater Use

Local records and interviews with property owners indicate that the area of the Site is served by the Woodloch supply wells (currently operated by Aqua PA) and private onlot supply wells. Although the former Rosemergy's store was served by a private onlot well, the new Facility on the Property is served by the public water system that has assumed control of the Woodloch wells. The former residential well on the Property was reportedly abandoned as part of the construction of the new fuel facility. Several adjacent properties are still served by private on-lot wells.

#### 7.3.4 PNDI Search

Converse performed a Pennsylvania Natural Diversity Index (PNDI) search for the Former Rosemergy Convenience Store Property. The PNDI search identifies threatened and endangered species or special concern species and resources that are potentially located in the search area. The PNDI search indicated that several species of concern potentially exist in the area of the Site. As no excavation or clearing activities are currently planned in unpaved areas, the species identified in the PNDI search are not expected to be impacted by cleanup activities at the Site. If additional measures are required, additional information will be requested from DCNR.

#### 7.3.5 Area Reconnaissance

Converse performed a door-to-door survey and site reconnaissance of the Property and vicinity to identify potential receptors. With the exception of the previously discussed domestic supply wells and potential receptors based on site use (employees, visitors, and construction workers), no potential receptor was identified during the site reconnaissance. The nearest surface water body is located approximately 1200 feet from the Property. The nearest off-Property residence does not have a basement.

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#### 7.4 SAMPLE COLLECTION AND ANALYSIS

#### 7.4.1 General

Soil and groundwater samples that were collected as part of site characterization activities were analyzed for the unleaded gasoline indicator compounds and by the analytical methods that are published in the PADEP *Technical Document 2530-BK-DEP2008: Closure Requirements for Underground Storage Tank Systems, Effective April 1, 1998 (1998 UST Technical Document)* unless otherwise noted. Soil vapor samples were analyzed for the unleaded gasoline parameters in the *1998 UST Technical Document* by Method TO-15.

Field and laboratory QA/QC protocol was consistent with PADEP protocol and with those that are published in the United States Environmental Protection Agency (USEPA) document titled *Solid Waste*, *Test Methods for Evaluating Solid Waste* (*EPA Manual SW-846*). The VOC portion of the soil samples was collected in accordance with *USEPA Method SW846 5035*. One (1) trip blank and one (1) duplicate sample were generally submitted with each sample set analyzed to provide quality assurance.

Nitrile disposable gloves were worn during sample collection activities and were changed prior to the collection of each sample. Each sample was given a unique identification number that was recorded on the field log, the Chain of Custody record, and the sample label.

All samples were placed in a cooler and chilled with ice for shipment to the analytical laboratory. All samples remained in the possession of Converse personnel until transferred to the analytical laboratory or to a courier for delivery to the analytical laboratory. Chain of Custody documentation was completed for and attended each sample set.

Single-use syringes, scoops, gloves, and acetate liners were used to collect the soil samples. Pumps with dedicated tubing or disposable bailers were used to purge and/or sample the wells.

## 7.4.2 Monitoring Well Construction and Development

Sixteen (16) groundwater monitoring wells were installed in the unconsolidated overburden at the Site to assess the extent of impacted groundwater. Monitoring wells MW-1 through MW-7 and MW-12 through MW-15 were installed on the former Rosemergy property. Monitoring wells MW-8, MW-9, and MW-16 were installed south of Rosemergy's on property owned by Woodloch. Monitoring wells MW-10 and MW-11 were installed east of Rosemergy's on property owned by the Jensens. The monitoring wells were completed using a Geoprobe rig using hollow stem augers. At each monitoring well location, 1.6-inch diameter by 5-feet long, soil cores were collected continuously from grade to the bottom of the boring. Monitoring well MW-6 was abandoned as part of the construction of the new convenience store by Lochgen. Analytical data indicates that monitoring well MW-6 was not in an area impacted by the release from the former UST systems.

All monitoring wells were installed by Odyssey Environmental of Harrisburg, Pennsylvania. The monitoring wells were installed as follows:

- MW-1 through MW-6 were installed under the direction of Bluestone Environmental during the period of March 13 through March 19, 2012.
- MW-7 through MW-9, MW-1R, and MW-12 were installed under the direction of Converse Consultants during the period of October 28 and October 29, 2013.
- MW-10 and MW-11 were installed under the direction of Converse Consultants on January 21, 2014.
- MW-13 through MW-16 were installed under the direction of Converse Consultants during the period of April 16 through April 17, 2014.

The wells were constructed similar to the requirements that are described in the PADEP 383-3000-001: Pennsylvania Groundwater Monitoring Guidance Manual, December 1, 2001 (2001 GM Guidance Manual) and ASTM Standard D 5092-04. The monitoring wells were completed to depths of approximately 15 feet below grade and the wells were screened across the water table encountered during drilling with 2-inch diameter, Schedule 40, 0.010-inch factory slotted, flush threaded, PVC screen. The borehole above the screened interval was cased with 2-inch diameter, Schedule 40, flush threaded PVC riser. The annular space between the borehole and the well

screen was filled with sand to approximately 1 foot above the screened interval. The remaining annular space was filled with bentonite and concrete. The monitoring wells were secured with an expandable locking cap and padlock and completed at the surface with a flush-mount, bolt-down, water-tight, manhole. Appendix D: Well Logs presents a summary of well construction and a description of the materials encountered and the field screening results logged during the installation of the monitoring wells.

In general, the monitoring wells were developed by Converse or Bluestone personnel to remove fine-grained material and to initiate hydraulic communication with the aquifer. Monitoring wells were developed using a direct current (DC) submersible 1.5 inch diameter Whale® (model #921) pump with a booster (inline mounted Whale® pump) and a 0.5-inch diameter polyethylene discharge line capable of pumping approximately two (2) gallons per minute (GPM) (depth dependent) consistent with the PADEP 2001 Guidance Document. Each well was purged for approximately ten (10) minutes with intermittent surging (vertical movement of the pump over a distance of 2 to 3 feet within the well during development pumping). Development of each well was terminated when the purge water had little to no turbidity. As the monitoring wells are not installed in ideal aquifer materials, turbidity often returns to the monitoring well after development is complete.

## 7.4.3 Soil Samples

## 7.4.3.1 Sample Collection

On March 13 through March 16 and March 19, 2012, Bluestone contracted with Odyssey Environmental Services to install soil borings to delineate contamination. A total of 20 soil borings were installed to a depth of fifteen (15) feet below ground surface (bgs). Borings were numbered SB-008 through SB-027 (Designations SB-001 through SB-007 were not used to avoid confusion with historical assessment activities). The soil borings were drilled and sampled similar to the methods that are described in *ASTM Standard D 6282-98*. At each boring location two-inch diameter direct-push soil cores were used to collect soil samples continuously from grade to the bottom of the boring.

The soil was visually inspected and logged in the field noting soil color, texture, moisture content, odor, and was characterized similar to the methods that are described in ASTM Standard D 2488-93. The liners were divided into roughly 2-foot intervals and a portion of each 2-foot interval was then transferred and allowed to equilibrate in a sealable plastic bag. After approximately 2 minutes, each sample was gently agitated to facilitate the partitioning of vapors into the headspace of the bag, and then field screened utilizing a Photoionization Detector (PID). A copy of the Soil Boring logs is included as Appendix D.

Soil samples that were submitted for laboratory analysis were either representative of "worst case" conditions in the respective boring, or, if no impact was identified, were collected from a variety of depths to provide an assessment of the potential vertical distribution of petroleum constituents in the saturated and unsaturated zones. samples that were submitted for laboratory analysis were transferred directly into laboratory-supplied glassware, and were not the portion of the sample that was collected for field screening purposes. The boreholes were filled to grade with bentonite and patched with an appropriate material.

#### 7.4.3.2 Sample Analysis

Twenty (20) soil samples were collected from the twenty (20) soil borings (one sample per borehole) completed around the area of the former UST systems. Samples were analyzed by Fairway labs of Altoona, Pennsylvania for the unleaded gasoline constituents on the 2008 PADEP Petroleum Short list. Appendix B: Table 2 summarizes the soil laboratory data. Appendix A: Figure 3 presents the locations of the site characterization soil borings.

Levels of at least one (1) short list petroleum constituent exceeded the the NRMSC SHSs in all soil samples except the soil sample collected from SB-15. Soil boring SB-15 was the easternmost boring located near the Jensen property boundary. laboratory reports and the corresponding Chain-of-Custody are presented in Appendix C.

With respect to the vertical distribution of contaminants in the overburden soil, the highest PID readings were encountered at the approximate depth of the water table smear zone that was encountered at depths of approximately 4 feet to 9 feet below grade. The distribution of analytes in soil indicates that the impacted unsaturated zone soil was removed as part of the UST closure activities. No residual source area is

indicated to be present in the unsaturated zone. The distribution of contaminants in saturated soil corresponds to the migration of groundwater from the former source area.

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In general, the highest concentrations of analytes were detected in soil samples that were collected west of the former UST excavation (soil borings SB-20 through SB-24). The area west of the UST excavation is also the area where the highest PID readings were observed during the soil borings. Appendix A: Figure 8 shows the highest PID concentration recorded in each of the soil borings.

## 7.4.3.3 Soil Analytical Summary

In general, the highest levels of petroleum constituents in each soil boring were detected at the soil/groundwater interface. In general, the highest levels of petroleum constituents in soil were detected in borings west (downgradient) of the former UST excavation. No residual source area is indicated to be present in the unsaturated zone.

## 7.4.4 Soil Gas Samples

## 7.4.4.1 Soil Gas Vapor Point Installation and Soil Gas Vapor Sample Collection

Four (4) soil vapor sample points were previously installed between the source area and the buildings at the Site by Bluestone using a Geoprobe. The soil vapor points were constructed of 0.75-inch diameter PVC installed to a depth of approximately 5 feet below grade with six-inches of screened interval at the bottom. It is our understanding that three (3) vapor points were subsequently destroyed by site development activities before they were sampled. The remaining vapor point, VP-1, is located between the former source area and the new convenience store at the Property. A second vapor point, VP-2, was installed between the source area and the building by Converse. VP-2 was installed to four feet below grade using a hammer drill. VP-2 consists of a 4" inch long stainless steel slotted implant connected to the ground surface by poly tubing. A third vapor point was planned for the Woodloch property south of the site to assess

vapor migration towards the residence south of the Former Rosemergy property. The third vapor point was not installed because groundwater is present at approximately 0.5 feet below grade at the planned location of VP-3 (adjacent to MW-16). Vapor and indoor air sample locations are shown on Figure 4 of Appendix A.

Soil Vapor Point sampling was conducted on February 4, 2014 and March 7, 2014 to evaluate potential vapor intrusion into the convenience store building from impacted groundwater.

The length of all sample transfer lines were kept as short as possible to minimize condensation of the extracted gas in the line. At least two (2) interior-diameter (ID) air volumes are purged prior to sample collection using a peristaltic pump.

Soil gas samples were collected using laboratory-supplied SUMMA Canisters (6 liter volume) over a period of two (2) hours. The SUMMA Canisters are purged, decontaminated, and sampled at the laboratory prior to shipment. One (1) duplicate soil vapor sample was submitted for laboratory analysis for quality control.

Each sample was given a unique identification number that was recorded on the field log, the Chain of Custody record, and the sample label. Chain of Custody documentation was completed for and accompanied each sample set. The samples were stored and shipped in accordance with requirements for the TO-15 method. Single-use, factory decontaminated nylon tubing was used to collect the samples therefore decontamination of the sample equipment was not necessary.

## 7.4.4.2 Laboratory Analysis

During each sampling event, three soil gas samples SV-1/VP-1 (sample of VP-1), SV-2/VP-2 (sample of VP-2), and SV-3/VP-3 (duplicate sample of SV-1/VP-1) were submitted for laboratory analysis. Appendix A: Figure 4 presents the locations of soil gas points. Appendix B: Table 4 summarizes the soil gas laboratory data. Appendix C presents chain-of-custody documentation and laboratory reports. Laboratory reports present the results as parts per billion by volume (ppbv) and micrograms per cubic meter ( $\mu g/m^3$ ).

No compound was identified in the ambient air sample at a concentration greater than the residential medium specific concentration for soil gas (RMSC<sub>SG</sub>). An example calculation for the conversion of laboratory units is presented in Appendix F.

As presented in Appendix B: Table 4, no compound exceeded the residential  $MSC_{SG}$  (RMSC<sub>SG</sub>) or nonresidential  $MSC_{SG}$  (NRMSC<sub>SG</sub>) in the soil gas samples collected from the two (2) soil vapor points (SV-1 and SV-2) located between the former release area and the building.

PADEP, 2004: Appendix A references §250.4 and provides a relative list of reporting limits (RLs) that represent PQLs for air analysis and states that "determining a PQL is specific to a particular laboratory". The LQLs for all compounds were less than the PQLs.

## 7.4.5 Indoor Air Samples

## 7.4.5.1 Sample Collection

The Pennsylvania's Land Recycling Program, Technical Guidance Manual, (253-0300-100), May 4, 2002 (2002 LRP TGM): Draft Vapor Intrusion Into Indoor Structures (June 14, 2002 draft partial) was used to identify appropriate screening methods to evaluate if an unacceptable risk is posed to indoor air quality (IAQ) as the result of vapor intrusion into a structure.

The collection of IAQ samples was the selected screening method because:

- 1. The use of screening values is inappropriate because insufficient soil is present between the depth of the plume and the base of the residential structure
- 2. The depth to water precluded the use of soil vapor wells.

A Pre-Sampling Inspection protocol was developed to identify if appropriate sampling conditions were present prior to the collection of the samples. "Appropriate sampling conditions" was defined as no potential source of petroleum vapors, other than vapor intrusion from groundwater, could be identified in the sample area during the Pre-Sampling Inspection. The Pre-Sampling Inspection included the:

1. Interview of the property owner or occupant relating to the past or current use or

storage of petroleum products in the sample area.

- 2. Visual inspection of the sample area for storage containers or equipment that might contain petroleum products.
- 3. Visual inspection of the sample area for penetrations or vents that might convey vapors from other areas of the structure.
- 4. Visual inspection of the sample area for stains or discoloration that might indicate the storage and/or spill or release of a petroleum product.

The pre-sampling protocol did not identify any conditions that would indicate a conflict with the proposed sampling method.

Indoor air quality (IAQ) sampling was conducted on June 18, 2014 to evaluate vapor intrusion into the adjacent residential structure from impacted groundwater as part of the site characterization.

Soil vapor and indoor air sample locations are shown on Figure 4 of Appendix A.

A total of two (2) samples were collected from the Woodloch property that is located south of the former Rosemergy property. Sample IA-1 was collected inside the residence within the entry hallway on the north side of the residence (closest to former Rosemergy property). Sample IA-2 was collected just outside the residence on the north side of the building as a means of eliminating any background (outdoor) concentrations of analytes.

The samples were collected using a using a 6-liter Summa canister for a period of four (4) hours. The SUMMA Canisters are purged, decontaminated, and sampled at the laboratory prior to shipment. Each sample was given a unique identification number that was recorded on the field log, the Chain of Custody record, and the sample label. Chain of Custody documentation was completed for and accompanied each sample set. The samples were stored and shipped in accordance with requirements for the TO-15 method.

7.4.5.2 Laboratory Analysis

A total of two (2) air samples were collected from the Woodloch property that is located south of the former Rosemergy property. The samples were analyzed using USEPA Method TO-15 by Contest Analytical Laboratory, East Longmeadow,

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Massachusetts.

Gasoline constituents were detected in the indoor air sample but were not present at

levels that exceed the RMSC SHSs for indoor air that are published by PADEP. The

detection limits for all compounds were below the applicable standards. Laboratory

reports and chain of custody forms are presented in Appendix C.

A second round of indoor air sample collection is planned for winter 2015 to provide

data during the winter season. The lack of a second sampling round at this point in time

will not delay the design and implementation of remedial measures as the remedial measures conducted at the property are not dependent on the indoor air data for distal

portions of the plume. If remediation of vapors is required at the residence it will be

completed independent of any measures that are undertaken to remediate impacted

saturated soil and groundwater.

7.4.6 Groundwater Samples

7.4.6.1 Water Level Gauging and Groundwater Sample Collection

Multiple rounds of groundwater sample collection and analysis have been conducted

to characterize groundwater during the course of the site characterization phase. As

discussed previously, additional groundwater monitoring wells were added in phases

to address data gaps. Unless otherwise noted, all accessible groundwater

monitoring wells were sampled during each event. Groundwater sample collection

events were conducted on the following dates:

May 8, 2012

June 7, 2012

November 8, 2013

December 11, 2013

February 4, 2014 (MW-10 through MW-12 only)

March 7, 2014

April 29, 2014 (MW-13 through MW-16 only)

June 12, 2014

Prior to sample collection, groundwater levels were measured at each monitoring well and the respective saturated casing volumes were calculated. Each well was then purged of at least three (3) saturated casing volumes or until all standing water was evacuated from the well prior to sample collection. The monitoring wells were purged and sampled using a peristaltic pump or "whale" pump and disposable tubing. The temperature, specific conductivity, and pH of the purge water were monitored at the beginning and end of each purge event. Potentially impacted purge water was treated on-site using granular activated carbon and discharged to the ground surface in the vicinity of the wells. Water samples were transferred directly into laboratory supplied glassware. Groundwater samples collected for VOC analysis were transferred to 40 milliliter (mL) VOA vials and preserved with hydrochloric acid (HCL).

No separate phase liquid (SPL) was observed during the purge or groundwater sample collection activities. Additional information on sampling protocols is discussed in the 2013 Converse Work Plan.

## 7.4.6.2 Laboratory Analysis

#### 7.4.6.2.1 General

As previously discussed, all accessible groundwater monitoring wells were sampled during each event unless otherwise noted. All groundwater samples were analyzed by Fairway Laboratories of Altoona, Pennsylvania for the unleaded gasoline constituents on the 2008 Petroleum short list.

No compound was identified in a trip blank at a concentration greater than the LQL. The LQLs for all compounds were less than the PQLs.

## **7.4.6.2.2** May 2012 Sampling Event

The May 2012 event included sample collection from monitoring wells MW-1 through MW-6. Concentrations of petroleum constituents exceeded the RMSC SHSs in

groundwater samples that were collected from monitoring wells MW-1, MW-2, MW-3, MW-4, and MW-5. The highest analyte concentrations were detected in monitoring wells MW-1, MW-3, and MW-4 that are located west, north, and south of the former UST excavation. The concentrations of all analytes in the groundwater sample from monitoring well MW-1 exceed the applicable RMSC SHSs. A benzene isoconcentration map for the May 2012 event was included in Appendix A of the Converse Work Plan submitted to PADEP in September 2013.

No compound was identified at a concentration greater than the LQLs in monitoring well MW-6. The LQLs for all compounds were less than the promulgated RMSC SHSs. Laboratory reports and chain of custody data are presented in Appendix C. Appendix B: Table 3 summarizes the groundwater analytical data.

## **7.4.6.2.3 June 2012 Sampling Event**

The June 2012 event included sample collection from monitoring wells MW-1 through MW-6. Concentrations of petroleum constituents exceeded the RMSC SHSs in groundwater samples that were collected from monitoring wells MW-1, MW-2, MW-3, MW-4, and MW-5. The highest analyte concentrations were detected in monitoring wells MW-1, MW-3, and MW-4 that are located west, north, and south of the former UST excavation. The concentrations of all analytes in the groundwater sample from monitoring well MW-1 except isopropylbenzene exceed the applicable RMSC SHSs. A benzene isoconcentration map for the May 2012 event was included in Appendix A of the Converse Work Plan submitted to PADEP in September 2013.

No compound was identified at a concentration greater than the LQLs in monitoring well MW-6. The LQLs for all compounds were less than the promulgated RMSC SHSs. Laboratory reports and chain of custody data are presented in Appendix C. Appendix B: Table 3 summarizes the groundwater analytical data.

Based on the analytical data for the May and June 2012 events, additional groundwater monitoring wells were installed at the site to assess the impacted groundwater plume.

## 7.4.6.2.4 November 2013 Sampling Event

The November 2013 event included sample collection from monitoring wells MW-1 through MW-9 (except for MW-6 that was destroyed during site development) and MW-12. Monitoring wells MW-10 and MW-11 were not installed yet due to off-Properrty access issues. Concentrations of petroleum constituents exceeded the RMSC SHSs in groundwater samples that were collected from monitoring wells MW-1, MW-2, MW-3, MW-4, MW-5, MW-7, and MW-9. The highest analyte concentrations were detected in monitoring wells MW-1, MW-2, MW-4, and MW-7 that are located west, north, and south of the former UST excavation. The concentrations of all analytes in the groundwater sample from monitoring well MW-1 except isopropylbenzene and xylenes exceeded the applicable RMSC SHSs. The concentration of benzene in the groundwater sample from monitoring well MW-9 (13 ug/l) located on the Woodloch property exceeded the RMSC SHS.

A benzene isoconcentration map for the November 2013 event is included as Figure 6A of Appendix A. An MTBE isoconcentration map for the November 2013 event is included as Figure 7A of Appendix A. The distribution of contaminants indicate groundwater flow to the west and south-southeast from the former UST area. A groundwater contour map for the November 2013 event is included as Figure 5A of Appendix A.

The LQLs were generally less than the promulgated RMSC SHSs. Laboratory reports and chain of custody data are presented in Appendix C. Appendix B: Table 3 summarizes the groundwater analytical data.

#### 7.4.6.2.5 December 2013 Sampling Event

The December 2013 event included sample collection from monitoring wells MW-1 through MW-9 (except for MW-6 that was destroyed during site development) and MW-12. Monitoring wells MW-10 and MW-11 were not installed yet due to off-Property access issues. Concentrations of petroleum constituents exceeded the RMSC SHSs in groundwater samples that were collected from monitoring wells MW-1, MW-2, MW-3, MW-4, MW-5, MW-7, and MW-9. The highest analyte concentrations were detected in monitoring wells MW-1, MW-2, MW-4, and MW-7 that are located west, north, and

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south of the former UST excavation. The concentrations of all analytes in the groundwater sample from monitoring well MW-1 except isopropylbenzene and xylenes exceeded the applicable RMSC SHSs. The concentration of benzene in the groundwater sample from monitoring well MW-9 (17 ug/l) located on the Woodloch property exceeded the RMSC SHS.

A benzene isoconcentration map for the December 2013 event is included as Figure 6B of Appendix A. An MTBE isoconcentration map for the December 2013 event is included as Figure 7B of Appendix A. The distribution of contaminants indicate groundwater flow to the west and south-southeast from the former UST area. A groundwater contour map for the November 2013 event is included as Figure 5B of Appendix A.

The LQLs were generally less than the promulgated RMSC SHSs. Laboratory reports and chain of custody data are presented in Appendix C. Appendix B: Table 3 summarizes the groundwater analytical data.

Based on the analytical data for the November and December 2013 events, additional groundwater monitoring wells were installed to the south and west to assess the impacted groundwater plume.

## 7.4.6.2.6 February 2014 Sampling Event

The February 2014 event included sample collection from newly installed monitoring wells MW-10 and MW-11 only. No analyte was detected in groundwater samples from monitoring wells MW-10 and MW-11 at concentrations that exceed the applicable RMSC SHSs. Trace concentrations of benzene were detected in both samples.

The LQLs were less than the promulgated RMSC SHSs. Laboratory reports and chain of custody data are presented in Appendix C. Appendix B: Table 3 summarizes the groundwater analytical data.

## **7.4.6.2.7 March 2014 Sampling Event**

The March 2014 event included sample collection from monitoring wells MW-1 through MW-12 (except for MW-6 and wells noted below). Monitoring wells MW-3, MW-4, and MW-7 could not be sampled during March due to snow cover and development activities. Concentrations of petroleum constituents exceeded the RMSC SHSs in groundwater samples that were collected from monitoring wells MW-1, MW-2, and MW-9. The highest analyte concentrations were detected in monitoring well MW-1 that is located west of the former UST excavation. The concentrations of all analytes in the groundwater sample from monitoring well MW-1 except isopropylbenzene exceed the applicable RMSC SHSs. The concentration of benzene in the groundwater sample from monitoring well MW-9 (96 ug/l) located on the Woodloch property exceeded the RMSC SHS.

A benzene isoconcentration map for the March 2014 event is included as Figure 6C of Appendix A. An MTBE isoconcentration map for the March 2014 event is included as Figure 7C of Appendix A. The distribution of contaminants indicate groundwater flow to the west and south-southeast from the former UST area. A groundwater contour map for the March 2014 event is included as Figure 5C of Appendix A.

The LQLs were generally less than the promulgated RMSC SHSs. Laboratory reports and chain of custody data are presented in Appendix C. Appendix B: Table 3 summarizes the groundwater analytical data.

### 7.4.6.2.8 April 2014 Sampling Event

The April 2014 event included sample collection from newly installed monitoring wells MW-13 through MW-16 only. No analyte was detected in groundwater samples from monitoring wells MW-13 through MW-16 at concentrations that exceed the applicable RMSC SHSs. MTBE was detected in monitoring well MW-16 (9 ug/l) at a concentration that is below the RMSC SHS.

The LQLs were less than the promulgated RMSC SHSs. Laboratory reports and chain of custody data are presented in Appendix C. Appendix B: Table 3 summarizes the groundwater analytical data.

## **7.4.6.2.9 June 2014 Sampling Event**

The June 2014 event included sample collection from monitoring wells MW-1 through MW-16 (except for previously destroyed MW-6). Monitoring well MW-2 could not be sampled in June due to site development activity that temporarily made the location inaccessible. Concentrations of petroleum constituents exceeded the RMSC SHSs in groundwater samples that were collected from monitoring wells MW-1, MW-3, MW-4, MW-5, MW-7, and MW-9. The highest analyte concentrations were detected in monitoring wells MW-1, MW-4, and MW-5 that are located west and south of the former UST excavation. The analyte concentrations detected in groundwater from MW-5 were much higher than previous groundwater sampling rounds. Significant increases in concentrations were also observed in monitoring well MW-3. Consistent with previous results, the concentration of benzene in the groundwater sample from monitoring well MW-9 (58 ug/l) located on the Woodloch property exceeded the RMSC SHS.

A benzene isoconcentration map for the June 2014 event is included as Figure 6D of Appendix A. An MTBE isoconcentration map for the June 2014 event is included as Figure 7D of Appendix A. The distribution of contaminants indicate groundwater flow to the west and south-southeast from the former UST area. A groundwater contour map for the June 2014 event is included as Figure 5D of Appendix A.

The LQLs were generally less than the promulgated RMSC SHSs. Laboratory reports and chain of custody data are presented in Appendix C. Appendix B: Table 3 summarizes the groundwater analytical data.

#### 7.4.6.2.10 Indicator Parameters

Based on the June 2014 sampling event that provides the most complete set of data, dissolved oxygen levels were generally highest in monitoring wells MW-14, MW-15, and MW-16 that are located furthest from the impacted groundwater plume in areas that are not covered by asphalt. ORP levels in the monitoring wells are generally lowest in the middle of the impacted groundwater plume, as expected.

#### 7.4.6.2.11 **Groundwater Analytical Data Evaluation**

The laboratory results indicate that petroleum constituents in the groundwater are present beneath the Property and the adjacent Woodloch property at levels that exceed the RMSC SHSs. UST closure data and the analytical data indicate that the petroleum product released at the site was unleaded gasoline. The highest levels of gasoline constituents have been detected in monitoring wells west of the former leaking UST system consistent with the local direction of groundwater flow indicated by water level data.

UST closure information and soils data indicate that impacted unsaturated zone soil was removed for off-site disposal. The source of the current groundwater plume is residual unleaded gasoline constituents in the soil smear zone located at the top of the water table. As the new UST systems at the Property are located outside of the impacted groundwater plume, no potential source area of additional petroleum product has been identified in the area of the release. Buried petroleum refuse related to the garage operation that was identified north of the building (and remediated under a separate case number with PADEP) is also located outside of the area currently impacted by the unleaded gasoline release.

As previously discussed, the principal direction of contaminant transport beneath the site is to the west. Groundwater level data and the observed distribution of contaminants also indicate a component of flow to the southeast. The impacted groundwater plume has not migrated to the west or southeast beyond the current monitoring well network at levels that exceed the RMSC SHSs

Insufficient rounds of quarterly groundwater sample collection have been completed to provide a meaningful analysis of groundwater trends. However, groundwater sample collection events for the central area of the impacted groundwater plume date back to May of 2012. Historical data for the core of plume indicate stable contaminant concentrations in monitoring wells MW-1 and MW-4, a general decline in concentrations in monitoring wells MW-2 and MW-7, and a post-construction increase in concentrations in monitoring wells MW-3 and MW-5.

## 7.4.7 On-Lot Supply Well Samples

## 7.4.7.1 Sample Collection

The Converse Work Plan specified sample collection from the on-lot supply wells on adjacent properties #1 (Jensen property), #2 (Rosemergy property), and #12 (Woodloch property) of Figure 8. Mr. Jensen did not provide access for the collection of a supply well sample from his Property. As the well on the Jensen is approximately 1000 feet northeast of the former leaking UST system it is not within the area potentially impacted by the release. Samples from the on-lot supply wells at the Rosemergy (labelled SW-8) and Woodloch properties (labelled SW-12) were collected on 12/11/13 and 2/4/14

In general, supply well samples were collected in accordance with the Converse Work Plan. Samples were collected directly from a tap into laboratory supplied glassware after stagnant water within the system had been purged by running the water for an extended period of time.

## 7.4.7.2 Sample Analysis

Supply well samples were collected from the Woodloch Property (labelled SW-12) and the Rosemergy Property (labelled SW-8) on both sample collection dates. Samples were analyzed by Fairway labs of Altoona, Pennsylvania for the unleaded gasoline constituents on the 2008 PADEP Petroleum Short list.

As presented on Appendix B: Table 6, no unleaded gasoline constituent was detected in the on-lot supply well samples at a concentration that exceeded the laboratory quantitation limits (LQLs) or the RMSC SHSs. Appendix A: Figure 8 presents the locations of the properties that were sampled. Property owners were notified of the analytical results for their wells.

#### 7.4.8 Waste Disposition

Potentially impacted soil cuttings that were generated during the completion of the soil borings and monitoring wells was containerized for subsequent disposition by Bluestone Environmental of Honesdale, Pennsylvania. Disposal manifests are included in Appendix E.

Purge water and development water from potentially impacted groundwater monitoring wells was treated using a granular activated carbon (GAC) canister and discharged to the ground surface at the Property. Discharge water from the GAC canister is periodically monitored and/or sampled during purge activities. No breakthrough of the carbon bed was detected during treatment events. The GAC unit is periodically emptied and filled with new coconut shell carbon (or equivalent) that is capable of removing the target analytes.

## 7.4.9 Elevation Survey

Kiley Associates LLC of Lakeville, Pennsylvania completed a survey of the locations and elevations of the monitoring wells that were utilized in this study to provide the data necessary to assess the direction of groundwater flow in the water table aquifer at and in the area of the Property. The location and top of casing (TOC) elevation for each well was measured relative to the 1983 North American Datum (NAD83) using the State Plane Coordinate System. The TOC elevations and the measured groundwater levels in each well were then used to calculate groundwater elevations at each monitoring well. Appendix B: Table 1 presents a tabulated summary of the elevation survey data, depth to water data, and calculated groundwater elevation data. Appendix A: Figures 5A through 5D present groundwater contour maps for four (4) of the groundwater sample collection events.

#### 8.0 INDOOR AIR QUALITY EVALUATION

#### 8.1 GENERAL

The presence of Volatile Organic Compounds (VOCs) in groundwater pose the potential for vapor intrusion into a structure. The Pennsylvania Land Recycling Program, *Technical Guidance Manual*, (253-0300-100), May 4, 2002 (2002 LRP TGM): Section IV(A)(4) Vapor Intrusion Into Buildings from Groundwater and Soil under the Act 2 Statewide Health Standard, dated January 24, 2004 (2004 Vapor Intrusion Guidance) provides guidance and was used for the assessment of potential subsurface vapor intrusion of volatile organic compounds into buildings.

#### 8.2 DECISION MATRIX

#### 8.2.1 General

The 2004 Vapor Intrusion Guidance: Figure 1 - GW IAQ Decision Matrix for SHS and Figure 2 - Soil IAQ Decision Matrix for SHS provide decision matrices for screening activities.

#### **8.2.2** Groundwater Decision Matrix

No separate phase liquid (SPL) has been identified at the Property. The Property building and the residence on the adjacent property to the south are within 100 feet of the impacted groundwater plume. No active preferential pathways have been identified at the Site although water in some locations is present at depths that could impact utility lines trenches. Assessments of soil vapor and indoor air (See Sections 7.4.4 and 7.4.5) were completed to evaluate potential vapor migration from groundwater to indoor air at the Site.

#### 8.2.3 Soil Decision Matrix

Soil data collected after UST closure activities indicate that unsaturated soil is not a current contaminant source area at the Site. No additional assessment is required at the site to evaluate the soil volatilization to indoor air pathway.

# 9.0 EVALUATION OF POTENTIAL DISCHARGES TO SURFACE WATER

#### 9.1 GENERAL

§245.310(a)(29) references that an evaluation of impacts to surface water may be conducted in accordance with §250.309 or §250.406, as necessary. §250.309(a) requires that "any regulated discharge to surface waters shall comply with the applicable provisions of Chapters 91-96, 97 (reserved), 102, 103 and 105, including antidegradation requirements, and may not cause an exceedance of the applicable water quality standards for the surface water in question".

No surface water body is present on the Property. The site is located approximately 1,200 feet south of Little Teedyuskung Lake. The lake drains into West Falls Creek which passes approximately 1,100 feet northeast of the site. West Falls Creek flows southeast to the Lackawaxen River. The site is located approximately 2,200 feet northeast and northwest, respectively, of two (2) small creeks that drain south into the Lackawaxen River.

§250.309(b) requires that "for point source discharges to surface water, compliance shall be measured at the point of discharge in accordance with limits specified in the NPDES permit". No point source discharge to surface water is present at the Property, and §250.406(b) is not applicable to this Property.

§250.309(c) presents compliance requirements for surface water quality standards for diffuse surface water and diffuse groundwater discharge. Residual constituents in groundwater have the potential to degrade surface water quality in the surface water. An evaluation of diffuse groundwater discharge to surface water is discussed in Section 9.2.

§250.309(d) requires an evaluation of diffuse surface water discharge to surface water from springs. No spring was identified at or in the area of the Property, and §250.309(d) is not applicable to this Property.

## 9.2 DIFFUSE GROUNDWATER DISCHARGE TO SURFACE WATER

Groundwater flow in the shallow overburden deposits is influenced by groundwater mounding in the southeast corner of the former Rosemergy Property. The distribution of contaminants and contours of the potentiometric surface (See Figures 5A through 5D of Appendix A) indicate that groundwater flow is primarily to the west and south-southeast. Fate and transport analysis and the distribution of contaminants within the overburden indicate that the impacted groundwater plume does not extend beyond the current monitoring well network at the Site and does not reach the identified surface water bodies. In the absence of preferential pathways, the direction of transport and limited mobility precludes the impacted groundwater within the shallow overburden from reaching surface water.

## 10.0 ECOLOGICAL RECEPTORS

§245.310(a)(28) references that an evaluation of impacts to ecological receptors may be conducted in accordance with §250.311 or §250.402(d), as necessary. §250.311 requires an evaluation of impacts to ecological receptors. The ecological receptors that are identified in §250.311(a) are:

- Individuals of threatened and endangered species as designated by the United States Fish and Wildlife Service under the Endangered Species Act (16 U.S.C.A. §§ 1531-1544).
- 2. Exceptional value wetland as defined by §105.17.
- 3. Habitats of concern.
- Species of concern.

In accordance with §250.311(b), no additional evaluation of ecological receptors is required at the Facility because it meets all three (3) criteria that are available for exemption from further assessment. Namely,

- Gasoline/diesel fuel/heating oil was the only source of constituents detected at the Site.
- 2. The area of contaminated soil is less than 2 acres (and impacted sediment is less than 1,000 square feet).
- 3. The site has features such as paved areas and buildings that limit potential exposure to impacted soil

#### 11.0 FATE AND TRANSPORT ANALYSIS

#### 11.1 GENERAL

Fate and transport analysis can be used to predict constituent concentrations in soil and groundwater at one (1) or more locations and at specific times. The *Pennsylvania's Land Recycling Program*, *Technical Guidance Manual*, (253-0300-100), *May 4*, 2002 (2002 LRP TGM): Section IV.A presents a description of how fate and transport analysis can be applied to the three (3) cleanup standards.

The 2002 LRP TGM: Section IV.A states that "fate and transport analysis or modeling is a necessary part of site characterization and demonstrating attainment of an Act 2 standard. However, the regulations governing Act 2 use the term 'fate and transport analysis' as opposed to 'fate and transport model.' This particular distinction was made because it will not always be necessary to run an analytical or numerical quantitative 'fate and transport model' to achieve a standard". Qualitative and analytical fate and transport modeling will be used to estimate future contaminant transport for COCs in site groundwater.

#### 11.2 SITE CONCEPTUAL MODEL

#### 11.2.1 Source and Extent

The site was developed as an automotive repair station with retail gasoline sales in approximately 1965. The site operated as both an automotive repair station and retail gasoline station until April 2000. The facility was out-of-service from April 2000 until February 2002. In February 2002, retail gasoline sales resumed at the site. A convenience store was also added in October 2002. The retail gasoline sales continued until March 2010.

The release of petroleum to the environment was first identified during a limited Phase II Environmental Assessment (Phase II) of the property on June 28th, 2011. The three (3) underground storage tanks (USTS) were removed from the Former Rosemergy's Convenient Store Facility in September 2011. Site Assessment Information generated during the removal and closure process indicated evidence of soil contamination throughout the excavation area. The heaviest contamination and highest field PID readings were identified directly below the pump island. The island

contained three dispensers. The heaviest soil contamination appeared to be under the center (unleaded gasoline) dispenser. The likely source of the release was the dispenser or piping connections under the dispenser. The leak appeared to be a slow release (chronic problem) that occurred over a multiple year period. There were no containment sumps under the dispensing units.

Approximately 100± tons, was removed from under the pump islands for off-site disposal as part of the UST closure activities. Soil borings completed since the USTs were removed have encountered widespread saturated zone soil that has been impacted by the release of gasoline, however no residual impacted soil appears to be present in the unsaturated zone. Groundwater samples collected from monitoring wells at the Site indicate that the residual petroleum constituents within the uppermost saturated soils represent the source area for the current impacted groundwater plume. In general, the highest concentrations in groundwater are associated with the highest levels of gasoline constituents detected in saturated soil.

The release of product impacted the shallow overburden (water table) aquifer beneath the Property. Groundwater mounding in the area of the former UST excavation effects groundwater transport beneath the Site. Flow within the shallow overburden aquifer flows toward the west with a component of flow to the south-southeast. The impacted groundwater extends beneath Route 590 to property owned by Woodloch. Although the Former Rosemergy Property is currently owned by Woodloch, it was not owned by Woodloch at the time that the release was discovered

#### 11.2.2 Constituents of Concern

The following unleaded gasoline indicator compounds are considered to be the constituents of concern (COCs) at the Property:

CONSTITUENTS OF CONCERN (COCs)	
CONSTITUENTS	CASRN
Benzene	71-43-2
Cumene (isopropylbenzene)	98-82-8
Ethylbenzene	100-41-4

CONSTITUENTS OF CONCERN (COCs)		
CONSTITUENTS	CASRN	
Methyl Tert-Butyl Ether (MTBE)	1634-04-4	
Naphthalene	91-20-3	
Toluene	108-88-3	
1,2,4-Trimethylbenzene	95-63-6	
1,3,5-Trimethylbenzene	108-67-8	
Xylene	1330-20-7	

## 11.2.3 Hydrogeology

Field data indicate that unconsolidated deposits are laterally extensive and serve as an aquifer beneath the Site. Groundwater in the area of the former UST system was encountered at a depth of approximately 4 feet below grade. The depth to groundwater indicates that the potential for preferential contaminant transport pathways exists at the site.

With respect to topography, the site is located near the saddle point that separates surface flow to the north towards Little Teedyuskung Lake from surface flow to the southeast and east towards creeks that drain into the Lackawaxen River. The site is located approximately 1,200 feet south of Little Teedyuskung Lake. The lake drains into West Falls Creek which passes approximately 1,100 feet northeast of the site. West Falls Creek flows southeast to the Lackawaxen River. The site is located approximately 2,200 feet northeast and northwest, respectively, of two (2) small creeks that drain south into the Lackawaxen River. The Lackawaxen River is located approximately 7,500 feet south of the site and flows from west to east (towards the Delaware River). The distribution of contaminants at the Site indicate that flow in the area of the former USTS is to the west with a minor component of flow to the south-southeast.

A cross section of the Site from west to east across the Site is included as Figure 9 of Appendix A.

Available geographical and historical data and the cross-section indicate:

- 1. The primary surface water discharge boundary in the area of the Site is the Lackawaxen River and its tributaries.
- 2. No distinct confining unit was evident in the subsurface that was evaluated by this study.
- The overburden consists of a poorly stratified mixture of silty sands and silts, with varying amounts of gravel, and occasional clayey horizons. Bedrock was not encountered during site characterization activities that investigated to a depth of approximately 21 feet below grade.
- 4. The water table is indicated to be shallow and located just below the depth of utilities at the Site. Although data indicates that the distribution of contaminants is consistent with groundwater flow predicted from contour maps, utilities could potentially serve as preferential pathways during periods of high water levels.
- 5. Groundwater mounding within the unconsolidated overburden occurs at the eastern end of the former UST area.
- 6. Although groundwater is shallow, experience with open holes and excavations indicate that very little water is available in the shallow overburden. Measurements of aquifer properties indicate very slow groundwater transport velocities.

## 11.2.4 Plume Configuration, Contaminant Distribution, and Plume Stability

A release of unleaded gasoline was identified at the Site in 2011. The impacted soil and groundwater have MTBE which gained widespread use in the northeast United States around 1995. Most suppliers replaced MTBE with other oxygenates by 2009. Aqua PA reported encountering evidence of a release across from the former Rosemergy's Store in 2002, however it was not "confirmed" by subsequent sampling. Information from the 1996 Hydrotech Assessment that is included in Exhibit A of the Bluestone Work Plan indicates that BTEX constituents were detected in groundwater in July of 1996. Although it is difficult to establish an exact timeline, it appears that the release began in 1995 or 1996 and most likely continued until UST system closure in 2011.

Bedrock was not encountered during site assessment activities that reached a total depth of approximately 21 feet below grade. Contaminant distributions within the soil borings indicate that the highest levels of residual impacted saturated soil and groundwater are at the water table. Indicators of contamination were observed to decrease with depth below the water table.

As discussed previously, impacted groundwater extends to the west and southeast of the former UST system at levels that exceed the RMSC SHSs. Although data is insufficient to assess constituent concentration trends, no potential source of additional petroleum hydrocarbons has been identified in the area of the impacted groundwater plume. Based on the age of the release, the lack of an active source, and the slow predicted transport velocities predicted for groundwater, the plume would be expected to be stable or shrinking.

Increases in contaminant concentrations were observed in groundwater samples collected from monitoring wells MW-3 and MW-5 during the June 2014 sampling event. The increase is likely the result of major construction activities for the new convenience store (including removal and replacement of asphalt in the area of the impacted groundwater plume) completed in the spring of 2014.

#### 11.3 FATE AND TRANSPORT IN THE UNSATURATED SOIL ZONE

The 2002 LRP TGM: Section IV.A.1.(a) identifies that fate and transport analysis should be conducted for the unsaturated zone if constituents of concern (COCs) in the unsaturated zone are identified at concentrations greater than the Soil to Groundwater Numeric Value (SGNV) MSC SHS.

Site characterization activities indicate that unsaturated zone soil is not currently a potential source area.

## 11.4 FATE AND TRANSPORT IN THE SATURATED SOIL ZONE

PADEP, 2002: Section (IV)(A)(2) provides guidance for fate and transport analysis in the saturated zone if constituents in the saturated soil zone are identified at concentrations greater than the MSC SHS. Fate and transport models usually evaluate constituent fate and transport in saturated soil as a function of constituent fate and transport in groundwater at the source area. Fate and transport from this source term is evaluated in the following Section.

#### 11.5 FATE AND TRANSPORT IN GROUNDWATER

#### 11.5.1 General

#### Data indicate:

- A release of product (unleaded gasoline) impacted soil and groundwater at the Property. The release is indicated to have been a slow release over a long time that may have begun as early as 1995.
- 2. Impacted unsaturated zone soils were remediated during UST closure activities.
- 3. The groundwater plume has been delineated both vertically and laterally.
- 4. An assessment of aquifer properties indicates that median transport velocities are expected to be extremely slow. This assessment is supported by the numerous excavations and boreholes that have been completed below the water table with minimal visible water infiltration.
- 5. As the UST systems have been moved to the far side of the Property and impacted unsaturated soil has been removed for off-site disposal, no source area for additional petroleum impact is located in the area of the impacted groundwater plume.

## 11.5.2 Qualitative Analysis

It is also our opinion that the qualitative fate and transport analysis presented below presents a reasonable assessment of solute fate and transport at the Site based on the current data.

Benzene and MTBE are present in groundwater beneath the Site. Both Benzene and MTBE are extremely soluble in groundwater, have low organic carbon coefficients (Koc), and are resistant (under some circumstances) to biologic attenuation. Benzene and MTBE are generally at the leading edge of a solute plume and are the most distally distributed solutes. At the Former Rosemergy Store/Garage, Benzene is the only unleaded gasoline constituent that has been detected in off-Property monitoring wells at levels that exceed the RMSC SHS. MTBE, however, has traveled the furthest distance from the source area. MTBE has been detected in monitoring well MW-16 located southeast of the former source area at the distal edge of the plume.

Insufficient quarterly groundwater sample collection events have been completed in downgradient wells to assess contaminant trends. However, based on the age of the release and the elimination of the leaking UST and unsaturated zone source area, the plume is expected to be stable or shrinking. Very low groundwater transport velocities that are based on aquifer testing and observations of open excavations below the water table that do not accumulate water after several hours support the current site conceptual model that the plume is expected to be stable or shrinking. As the current monitoring well array is sufficient to detect expansion of the plume before the plume reaches downgradient receptors, quantitative analysis of fate and transport is not required at this point in time.

## 11.5.3 Quantitative Analysis

As the current monitoring well array is sufficient to monitor the extent of impacted groundwater migration, the contaminant migration is expected to be very slow, the plume is expected to be at equilibrium or shrinking, and additional groundwater monitoring events are required to assess concentrations in the newly installed monitoring wells, no quantitative analysis is planned until two (2) additional quarterly groundwater sample collection events are collected.

It is our opinion that sufficient contaminant distribution and migration data has been collected to formulate a Remedial Action Plan for the site.

#### 12.0 PLANNED ACTIVITIES

The following activities are currently planned:

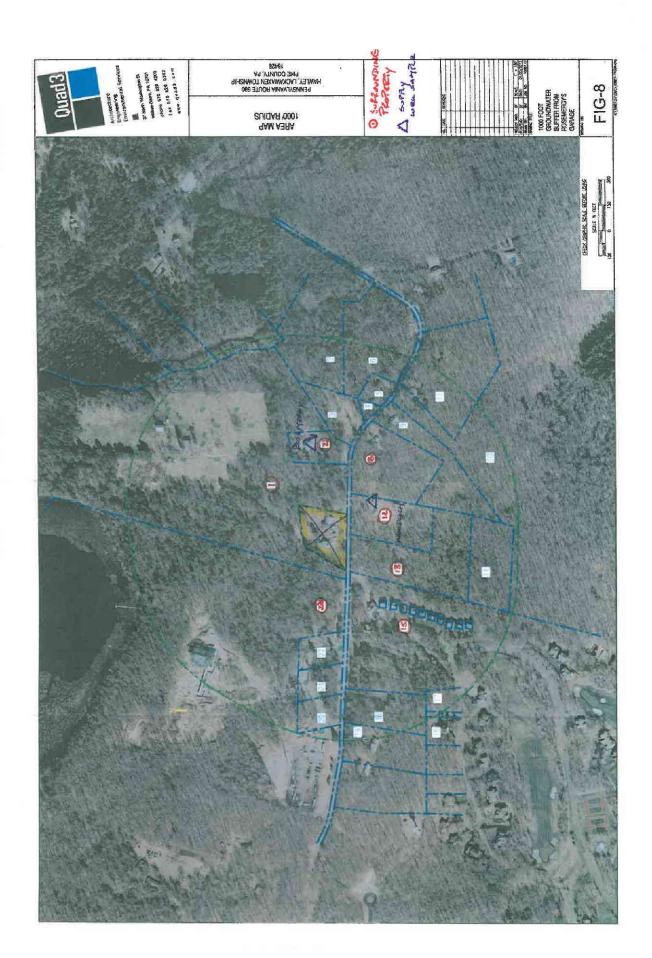
- Screening of remedial alternatives and submission of a Remedial Action Plan.
- Quarterly Groundwater Monitoring and Reporting.
- A second indoor air sampling event during the winter of 2015.
- Construction activities have caused an increase in gasoline constituents in monitoring wells MW-3 and MW-5 that are located near off-property monitoring wells and the off-property residential supply wells. A groundwater extraction event will be proposed to USTIF to address the increase in contaminant concentrations and preclude additional off-property movement of the petroleum constituents.
- Quantitative fate and transport analysis, if required.

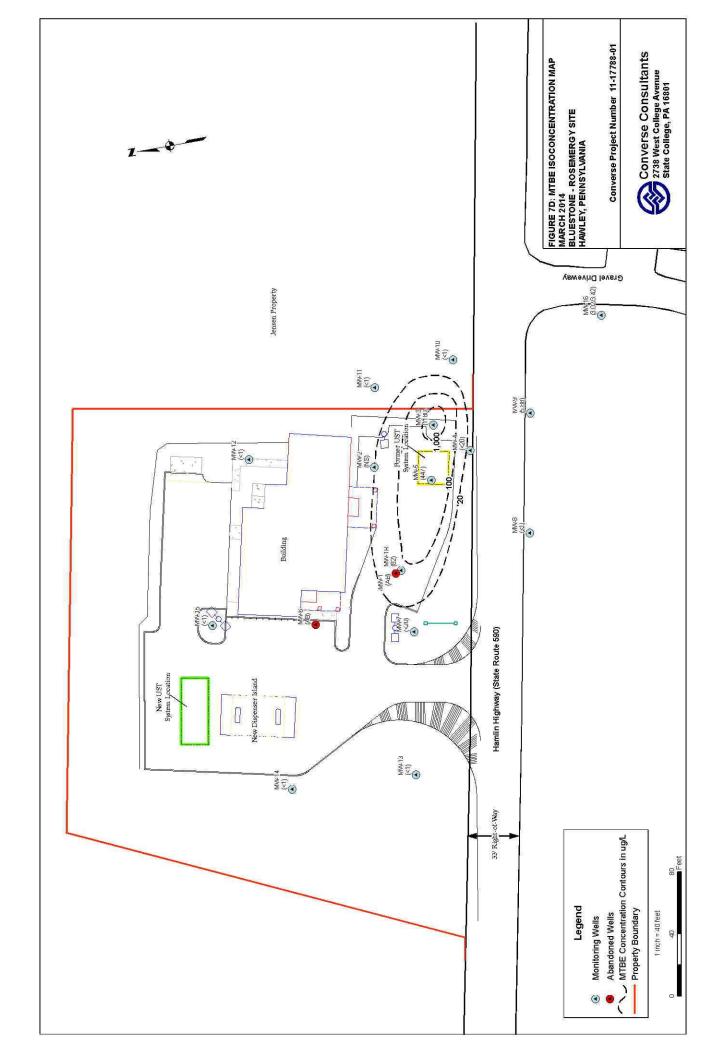
## 13.0 QUALIFICATIONS

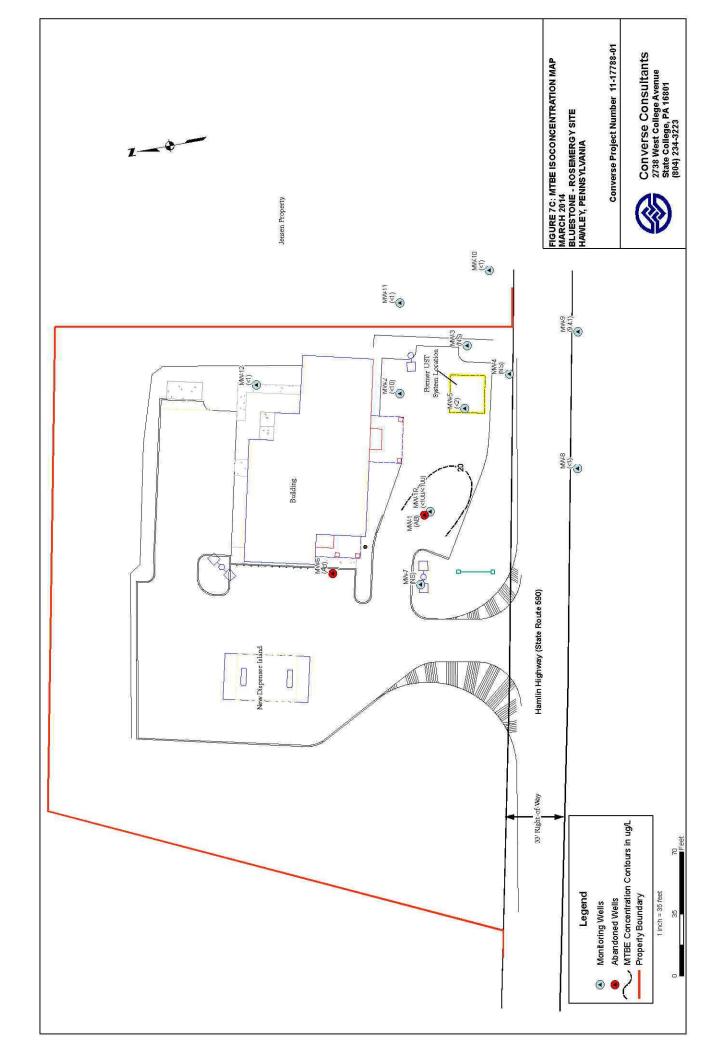
Mr. David W. Swetland, P.G., Senior Geologist, was responsible for management of the project and technical oversight of the work completed by Converse. Mr. Swetland has twenty-five (25) years of experience supervising site characterizations and providing environmental consulting services throughout the Northeast.

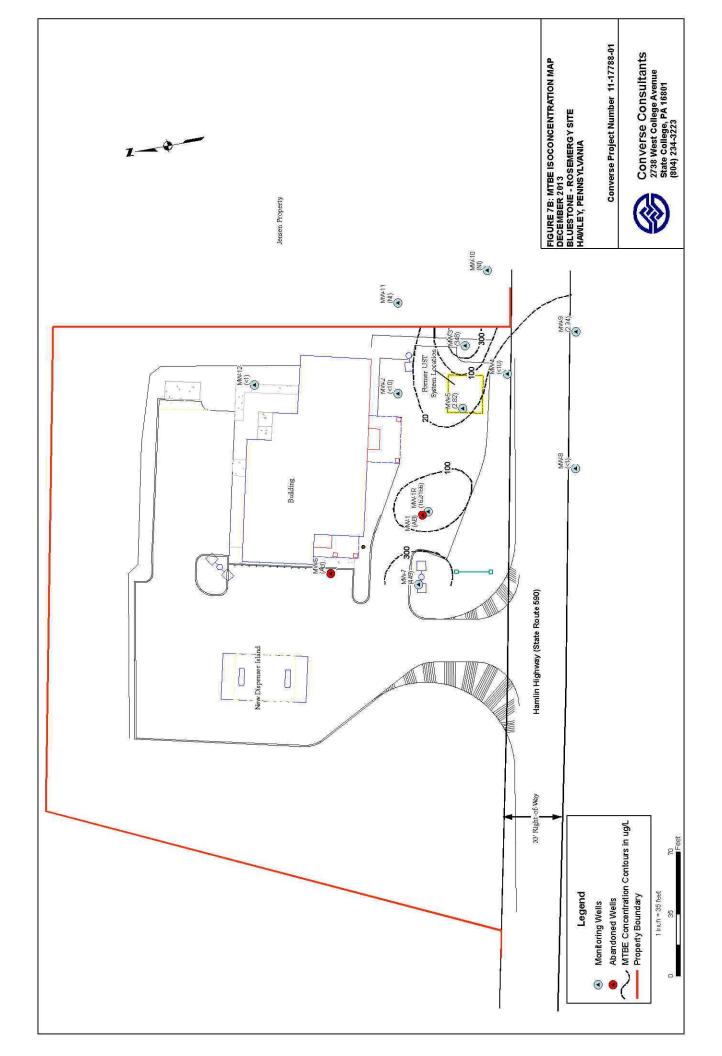
Mr. David W. Swetland, P.G., Senior Geologist

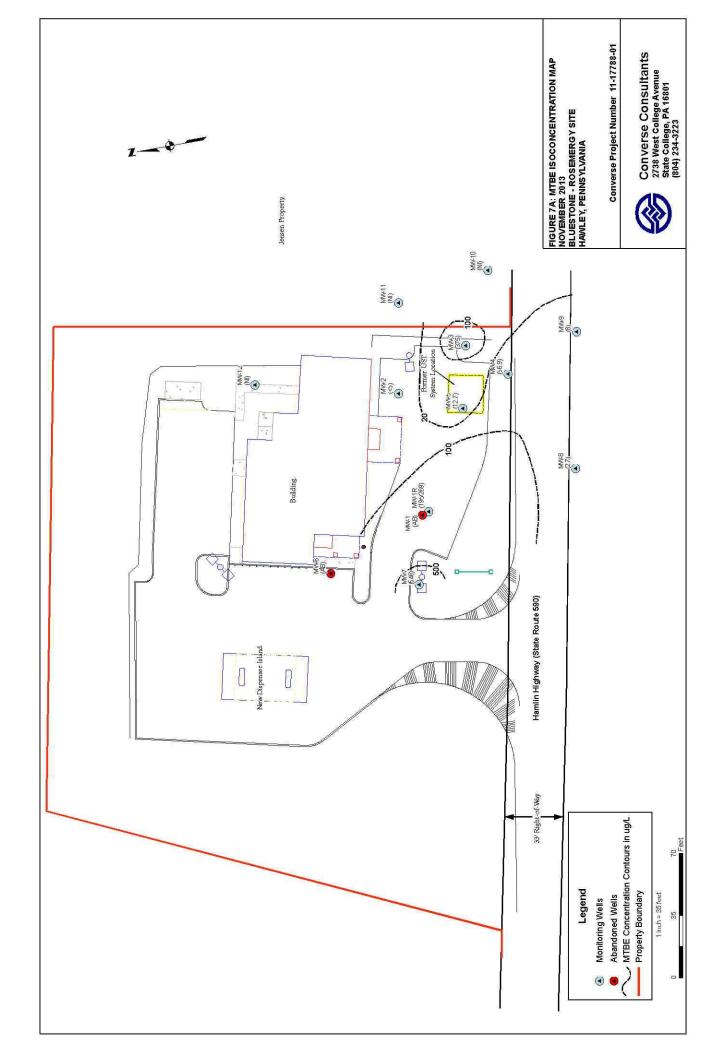
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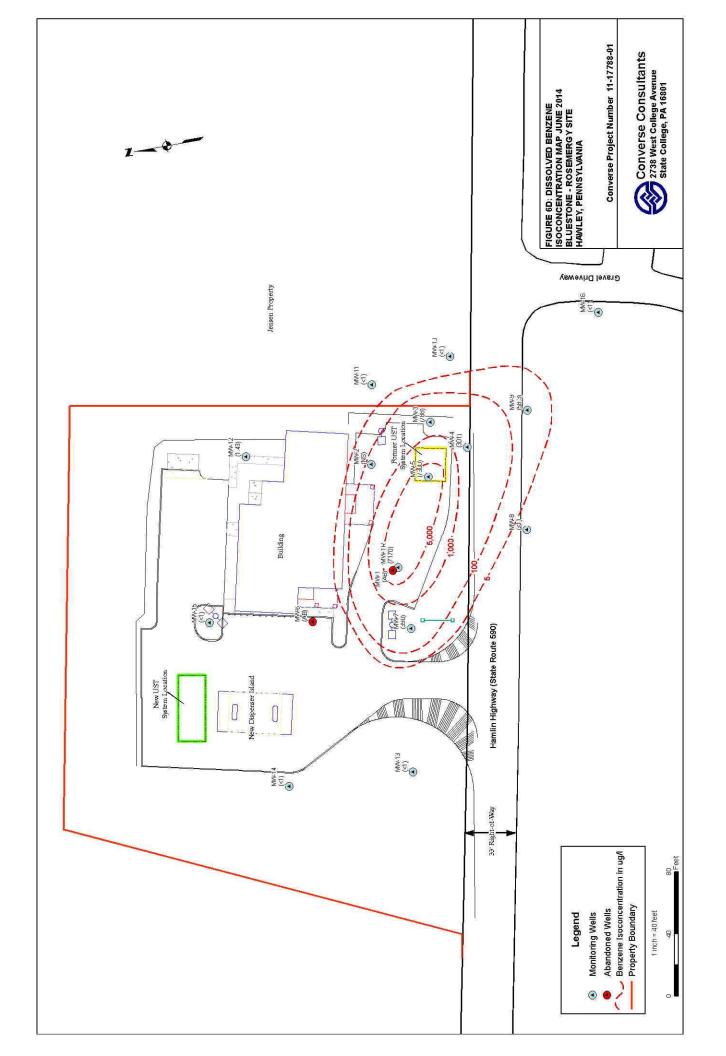


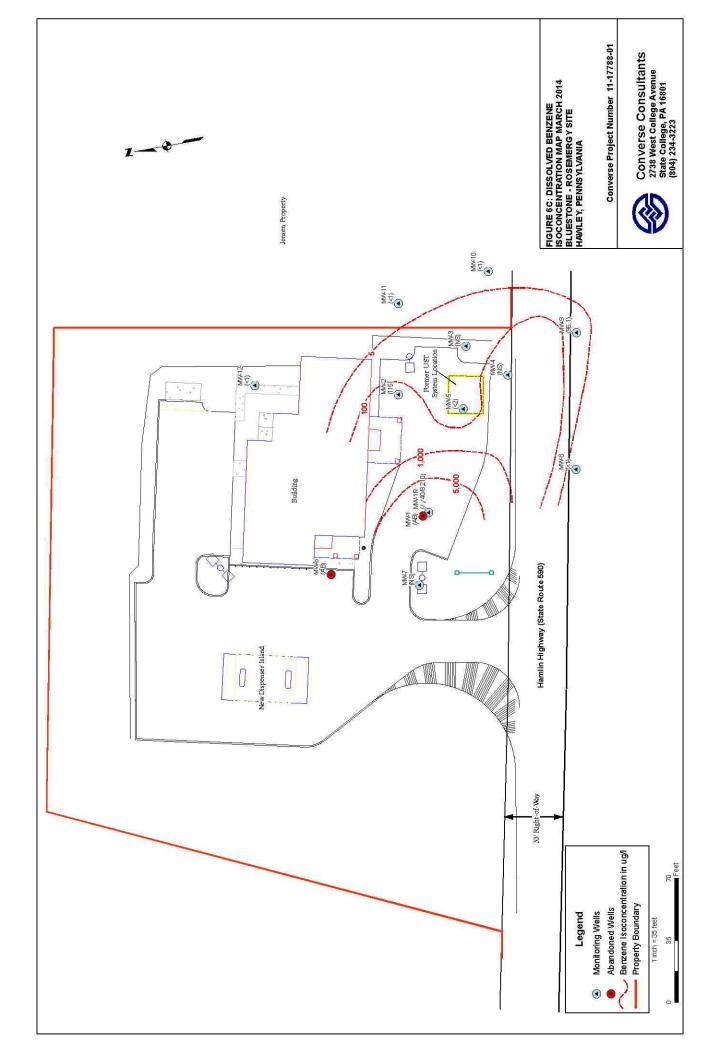


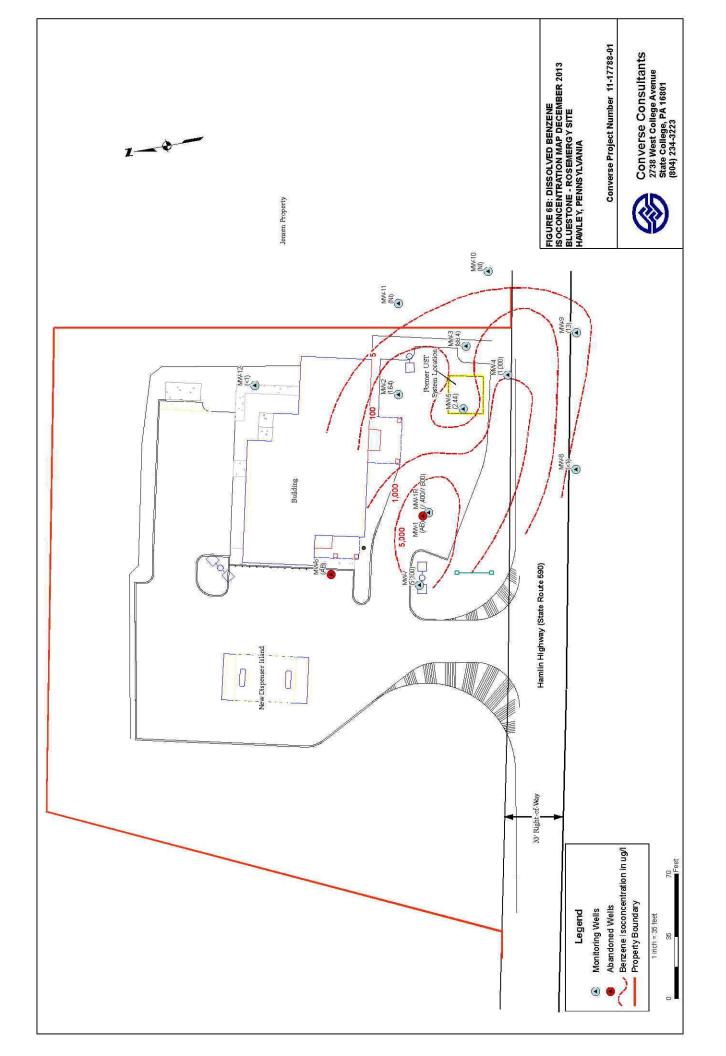


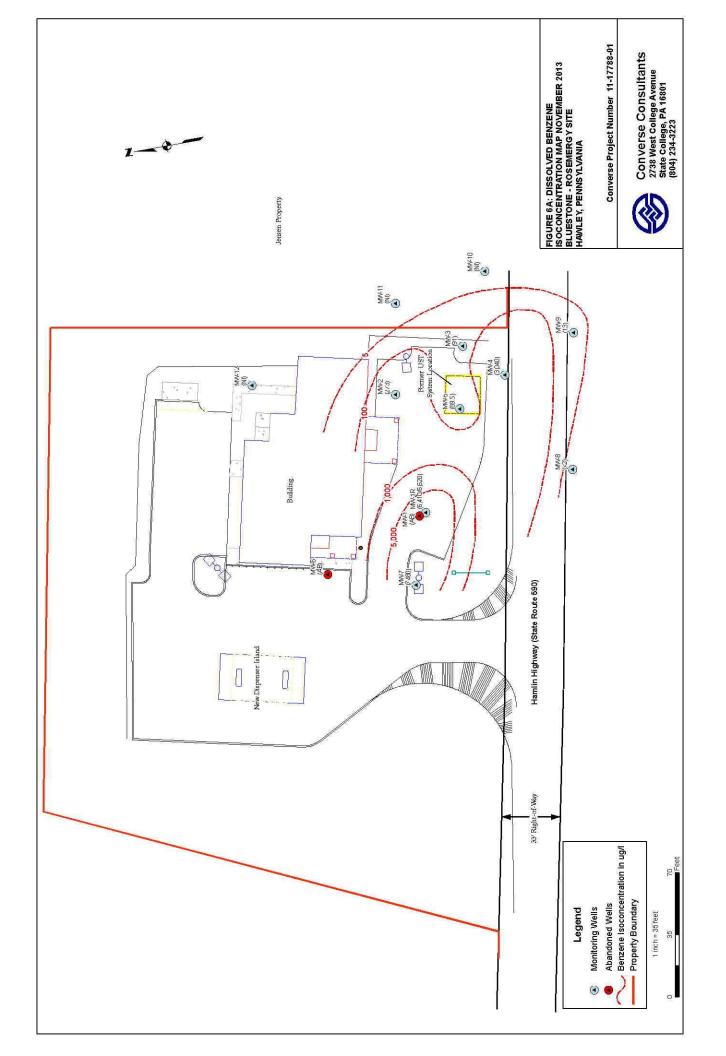


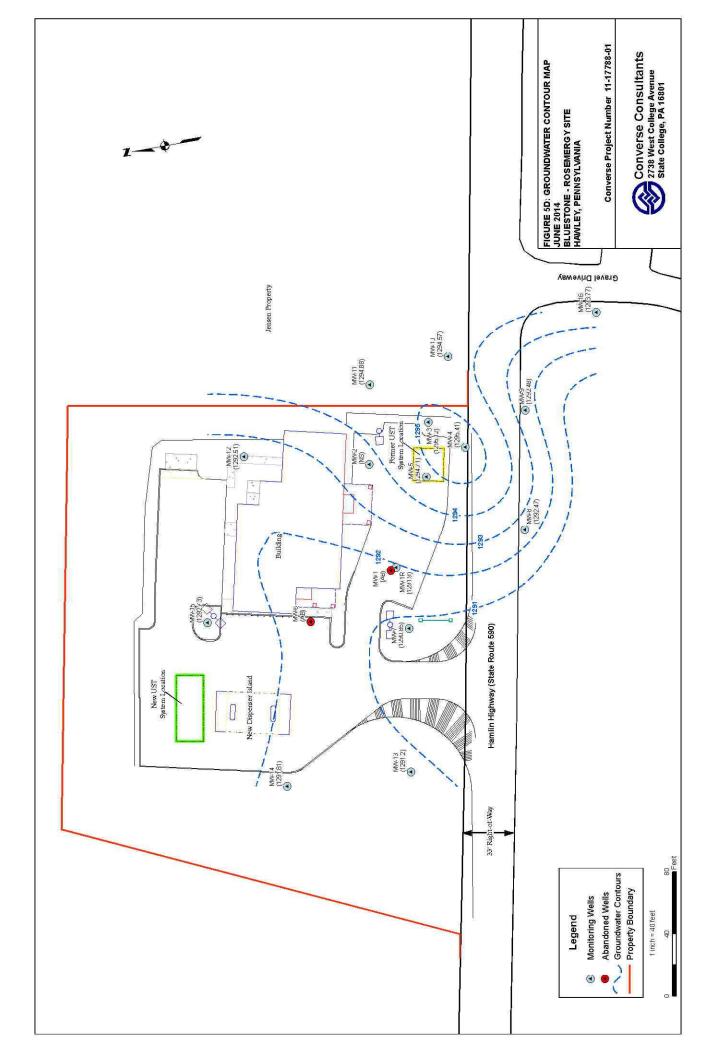


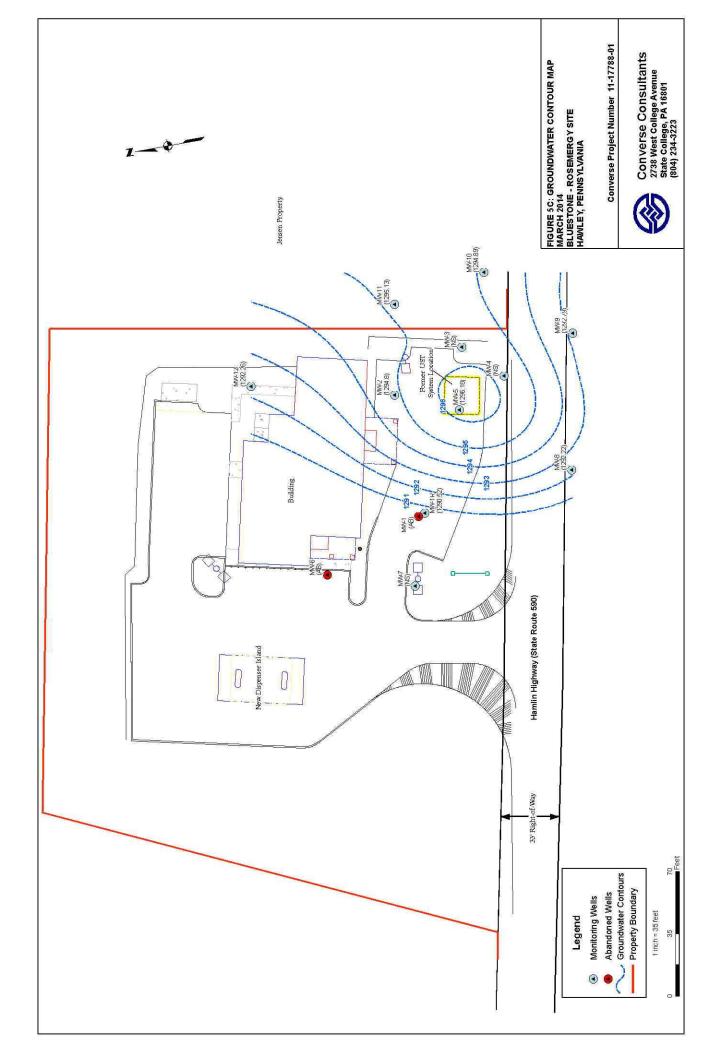


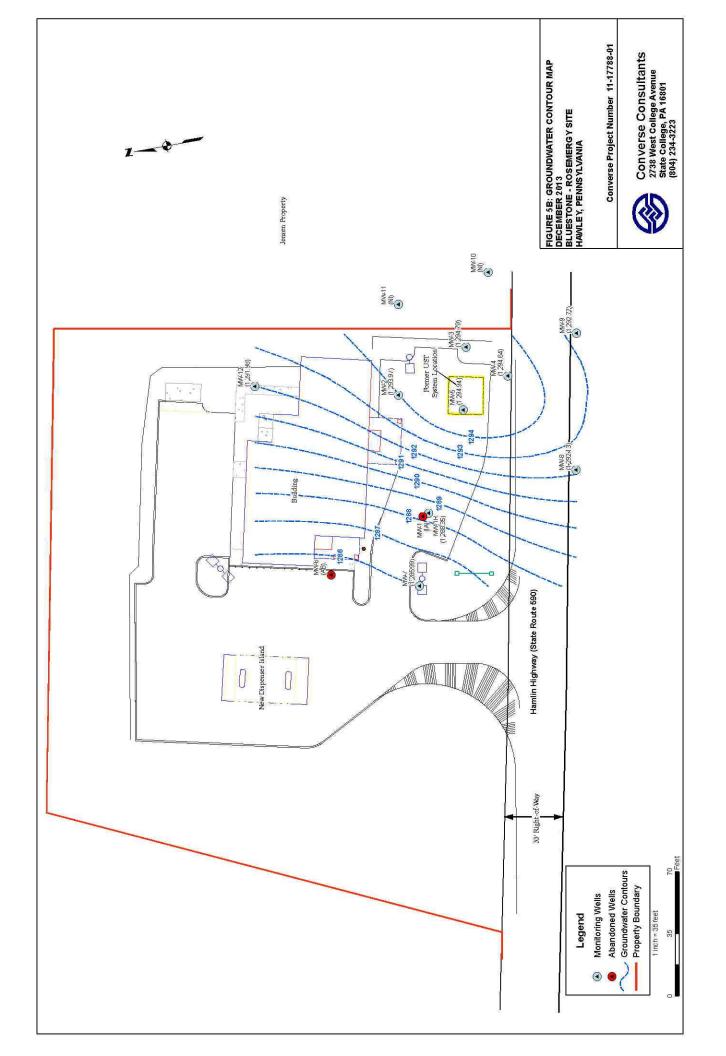


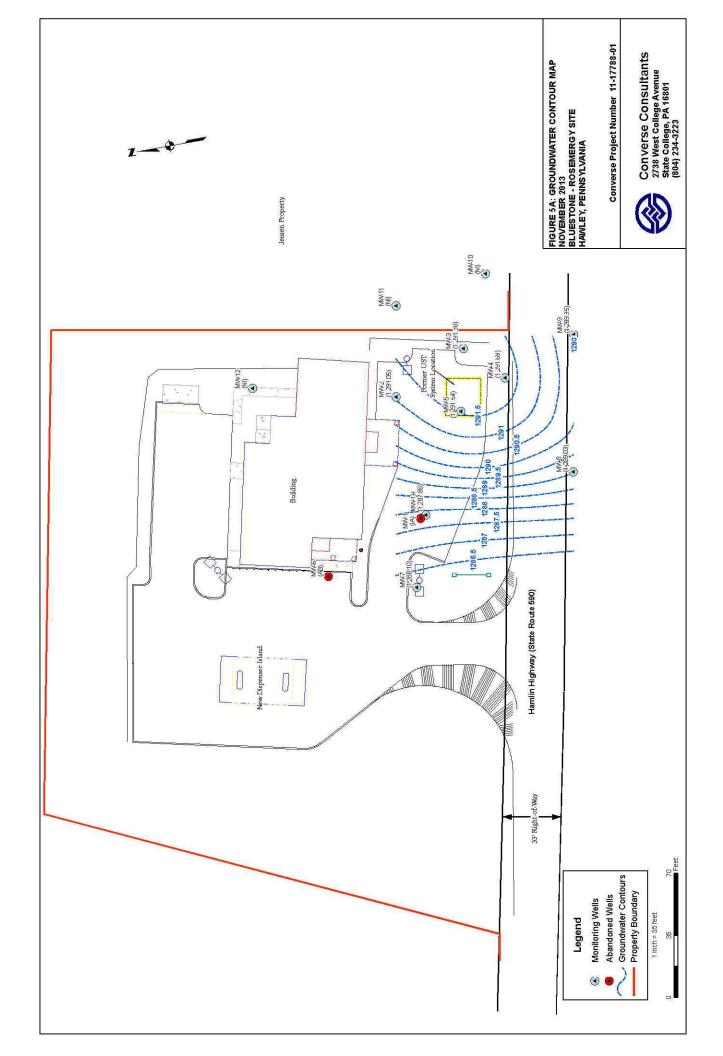


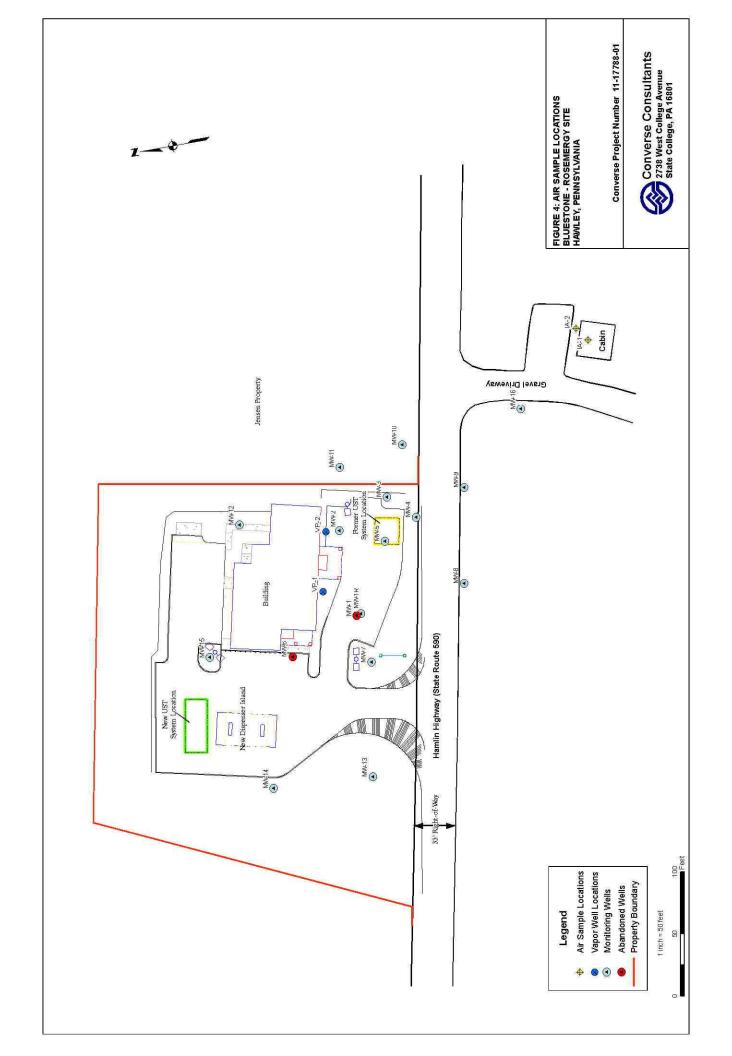


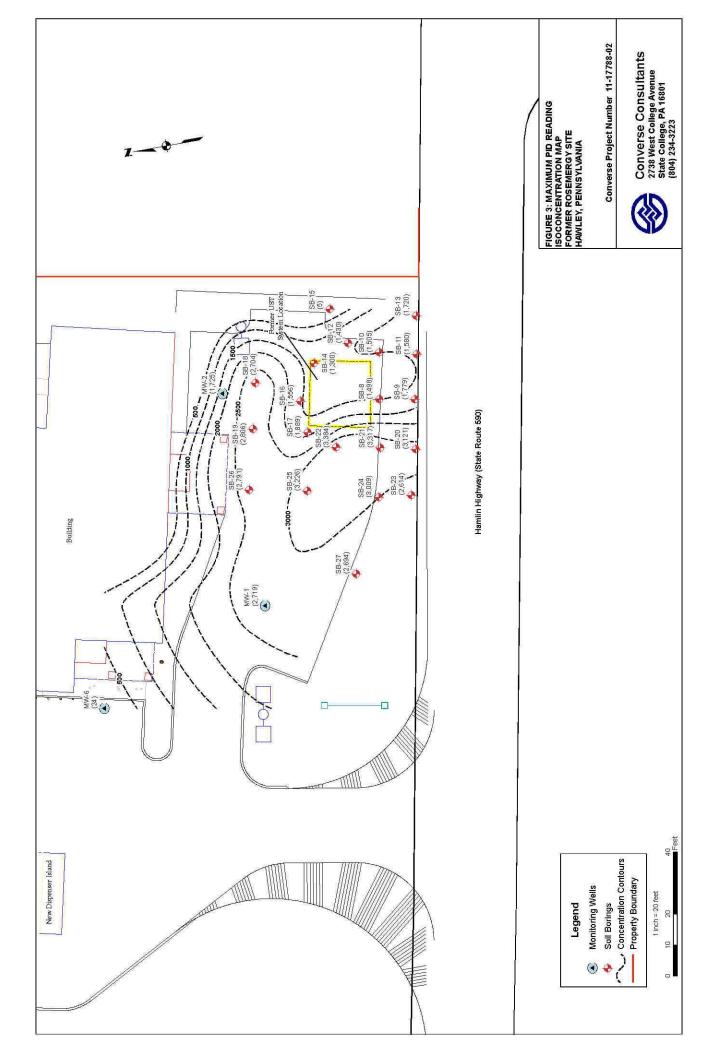


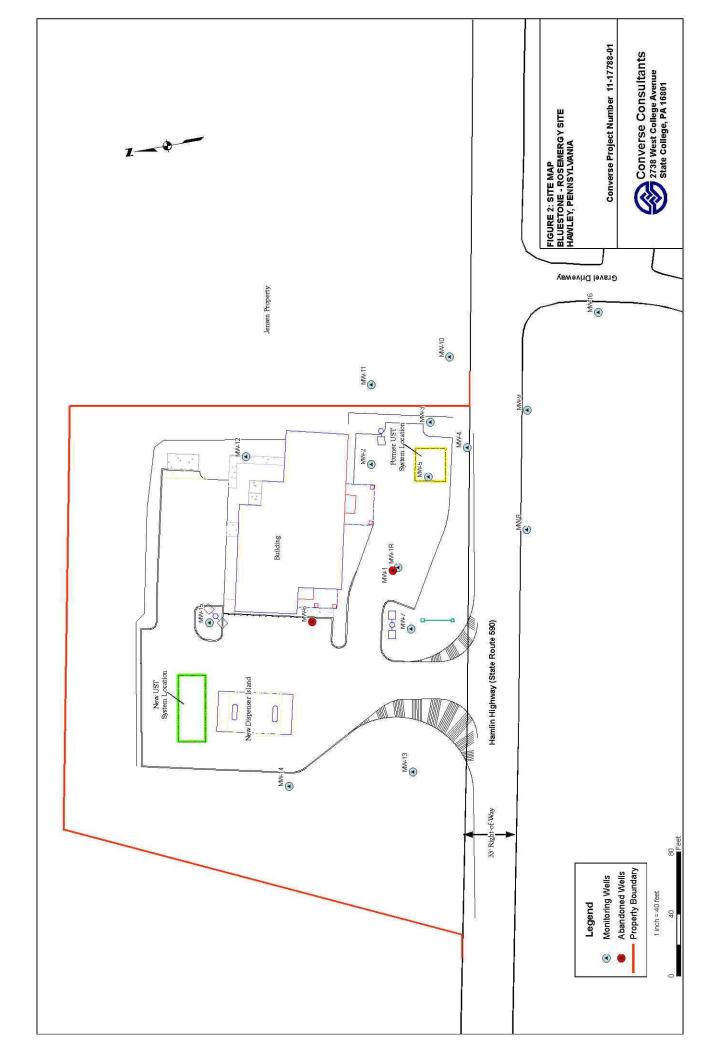












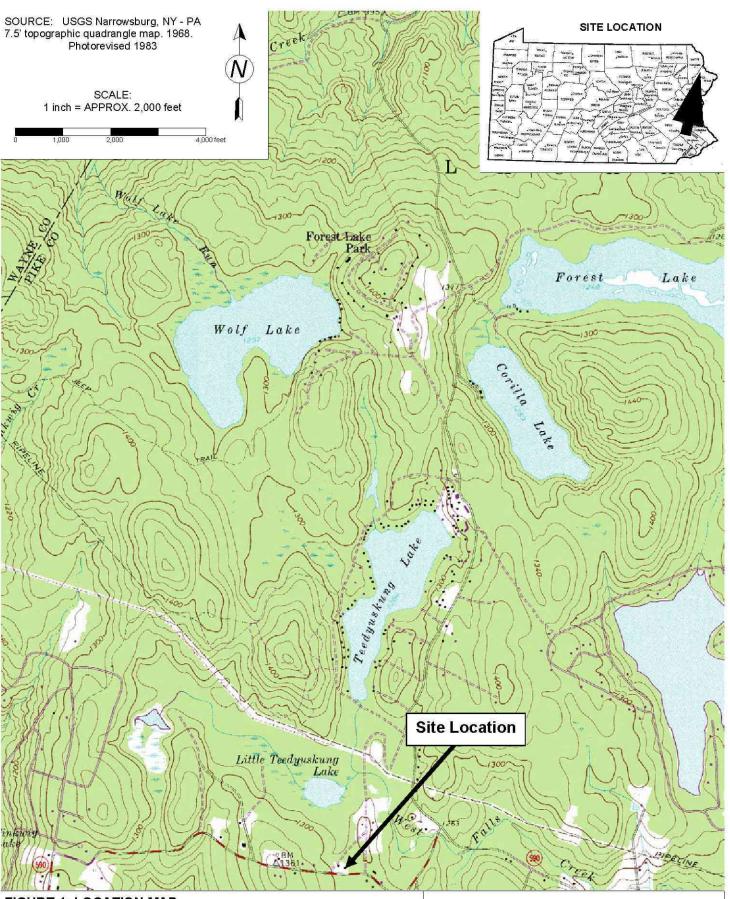


FIGURE 1: LOCATION MAP

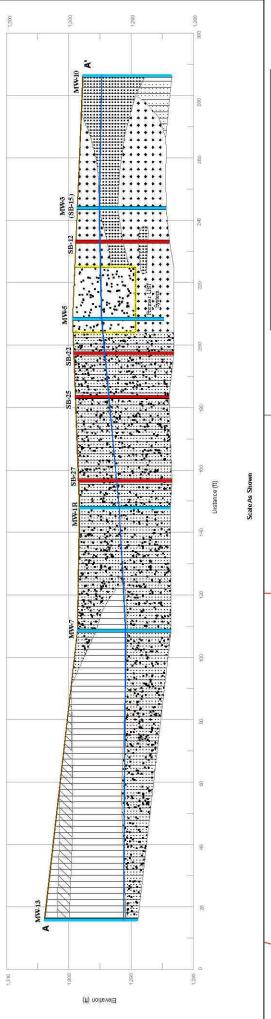
ROSEMERGY SITE HAMLIN HIGHWAY (PA 590) HAWLEY, PIKE COUNTY, PENNSYLVANIA

Converse Project Number 11-17829-01

Revised 01/09/13



CONVERSE CONSULTANTS 2738 West College Avenue State College, PA 16801 (814) 234-3223





### CROSS SECTION A-A'

FORMER ROSEMERGY'S CONVENIENCE STORE Hamlin Highway Hawley, Pennsylvania

Plate 1



Gravel Driveway

9

Hamlin Highway (State Route 598)

New USI System Former UST Area

Montoring Wells
Abandoned Wells
Soil Borings

⊙ ● ♦

	INDOOR A FORMER R	IR ASSES OSEMER(	TABLE 5 SESSMENT SA ERGY'S CONV HAWLEY, PA 11-17788-02	TABLE 5 INDOOR AIR ASSESSMENT SAMPLE RESULTS FORMER ROSEMERGY'S CONVENIENCE STORE HAWLEY, PA 11-17788-02	SULTS STORE		
PARAMETER	RMSC	NRMSC	R	∀1	IA-1	ΥI	IA-2
	(	(		6/18/14	6/18/14 Winter 2015	6/18/14	6/18/14 Winter 2015
BENZENE	0.0027	0.01	0.00011	0.0011		0.00088	
CUMENE (Isopropylbenzene)	0.540	1.1	0.00015	<0.00065		<0.00065	
ETHYLBENZENE	0.019	0.073	0.012	0.0024		0.00051	
METHYL TERT-BUTYL ETHER	0.0810	0.31	0.00013	0.007		<0.0013	
NAPHTHALENE	0.0042	0.0088	0.00018	<0.00018		<0.00018	
TOLUENE	0.56	1.2	0.0038	0.017		0.0036	
1,2,4-TRIMETHYLBENZENE	0.0083	0.017	0.0049	0.0015		0.00042	
1,3,5-TRIMETHYLBENZENE	0.0083	0.017	0.00017	0.0005		<0.00017	
m & p-XYLENE	0.14	0.3	0.0087	0.008		0.0018	
o-XYLENE	0.14	0.3	0.0043	0.0022		0.00054	

Concentrations reported in milligrams per cubic meter (mg/m  $^3$  ). RMSC  $_{\rm M}$  Residential Medium Specific Concentration for Indoor Air.

 $\mathsf{NRMSC}_{\mathbb{A}^{\cdot}}$  Non-Residential Medium Specific Concentration for Indoor Air.

RL: Reporting Limit. IA-1 Collected inside residence IA-2 Collected outside residence (ambient air)

### FORMER ROSEMERGY'S CONVENIENCE STORE TABLE 4 SOIL GAS SAMPLE RESULTS HAWLEY, PA 11-17788-02

( L + L + L + C + C + C + C + C + C + C +	(				Č	Ó	(	Ć	Ć	Ć
TATAINE ET	S) NMX Se	NAIM CSG	보		L-/か	2-75	S-7S	r-4>	Z-4A	۶-۲۸
							(SV-1 dub)			(VP-1 dup)
				Date	2/4/14	2/4/14	2/4/14	3/7/14	3/7/14	3/7/14
BENZENE	0.27	1.1	0.64		0.00042	0.00035	0.00038	<0.00032	0.0012	<0.0016
CUMENE (Isopropylbenzene)	54	110	2		<0.0018	<0.0018	<0.0018	0.003	<0.0018	<0.0092
ETHYLBENZENE	1.9	7.3	0.87		<0.00043	<0.00043	<0.00043	<0.00043	<0.00043	<0.0022
METHYL TERT-BUTYL ETHER	8.1	31	3.6		96000.0>	<0.00036	96000.0>	<0.00036	<0.00036	<0.0018
NAPHTHALENE	0.42	0.88	10		<0.00052	<0.00052	<0.00052	0.004	<0.00052	<0.0026
TOLUENE	99	120	1.1		NA	NA	NA	0.15	0.37	1.2
1,2,4-TRIMETHYLBENZENE	0.83	1.7	2		<0.00049	0.00065	<0.00049	<0.00049	<0.00049	<0.0025
1,3,5-TRIMETHYLBENZENE	0.83	1.7	2		<0.00049	<0.00049	<0.00049	<0.00049	<0.00049	<0.0025
m & p-XYLENE	14	30	2.2		0.0011	0.0013	0.0012	0.0048	0.0047	0.022
o-XYLENE	14	30	2.2		0.00047	0.0006	0.00053	0.0015	0.0015	0.0071
Compounds identified at concentrations greater than quantitation limit	ions greater	: than quanti	tation l	imit.			NA: Not Analyzed	zed.		

Concentrations reported in milligrams per cubic meter (mg/m³)

RMSC<sub>sG</sub>. Residential Medium Specific Concentration.

NRMSC<sub>s6</sub>: Non-Residential Medium Specific Concentration.

RL: Reporting Limit. NPL: No published Act II standard value.

NS - Not Sampled All concentrations in micrograms per liter (ug/L)

		H	37 00 6 2	1				)
	GROUNDWATER ANALYTICAL DATA FORMER ROSEMERGY'S CONVENIENT STORE 1623 ROUTE 590 HAWLEY, PA 11-17788-02	UNDWAT UNDWAT ROSEMEI 162 HA	GROUNDWATER ANALYTICAL DATA IER ROSEMERGY'S CONVENIENT ST 1623 ROUTE 590 HAWLEY, PA 11-17788-02	iueu) YTICAL DA NVENIEN] S90 A	ATA - STORE			
	Statewide Health	2						
Sample ID (Depth)	Standards	MW-3	WM-3	MW-3	MW-3	MW-3	MW-3	MW-3
Sampling Date	Groundwater	5/8/12	6/17/12	11/8/13	12/11/13	2/4/14	3/7/14	6/12/14
Units	<2,500 TDS	(na/L)	(na/E)	(na/L)	(na/L)	(na/L)	(na/L)	(na/L)
VOLATILE ORGANIC COMPOUNDS	4POUNDS							
1,3,5-Trimethylbenzene	13	<10	<10	<5	<2	NS	SN	<10
1,2,4-Trimethylbenzene	15	<10	<10	5.15	<2	NS	SN	38.5
Benzene	5	273	536	91	88.4	NS	SN	788
Toluene	1,000	86.4	<10	<5	<2	NS	NS	62.8
Ethylbenzene	700	12.2	<10	<5	3.24	NS	NS	26.8
Xylenes (total)	10,000	49.2	<20	<10	7.24	NS	SN	122
Isopropylbenzene	840	<10	П	12.6	88.9	NS	NS	44.4
Methyl tert-butyl ether	20	768	684	375	348	NS	NS	1,180
Naphthalene	100	<10	<10	<5	2.5	NS	SN	<10
	Statewide							
Sample ID (Depth)	Standards	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4
Sampling Date	Groundwater	5/8/12	6/17/12	11/8/13	12/11/13	2/4/14	3/7/14	6/12/14
Matrix	Used Aquifers	Water	Water	Water	Water	Water	Water	Water
Units	<2,500 TDS	(ng/L)	(ng/L)	(¬/gn)	(ng/L)	(ng/L)	(ng/L)	(ng/L)
1.2 E Trimothylhonzonol 12	12 13	E0.4	200	726	202	NIC	NIC	250
1.2.4-Trimethylbenzene	7 -	1.400	2,210	2,000	2.750	SN	SN	1.250
Benzene	2	4,120	2,460	3,040	1,000	NS	SN	301
Toluene	1,000	19,700	9,210	2,860	5,550	NS	SN	2,060
Ethylbenzene	700	1,420	2,000	2,290	2,250	NS	SN	1,050
Xylenes (total)	10,000	9,440	10,400	5,540	10,900	NS	SN	4,720
Isopropylbenzene	840	728	228	433	387	NS	SN	178
Methyl tert-butyl ether	20	14.8	<50	56.9	<10	NS	NS	<20
Naphthalene	100	1,090	244	604	404	NS	NS	205

NS - Not Sampled All concentrations in micrograms per liter (ug/L)

# TABLE 3 (Continued) GROUNDWATER ANALYTICAL DATA FORMER ROSEMERGY'S CONVENIENT STORE 1623 ROUTE 590 HAWLEY, PA 11-17788-02

	Statewide Health							
Sample 1D (Deptn)	Standards	MW-5	MW-5	C-MW	MW-5	MW-5	C-MM	MW-5
Sampling Date	Groundwater	5/8/12	6/17/12	11/8/13	12/11/13	2/4/14	3/7/14	6/12/14
Matrix	Used Aquifers	Water	Water	Water	Water	Water	Water	Water
Units	<2,500 TDS	(ng/L)	(¬/bn)	(¬/6n)	(ng/L)	(ng/L)	(ng/L)	(ng/L)
VOLATILE ORGANIC COMPOUNDS	APOUNDS							
1,3,5-Trimethylbenzene	13	155	14.7	<10	<2	NS	<2	989
1,2,4-Trimethylbenzene	15	427	36.2	13.6	<2	NS	<2	2,270
Benzene	5	14.4	4.3	89.5	2.44	NS	<2	7,300
Toluene	1,000	116	14.1	<10	<2	NS	<2	8,650
Ethylbenzene	002	107	14.6	2.08	<2	SN	<2	2,590
Xylenes (total)	10,000	403	288.7	<20	<4	NS	<b>4</b>	12,800
Isopropylbenzene	840	51.8	<10	25.3	<2	NS	<2	322
Methyl tert-butyl ether	20	<5	<10	12.7	2.82	NS	<2	447
Naphthalene	100	94.4	<10	<10	<2	NS	<2	502

ter 5/8/12 6/17/12 ers Water Water DS (ug/L) (ug/L) <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <		Statewide			
Groundwater   5/8/12   6/17/12     Used Aquifers   Water   Water   A2,500 TDS   (ug/L)   (ug/L)     ANIC COMPOUNDS   (ug/L)   (ug/L)     ANIC COMPOUNDS   (ug/L)   (ug/L)     Independent   13   (ug/L)   (ug/L)     Independent   13   (ug/L)   (ug/L)     Independent   1,000   (ug/L)   (ug/L)     Independent   10,000   (ug/L)   (ug/L)     Independent   100   (ug/L)   (ug/L)   (ug/L)     Independent   100   (ug/L)	Sample ID (Depth)	Standards	9-MM	9-WM	9-MM
Used Aquifers   Water   Water   CCOMPOUNDS   (ug/L)   (ug/L)	Sampling Date	Groundwater	5/8/12	6/17/12	3/7/14
CCOMPOUNDS	Matrix	Used Aquifers	Water	Water	Water
CCOMPOUNDS   C   C   C   C   C   C   C   C   C	Units	<2,500 TDS	(ng/L)	(ng/L)	(ng/L)
13	<b>VOLATILE ORGANIC CON</b>	MPOUNDS			
15   <1   <1     5   <1   1.15     1,000   <1   2.55     700   <1   <1     10,000   <2   <2     840   <1   <1     ther   20   <1   <1     100   <1   <1     100   <1   <1     100   <1   <1     100   <1   <1     100   <1   <1     100   <1   <1     100   <1   <1     100   <1   <1     100   <1   <1     100   <1   <1     100   <1   <1     100   <1   <1     100   <1   <1     100   <1   <1     100   <1   <1     100   <1   <1     100   <1   <1     100   <1   <1     100   <1   <1     100   <1   <1     100   <1   <1     100   <1   <1     100   <1   <1     100   <1   <1     100   <1   <1     100   <1   <1     100   <1   <1     100   <1   <1     100   <1   <1     100   <1   <1     100   <1   <1     100   <1   <1     100   <1   <1     100   <1   <1     100   <1   <1     100   <1   <1     100   <1   <1     100   <1   <1     100   <1   <1     100   <1   <1     100   <1   <1     100   <1   <1     100   <1   <1     100   <1   <1     100   <1   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100   <1     100	1,3,5-Trimethylbenzene		7	7	AB
5 <1 1.15   1.15   1.000   2.55   2.55   2.000   2.55	1,2,4-Trimethylbenzene		7	⊽	AB
1,000 <1 2.55 700 <1 <1 10,000 <2 <2 840 <1 <1 100 <1 <1	Benzene	2	<1	1.15	AB
700 <1 <1 10,000 <2 <2 840 <1 <1 100 <1 <1	Toluene	1,000	<1	2.55	AB
10,000 <2 <2 840 <1 <1 100 <1 <1	Ethylbenzene	002	<1	<1	AB
840         <1	Xylenes (total)	10,000	<2	<2	AB
20 <1 <1 100 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1	Isopropylbenzene	840	<1	<1	AB
100   <1   <1	Methyl tert-butyl ether	20	<1	<1	AB
	Naphthalene	100	<1	<1	AB

## TABLE 3 (Continued) GROUNDWATER ANALYTICAL DATA FORMER ROSEMERGY'S CONVENIENT STORE 1623 ROUTE 590 HAWLEY, PA 11-17788-02

Standards   MW-7     Groundwater   11/8/13     Used Aquifers   Water     <2,500 TDS   (ug/L)     CCOMPOUNDS     12	StateWide				
Groundwater   11/8/13     Used Aquifers   Water     <2,500 TDS   (ug/L)     Sanic Compounds     Sanic Co		MW-7	MW-7	MW-7	MW-7
Used Aquifers   C2,500 TDS	11/8/13	12/11/13	2/4/14	3/7/14	6/12/14
<2,500 TDS		Water	Water	Water	Water
SANIC COMPOUNDS   13   1,000   10,000	_	(ng/L)	(ng/L)	(ng/L)	(1/6n)
ylbenzene 13 ylbenzene 15 5 1,000 700 700 10,000				8	
ylbenzene 15 5 1,000 700 10,000	8.5	12.1	NS	NS	<20
5 1,000 700 10,000	5.22	6.44	NS	NS	40.4
1,000 700 10,000	7,480	5,100	SN	NS	390
700	62.7	54.8	NS	NS	<20
10,000	34.3	30.9	NS	NS	<20
070	31.8	33.3	NS	NS	8.96
Tsopiopyipenzene 840 45	43	54.9	NS	NS	<20
Methyl tert-butyl ether 20 546	546	449	NS	NS	<20
Naphthalene 100 43.7	43.7	78.9	NS	NS	<20

	Statewide Health					
Sample ID (Depth)	Standards	MW-8	8-WM	MW-8	8-WM	MW-8
Sampling Date	Groundwater	11/8/13	12/11/13	2/4/14	3/7/14	6/12/14
Matrix	Used Aquifers	Water	Water	Water	Water	Water
Units	<2,500 TDS	(ng/L)	(T/6n)	(ng/L)	(ng/L)	(ng/L)
VOLATILE ORGANIC COMPOUNDS	MPOUNDS					
1,3,5-Trimethylbenzene	13	<2	<1	NS	<1	<1
1,2,4-Trimethylbenzene	15	<2	<1	NS	<1	<1
Benzene	5	<2	<1	NS	<1	<1
Toluene	1,000	<2	<1	NS	<1	<1
Ethylbenzene	002	<2	<1	NS	<1	<1
Xylenes (total)	10,000	<4	<2	NS	<2	<2
Isopropylbenzene	840	<2	<1	NS	<1	<1
Methyl tert-butyl ether	20	2.7	<b>1</b> >	NS	<1	<1
Naphthalene	100	<2	<1	NS	<1	<1

### TABLE 3 (Continued) GROUNDWATER ANALYTICAL DATA FORMER ROSEMERGY'S CONVENIENT STORE 1623 ROUTE 590

HAWLEY, PA 11-17788-02

	Health					
Sample ID (Depth)	Standards	MW-9	6-MM	MW-9	6-WM	6-MM
Sampling Date	Groundwater	11/8/13	12/11/13	2/4/14	3/7/14	6/12/14
Matrix   L	Used Aquifers	Water	Water	Water	Water	Water
Units	<2,500 TDS	(ng/L)	(¬/bn)	(ng/L)	(ng/L)	(7/6n)
<b>VOLATILE ORGANIC COMPOUNDS</b>	POUNDS					
1,3,5-Trimethylbenzene	13	<2	<1	NS	<1	<1
1,2,4-Trimethylbenzene	15	<2	<1	NS	<1	<b>1</b> >
Benzene	5	13	16.9	NS	1.96	28'3
Toluene	1,000	<2	<1	NS	<1	2.24
Ethylbenzene	700	<2	<1	NS	3.18	1.96
Xylenes (total)	10,000	<4	<2	NS	<2	<2
Isopropylbenzene	840	<2	<b>-1</b>	NS	5.48	2.73
Methyl tert-butyl ether	20	8	2.94	NS	9.41	88.3
Naphthalene	100	<2	<1	NS	<1	<1

	Statewide Health			
Sample ID (Depth)	Standards	MW-10	MW-10	MW-10
Sampling Date	Groundwater	2/4/14	3/7/14	6/12/14
Matrix	Used Aquifers	Water	Water	Water
Units	<2,500 TDS	(ng/L)	(ng/L)	(ng/L)
<b>VOLATILE ORGANIC COMPOUNDS</b>	MPOUNDS			
1,3,5-Trimethylbenzene	13	<2	- -	<1
1,2,4-Trimethylbenzene	15	<2	₹	<1
Benzene	5	<0.24	<1	<1
Toluene	1,000	<2	<1	<1
Ethylbenzene	200	<2	<1	<1
Xylenes (total)	10,000	<b>4</b> >	<2	<2
Isopropylbenzene	840	<2	ľ	<1
Methyl tert-butyl ether	20	<2	7	√1
Naphthalene	100	<2	<1	7

# TABLE 3 (Continued) GROUNDWATER ANALYTICAL DATA FORMER ROSEMERGY'S CONVENIENT STORE 1623 ROUTE 590 HAWLEY, PA 11-17788-02

Health   Standards   MW-11   MW-11   MW-11   MW-11   MW-11   Standards   2/4/14   3/7/14   3/7/14   3/5/14		Statewide				
Groundwater 2/4/14 3/7/14   Used Aguifers Water   Water   Water   Value   Cahic   Compounds   Cahic   Cahic	Sample ID (Depth)	Health Standards	WW-11	MW-11	MW-11	
Used Aquifers   Water   Water     <2,500 TDS   (ug/L)   (ug/L)     E ORGANIC COMPOUNDS   (2,500 TDS     methylbenzene   13   <2   <1     methylbenzene   15   <2   <1     5   0.3   <1     1,000   <2   <1     cene   700   <4   <5     cene   700   <5   <4     cene   700   <5     cene   700   <5	Sampling Date	Groundwater	2/4/14	3/7/14		
Compounds	Matrix	Used Aquifers	Water	Water	Water	
E ORGANIC COMPOUNDS           methylbenzene         13         <2	Units	<2,500 TDS	(ng/L)	(ng/L)	(ng/L)	
methylbenzene         13         <2	WOLKALPILLE ORGANICOLOGI	<b>APOUNDS</b>				
methylbenzene   15   <2       5   0.3       1,000   <2     2cne   700   <2     (total)   10,000   <4     (total)   10,000   <2     (total)   10,000   <4     (total)   20   <2     ext-hitylether   20   <2	1,3,5-Trimethylbenzene		<2	<u>^</u>	V	
5 0.3     1,000   <2	1,2,4-Trimethylbenzene	15	<2	۲ <u>۱</u>	ŗ.	
1,000 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2   200 <2	Benzene	5	0.3	<u>ر</u> 1	  -	
700     <2	Toluene	1,000	<2	1∆	<b>^</b> 1	
10,000 <4 840 <2 20 <2	Ethylbenzene	002	<2	۸1	Ņ	
840 <2	Xylenes (total)	000'01	<b>4</b> 4	<2	:<2	
62   06	Isopropylbenzene	840	<2	<1	.<1	
7.	Methyl tert-butyl ether	50	<2	<1	<1	
Naphthalene 100 <2 <1	Naphthalene	100	<2	<1	<1	

	Statewide					
Sample TD (Denth)	Standards	VW-17	C1-WW	C1-WW	MW-12	CT-JWW
Sampling Date	Groundwater	11/8/13	12/11/13	800	3/7/14	6/12/14
Matrix	Used Aquifers	Water	Water	Water	Water	Water
Units	<2,500 TDS	(ng/L)	(ng/L)	(ng/L)	(1/gn)	(ng/L)
VOLATTLE ORGANIC COMPOUNDS	MPOUNDS					
1,3,5-Trimethylbenzene	. 13	<2	<1	SN	Ţ>	1>
1,2,4-Trimethylbenzene	15	<2	7	NS	<1	7
Benzene	ις	2.12	1.	SN	<b>1</b> 7	1.43
Toluene	1,000	6.64	41	NS	<b>1&gt;</b>	3,12
Ethylbenzene	002	<2	<u>^</u>	NS	<1	1.48
Xylenes (total)	000'01	4.1	<2	SN	Z>	9.35
Isopropylbenzene	840	<2	<b>√</b> 1	SN	1>	<b>1</b> >
Methyl tert-butyl ether	20	<2	\ 1	NS	<1	≺1
Naphthalene	100	<2		SN	<1	Ÿ.

NS:- Not.Sampled All concentrations in micrograms per liter (ug/L)

# TABLE 3 (Continued) GROUNDWATER ANALYTICAL DATA FORMER ROSEMERGY'S CONVENIENT STORE 1623 ROUTE 590 HAWLEY, PA 11-17788-02

	Statewide			
	Health			
Sample ID (Depth)	Standards	MW-13	MW-13	
Sampling Date	Groundwater	4/29/14	6/12/14	
Matrix	Used Aquifers	Water	Water	
Units	<2,500 TDS	(ng/L)	(1/gn)	
WOLVATELLERORGANICO COMPOUNDS	4POUNDS			
1,3,5-Trimethylbenzene	13	Ţ»	1>:	
1,2,4-Trimethylbenzene	15	<1	<1	
Benzene	ĘĆ	<1>	<1	
Toluene	1,000	66.1	102	
Ethylbenzene	002	<1	<1	
Xylenes (total)	000'0T	<2	<2	
Isopropylbenzene	840	<1	:<1	
Methyl tert-butyl ether	20	×.	<u>^</u>	
Naphthalene	100	<1	·<1	

	Statewide Health			
Sample ID (Depth)	Standards	MW-14	MW-14	MW-14 MW-14
Sampling Date	Groundwater	4/29/14	6/12/14	
Matrix	Used Aquifers	Water	Water	
Units	<2,500 TDS	(ng/L)	(ng/L)	
VOLATITE ORGANIC COMPOUNDS.	(POUNDS			
1,3,5-Trimethylbenzene	1.3	1≽	1>:	
1,2,4-Trimethylbenzene	15	<1	<1	
Benzene	5	<1	<1	
Toluene	1,000	Ţ	.<1	
Ethylbenzene	200	1>	1	
Xylenes (total)	10,000	<2	<2	
Isopropylbenzene	840	×1	:<1	
Methyl tert-butyl ether	20	<1	<1	
Naphthalene	1:00	<1	<1	

NS - Not Sampled All concentrations in micrograms per liter (ug/L)

### FORMER ROSEMERGY'S CONVENIENT STORE 1623 ROUTE 590 HAWLEY, PA 11-17788-02 TABLE 3 (Continued) GROUNDWATER ANALYTICAL DATA

	Statewide Health			
Sample ID (Depth)	Standards	MW-15	MW-15	
Sampling Date	Groundwater	4/29/14	6/12/14	
Matrix	Used Aquifers	Water	Water	
Units	<2,500 TDS	(ng/L)	(ng/L)	
VOLATILE ORGANIC COMPOUNDS	<b>APOUNDS</b>			
1,3,5-Trimethylbenzene	213	<1	-<1	
1,2,4-Trimethylbenzene	15	<1	<1	
Benzene	5	<1	<1	
Toluene	000'T	<1	2,35	
Ethylbenzene	002	<u> </u>	<1	
Xylenes (total)	000'01	<2	2.94	
Isopropylbenzene	8:40	<1.	<1	
Methyl tert-butyl ether	20	<1	<1	
Naphthalene	00T	<1	<1	

(Depth)	Statewide			
(Depth)	Health			
	Standards	MW-16	MW-16	
Sampling Date G	Groundwater	4/29/14	6/12/14	
Matrix	Jsed Aquifers	Water	Water	
Units	<2,500 TDS	(ng/L)	(ng/L)	
VOLATILE ORGANIC COMPOUNDS	OUNDS			
1,3,5-Trimethylbenzene	13	Į>	<1	
1,2,4-Trimethylbenzene	15	<1	<1	
Benzene	5	<1	<1	
Toluene	1,000	<1	<1	
Ethylbenzene	200	<1	<1	
Xylenes (total)	10,000	<2	<2	
Isopropylbenzene	840	<1	<1	
Methyl tert-butyl ether	20	9.18	3.02/3.42	
Naphthalene	100	7	✓1	

FORMER ROSEMERGY'S CONVENIENCE STORE **MARCH 13, 2012** SOIL SAMPLES TABLE 2

HAWLEY, PA 11-17788-02

PARAMETER	NRMSC	NRMSQ PQL's	SB-8	SB-9	SB-10	SB-11		SB-13	SB-14	SB-15	SB-16	SB-17	SB-18
Sample Depth (Ft.)			(9)	(10)	(6)	(7)		(9)	(9)	(9)	(6)	(6)	(9)
BENZENE	0.5	0.005	2.4	6.68	0.78	1.24	27.7	1.41	<0.3	<0.0016	2.07	1.59	<0.524
CUMENE (Isopropylbenzene)	009	0.005	8.57	9.49	7.09	4.57	12.3	17.71	4.49	<0.004	10.5	5.48	3.85
ETHYLBENZENE	70	0.005	25.3	21.7	16	10.3	28	40.8	3.51	<0.004	28.7	19.1	9.82
METHYL TERT-BUTYL ETHER	2	99.0	<1.45	<1.46	<1.44	<1.15	<1.41	<1.43	152'>	0.0386	<1.27	<0.818	<1.31
NAPHTHALENE	25	99.0	9.22	5.7	4.97	4.34	9.29	12.9	1.27	<0.004	7.76	5.76	2.44
TOLUENE	100	0.005	53.7	82.7	49.4	30.6	55.9	57	<.751	<0.004	15.3	17.8	8.19
1,2,4-TRIMETHYLBENZENE	20	0.005	71.2	33.5	36.2	28	89	109	26.5	<0.004	68.1	38.8	24.3
1,3,5-TRIMETHYLBENZENE	6.2	NPQL	25.7	15.8	12.6	8.94	25.5	32.3	10.5	<0.004	21.8	13	6.31
XYLENES (totals)	1,000	0.005	130	87.3	9.79	46.7	147	217	2.91	<0.0079	104	83.2	47.9

PARAMETER Sample Depth (Ft.)	NRMSC POL's	PQL's	SB-19 (6)	SB-20 (4.5)	SB-21 (6)	SB-22 (6)	SB-23 (6)	SB-24 (6)	SB-25 (6)	SB-26 (9)	SB-27 (6)	TRIP BLANK
BENZENE	0.5	0.005	0.594	113	15	16	25.7	16	3.31	1.27	<0.135	<u>\</u>
CUMENE (Isopropylbenzene)	009	0.005	7.47	102	11.6	8.74	17.8	9.55	6.46	10.3	12.4	<u>\</u>
ETHYLBENZENE	0/	0.005	12.2	348	39.8	32.4	50.4	22.1	21.6	24	23.6	<u>\</u>
METHYL TERT-BUTYL ETHER	2	99.0	<0.370	<1.54	<1.51	<1.49	<0.613	<0.747	<0.752	<0.688	<0.337	\ \
NAPHTHALENE	22	99.0	5.13	58	13	10.9	20.2	8.33	7.94	8.56	8.13	\
TOLUENE	100	0.005	1.55	1040	151	152	161	42.6	20.2	61.3	26.3	V
1,2,4-TRIMETHYLBENZENE	20	0.005	40.6	826	82.9	64.5	131	55.4	54.2	55.3	6.98	\ \
1,3,5-TRIMETHYLBENZENE	6.2	NPQL	11.3	234	28.3	23.8	36.1	16	12	15.8	26.2	\ \
XYLENES (totals)	1,000	0.005	54.7	1750	202	164	276	112	108	127	131	<2

Concentrations in milligrams per kilogram (mg/Kg). Trip Blank reported in micrograms per liter (μ/L). NRMSC: Non-Residential Medium Specific Concentration SHS, Soil to Groundwater Numeric Value. Used Aquifer, TDS less than or equal to 2,500 mg/L.

PQL: Practical Quantitation Limits.

NPQL: No Practical Quantitation Limits.

### TABLE 1 GROUNDWATER ELEVATION DATA FORMER ROSEMERGY'S STORE/GARAGE 1623 ROUTE 590 HAWLEY, PA 11-17788-02

WELL	TWD	SI	TOCG	TOC	DATE	DTW	GW ELEV
MW-1	14.70	3-14.7	-0.48	1300.57	5/8/12	5.30	1295.27
(2)					6/17/12	6.52	1294.05
					5/14/13	IA	IA
					12/11/13	AB	AB
MW-1R	14.61	4-14.61	-0.28	1298.25	11/8/13	10.89	1287.36
					12/11/13	9.90	1288.35
					2/4/14	7.82	1290.43
					3/7/14	7.73	1290.52
					4/29/14	NS	NC
					6/12/14	6.35	1291.90
MW-2	14.40	3-14.4	-0.67	1299.67	5/8/12	3.18	1296.49
(2)					6/17/12	5.61	1294.06
					5/14/13	3.51	1296.16
					11/8/13	8.62	1291.05
					12/11/13	5.70	1293.97
					2/4/14	NS	NC
					3/7/14	4.87	1294.80
					4/29/14	NS	NC
					6/12/14	NS	NC
MW-3	14.21	3-14.21	-0.37	1298.61	5/8/12	2.13	1296.48
(2)					6/17/12	3.45	1295.16
					5/14/13	2.71	1295.90
					11/8/13	6.73	1291.88
					12/11/13	3.82	1294.79
					2/4/14	NS	NC
					3/7/14	NS	NC
					4/29/14	NS	NC
					6/12/14	3.49	1295.12
MW-4	14.56	3-14.56	-0.56	1299.05	5/8/12	2.45	1296.60
(2)					6/17/12	3.96	1295.09
					5/14/13	3.19	1295.86
					11/8/13	7.36	1291.69
					12/11/13	4.41	1294.64
					2/4/14	NS	NC
					3/7/14	NS	NC
					4/29/14	NS	NC
					6/12/14	3.64	1295.41

### TABLE 1 GROUNDWATER ELEVATION DATA FORMER ROSEMERGY'S STORE/GARAGE 1623 ROUTE 590 HAWLEY, PA 11-17788-02

WELL	TWD	SI	TOCG	TOC	DATE	DTW	GW ELEV
MW-5	14.68	3-14.68	-0.26	1299.36	5/8/12	2.65	1296.71
(2)					6/17/12	3.90	1295.46
					5/14/13	3.18	1296.18
					11/8/13	7.82	1291.54
					12/11/13	4.42	1294.94
					2/4/14	NS	NC
					3/7/14	3.83	1295.53
					4/29/14	NS	NC
					6/12/14	4.65	1294.71
MW-6	15.30	3-15.3	-0.51	1301.21	5/8/12	5.74	1295.47
(2)					6/17/12	7.98	1293.23
					5/14/13	6.08	1295.13
					11/8/13	AB	AB
MW-7	14.99	5-14.99	-0.57	1298.58	11/8/13	12.48	1286.10
					12/11/13	12.59	1285.99
					2/4/14	NS	NC
					3/7/14	NS	NC
					4/29/14	NS	NC
					6/12/14	7.73	1290.85
MW-8	14.62	4-14.62	-0.39	1295.27	11/8/13	6.24	1289.03
					12/11/13	3.14	1292.13
					2/4/14	3.52	1291.75
					3/7/14	3.05	1292.22
					4/29/14	NS	NC
					6/12/14	2.80	1292.47
MW-9	14.65	4-14.62	-0.37	1293.91	11/8/13	3.96	1289.95
					12/11/13	1.14	1292.77
					2/4/14	1.82	1292.09
					3/7/14	1.12	1292.79
					4/29/14	NS	NC
					6/12/14	1.43	1292.48
MW-10	14.25	5-14.25	-0.41	1297.61	11/8/13	NI	NC
					12/11/13	NI	NC
					2/4/14	3.13	1294.48
					3/7/14	2.72	1294.89
					4/29/14	NS	NC
					6/12/14	3.04	1294.57

### TABLE 1 GROUNDWATER ELEVATION DATA FORMER ROSEMERGY'S STORE/GARAGE 1623 ROUTE 590 HAWLEY, PA 11-17788-02

WELL	TWD	SI	TOCG	TOC	DATE	DTW	GW ELEV
MW-11	14.73	5-14.73	-0.25	1298.35	11/8/13	NI	NC
					12/11/13	NI	NC
					2/4/14	3.68	1294.67
					3/7/14	3.22	1295.13
					4/29/14	NS	NC
					6/12/14	3.47	1294.88
MW-12	14.65	4-14.65	-0.81	1297.44	11/8/13	9.40	1288.04
					12/11/13	5.46	1291.98
					2/4/14	5.55	1291.89
					3/7/14	5.18	1292.26
					4/29/14	NS	NC
					6/12/14	4.93	1292.51
MW-13	14.93	5.75-14.93	-0.2	1303.84	11/8/13		
					12/11/13	l v	MNI
					2/4/14		
					3/7/14		•
					4/29/14	11.53	1292.31
					6/12/14	12.64	1291.20
MW-14	18.65	5-18.65	-0.3	1304.54	11/8/13		
					12/11/13	V	WNI
					2/4/14		
					3/7/14		ı
					4/29/14	11.37	1293.17
					6/12/14	12.73	1291.81
MW-15	14.86	5-14.86	-0.3	1301.14	11/8/13		
					12/11/13	V	MNI
					2/4/14		
					3/7/14		
					4/29/14	6.45	1294.69
N 0 0 / 1 0	44.00	5.44.00	0.0	4005.07	6/12/14	8.41	1292.73
MW-16	14.69	5-14.69	-0.3	1295.24	11/8/13		
					12/11/13	V	WNI
					2/4/14		
					3/7/14	0.700	400450
					4/29/14	0.708	1294.53
					6/12/14	1.47	1293.77

(2) = Diameter of Well Casing in Inches.
 TWD = Total Well Depth in feet below grade.
 SI = Screened Interval in feet below grade.
 TOCG = Top of Well Casing relative to Grade.

+ = Approximate feet above grade.

- = Approximate feet below grade.

TOC = Top of Well Casing.

NI = Not Installed

DTW = Measured Depth to Groundwater from TOC.
GW ELEV = Calculated Groundwater Elevation.

NM = Well not measured.

NA = Not Applicable.

IA = Inaccessible.

NS = Not Sampled.

AB = Abandoned or Destroyed



July 8, 2014

Orion Cook Converse Consultants 2738 West College Avenue State College, PA 16801

Project Location: Rosemary - Hawley, PA

Client Job Number:

Project Number: 11-17788-01

Laboratory Work Order Number: 14F1265

Meghan S. Kelley

Enclosed are results of analyses for samples received by the laboratory on June 26, 2014. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Meghan E. Kelley Project Manager

### Table of Contents

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Converse Consultants 2738 West College Avenue State College, PA 16801 ATTN: Orion Cook

REPORT DATE: 7/8/2014

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 11-17788-01

### ANALYTICAL SUMMARY

WORK ORDER NUMBER: 14F1265

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: Rosemary - Hawley, PA

FIELD SAMPLE#	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB	
IA-1 Indoor Air	14F1265-01	Indoor air		EPA TO-15		
IA-2 Indoor Air	14F1265-02	Indoor air		EPA TO-15		



### CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Michael A. Erickson Laboratory Director

Culu



### ANALYTICAL RESULTS

Project Location: Rosemary - Hawley, PA Date Received: 6/26/2014

Field Sample #: IA-1 Indoor Air Sample ID: 14F1265-01 Sample Matrix: Indoor air Sampled: 6/18/2014 12:30 Sample Description/Location: Sub Description/Location: Canister ID: 1448 Canister Size: 6 liter Flow Controller ID: 4625

Sample Type: 3 hr

Work Order: 14F1265 Initial Vacuum(in Hg): -28.6 Final Vacuum(in Hg): -7.8 Receipt Vacuum(in Hg): -4.6 Flow Controller Type: Fixed-Orifice Flow Controller Calibration

Flow Controller Calibration RPD Pre and Post-Sampling:

							50 NE	
		E	PA TO-15					
	pp	bv		ug/ı	m3		Date/Time	
Analyte	Results	RL	Flag/Qual	Results	RL	Dilution	Analyzed	Analyst
Benzene	0.35	0.035		1.1	0.11	0.702	6/27/14 21:03	WSD
Ethylbenzene	0.55	0.035		2.4	0.15	0.702	6/27/14 21:03	WSD
Isopropylbenzene (Cumene)	ND	0.13		ND	0.65	0.702	6/27/14 21:03	WSD
Methyl tert-Butyl Ether (MTBE)	0.20	0.035		0.70	0.13	0.702	6/27/14 21:03	WSD
Naphthalene	ND	0.035		ND	0.18	0.702	6/27/14 21:03	WSD
Toluene	4.6	0.035		17	0.13	0.702	6/27/14 21:03	WSD
1,2,4-Trimethylbenzene	0.30	0.035		1.5	0.17	0.702	6/27/14 21:03	WSD
1,3,5-Trimethylbenzene	0.10	0.035		0.50	0.17	0.702	6/27/14 21:03	WSD
m&p-Xylene	1.8	0.070		8.0	0.30	0.702	6/27/14 21:03	WSD
o-Xylene	0.52	0.035		2.2	0.15	0.702	6/27/14 21:03	WSD
Surrogates	% Reco	very		% REC	C Limits			
4-Bromofluorobenzene (1)		95.6		70-	-130		6/27/14 21:03	
4-Bromofluorobenzene (2)		102		70-	-130		6/27/14 21:03	



### ANALYTICAL RESULTS

Project Location: Rosemary - Hawley, PA Date Received: 6/26/2014 Field Sample #: IA-2 Indoor Air Sample ID: 14F1265-02 Sample Matrix: Indoor air

Sampled: 6/18/2014 12:31

Sample Description/Location: Sub Description/Location: Canister ID: 1218 Canister Size: 6 liter Flow Controller ID: 4626 Sample Type: 3 hr Work Order: 14F1265
Initial Vacuum(in Hg): -28.2
Final Vacuum(in Hg): -7.6
Receipt Vacuum(in Hg): -8.1
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

EPA	TOL	15

	ppbv ug/m3			Date/Time					
Analyte	Results	RL	Flag/Qual	Results	RL	Dilution	Analyzed	Analyst	
Benzene	0.28	0.035		0.88	0.11	0.702	6/27/14 21:50	WSD	
Ethylbenzene	0.12	0.035		0.51	0.15	0.702	6/27/14 21:50	WSD	
Isopropylbenzene (Cumene)	ND	0.13		ND	0.65	0.702	6/27/14 21:50	WSD	
Methyl tert-Butyl Ether (MTBE)	ND	0.035		ND	0.13	0.702	6/27/14 21:50	WSD	
Naphthalene	ND	0.035		ND	0.18	0.702	6/27/14 21:50	WSD	
Toluene	0.95	0.035		3.6	0.13	0.702	6/27/14 21:50	WSD	
1,2,4-Trimethylbenzene	0.086	0.035		0.42	0.17	0.702	6/27/14 21:50	WSD	
1,3,5-Trimethylbenzene	ND	0.035		ND	0.17	0.702	6/27/14 21:50	WSD	
m&p-Xylene	0.41	0.070		1.8	0.30	0.702	6/27/14 21:50	WSD	
o-Xylene	0.12	0.035		0.54	0.15	0.702	6/27/14 21:50	WSD	
Surrogates	% Recov	% Recovery		% REC Limits					
4-Bromofluorobenzene (1)		95.1		70-130		6/27/14 21:50			
4-Bromofluorobenzene (2)		103		70-130			6/27/14 21:50		



### Sample Extraction Data

Prep Method: TO-15 Prep-EPA TO-15		Pressure	Pre	Pre-Dil Initial	Pre-Dil Final	Default Injection	Actual Injection	221 10
Lab Number [Field ID]	Batch	Dilution	Dilution	mL	mL	mL	mL	Date
14F1265-01 [IA-1 Indoor Air]	B099185	1.5	1	N/A	1000	400	855	06/27/14
14F1265-02 [IA-2 Indoor Air]	B099185	1.5	1	N/A	1000	400	855	06/27/14



### QUALITY CONTROL

### Air Toxics by EPA Compendium Methods - Quality Control

ne with	pp		30	/m3	Spike Level	Source		%REC	(20)2520)	RPD	19 <u>07/4</u> (1908)
Analyte	Results	RL	Results	RL	ppbv	Result	%REC	Limits	RPD	Limit	Flag/Qua
Batch B099185 - TO-15 Prep											
Blank (B099185-BLK1)					Prepared & A	Analyzed: 06	/27/14				
Benzene	ND	0.025									
Ethylbenzene	ND	0.025									
Isopropylbenzene (Cumene)	ND	0.094									
Methyl tert-Butyl Ether (MTBE)	ND	0.025									
Naphthalene	ND	0.025									
Toluene	ND	0.025									
1,2,4-Trimethylbenzene	ND	0.025									
1,3,5-Trimethylbenzene	ND	0.025									
m&p-Xylene	ND	0.050									
o-Xylene	ND	0.025									
Surrogate: 4-Bromofluorobenzene (1)	6.62				8.00		82.8	70-130			
Surrogate: 4-Bromofluorobenzene (2)	6.96				8.00		87.0	70-130			
LCS (B099185-BS1)					Prepared & A	Analyzed: 06	/27/14				
Benzene	3.82				5.00		76.3	70-130			
Ethylbenzene	4.58				5.00		91.6	70-130			
Isopropylbenzene (Cumene)	1.37				1.27		108	70-130			
Methyl tert-Butyl Ether (MTBE)	4.62				5.00		92.4	70-130			
Naphthalene	4.09				5.00		81.7	70-130			
Toluene	4.46				5.00		89.1	70-130			
1,2,4-Trimethylbenzene	4.64				5.00		92.8	70-130			
1,3,5-Trimethylbenzene	4.76				5.00		95.3	70-130			
m&p-Xylene	9.55				10.0		95.5	70-130			
o-Xylene	4.50				5.00		90.0	70-130			
Surrogate: 4-Bromofluorobenzene (1)	7.39				8.00		92.4	70-130			
Surrogate: 4-Bromofluorobenzene (2)	7.49				8.00		93.7	70-130			
Duplicate (B099185-DUP1)		Sour	ce: 14F1265-	-02	Prepared & A	Analyzed: 06	/27/14				
Benzene	0.28	0.035	0.90	0.11		0.28			2.02	25	
Ethylbenzene	0.12	0.035	0.52	0.15		0.12			3.55	25	
Isopropylbenzene (Cumene)	ND	0.13	ND	0.65		ND				25	
Methyl tert-Butyl Ether (MTBE)	ND	0.035	ND	0.13		ND				2.5	
Naphthalene	ND	0.035	ND	0.18		ND				25	
Toluene	0.93	0.035	3.5	0.13		0.95			1.19	2.5	
1,2,4-Trimethylbenzene	0.081	0.035	0.40	0.17		0.086			5.91	25	
1,3,5-Trimethylbenzene	ND	0.035	ND	0.17		ND				25	
m&p-Xylene	0.42	0.070	1.8	0.30		0.41			1.35	2.5	
o-Xylene	0.12	0.035	0.54	0.15		0.12			0.00	25	
Surrogate: 4-Bromofluorobenzene (1)	7.50				8.00		93.8	70-130			
Surrogate: 4-Bromofluorobenzene (2)	8.19				8.00		102	70-130			



### 39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332 FLAG/QUALIFIER SUMMARY

- \* QC result is outside of established limits.
- † Wide recovery limits established for difficult compound.
- ‡ Wide RPD limits established for difficult compound.
- # Data exceeded client recommended or regulatory level

Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the

calculation which have not been rounded.

No results have been blank subtracted unless specified in the case narrative section.



### CERTIFICATIONS

### Certified Analyses included in this Report

Analyte Certifications

EPA .	TO-1	5	in	$A_{i}$	r
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Benzene AIHA,FL,NJ,NY,VA,ME Ethylbenzene AIHA,FL,NJ,NY,VA,ME Isopropylbenzene (Cumene) AIHA,NJ,NY,ME Methyl tert-Butyl Ether (MTBE) AIHA,FL,NJ,NY,VA,ME Naphthalene NY,ME Toluene AIHA,FL,NJ,NY,VA,ME 1,2,4-Trimethylbenzene AIHA,NJ,NY,ME 1,3,5-Trimethylbenzene AIHA,NJ,NY,ME m&p-Xylene AIHA,FL,NJ,NY,VA,ME o-Xylene AIHA,FL,NJ,NY,VA,ME

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2016
MA	Massachusetts DEP	M-MA100	06/30/2015
CT	Connecticut Department of Public Health	PH-0567	09/30/2015
NY	New York State Department of Health	10899 NELAP	04/1/2015
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2015
RI	Rhode Island Department of Health	LAO00112	12/30/2014
NC	North Carolina Div. of Water Quality	652	12/31/2014
NJ	New Jersey DEP	MA007 NELAP	06/30/2015
FL	Florida Department of Health	E871027 NELAP	06/30/2015
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2015
WA	State of Washington Department of Ecology	C2065	02/23/2015
ME	State of Maine	2011028	06/9/2015
VA	Commonwealth of Virginia	460217	12/14/2014
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2014

## IMPORTANT!

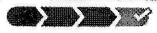
Severe thunderstorms are causing delays and disruptions. Learn More



## 790014025475

Ship (P/U) date Tues 6/24/2014

STATE COLLEGE, PA US



Delivered Signed for by: CCCCLINS Actual delivery: Thur 6/26/2014 3:41 pm East Longmeadow, MA US

#### Returns

## **Travel History**

ACYC SYMMO	▲ Date/Time	Activity	Location
and an arrangement	+ 6/26/2014	- Thursday	
CONTRACTOR DECISION	3:41 pm	Delivered	East Language

East Longmesdow, MA 5:25 am On FedEx vehicle for delivery CHICOPEE, MA 5:18 am At local FedEx facility CHICOPEE, MA

- 6/25/2014 - Wednesday

Departed FedEx location 11:44 pm WILLINGTON, CT 7:54 pm Arrived at FedEx location WILLINGTON, CT 10:09 am Departed FedEx location LEWISBERRY, PA 5:04 am Arrived at FedEx location LEWISBERRY, PA

- 6/24/2014 - Tuesday 9:43 pm Left FedEx origin facility DUNCANSVILLE, PA 8:20 pm Arrived at FodEx location DUNCANSVILLE, PA 10:56 am Picked up DUNCANSVILLE, PA

Local Scan Time

## **Shipment Facts**

section

Tracking number	790014025475	Sorvice	FedEx Ground
Weight	20.8 lbs	Dimensions	22x18x13 in,
Total pieces	1	Packaging	Package
Special handling			

Package Relurns Program

# Page 2 of 2

<u>Login Sample Receipt Checklist</u> (Rejection Criteria Listing - Using Sample Acceptance Policy) Any False statement will be brought to the attention of Client

Question Any Faise statement will	Answer (True/False)	
	T/F/NA	1. 0.1.0.1.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0
1) The cooler's custody seal, if present, is intact.	NA	
2) The cooler or samples do not appear to have been compromised or tampered with.	NA	
3) Samples were received on ice.	NA	
4) Cooler Temperature is acceptable.	NA	
5) Cooler Temperature is recorded.	NR	
6) COC is filled out in ink and legible.	T	
7) COC is filled out with all pertinent information.	T	
8) Field Sampler's name present on COC.	T	W 8989 75-00-00 FEB.
There are no discrepancies between the sample IDs on the container and the COC.	T	
10) Samples are received within Holding Time.	T	
11) Sample containers have legible labels.		
12) Containers are not broken or leaking.	Τ	
13) Air Cassettes are not broken/open.	ACA	3000
14) Sample collection date/times are provided.		200
15) Appropriate sample containers are used.	T	
16) Proper collection media used.	T	
17) No headspace sample bottles are completely filled.	NA	
18) There is sufficient volume for all requsted analyses, including any requested MS/MSDs.	T	
19) Trip blanks provided if applicable.	NA PA	
20) VOA sample vials do not have head space or bubble is <6mm (1/4") in diameter.	NA	
21) Samples do not require splitting or compositing.	τ	2000-000 de 1
	Who notified of Fals	e statements? Date/Time:

Doc #278 Rev. 4 January 2014

Who notified of False statements?

Log-In Technician Initials:

Date/Time: Date/Time: 6.2614



Page 1 of 2

Page 14 of 14 14F1265\_1 Contest\_Final 07 08 14 1411 07/08/14 14:12:05

39 Spruce St.
East Longmeadow, MA.
01028
P: 413-525-2332

P: 413-525-2332 F: 413-525-6405

# **AIR Only Receipt Checklist**

5) Are there any RUSH or SHORT HOLDING TIME samples?  Who was notified Date Time  Permission to subcontinuation of the process of	Stored where:  tract samples? Yes No if not already approved
If not, explain:  3) Are all the samples in good condition? If not, explain:  4) Are there any samples "On Hold"?  5) Are there any RUSH or SHORT HOLDING TIME samples? Who was notified Date Time  Permission to subcontinue (Walk-in clients only) if	tract samples? Yes No if not already approved
If not, explain:  4) Are there any samples "On Hold"?  5) Are there any RUSH or SHORT HOLDING TIME samples?  Who was notified Date Time  Permission to subconte (Walk-in clients only) if	tract samples? Yes No if not already approved
5) Are there any RUSH or SHORT HOLDING TIME samples?  Who was notified Date Time  Permission to subconte (Walk-in clients only) if	tract samples? Yes No if not already approved
Who was notified Date Time Permission to subcont (Walk-in clients only) if	if not already approved
Who was notified Date Time Permission to subcont (Walk-in clients only) if	if not already approved
6) Location where samples are stored:  On the location where samples are stored:  (Walk-in clients only) if	if not already approved
7) Number of cans Individually Certified or Batch Certified? NOV.	
7) Number of cans Individually Certified or Batch Certified?	
Containers received at Con-Test	
# of Containers	Types (Size, Duration)
Summa Cans (TO-14/TO-15/APH)	2 6 LL 1 LL
Tedlar Bags TO-17 Tubes	20 15 15 15 15 15 15 15 15 15 15 15 15 15
TO-17 Tubes    Compared to the	2 - 8080 - 5008 - 8808 (340) (III) (III) (600 -
Regulators 3	4 hr
Restrictors	7_00000 W
Hg/Hopcalite Tube (NIOSH 6009)	- 688(25 - 1986)。 2008(6 5 中川川川川田彦)
(TO-4A/ TO-10A/TO-13) PUFs	
PCB Florisil Tubes (NIOSH 5503)	
Air cassette	
PM 2.5/PM 10	50
TO-11A Cartridges	
Other	
Unused Summas/PUF Media: Unused Regulators:	940-11
1412	
1) Was all media (used & unused) checked into the WASP?	
2) Were all returned summa cans, Restrictors & Regulators and PUF's documenthe Air Lab Inbound/Outbound Excel Spreadsheet?	nented as returned in
Laboratory Comments: 1448 3224 1218 4625 4626	

WORK ORDER

...oidi oidi

Printed: 6/26/2014 4:37:52PM

PO #:

14F1265

**Con-Test Analytical Laboratory** 

Client: Converse Consultants

Project: Hawley, PA

Project Location: Rosemary - Hawley, PA

Project Manager: Project Number:

Deliverable Package:

Meghan E. Kelley

11-17788-01

No

None Requested

Report To: <u>Invoice To:</u>

Converse Consultants Converse Consultants

Orion Cook Orion Cook

 2738 West College Avenue
 2738 West College Avenue

 State College, PA 16801
 State College, PA 16801

 Phone: 814-234-3223
 Phone: 814-234-3223

 Fax: 814-234-3255
 Fax: 814-234-3255

Date Due: 07/08/14 18:00 (7 day TAT)

Received By:Paula E. BlakeboroughDate Received:06/26/14 15:41Logged In By:Paula E. BlakeboroughDate Logged In:06/26/14 16:32

Samples Received at:

COC Relinquish Signed Yes Temperature by Temp. Blank

COC/Sample Labels Agree Yes Temperature by Temp. Gun No Soil VOA samples not completely covered by preserv No All Samples In Good Condition Yes Direct From Sampling - Ambient Temp. No Container(s) not suppplied by Con-Test Lab No Samples Received at < 6 C. No Received On Ice No Custody Seals No

Analysis Due TAT Expires Comments

14F1265-01 IA-1 Indoor Air [Air] Sampled 06/18/14 12:30 Eastern

TO-15 Select List Low Level 07/07/14 23:59 7 07/18/14 12:30

14F1265-02 IA-2 Indoor Air [Air] Sampled 06/18/14 12:31 Eastern

TO-15 Select List Low Level 07/07/14 23:59 7 07/18/14 12:31

Reviewed By Date

Invoice OK to Spool

Initials



March 25, 2014

Orion Cook Converse Consultants 2738 West College Avenue State College, PA 16801

Project Location: Hawley, PA

Client Job Number:

Project Number: 11-17788-01

Laboratory Work Order Number: 14C0469

Meghan S. Kelley

Enclosed are results of analyses for samples received by the laboratory on March 14, 2014. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Meghan E. Kelley Project Manager



Converse Consultants 3/25/2014 2738 West College Avenue

State College, PA 16801 ATTN: Orion Cook PURCHASE ORDER NUMBER:

PROJECT NUMBER: 11-17788-01

#### ANALYTICAL SUMMARY

WORK ORDER NUMBER: 14C0469

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: Hawley, PA

FIELD SAMPLE#	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB	
VP-1	14C0469-01	Soil Gas		EPA TO-15		
VP-2	14C0469-02	Soil Gas		EPA TO-15		
VP-3	14C0469-03	Soil Gas		EPA TO-15		



#### CASE NARRATIVE SUMMARY

Al	1 reported	l results:	are within	defined	laboratory	quality	control o	phie	ctives n	nless 1	isted	hel	ow or of	herwise o	qualified in	this report.

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Daren J. Damboragian Laboratory Manager



#### ANALYTICAL RESULTS

Project Location: Hawley, PA Date Received: 3/14/2014 Field Sample#: VP-1 Sample ID: 14C0469-01 Sample Matrix: Soil Gas Sampled: 3/7/2014 15:00 Sample Description/Location: Sub Description/Location: Canister ID: 2093 Canister Size: 1 liter Flow Controller ID: 3310 Sample Type: 1 hr Work Order: 14C0469
Initial Vacuum(in Hg): -24.9
Final Vacuum(in Hg): -4
Receipt Vacuum(in Hg): -8.3
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

	E	PA TO-15						
ppl	v		ug/r	n3		Date/T	ime	
Results	RL	Flag/Qual	Results	RL	Dilution	Analyz	zed	Analyst
ND	0.10		ND	0.32	2	3/25/14	6:10	TPH
ND	0.10		ND	0.43	2	3/25/14	6:10	TPH
0.61	0.38		3.0	1.8	2	3/25/14	6:10	TPH
ND	0.10		ND	0.36	2	3/25/14	6:10	TPH
0.77	0.10		4.0	0.52	2	3/25/14	6:10	TPH
39	0.10		150	0.38	2	3/25/14	6:10	TPH
ND	0.10		ND	0.49	2	3/25/14	6:10	TPH
ND	0.10		ND	0.49	2	3/25/14	6:10	TPH
1.1	0.20		4.8	0.87	2	3/25/14	6:10	TPH
0.36	0.10		1.5	0.43	2	3/25/14	6:10	TPH
% Recov	ery		% REC	C Lim its				
	103		70-	130		3/25/14	6:10	
	111		70-	130		3/25/14	6:10	
	Results  ND  ND  0.61  ND  0.77  39  ND  ND  1.1  0.36	Ppbv   Results   RL	Results   RL   Flag/Qual	ppbv         ug/r           Results         RL         Flag/Qual         Results           ND         0.10         ND           ND         0.10         ND           0.61         0.38         3.0           ND         0.10         ND           0.77         0.10         4.0           39         0.10         150           ND         0.10         ND           ND         0.10         ND           1.1         0.20         4.8           0.36         0.10         1.5           % Recovery         % REC	ppbv         ug/m3           Results         RL         Flag/Qual         Results         RL           ND         0.10         ND         0.32           ND         0.10         ND         0.43           0.61         0.38         3.0         1.8           ND         0.10         ND         0.36           0.77         0.10         4.0         0.52           39         0.10         150         0.38           ND         0.10         ND         0.49           ND         0.10         ND         0.49           1.1         0.20         4.8         0.87           0.36         0.10         1.5         0.43    **Recovery**  **Recution**  **Recution**  **Recution**  **Property**  **Recution**   results         Results         RL         Flag/Qual         Results         RL         Dilution           ND         0.10         ND         0.32         2           ND         0.10         ND         0.43         2           ND         0.61         0.38         3.0         1.8         2           ND         0.10         ND         0.36         2           0.77         0.10         ND         0.52         2           39         0.10         150         0.38         2           ND         0.10         ND         0.49         2           ND         0.10         ND         0.49         2           1.1         0.20         4.8         0.87         2           0.36         0.10         1.5         0.43         2    **Rec Limits*	rppbv         ug/m3         Date/T           Results         RL         Flag/Qual         Results         RL         Dilution         Analyse           ND         0.10         ND         0.32         2         3/25/14           ND         0.10         ND         0.43         2         3/25/14           ND         0.61         0.38         3.0         1.8         2         3/25/14           ND         0.10         ND         0.36         2         3/25/14           0.77         0.10         4.0         0.52         2         3/25/14           ND         0.10         ND         0.49         2         3/25/14           ND         0.10         ND         0.49         2         3/25/14           1.1         0.20         4.8         0.87         2         3/25/14           0.36         0.10         1.5         0.43         2         3/25/14           **Recovery**         **Rec Limits**         **Recovery**         **Rec Limits**         **To-130         3/25/14	Results         RL         Flag/Qual         Results         RL         Dilution         Date/Time/Analyzer           ND         0.10         ND         0.32         2         3/25/14         6:10           ND         0.10         ND         0.43         2         3/25/14         6:10           ND         0.61         0.38         3.0         1.8         2         3/25/14         6:10           ND         0.10         ND         0.36         2         3/25/14         6:10           0.77         0.10         4.0         0.52         2         3/25/14         6:10           39         0.10         150         0.38         2         3/25/14         6:10           ND         0.10         ND         0.49         2         3/25/14         6:10           ND         0.10         ND         0.49         2         3/25/14         6:10           1.1         0.20         4.8         0.87         2         3/25/14         6:10           96 Recovery         %Recovery         %REC Limits         3/25/14         6:10	



## ANALYTICAL RESULTS

Project Location: Hawley, PA Date Received: 3/14/2014 Field Sample #: VP-2 Sample ID: 14C0469-02 Sample Matrix: Soil Gas Sampled: 3/7/2014 15:27 Sample Description/Location: Sub Description/Location: Canister ID: 2095 Canister Size: 1 liter Flow Controller ID: 3063 Sample Type: 1 hr Work Order: 14C0469
Initial Vacuum(in Hg): -29.6
Final Vacuum(in Hg): -6
Receipt Vacuum(in Hg): -3.6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

2777.4	TO	
KPA	10	15

		r	FA 10-15							
	pp	ppbv			n3		Date/Time			
Analyte	Results	RL	Flag/Qual	Results	RL	Dilution	Analyz	zed	Analyst	
Benzene	0.39	0.10		1.2	0.32	2	3/25/14	6:49	TPH	
Ethylbenzene	ND	0.10		ND	0.43	2	3/25/14	6:49	TPH	
Isopropylbenzene (Cumene)	ND	0.38		ND	1.8	2	3/25/14	6:49	TPH	
Methyl tert-Butyl Ether (MTBE)	ND	0.10		ND	0.36	2	3/25/14	6:49	TPH	
Naphthalene	ND	0.10		ND	0.52	2	3/25/14	6:49	TPH	
Toluene	99	0.50		370	1.9	10	3/25/14	11:56	TPH	
1,2,4-Trimethylbenzene	ND	0.10		ND	0.49	2	3/25/14	6:49	TPH	
1,3,5-Trimethylbenzene	ND	0.10		ND	0.49	2	3/25/14	6:49	TPH	
m&p-Xylene	1.1	0.20		4.7	0.87	2	3/25/14	6:49	TPH	
o-Xylene	0.33	0.10		1.5	0.43	2	3/25/14	6:49	TPH	
Surrogates	% Reco	very		% REC	C Limits					
4-Bromofluorobenzene (1)		102		70-	-130		3/25/14	6:49		
4-Bromofluorobenzene (1)		94.3		70-	-130		3/25/14	11:56		
4-Bromofluorobenzene (4)		109		70-	-130		3/25/14	6:49		



## ANALYTICAL RESULTS

Project Location: Hawley, PA Date Received: 3/14/2014 Field Sample #: VP-3 Sample ID: 14C0469-03 Sample Matrix: Soil Gas Sampled: 3/7/2014 15:28 Sample Description/Location: Sub Description/Location: Canister ID: 2094 Canister Size: 1 liter Flow Controller ID: 3045 Sample Type: 1 hr Work Order: 14C0469
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -7.6
Receipt Vacuum(in Hg): -7.5
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

	EPA	TO	-15
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	pp	bv		ug/r	n3		Date/T	ime	
Analyte	Results	RL	Flag/Qual	Results	RL	Dilution	Analy	zed	Analyst
Benzene	ND	0.50		ND	1.6	10	3/25/14	7:29	TPH
Ethylbenzene	ND	0.50		ND	2.2	10	3/25/14	7:29	TPH
Isopropylbenzene (Cumene)	ND	1.9		ND	9.2	10	3/25/14	7:29	TPH
Methyl tert-Butyl Ether (MTBE)	ND	0.50		ND	1.8	10	3/25/14	7:29	TPH
Naphthalene	ND	0.50		ND	2.6	10	3/25/14	7:29	TPH
Toluene	320	0.50		1200	1.9	10	3/25/14	7:29	TPH
1,2,4-Trimethylbenzene	ND	0.50		ND	2.5	10	3/25/14	7:29	TPH
1,3,5-Trimethylbenzene	ND	0.50		ND	2.5	10	3/25/14	7:29	TPH
m&p-Xylene	5.2	1.0		22	4.3	10	3/25/14	7:29	TPH
o-Xylene	1.6	0.50		7.1	2.2	10	3/25/14	7:29	TPH
Surrogates	% Recov	ery/		% REC	C Limits				
4-Bromofluorobenzene (1)		103		70-	130		3/25/14	7:29	
4-Bromofluorobenzene (4)		111		70-	130		3/25/14	7:29	



## Sample Extraction Data

Prep Method: TO-15 Prep-EPA TO-15		Pressure	Pre	Pre-Dil Initial	Pre-Dil	Default Injection	Actual Injection	
Lab Number [Field ID]	Batch	Dilution	Dilution	mL	Final mL	mL	mL	Date
14C0469-01 [VP-1]	B092509	1.5	1.	N/A	1000	400	300	03/24/14
14C0469-02 [VP-2]	B092509	1.5	1	N/A	1000	400	300	03/24/14
14C0469-02RE1 [VP-2]	B092509	1.5	1.	N/A	1000	400	60	03/24/14
14C0469-03 [VP-3]	B092509	1.5	1.	N/A	1000	400	300	03/24/14



## QUALITY CONTROL

#### Air Toxics by EPA Compendium Methods - Quality Control

	pp	bv	ug/r	n3	Spike Level	Source		%REC		RPD	
Analyte	Results	RL	Results	RL	ppbv	Result	%REC	Limits	RPD	Limit	Flag/Qual
Batch B092509 - TO-15 Prep											
Blank (B092509-BLK1)					Prepared & A	Analyzed: 03	/24/14				
Benzene	ND	0.025									
Ethylbenzene	ND	0.025									
Isopropylbenzene (Cumene)	ND	0.094									
Methyl tert-Butyl Ether (MTBE)	ND	0.025									
Naphthalene	ND	0.025									
Toluene	ND	0.025									
1,2,4-Trimethylbenzene	ND	0.025									
1,3,5-Trimethylbenzene	ND	0.025									
m&p-Xylene	ND	0.050									
o-Xylene	ND	0.025									
Surrogate: 4-Bromofluorobenzene (1)	8.19				8.00		102	70-130			
Surrogate: 4-Bromofluorobenzene (4)	8.82				8.00		110	70-130			
LCS (B092509-BS1)					Prepared & A	Analyzed: 03	/24/14				
Benzene	4.49				5.00		89.7	70-130			
Ethylbenzene	4.36				5.00		87.2	70-130			
Isopropylbenzene (Cumene)	8.00				9.38		85.4	70-130			
Methyl tert-Butyl Ether (MTBE)	4.61				5.00		92.2	70-130			
Naphthalene	3.91				5.00		78.2	70-130			
Toluene	4.93				5.00		98.6	70-130			
1,2,4-Trimethylbenzene	4.68				5.00		93.7	70-130			
1,3,5-Trimethylbenzene	4.49				5.00		89.8	70-130			
m&p-Xylene	8.91				10.0		89.1	70-130			
o-Xylene	4.33				5.00		86.6	70-130			
Surrogate: 4-Bromofluorobenzene (1)	8.18				8.00		102	70-130			
Surrogate: 4-Bromofluorobenzene (4)	8.85				8.00		111	70-130			



## FLAG/QUALIFIER SUMMARY

*				
	OC resu			

- † Wide recovery limits established for difficult compound.
- ‡ Wide RPD limits established for difficult compound.
- # Data exceeded client recommended or regulatory level

Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the

calculation which have not been rounded.

No results have been blank subtracted unless specified in the case narrative section.



#### CERTIFICATIONS

## Certified Analyses included in this Report

Analyte Certifications

EPA	T	0-	15	in	$A_{i}$	r

Benzene AIHA,FL,NJ,NY,VA,ME Ethylbenzene AIHA,FL,NJ,NY,VA,ME Isopropylbenzene (Cumene) AIHA,NJ,NY,ME Methyl tert-Butyl Ether (MTBE) AIHA,FL,NJ,NY,VA,ME Naphthalene NY,ME Toluene AIHA,FL,NJ,NY,VA,ME 1,2,4-Trimethylbenzene AIHA,NJ,NY,ME 1,3,5-Trimethylbenzene AIHA,NJ,NY,ME m&p-Xylene AIHA,FL,NJ,NY,VA,ME o-Xylene AIHA,FL,NJ,NY,VA,ME

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2016
MA	Massachusetts DEP	M-MA100	06/30/2014
CT	Connecticut Department of Public Health	PH-0567	09/30/2015
NY	New York State Department of Health	10899 NELAP	04/1/2014
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2015
RI	Rhode Island Department of Health	LAO00112	12/30/2014
NC	North Carolina Div. of Water Quality	652	12/31/2014
NJ	New Jersey DEP	MA007 NELAP	06/30/2014
FL	Florida Department of Health	E871027 NELAP	06/30/2014
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2014
WA	State of Washington Department of Ecology	C2065	02/23/2015
ME	State of Maine	2011028	06/9/2015
VA	Commonwealth of Virginia	460217	12/14/2014
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2014

ANALYTICAL LABORATORY	con-test

Hecelsed by (signature)	Denoived her	Relinquished I	FULLE	Received by: (signature)		Relinquished by: (signature)	 Laboratory Comments:						VP-3	12-9V	1-9V		☐ yes	Proposal Pro	sampled by:	Complete Bu	Project   postion	Attention:			Address:	Company Name:			
signamis)	signatura)	y: (signature)	Pilkere Bust	signature) 0	1. h ( 1	y: (signature)/	mments:						K		Soil Gas	Sample Description	proposal date	Proposal Provided? (For Billing purposes)	Jun Garthe	۱ کو در در در د		Pus or	State Celly	1136 W. Ca	۽ (	ime.	ANALY ICAL LABORATORY	COIT-CO	100-100
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*Approval Required	1 -72-Hr   *4-Day			į 🗆		Turnaround **							3-9-14 2:28	3-9-14 2:23	3:3-14 2:00		Start	Date Sampled	Email. 女	T 197	Fax # 7	DATA DEL			Project #	Telephone:(814)	)s.com		AIR SAI
3				10-Day	7-Day	** banc	-						3-9-R4 3:28	3-9-44 3:23	3:00	ļ.,	Stop	<u> </u>	KEXCEL I	Email work 0 / winds	2	DATA DELIVERY (check one):		. 1	11-13788-01	(814)			AIR SAMPLE CHAIN OF CUSTODY
	Other	Required	Enhanced	Data Enha	Regulations:								60	60	8	Minutes Sampled	Total	ONLY USE	l ľ	- 1		eck one)			10-88	234- 3223	エつ	RECORD	HAIN O
	negalieu betechoù chiko Other	(surchage applies)	Enhanced Data Package DY	Data Enhansement/RCP? TY	ns.	Special	CLIENT COMMENTS:		;				0.0161	6.0167	6,0161	M <sup>3</sup> /Min. ex	Flow Rate	ONLY USE WHEN US	GIS KEY	1.11.	1	E CHENT				223	SLOJE LOJE	30	F CUST
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#### IMPORTANT:

FodEx has resumed standard daily operations in the northeastern U.S. Learn More



7958965103	377			
Ship (P/U) date Wed 3/12/2014 STATE COLLEGE, P	A US	<b>(3)</b>	) I Vered	Actual delivery Fri 3/14/2014 12:37 pm. East Longmeadow, MA US
			arby crolling	
4		0.6 44 40	oughthers are a completely	e stade 5
Travel History	<b>f</b>			
Date/Time	Activity:			Location
- 3/14/2014 - 1	Friday			
12:37 pm	Delivered			East Longmendow, MA
6 36 am	On FedEx vehicle for	delivery:		Cartooperina
6.30 am	At local FedEx facility			SALE OFFICE ASS.
12.50 am	Departed FedEx local	ion		WHERAGLON-CI.
- 3/13/2014	Thursday			
5:27 pm	Arrived at FedEx local	ion		WILLIAM GT
6:19 ani	Departed FedEx local	ióri.		LEIANSOS RIPY ITA
2.38 am	Arrived at FedEx local	ion.		LE SMISHE ROY, PA
+: 3/12/2014 - 1	Wednesday			
9:15 pm	Lett FedEx ongar facil	ity		DUNCANSVILE TA
7/11 pm	Armed at FedEx local	lion		DUNCANSVILLE: PA
12 33 pm	Picked up			DOM: ANSWILL PA
				Local Scan Time
Shipment Fac	cts <sub>:</sub>			
Tracking number	7958965103	Ż7	Service	FedEx Ground
Weight	20 lbs		Dimensions	21x18x14-m
Total pieces	4		Packaging	Package
Special handling section	Package Re	turns Program		





39 Spruce St. East Longmeadow, MA. 01028

## **AIR Only Receipt Checklist**

Page 1 of 2 P: 413-525-2332 F: 413-525-6405

Page 13 of 14 14C0469\_1 Contest\_Final 03 25 14 1709 03/25/14 17:09:12

CLIENT NAME: CONCER CON	witants A	ECEI	VED BY: REF	DATE:3/14/14
1) Was the chain(s) of custody relinquis	hed and signed	?	Yes N	o
2) Does the chain agree with the sample if not, explain:	s?		Yes N	0
3) Are all the samples in good condition If not, explain:	?		Yes N	o
4) Are there any samples "On Hold"?			Yes: (N	Stored where:
5) Are there any RUSH or SHORT HOLD	ING TIME samp	les?	Yes (N	<b>70</b> 0
•	Date		me	
6) Location where samples are stored:	arla	b	1 1	ocontract samples? Yes No nly) if not already approved
7) Number of cans Individually Certified	or Batch Certif	ied?		The transport of the second se
				ie minister au lingster er en de de la communication de la communi
Contair	iers rece	IVE	ed at Con-Te	st
			# of Containers	Types (Size, Duration)
Summa Cans (TO-14/(O-15/Al			=3	1 IL
Tedlar Bags			·	<u> </u>
TO-17 Tubes		A (10 DO)		35900000 200000 200000
Regulators		XXXX.	2	11/10
Restrictors			and the last of th	
BH-SALUEL (1997) - BRINGER BROWN BROWN BROWN BROWN BROWN BROWN	77.30-300600000000000000000000000000000000		===5\$0000000000000000000000000000000000	шынып <mark>олер жан</mark> шыру — жал 22 жылыс ли
Hg/Hopcalite Tube (NIOSH 60				The street, and the street,
(TO-4A/ TO-10A/TO-13) PUF PCB Florisil Tubes (NIOSH 55				· · · · · · · · · · · · · · · · · · ·
Air cassette			<u> </u>	
PM 2.5/PM 10			Control	
TO-11A Cartridges				
Other				
Unused Summas/PUF Media:		L	Inused Regulators:	
1) Was all media (used & unused) c 2) Were all returned summa cans, F	Restrictors & F	≀egu		ocumented as returned in
Laboratory Comments:	ei Spreadsnee	-	3310 3063	, (iv.) (iv.

## Page 2 of 2 Login Sample Receipt Checklist

# (Rejection Criteria Listing - Using Sample Acceptance Policy) Any False statement will be brought to the attention of Client

Question	Answer (True/False)	<u>Comment</u>
	<u>T/F/NA</u>	est t
1) The cooler's custody seal, if present, is intact.	T	
The cooler or samples do not appear to have been compromised or tampered with.	<u> </u>	
3) Samples were received on ice.	M)	
4) Cooler Temperature is acceptable.	NA	William -
5) Cooler Temperature is recorded.	NA	V (1)
6) COC is filled out in ink and legible.	Ţ <u>T</u>	
7) COC is filled out with all pertinent information.		· · · · · · · · · · · · · · · · · · ·
8) Field Sampler's name present on COC.	T	
There are no discrepancies between the sample IDs on the container and the COC.	T	
10) Samples are received within Holding Time.		
11) Sample containers have legible labels.		
12) Containers are not broken or leaking.	一丁	
13) Air Cassettes are not broken/open.	LA.	
14) Sample collection date/times are provided.	T T	
15) Appropriate sample containers are used.	T	
16) Proper collection media used.		27diu
17) No headspace sample bottles are completely filled.		and the part of the same of th
18) There is sufficient volume for all requsted analyses, including any requested MS/MSDs.	Т	
19) Trip blanks provided if applicable.	LA	
20) VOA sample vials do not have head space or bubble is <6mm (1/4") in diameter.	AUI	
21) Samples do not require splitting or compositing.		
The state of the s	Who notified of False stat	ements? Date/Time:

Doc #278 Rev. 4 January 2014

Page 14 of 14 14C0469\_1 Contest\_Final 03 25 14 1709 03/25/14 17:09:12

Date/Time:

Log-In Technician Initials:



February 28, 2014

Orion Cook Converse Consultants 2738 West College Avenue State College, PA 16801

Project Location: Hawley, PA

Client Job Number:

Project Number: 11-17788-02

Laboratory Work Order Number: 14B0525

Meghan S. Kelley

Enclosed are results of analyses for samples received by the laboratory on February 19, 2014. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Meghan E. Kelley Project Manager



Converse Consultants 2738 West College Avenue State College, PA 16801

ATTN: Orion Cook

REPORT DATE: 2/28/2014

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 11-17788-02

#### ANALYTICAL SUMMARY

WORK ORDER NUMBER: 14B0525

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: Hawley, PA

FIELD SAMPLE#	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB	
SV-1	14B0525-01	Soil Gas		EPA TO-15		
SV-2	14B0525-02	Soil Gas		EPA TO-15		
SV-3	14B0525-03	Soil Gas		EPA TO-15		



#### CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

EPA TO-15

Qualifications:

Surrogate outside of control limits.

Analyte & Samples(s) Qualified:

4-Bromofluorobenzene (4)

14B0525-01[SV-1], 14B0525-03[SV-3]

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Daren J. Damboragian Laboratory Manager



#### ANALYTICAL RESULTS

Project Location: Hawley, PA Date Received: 2/19/2014 Field Sample#: SV-1 Sample ID: 14B0525-01 Sample Matrix: Soil Gas Sampled: 2/4/2014 16:08 Sample Description/Location: Sub Description/Location: Canister ID: 1546 Canister Size: 1 liter Flow Controller ID: 3050 Sample Type: 1 hr Work Order: 14B0525 Initial Vacuum(in Hg): -30 Final Vacuum(in Hg): -5.7 Receipt Vacuum(in Hg): -2.3 Flow Controller Type: Fixed-Orifice Flow Controller Calibration RPD Pre and Post-Sampling:

		E	PA TO-15					
	ppl	ov		ug/r	n3	Date	/Time	
Analyte	Results	RL	Flag/Qual	Results	RL	Dilution Ana	lyzed	Analyst
Benzene	0.13	0.10		0.42	0.32	2 2/22/1	4 15:22	TPH
Ethylbenzene	ND	0.10		ND	0.43	2 2/22/1	4 15:22	TPH
Isopropylbenzene (Cumene)	ND	0.38		ND	1.8	2 2/22/1	4 15:22	TPH
Methyl tert-Butyl Ether (MTBE)	ND	0.10		ND	0.36	2 2/22/1	4 15:22	TPH
Naphthalene	ND	0.10		ND	0.52	2 2/22/1	4 15:22	TPH
1,2,4-Trimethylbenzene	ND	0.10		ND	0.49	2 2/22/1	4 15:22	TPH
1,3,5-Trimethylbenzene	ND	0.10		ND	0.49	2 2/22/1	4 15:22	TPH
m&p-Xylene	0.25	0.20		1.1	0.87	2 2/22/1	4 15:22	TPH
o-Xylene	0.11	0.10		0.47	0.43	2 2/22/1	4 15:22	TPH
Surrogates	% Recov	ery		% REC	C Limits			
4-Bromofluorobenzene (1)		123		70-	130	2/22/1	4 15:22	
4-Bromofluorobenzene (4)		133*	S-26	70-	130	2/22/1	4 15:22	



## ANALYTICAL RESULTS

Project Location: Hawley, PA Date Received: 2/19/2014 Field Sample #: SV-2 Sample ID: 14B0525-02 Sample Matrix: Soil Gas Sampled: 2/4/2014 14:21 Sample Description/Location: Sub Description/Location: Canister ID: 1543 Canister Size: 1 liter Flow Controller ID: 3042 Sample Type: 1 hr Work Order: 14B0525
Initial Vacuum(in Hg): -26.9
Final Vacuum(in Hg): -2.2
Receipt Vacuum(in Hg): -2.3
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

EPA TO-15

			FA 10-13								
	pp)	ppbv			n3		Date/Time				
Analyte	Results	RL	Flag/Qual	Results	RL	Dilution	Analyzed	Analyst			
Benzene	0.11	0.10		0.35	0.32	2	2/22/14 16:02	TPH			
Ethylbenzene	ND	0.10		ND	0.43	2	2/22/14 16:02	TPH			
Isopropylbenzene (Cumene)	ND	0.38		ND	1.8	2	2/22/14 16:02	TPH			
Methyl tert-Butyl Ether (MTBE)	ND	0.10		ND	0.36	2	2/22/14 16:02	TPH			
Naphthalene	ND	0.10		ND	0.52	2	2/22/14 16:02	TPH			
1,2,4-Trimethylbenzene	0.13	0.10		0.65	0.49	2	2/22/14 16:02	TPH			
1,3,5-Trimethylbenzene	ND	0.10		ND	0.49	2	2/22/14 16:02	TPH			
m&p-Xylene	0.31	0.20		1.3	0.87	2	2/22/14 16:02	TPH			
o-Xylene	0.14	0.10		0.60	0.43	2	2/22/14 16:02	TPH			
Surrogates	% Recovery % REC Limits		C Limits								
4-Bromofluorobenzene (1)		120		70-	130		2/22/14 16:02				
4-Bromofluorobenzene (4)		129		70-	130		2/22/14 16:02				



## ANALYTICAL RESULTS

Project Location: Hawley, PA Date Received: 2/19/2014 Field Sample #: SV-3 Sample ID: 14B0525-03 Sample Matrix: Soil Gas Sampled: 2/4/2014 16:08 Sample Description/Location: Sub Description/Location: Canister ID: 1544 Canister Size: 1 liter Flow Controller ID: 3043 Sample Type: 1 hr Work Order: 14B0525
Initial Vacuum(in Hg): -29.6
Final Vacuum(in Hg): -3.0
Receipt Vacuum(in Hg): -1.8
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling:

	EPA	TO	-15
--	-----	----	-----

	pp	ppbv ug/m3					Date/Time				
Analyte	Results	RL	Flag/Qual	Results	RL	Dilution	Analyzed	Analyst			
Benzene	0.12	0.10		0.38	0.32	2	2/22/14 16:41	TPH			
Ethylbenzene	ND	0.10		ND	0.43	2	2/22/14 16:41	TPH			
Isopropylbenzene (Cumene)	ND	0.38		ND	1.8	2	2/22/14 16:41	TPH			
Methyl tert-Butyl Ether (MTBE)	ND	0.10		ND	0.36	2	2/22/14 16:41	TPH			
Naphthalene	ND	0.10		ND	0.52	2	2/22/14 16:41	TPH			
1,2,4-Trimethylbenzene	ND	0.10		ND	0.49	2	2/22/14 16:41	TPH			
1,3,5-Trimethylbenzene	ND	0.10		ND	0.49	2	2/22/14 16:41	TPH			
m&p-Xylene	0.28	0.20		1.2	0.87	2	2/22/14 16:41	TPH			
o-Xylene	0.12	0.10		0.53	0.43	2	2/22/14 16:41	TPH			
Surrogates	% Recov	ery	% REC Limits								
4-Bromofluorobenzene (1)		121		70-	130		2/22/14 16:41				
4-Bromofluorobenzene (4)		187*	S-26	S-26 70-130			2/22/14 16:41				



## Sample Extraction Data

Prep Method: TO-15 Prep-EPA TO-15		Pressure	Pre	Pre-Dil Initial	Pre-Dil Final	Default Injection	Actual Injection	
Lab Number [Field ID]	Batch	Dilution	Dilution	mL	mL	mL	mL	Date
14B0525-01 [SV-1]	B090869	2	1.	N/A	1000	400	400	02/21/14
14B0525-02 [SV-2]	B090869	2	1	N/A	1000	400	400	02/21/14
14B0525-03 [SV-3]	B090869	2	1.	N/A	1000	400	400	02/21/14



## QUALITY CONTROL

#### Air Toxics by EPA Compendium Methods - Quality Control

100 20 401	ppl		ug/n		Spike Level	Source		%REC		RPD	Pacific Discount of
Analyte	Results	RL	Results	RL	ppby	Result	%REC	Limits	RPD	Limit	Flag/Qual
Batch B090869 - TO-15 Prep											-
Blank (B090869-BLK1)					Prepared & A	Analyzed: 02	/21/14				
Benzene	ND	0.025									
Ethylbenzene	ND	0.025									
Isopropylbenzene (Cumene)	ND	0.064									
Methyl tert-Butyl Ether (MTBE)	ND	0.025									
Naphthalene	ND	0.025									
1,2,4-Trimethylbenzene	ND	0.025									
1,3,5-Trimethylbenzene	ND	0.025									
m&p-Xylene	ND	0.050									
o-Xylene	ND	0.025									
LCS (B090869-BS1)					Prepared & A	Analyzed: 02	/21/14				
Benzene	4.09				5.00		81.9	70-130			
Ethylbenzene	5.12				5.00		102	70-130			
Isopropylbenzene (Cumene)	9.57				9.38		102	70-130			
Methyl tert-Butyl Ether (MTBE)	5.20				5.00		104	70-130			
Naphthalene	4.90				5.00		98.0	70-130			
1,2,4-Trimethylbenzene	5.89				5.00		118	70-130			
1,3,5-Trimethylbenzene	5.64				5.00		113	70-130			
m&p-Xylene	10.8				10.0		108	70-130			
o-Xylene	5.42				5.00		108	70-130			



## FLAG/QUALIFIER SUMMARY

de	OC resu	40	CONTROL OF 1	C 11	47 1	

† Wide recovery limits established for difficult compound.

‡ Wide RPD limits established for difficult compound.

# Data exceeded client recommended or regulatory level

Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the

calculation which have not been rounded.

No results have been blank subtracted unless specified in the case narrative section.

S-26 Surrogate outside of control limits.



#### CERTIFICATIONS

## Certified Analyses included in this Report

Analyte Certifications

#### EPA TO-15 in Air

Benzene AIHA,FL,NJ,NY,VA,ME
Ethylbenzene AIHA,FL,NJ,NY,VA,ME
Isopropylbenzene (Cumene) AIHA,NJ,NY,ME
Methyl tert-Butyl Ether (MTBE) AIHA,FL,NJ,NY,VA,ME
Naphthalene NY,ME
1,2,4-Trimethylbenzene AIHA,NJ,NY,ME

 1,3,5-Trimethylbenzene
 AIHA,NJ,NY,ME

 m&p-Xylene
 AIHA,FL,NJ,NY,VA,ME

 o-Xylene
 AIHA,FL,NJ,NY,VA,ME

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2016
MA	Massachusetts DEP	M-MA100	06/30/2014
CT	Connecticut Department of Publile Health	PH-0567	09/30/2015
NY	New York State Department of Health	10899 NELAP	04/1/2014
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2015
RI	Rhode Island Department of Health	LAO00112	12/30/2014
NC	North Carolina Div. of Water Quality	652	12/31/2014
NJ	New Jersey DEP	MA007 NELAP	06/30/2014
FL	Florida Department of Health	E871027 NELAP	06/30/2014
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2014
WA	State of Washington Department of Ecology	C2065	02/23/2015
ME	State of Maine	2011028	06/9/2015
VA	Commonwealth of Virginia	460217	12/14/2014
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2014

processing of the control of the con
- Company
ANALYTICAL LABORATORY

Received by: (signature)	Relinquished by: (signature)	Regioned by: (signalive)	_31	Relinquished by (signature)	Laboratory Comments:		de per de la companya de la company			3	25	Z.	Sample Desc	yes proposal date	Proposal Provided? (For Billing purposes)	Sampled By:	tion:	Attention: DUS W		Address: 278 2. 2		ANALYHOALLABOBATOBY	Particular and Control of the Contro
Date/Time:	Date∕Time:	2:19:11 10:12	* *50	Date/Time:						Sign of the state	\( \)	2	Wedia Lab #	(e	ses)				160		www.conjestlabs.com	Fax: 413-525-5405 Email: Info@contestlabs.com	© Phone: 413-525-2332
☐ *72-Hr ☐ *4-Day *Approval Required	0 2431 0 *48-H	□ los®ay		Turatoung **	And the first in the first of t						126   501 11-11-11   11-12	2.4.14 2.4.14	Date Date Time Time	Start Stop	Date Sampled	Format M EXCEL		DATA DELIVERY (check one):	Client PO#	Telephone (本学) _ Project #/////	, pho		AM SAMPLE (
Other	(Surchage Applies) Required Detection Limits:	Data Enhancement/HCP? ☐ Y Enhanced Data Package ☐ Y	Regulations:	Special Requirements	O FRAT COMMENTS					25 20179 1	1 221001 26	75 0.0188 1		Total Flow Rate Volume	ONLY USE WHEN USING PUMPS	PDF DGISKEY DOTHER		heck one):   TWEBSITE CLIENT		11-17988-02 11-17988-02	していて	RECORD IPPO JO JO	AIR SAMPLE CHAIN OF CUSTODY
BL = BLANK	SS=SU	22		Inents hatrix code:						<b>X</b>	× ×	*	Matrix A A Code*		4					REQUESTED		EAST LONGMEADOW, MA 01028	39 SPRUCE ST
ente enterior de la companion de	BSLAB	AMB=AMBIENT P=	-		and a			unimentalism de desimente		7262020	X 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	70+ S.7 2.7	inicialisione de		n (n n (n n (n	0 -		<u>b</u> j	estation de marchador de la companya del companya del companya de la companya de	n o r	T T T	A 01028	Page
C=cassette O = Other	T=tube F= filter	¥8≕tedlar bag P≞PUF	S-summa can	*:Media Codes:		ecotores anno				S. S		gioneric constant		Summa Flow	cleaning.	of 14 days after	Summa canisters will retained for a minimu	of receipt or rental fe	flow controllers must	and retain the yellow copy for your record.	Please fill out		Of constructions
	<del></del>	<del></del>	×4.					Page	: 11 6	of 15	学 14Bi	چ 2525 2525	ntroll	⋛ onte		-	ii ii iii   02∶	- 45		02/28/		7:38:0	)5



#### 801013120117

Ship (P/U) date: Fri 2/14/2014 10:48 am

STA US



Delivered Signed for by: J.EL.KNN Actual delivery : Wed 2/19/2014 10:12 am EAST LONGMEADOW, MA 108

Location

LEAST LONGOWADOW, MA

WINDSOFF COOKS, OT

WINDSON COCKS, CT

VIIIOSOR LOCKS, CT

WINDSOR LOCKS, CT

WINDSON LOCKS, OT

WINDSOR LOCKS, CT

EAST GRANBY GT NEWSTAK WA

STATE COLLEGE; PX

STATE COLLEGE, PA

FedEx Express Saver

## Travel History

Date/Time Activity

- 2/19/2014 - Wednesday

10:12 am :Delivered.

8341 am On FedEx vehicle for delivery

~ 2/18/2014 - Tuesday

7:48 pin At local FedEx facility

8:59:am At local FedEx facility

Package not due for delivery

~ 2/17/2014 - Monday

12:13 pm

At local FedEx facility 9:28 pm

At local FedEx facility

Package not due for delivery

At local FedEx facility 7:15 ans 4 2/15/2014 - Saturday

10:06 pm At destination sort facility

6:43 pm Departed FedEx location - 2/14/2014 - Friday

7:25 pm Left FedEx origin facility

19:48 am Picked up

Service

Packaging

Local Scan Time

## **Shipment Facts**

Tracking number Weight Delivered To:

Total shipment

weight Special handling 801013120147

10 los

Shipping/Receiving

10 lbs / 4.5 kgs

Deliver Weekday

Dimensions 22x9x14 m. Total pieces

Your Paukaging

## Page 2 of 2

## Login Sample Receipt Checklist

# (Rejection Criteria Listing - Using Sample Acceptance Policy) Any False statement will be brought to the attention of Client

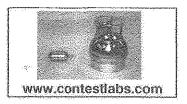
Question	Answer (True/False	mandamento antico de la constantida de
	T/F/NA	
1) The cooler's custody seal, if present, is intact.	au.	
The cooler or samples do not appear to have been compromised or tampered with.	TOPA	
3) Samples were received on ice.	l w	
4) Cooler Temperature is acceptable.		
5) Cooler Temperature is recorded.	Ne	
6) COC is filled out in ink and legible.	<u> </u>	
7) COC is filled out with all pertinent information.		
8) Field Sampler's name present on COC.		
There are no discrepancies between the sample IDs on the container and the COC.		
10) Samples are received within Holding Time.	in the second se	
11) Sample containers have legible labels.	and project	
12) Containers are not broken or leaking.		
13) Air Cassettes are not broken/open.	NR	
14) Sample collection date/times are provided.		
15) Appropriate sample containers are used.		
16) Proper collection media used.		
17) No headspace sample bottles are completely filled.	NA	
18) There is sufficient volume for all requsted analyses, including any requested MS/MSDs.	- anni-	
19) Trip blanks provided if applicable.	N	
20) VOA sample vials do not have head space or bubble is <6mm (1/4") in diameter.	AN	
21) Samples do not require splitting or compositing.		

Doc #278 Rev. 4 January 2014

Who notified of False statements? Log-In Technician Initials: PB

Date/Time: Date/Time: 2 . 19-14

10:12





# AIR Only Receipt Checklist

39 Spruce St.
East Longmeadow, MA.
61028

P: 413-525-2332 F: 413-525-6405

CLIENT NAME: Converse Consultan	12 RECEI	VED BY: PB	DATE: 2-19-1U
1) Was the chain(s) of custody relinquished a	nd sianed?	(Tès	No
Does the chain agree with the samples?  If not, explain:	ar now and the second of	Yes	No
3) Are all the samples in good condition?  If not, explain:		Ves	No
4) Are there any samples "On Hold"?		Yes	No Stored where:
5) Are there any RUSH or SHORT HOLDING T	IME samples?	Yes	No.
Who was notified Date		me	
S) Lacation where carrelles are stored.	ir Lab		subcontract samples? Yes No s only) if not already approved e:
7) Number of cans Individually Certified or Ba	atch Certified?		
Containers	receive	d at Con-T	est
Nick terminant and the state of	1	# of Containers	Types (Size, Duration)
Summa Cans (TO-14/TO-15/APH)		3	i i i i i i i i i i i i i i i i i i i
Tedlar Bags	[5:84pt	energy and the second s	
TO-17 Tubes			
		3	1 hr
Regulators			\$ 18.
Restrictors			
Hg/Hopcalite Tube (NIOSH 6009)			
(TO-4A/ TO-10A/TO-13) PUFs			
PCB Florisil Tubes (NIOSH 5503)	8 6 8		
Air cassette			
PM 2.5/PM 10			
TO-11A Cartridges		<u></u>	
Other			
Unused Summas/PUF Media:	夏童:	nused Regulators:	
1) Was all media (used & unused) checke 2) Were all returned summa cans, Restric the Air Lab Inbound/Outbound Excel Spr	ctors & Regul		Jocumented as returned in
Laboratory Comments: 1546 305 1543 3043 1544 3043	0		

## Meghan Kelley

From:

Orion B. Cook [ocook@ConverseConsultants.com]

Sent:

Monday, February 24, 2014 2:50 PM

To: Subject: Meghan Kelley RE: 11-17788-02

Kelly,

List is:

- Benzene
- Ethylbenzene
- Isopropylbenzene (Cumene)
- Methyl tert-butyl ether (MTBE)
- Naphthalene
- Toluene
- Xylenes (total)
- 1,2,4-Timethylbenzene (1,2,4-TMB)
- 1,3,5-Timethylbenzene (1,3,5-TMB)

Let me know if you need anything else.

Gratefully,

Orion B. Cook, P.E. Project Engineer

From: Meghan Kelley [mailto:mkelley@contestlabs.com]

Sent: Monday, February 24, 2014 2:47 PM

To: Orion B. Cook Subject: 11-17788-02

Hi Orion,

Can you please send me the compound list included in the 2008 unleaded gas short list?

-Meghan

Meghan Kelley
Con-Test Analytical Laboratory
39 Spruce Street., East Longmeadow, MA 01028
Phone: 413.525,2332 x55 | Email: mkelley@contestlabs.com





State College PA, 16801

## 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) 494-6380 PaDEP: PA 41-04684

Collector:

OC



12/20/13 09:45

State Certifications: MD 275, WV 364

ROSEMERGY'S Project: Converse

Project Number: 2738 West College Avenue [none] Reported:

Project Manager: Orion Cook Number of Containers: 23

## ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Sample Type	Date Sampled	Date Received
MW-1R	3L12098-01	Water	Grab	12/11/13 13:35	12/12/13 15:05
MW-2	3L12098-02	Water	Grab	12/11/13 12:02	12/12/13 15:05
MW-3	3L12098-03	Water	Grab	12/11/13 11:33	12/12/13 15:05
MW-4	3L12098-04	Water	Grab	12/11/13 11:10	12/12/13 15:05
MW-5	3L12098-05	Water	Grab	12/11/13 12:35	12/12/13 15:05
MW-7	3L12098-06	Water	Grab	12/11/13 12:55	12/12/13 15:05
MW-8	3L12098-07	Water	Grab	12/11/13 10:40	12/12/13 15:05
MW-9	3L12098-08	Water	Grab	12/11/13 10:12	12/12/13 15:05
MW-12	3L12098-09	Water	Grab	12/11/13 14:15	12/12/13 15:05
SW-8	3L12098-10	Water	Grab	12/11/13 15:15	12/12/13 15:05
SW-12	3L12098-11	Water	Grab	12/11/13 15:05	12/12/13 15:05
ТВ	3L12098-12	Water	Trip Blank	12/11/13 00:00	12/12/13 15:05
MW-1M	3L12098-13	Water	Grab	12/11/13 13:40	12/12/13 15:05

Fairway Laboratories, Inc.

Reviewed and Submitted by:

MAI

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

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.



Converse

## 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) 494-6380 PaDEP: PA 41-04684

Project:

ROSEMERGY'S



State Certifications: MD 275, WV 364

2738 West College Avenue Project Number: [none] Reported:

State College PA, 16801 Collector: CLIENT 12/20/13 09:45

Project Manager: Orion Cook Number of Containers: 23

Client Sample ID: MW-1R Date/Time Sampled: 12/11/13 13:35

Laboratory Sample ID: 3L12098-01 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
Volatile Organic Compounds by EPA Method 8260B								
1,3,5-Trimethylbenzene	643		20.0	ug/l	12/17/13 10:56	EPA 8260B	mte	
1,2,4-Trimethylbenzene	2100		20.0	ug/l	12/17/13 10:56	EPA 8260B	mte	
Benzene	7400		200	ug/l	12/18/13 22:45	EPA 8260B	mte	
Toluene	9960		200	ug/l	12/18/13 22:45	EPA 8260B	mte	
Ethylbenzene	2380		20.0	ug/l	12/17/13 10:56	EPA 8260B	mte	
Xylenes (total)	5550		400	ug/l	12/18/13 22:45	EPA 8260B	mtc	
Isopropylbenzene	387		20.0	ug/l	12/17/13 10:56	EPA 8260B	mte	
Methyl tert-butyl ether	162		20.0	ug/l	12/17/13 10:56	EPA 8260B	mtc	
Naphthalene	424		20.0	ug/l	12/17/13 10:56	EPA 8260B	mte	
Surrogate: 4-Bromofluorobenzene		101 %		130	12/17/13 10:56	EPA 8260B	mte	
Surrogate: 1,2-Dichloroethane-d4		109 %		130	12/17/13 10:56	EPA 8260B	mte	
Surrogate: Fluorobenzene		90.7 %		130	12/17/13 10:56	EPA 8260B	mte	

l'airway 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.



89 Kristi Road Pennsdale, PA 17756 (570) 494-6380

PaDEP: PA 41-04684



State Certifications: MD 275, WV 364

Project: ROSEMERGY'S Converse

2738 West College Avenue Project Number: [none] Reported: State College PA, 16801 Collector: CLIENT 12/20/13 09:45

Project Manager: Orion Cook Number of Containers: 23

Client Sample ID: MW-2 **Date/Time Sampled:** 12/11/13 12:02

> Laboratory Sample ID: 3L12098-02 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
Volatile Organic Compounds by EPA	Method 8260B							
1,3,5-Trimethylbenzene	401		10.0	ug/l	12/16/13 21:18	EPA 8260B	wlm	
1,2,4-Trimethylbenzene	1110		10.0	ug/l	12/16/13 21:18	EPA 8260B	wlm	
Benzene	164		10.0	ug/l	12/16/13 21:18	EPA 8260B	wlm	
Toluene	514		10.0	ug/l	12/16/13 21:18	EPA 8260B	wlm	
Ethylbenzene	634		10.0	ug/l	12/16/13 21:18	EPA 8260B	wlm	
Xylenes (total)	875		20.0	ug/l	12/16/13 21:18	EPA 8260B	wlm	
Isopropylbenzene	255		10.0	ug/l	12/16/13 21:18	EPA 8260B	wlm	
Methyl tert-butyl ether	<10.0		10.0	ug/l	12/16/13 21:18	EPA 8260B	wlm	
Naphthalene	265		10.0	ug/l	12/16/13 21:18	EPA 8260B	wlm	
Surrogate: 4-Bromofluorobenzene		95.0 %	70-	130	12/16/13 21:18	EPA 8260B	wlm	
Surrogate: 1,2-Dichloroethane-d4		105 %	70-	130	12/16/13 21:18	EPA 8260B	wlm	
Surrogate: Fluorobenzene		90.4 %	70-	130	12/16/13 21:18	EPA 8260B	wlm	



NELAP: PA 07-062, VA 460212

89 Kristi Road Pennsdale, PA 17756 (570) 494-6380

PaDEP: PA 41-04684



State Certifications: MD 275, WV 364

Project: ROSEMERGY'S Converse

2738 West College Avenue Project Number: [none] Reported: State College PA, 16801 Collector: CLIENT 12/20/13 09:45

Project Manager: Orion Cook Number of Containers: 23

Client Sample ID: MW-3 **Date/Time Sampled:** 12/11/13 11:33

> Laboratory Sample ID: 3L12098-03 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
V. I	Maria Loavon							
Volatile Organic Compounds by EPA	Method 8260B							
1,3,5-Trimethylbenzene	< 2.00		2.00	ug/l	12/17/13 00:47	EPA 8260B	wlm	
1,2,4-Trimethylbenzene	< 2.00		2.00	ug/l	12/17/13 00:47	EPA 8260B	wlm	
Benzene	88.4		2.00	ug/l	12/17/13 00:47	EPA 8260B	wlm	
Toluene	<2.00		2.00	ug/l	12/17/13 00:47	EPA 8260B	wlm	
Ethylbenzene	3.24		2.00	ug/l	12/17/13 00:47	EPA 8260B	wlm	
Xylenes (total)	7.24		4.00	ug/l	12/17/13 00:47	EPA 8260B	wlm	
Isopropylbenzene	6.88		2.00	ug/l	12/17/13 00:47	EPA 8260B	wlm	
Methyl tert-butyl ether	348		10.0	ug/l	12/18/13 02:19	EPA 8260B	wlm	
Naphthalene	2.50		2.00	ug/l	12/17/13 00:47	ЕРЛ 8260В	wlm	
Surrogate: 4-Bromofluorobenzene		97.6 %	70-	130	12/17/13 00:47	EPA 8260B	wlm	
Surrogate: 1,2-Dichloroethane-d4		99.9 %	70-	130	12/17/13 00:47	EPA 8260B	wlm	
Surrogate: Fluorobenzene		89.3 %	70-	130	12/17/13 00:47	EPA 8260B	wlm	



89 Kristi Road Pennsdale, PA 17756 (570) 494-6380

PaDEP: PA 41-04684



State Certifications: MD 275, WV 364

Project: ROSEMERGY'S Converse

2738 West College Avenue Project Number: [none] Reported: State College PA, 16801 Collector: CLIENT 12/20/13 09:45

Project Manager: Orion Cook Number of Containers: 23

Client Sample ID: MW-4 **Date/Time Sampled:** 12/11/13 11:10

> Laboratory Sample ID: 3L12098-04 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
Volatile Organic Compounds by EPA	Method 8260B							
1,3,5-Trimethylbenzene	703		10.0	ug/l	12/16/13 21:56	EPA 8260B	wlm	
1,2,4-Trimethylbenzene	2750		100	ug/l	12/17/13 21:56	EPA 8260B	wlm	
Benzene	1000		10.0	ug/l	12/16/13 21:56	EPA 8260B	wlm	
Toluene	5550		100	ug/l	12/17/13 23:28	EPA 8260B	wlm	
Ethylbenzene	2250		100	ug/l	12/17/13 23:28	EPA 8260B	wlm	
Xylenes (total)	10900		200	ug/l	12/17/13 23:28	EPA 8260B	wlm	
Isopropylbenzene	387		10.0	ug/l	12/16/13 21:56	EPA 8260B	wlm	
Methyl tert-butyl ether	<10.0		10.0	ug/l	12/16/13 21:56	EPA 8260B	wlm	
Naphthalene	404		10.0	ug/l	12/16/13 21:56	EPA 8260B	wlm	
Surrogate: 4-Bromofluorobenzene	1	01 %	70	130	12/16/13 21:56	EPA 8260B	wlm	
Surrogate: 1,2-Dichloroethane-d4	1	05 %	70	130	12/16/13 21:56	EPA 8260B	wlm	
Surrogate: Fluorobenzene	9	1.7%	70	130	12/16/13 21:56	EPA 8260B	wlm	



NELAP: PA 07-062, VA 460212

89 Kristi Road Pennsdale, PA 17756 (570) 494-6380 PaDEP: PA 41-04684



FAIRWAY

State Certifications: MD 275, WV 364

Converse Project: ROSEMERGY'S

2738 West College AvenueProject Number:[none]Reported:State College PA, 16801Collector:CLIENT12/20/13 09:45

Project Manager: Orion Cook Number of Containers: 23

Client Sample ID: MW-5 Date/Time Sampled: 12/11/13 12:35

Laboratory Sample ID: 3L12098-05 (Water/Grab)

Volatile Organic Compounds by EPA Method 8260B           1,3,5-Trimethylbenzene         <2.00         2.00         ug/l         12/17/13 01:25         E           1,2,4-Trimethylbenzene         <2.00         2.00         ug/l         12/17/13 01:25         E           Benzene         2.44         2.00         ug/l         12/17/13 01:25         E           Toluene         <2.00         2.00         ug/l         12/17/13 01:25         E           Ethylbenzene         <2.00         2.00         ug/l         12/17/13 01:25         E           Xylenes (total)         <4.00         4.00         ug/l         12/17/13 01:25         E           Isopropylbenzene         <2.00         2.00         ug/l         12/17/13 01:25         E           Methyl tert-butyl ether         2.82         2.00         ug/l         12/17/13 01:25         E           Naphthalene         <2.00         2.00         ug/l         12/17/13 01:25         E           Surrogate: 4-Bromofluorobenzene         96.1 %         70-130         12/17/13 01:25         E			
1,3,5-Trimethylbenzene       <2.00       2.00       ug/l       12/17/13 01:25       E         1,2,4-Trimethylbenzene       <2.00       2.00       ug/l       12/17/13 01:25       E         Benzene       2.44       2.00       ug/l       12/17/13 01:25       E         Toluene       <2.00       2.00       ug/l       12/17/13 01:25       E         Ethylbenzene       <2.00       2.00       ug/l       12/17/13 01:25       E         Xylenes (total)       <4.00       4.00       ug/l       12/17/13 01:25       E         Isopropylbenzene       <2.00       2.00       ug/l       12/17/13 01:25       E         Methyl tert-butyl ether       2.82       2.00       ug/l       12/17/13 01:25       E         Naphthalene       <2.00       2.00       ug/l       12/17/13 01:25       E         Surrogate: 4-Bromofluorobenzene       96.1 %       70-130       12/17/13 01:25       E	lethod (	* Analyst N	Note
1,3,5-Trimethylbenzene       <2.00			
1,2,4-Trimethylbenzene       <2.00			
Benzene         2.44         2.00 ug/l         12/17/13 01:25         E           Toluene         <2.00	EPA 8260B	wlm	
Toluene         <2.00         2.00         ug/l         12/17/13 01:25         E           Ethylbenzene         <2.00	EPA 8260B	wlm	
Ethylbenzene         <2.00         2.00         ug/l         12/17/13 01:25         E           Xylenes (total)         <4.00	EPA 8260B	wlm	
Xylenes (total)       <4.00       4.00       ug/l       12/17/13 01:25       E         Isopropylbenzene       <2.00	EPA 8260B	wlm	
Isopropylbenzene         <2.00         2.00         ug/l         12/17/13 01:25         E           Methyl tert-butyl ether         2.82         2.00         ug/l         12/17/13 01:25         E           Naphthalene         <2.00         2.00         ug/l         12/17/13 01:25         E           Surrogate: 4-Bromofluorobenzene         96.1 %         70-130         12/17/13 01:25         E	EPA 8260B	wlm	
Methyl tert-butyl ether         2.82         2.00 ug/l         12/17/13 01:25         E           Naphthalene         <2.00	EPA 8260B	wlm	
Naphthalene         <2.00         2.00 ug/l         12/17/13 01:25         E           Surrogate: 4-Bromofluorobenzene         96.1 %         70-130         12/17/13 01:25         E	EPA 8260B	wlm	
Surrogate: 4-Bromofluorobenzene         96.1 %         70-130         12/17/13 01:25         E	EPA 8260B	wlm	
	EPA 8260B	wlm	
Surrogate: 1,2-Dichloroethane-d4 105 % 70-130 12/17/13 01:25 E	EPA 8260B	wlm	
	EPA 8260B	wlm	
Surrogate: Fluorobenzene 91.4 % 70-130 12/17/13 01:25 E	EPA 8260B	wlm	

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89 Kristi Road Pennsdale, PA 17756 (570) 494-6380

PaDEP: PA 41-04684



State Certifications: MD 275, WV 364

Project: ROSEMERGY'S Converse

2738 West College Avenue Project Number: [none] Reported: State College PA, 16801 Collector: CLIENT 12/20/13 09:45

Project Manager: Orion Cook Number of Containers: 23

Client Sample ID: MW-7 **Date/Time Sampled:** 12/11/13 12:55

> Laboratory Sample ID: 3L12098-06 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
Volatile Organic Compounds by EPA	Method 8260B							
1,3,5-Trimethylbenzene	12.1		1.00	ug/l	12/13/13 21:21	EPA 8260B	wlm	
1,2,4-Trimethylbenzene	6.44		1.00	ug/l	12/13/13 21:21	EPA 8260B	wlm	
Benzene	5100		500	ug/l	12/16/13 19:36	EPA 8260B	wlm	2b
Toluene	54.8		1.00	ug/l	12/13/13 21:21	EPA 8260B	wlm	
Ethylbenzene	30.9		1.00	ug/l	12/13/13 21:21	EPA 8260B	wlm	
Xylenes (total)	33.3		2.00	ug/l	12/13/13 21:21	EPA 8260B	wlm	
Isopropylbenzene	54.9		1.00	ug/l	12/13/13 21:21	EPA 8260B	wlm	
Methyl tert-butyl ether	449		10.0	ug/l	12/16/13 20:14	EPA 8260B	wlm	2b
Naphthalene	78.9		1.00	ug/l	12/13/13 21:21	ЕРЛ 8260В	wlm	
Surrogate: 4-Bromofluorobenzene		111 %	70-	130	12/13/13 21:21	EPA 8260B	wlm	
Surrogate: 1,2-Dichloroethane-d4		109 %	70-	130	12/13/13 21:21	EPA 8260B	wlm	
Surrogate: Fluorobenzene	g	9.5 %	70-	130	12/13/13 21:21	EPA 8260B	wlm	



89 Kristi Road Pennsdale, PA 17756 (570) 494-6380 PaDEP: PA 41-04684



State Certifications: MD 275, WV 364

Project: ROSEMERGY'S Converse

2738 West College Avenue Project Number: [none] Reported: State College PA, 16801 Collector: CLIENT 12/20/13 09:45

Project Manager: Orion Cook Number of Containers: 23

Client Sample ID: MW-8 **Date/Time Sampled:** 12/11/13 10:40

> 3L12098-07 (Water/Grab) Laboratory Sample ID:

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
Volatile Organic Compounds by EPA	Method 8260B							
1,3,5-Trimethylbenzene	<1.00		1.00	ug/l	12/14/13 03:38	EPA 8260B	wlm	
1,2,4-Trimethylbenzene	<1.00		1.00	ug/l	12/14/13 03:38	EPA 8260B	wlm	
Benzene	<1.00		1.00	ug/l	12/14/13 03:38	EPA 8260B	wlm	
Toluene	<1.00		1.00	ug/l	12/14/13 03:38	EPA 8260B	wlm	
Ethylbenzene	<1.00		1.00	ug/l	12/14/13 03:38	EPA 8260B	wlm	
Xylenes (total)	< 2.00		2.00	ug/l	12/14/13 03:38	EPA 8260B	wlm	
Isopropylbenzene	<1.00		1.00	ug/l	12/14/13 03:38	EPA 8260B	wlm	
Methyl tert-butyl ether	<1.00		1.00	ug/l	12/14/13 03:38	EPA 8260B	wlm	
Naphthalene	<1.00		1.00	ug/l	12/14/13 03:38	EPA 8260B	wlm	
Surrogate: 4-Bromofluorohenzene	Ģ	06.5 %	70	130	12/14/13 03:38	EPA 8260B	wlm	
Surrogate: 1,2-Dichloroethane-d4		107 %	70	130	12/14/13 03:38	EPA 8260B	wlm	
Surrogate: Fluorobenzene		103 %	70-	130	12/14/13 03:38	EPA 8260B	wlm	

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NELAP: PA 07-062, VA 460212

89 Kristi Road Pennsdale, PA 17756 (570) 494-6380 PaDEP: PA 41-04684

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State Certifications: MD 275, WV 364

Converse Project: ROSEMERGY'S

2738 West College Avenue Project Number: [none] Reported:
State College PA, 16801 Collector: CLIENT 12/20/13 09:45

Project Manager: Orion Cook Number of Containers: 23

Client Sample ID: MW-9 Date/Time Sampled: 12/11/13 10:12

Laboratory Sample ID: 3L12098-08 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
Volatile Organic Compounds by EPA	Method 8260R							
1,3,5-Trimethylbenzene	<1.00		1.00	ug/l	12/14/13 07:56	EPA 8260B	wlm	
1,2,4-Trimethylbenzene	<1.00		1.00	ug/l	12/14/13 07:56	EPA 8260B	wlm	
Benzene	16.9		1.00	ug/l	12/14/13 07:56	EPA 8260B	wlm	
Toluene	<1.00		1.00	ug/l	12/14/13 07:56	EPA 8260B	wlm	
Ethylbenzene	<1.00		1.00	ug/l	12/14/13 07:56	EPA 8260B	wlm	
Xylenes (total)	<2.00		2.00	ug/l	12/14/13 07:56	EPA 8260B	wlm	
Isopropylbenzene	<1.00		1.00	ug/l	12/14/13 07:56	EPA 8260B	wlm	
Methyl tert-butyl ether	2.94		1.00	ug/l	12/14/13 07:56	EPA 8260B	wlm	
Naphthalene	<1.00		1.00	ug/I	12/14/13 07:56	EPA 8260B	wlm	
Surrogate: 4-Bromofluorobenzene	9	4.1 %	70-	130	12/14/13 07:56	EPA 8260B	wlm	
Surrogate: 1,2-Dichloroethane-d4	8	7.8 %	70-	130	12/14/13 07:56	EPA 8260B	wlm	
Surrogate: Fluorobenzene		105 %	70-	130	12/14/13 07:56	EPA 8260B	wlm	



89 Kristi Road Pennsdale, PA 17756 (570) 494-6380 PaDEP: PA 41-04684



State Certifications: MD 275, WV 364

Project: ROSEMERGY'S Converse

2738 West College Avenue Project Number: [none] Reported: State College PA, 16801 Collector: CLIENT 12/20/13 09:45

Project Manager: Orion Cook Number of Containers: 23

Client Sample ID: MW-12 **Date/Time Sampled:** 12/11/13 14:15

> 3L12098-09 (Water/Grab) Laboratory Sample ID:

					Date / Time		*	-907 (10)
Analyte	Result	MDL	RL	Units	Analyzed	Method	Analyst	Note
Volatile Organic Compounds by EPA	Method 8260B							
1,3,5-Trimethylbenzene	<1.00		1.00	ug/l	12/14/13 08:23	EPA 8260B	wlm	
1,2,4-Trimethylbenzene	<1.00		1.00	ug/l	12/14/13 08:23	EPA 8260B	wlm	
Benzene	<1.00		1.00	ug/l	12/14/13 08:23	EPA 8260B	wlm	
Toluene	<1.00		1.00	ug/l	12/14/13 08:23	EPA 8260B	wlm	
Ethylbenzene	<1.00		1.00	ug/l	12/14/13 08:23	EPA 8260B	wlm	
Xylenes (total)	< 2.00		2.00	ug/l	12/14/13 08:23	EPA 8260B	wlm	
Isopropylbenzene	<1.00		1.00	ug/l	12/14/13 08:23	EPA 8260B	wlm	
Methyl tert-butyl ether	<1.00		1.00	ug/l	12/14/13 08:23	EPA 8260B	wlm	
Naphthalene	<1.00		1.00	ug/l	12/14/13 08:23	EPA 8260B	wlm	
Surrogate: 4-Bromofluorobenzene		94.4 %	70-	130	12/14/13 08:23	EPA 8260B	wlm	
Surrogate: 1,2-Dichloroethane-d4		88.9 %	70-	130	12/14/13 08:23	EPA 8260B	wlm	
Surrogate: Fluorobenzene		107 %	70-	130	12/14/13 08:23	EPA 8260B	wlm	

Fairway Laboratories, Inc.

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89 Kristi Road Pennsdale, PA 17756 (570) 494-6380 PaDEP: PA 41-04684 FAIRWAY LABORATORIES

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State Certifications: MD 275, WV 364

Converse Project: ROSEMERGY'S

2738 West College Avenue Project Number: [none] Reported:
State College PA, 16801 Collector: CLIENT 12/20/13 09:45

Project Manager: Orion Cook Number of Containers: 23

Client Sample ID: SW-8 Date/Time Sampled: 12/11/13 15:15

Laboratory Sample ID: 3L12098-10 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
	1.00×0P							
Volatile Organic Compounds by EPA	Method 8260B							
1,3,5-Trimethylbenzene	<1.00		1.00	ug/l	12/14/13 08:51	EPA 8260B	wlm	
1,2,4-Trimethylbenzene	<1.00		1.00	ug/l	12/14/13 08:51	EPA 8260B	wlm	
Benzene	<1.00		1.00	ug/l	12/14/13 08:51	EPA 8260B	wlm	
Toluene	<1.00		1.00	ug/l	12/14/13 08:51	EPA 8260B	wlm	
Ethylbenzene	<1.00		1.00	ug/l	12/14/13 08:51	EPA 8260B	wlm	
Xylenes (total)	< 2.00		2.00	ug/l	12/14/13 08:51	EPA 8260B	wlm	
Isopropylbenzene	<1.00		1.00	ug/l	12/14/13 08:51	EPA 8260B	wlm	
Methyl tert-butyl ether	<1.00		1.00	ug/l	12/14/13 08:51	EPA 8260B	wlm	
Naphthalene	<1.00		1.00	ug/l	12/14/13 08:51	EPA 8260B	wlm	
Surrogate: 4-Bromofluorobenzene		94.7 %	70-	130	12/14/13 08:51	EPA 8260B	wlm	
Surrogate: 1,2-Dichloroethane-d4		89.5 %	70-	130	12/14/13 08:51	EPA 8260B	wlm	
Surrogate: Fluorobenzene		109 %	70-	130	12/14/13 08:51	EPA 8260B	wlm	



NELAP: PA 07-062, VA 460212

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State Certifications: MD 275, WV 364

Converse Project: ROSEMERGY'S

2738 West College Avenue Project Number: [none] Reported:
State College PA, 16801 Collector: CLIENT 12/20/13 09:45

Project Manager: Orion Cook Number of Containers: 23

Client Sample ID: SW-12 Date/Time Sampled: 12/11/13 15:05

Laboratory Sample ID: 3L12098-11 (Water/Grab)

Result	MDL	RL	**	Date / Time			
√ ×I × × 1 00×0D			Units	Analyzed	Method	Λnalyst	Note
1cthod 8260B							
<1.00		1.00	ug/l	12/14/13 09:48	EPA 8260B	wlm	
<1.00		1.00	ug/l	12/14/13 09:48	EPA 8260B	wlm	
<1.00		1.00	ug/l	12/14/13 09:48	EPA 8260B	wlm	
<1.00		1.00	ug/l	12/14/13 09:48	EPA 8260B	wlm	
<1.00		1.00	ug/l	12/14/13 09:48	EPA 8260B	wlm	
< 2.00		2.00	ug/l	12/14/13 09:48	EPA 8260B	wlm	
<1.00		1.00	ug/l	12/14/13 09:48	EPA 8260B	wlm	
<1.00		1.00	ug/l	12/14/13 09:48	EPA 8260B	wlm	
<1.00		1.00	ug/l	12/14/13 09:48	EPA 8260B	wlm	
	97.1 %	70-	130	12/14/13 09:48	EPA 8260B	wlm	
	103 %	70-	130	12/14/13 09:48	EPA 8260B	wlm	
	108 %	70-	130	12/14/13 09:48	FP4 8260B	wlm	
	<1.00 <1.00 <1.00 <1.00 <2.00 <1.00 <1.00	<1.00 <1.00 <1.00 <1.00 <2.00 <1.00 <1.00 <1.00	<1.00 1.00 <1.00 1.00 1.00 <1.00 1.00 <1.00 1.00	<1.00	<1.00	<1.00	<1.00



Converse

# 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) 494-6380 PaDEP: PA 41-04684



Project: ROSEMERGY'S

State Certifications: MD 275, WV 364

2738 West College Avenue Project Number: [none] Reported:

State College PA, 16801 Collector: CLIENT 12/20/13 09:45

Project Manager: Orion Cook Number of Containers: 23

Client Sample ID: TB Date/Time Sampled: 12/11/13 00:00

Laboratory Sample ID: 3L12098-12 (Water/Trip Blank)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
Volatile Organic Compounds by EPA	Method 8260B							
1,3,5-Trimethylbenzene	<1.00		1.00	ug/l	12/14/13 03:00	EPA 8260B	wlm	
1,2,4-Trimethylbenzene	<1.00		1.00	ug/l	12/14/13 03:00	EPA 8260B	wlm	
Benzene	<1.00		1.00	ug/l	12/14/13 03:00	EPA 8260B	wlm	
Toluene	<1.00		1.00	ug/l	12/14/13 03:00	EPA 8260B	wlm	
Ethylbenzene	<1.00		1.00	ug/l	12/14/13 03:00	EPA 8260B	wlm	
Xylenes (total)	< 2.00		2.00	ug/l	12/14/13 03:00	EPA 8260B	wlm	
Isopropylbenzene	<1.00		1.00	ug/l	12/14/13 03:00	EPA 8260B	wlm	
Methyl tert-butyl ether	<1.00		1.00	ug/l	12/14/13 03:00	EPA 8260B	wlm	
Naphthalene	<1.00		1.00	ug/l	12/14/13 03:00	ЕРЛ 8260В	wlm	
Surrogate: 4-Bromofluorobenzene	Ģ	96.8 %	70-	130	12/14/13 03:00	EPA 8260B	wlm	
Surrogate: 1,2-Dichloroethane-d4		104 %	70-	130	12/14/13 03:00	EPA 8260B	wlm	
Surrogate: Fluorobenzene		102 %	70-	130	12/14/13 03:00	EPA 8260B	wlm	



NELAP: PA 07-062, VA 460212

89 Kristi Road Pennsdale, PA 17756 (570) 494-6380 PaDEP: PA 41-04684



State Certifications: MD 275, WV 364

Converse Project: ROSEMERGY'S

2738 West College Avenue Project Number: [none] Reported:
State College PA, 16801 Collector: CLIENT 12/20/13 09:45

Project Manager: Orion Cook Number of Containers: 23

Client Sample ID: MW-1M Date/Time Sampled: 12/11/13 13:40

Laboratory Sample ID: 3L12098-13 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
Volatile Organic Compounds by EPA	Method 8260B							
1,3,5-Trimethylbenzene	625		20.0	ug/l	12/17/13 11:34	EPA 8260B	mte	
1,2,4-Trimethylbenzene	2050		20.0	ug/l	12/17/13 11:34	EPA 8260B	mte	
Benzene	7610		200	ug/l	12/18/13 23:22	EPA 8260B	mte	
Toluene	10000		200	ug/l	12/18/13 23:22	EPA 8260B	mte	
Ethylbenzene	2350		20.0	ug/l	12/17/13 11:34	EPA 8260B	mte	
Xylenes (total)	5390		400	ug/l	12/18/13 23:22	EPA 8260B	mtc	
Isopropylbenzene	386		20.0	ug/l	12/17/13 11:34	EPA 8260B	mte	
Methyl tert-butyl ether	166		20.0	ug/l	12/17/13 11:34	EPA 8260B	mte	
Naphthalene	450		20.0	ug/l	12/17/13 11:34	EPA 8260B	mte	
Surrogate: 4-Bromofluorobenzene		107 %	70-	130	12/17/13 11:34	EPA 8260B	mte	
Surrogate: 1,2-Dichloroethane-d4		108 %	70-	130	12/17/13 11:34	EPA 8260B	mte	
Surrogate: Fluorobenzene		90.2 %	70-	130	12/17/13 11:34	EPA 8260B	mte	

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89 Kristi Road Pennsdale, PA 17756 (570) 494-6380 PaDEP: PA 41-04684



State Certifications: MD 275, WV 364

Converse Project: ROSEMERGY'S

2738 West College Avenue Project Number: [none] Reported:

State College PA, 16801 Collector: CLIENT 12/20/13 09:45

Project Manager: Orion Cook Number of Containers: 23

#### Notes

2b The spike recovery was outside acceptance limits for the MS and/or MSD.

#### 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.

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.

MBAS, calculated as LAS, mol wt 320

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.

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

\* P indicates analysis performed by Fairway Laboratories, Inc. at the Pennsdale location. 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.

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.

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NELAP: PA 07-062, VA 460212

89 Kristi Road Pennsdale, PA 17756 (570) 494-6380

PaDEP: PA 41-04684



State Certifications: MD 275, WV 364

Project: ROSEMERGY'S Converse

Project Number: 2738 West College Avenue 11-17788-02 Reported: State College PA, 16801 Collector: OC 11/20/13 10:29

Project Manager: Orion Cook Number of Containers: 24

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Sample Type	Date Sampled	Date Received
MW-1R	3K11046-01	Water	Grab	11/08/13 13:48	11/11/13 14:45
MW-2	3K11046-02	Water	Grab	11/08/13 12:50	11/11/13 14:45
MW-3	3K11046-03	Water	Grab	11/08/13 12:25	11/11/13 14:45
MW-4	3K11046-04	Water	Grab	11/08/13 13:25	11/11/13 14:45
MW-5	3K11046-05	Water	Grab	11/08/13 11:55	11/11/13 14:45
MW-7	3K11046-06	Water	Grab	11/08/13 10:50	11/11/13 14:45
MW-8	3K11046-07	Water	Grab	11/08/13 10:00	11/11/13 14:45
MW-9	3K11046-08	Water	Grab	11/08/13 10:25	11/11/13 14:45
MW-12	3K11046-09	Water	Grab	11/08/13 11:35	11/11/13 14:45
MW-1M	3K11046-10	Water	Grab	11/08/13 13:50	11/11/13 14:45
OW-1	3K11046-11	Water	Grab	11/08/13 14:50	11/11/13 14:45
TB	3K11046-12	Water	Trip Blank	11/08/13 00:00	11/11/13 14:45

Fairway Laboratories, Inc.

Reviewed and Submitted by:

MAI

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

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.

Michael P. Tyler Laboratory Director



NELAP: PA 07-062, VA 460212

89 Kristi Road Pennsdale, PA 17756 (570) 494-6380

PaDEP: PA 41-04684



State Certifications: MD 275, WV 364

Converse Project: ROSEMERGY'S

 2738 West College Avenue
 Project Number:
 11-17788-02
 Reported:

 State College PA, 16801
 Collector:
 OC
 11/20/13 10:29

Project Manager: Orion Cook Number of Containers: 24

Client Sample ID: MW-1R Date/Time Sampled: 11/08/13 13:48

Laboratory Sample ID: 3K11046-01 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
Volatile Organic Compounds by EPA	Method 8260B							
1,3,5-Trimethylbenzene	310		250	ug/I	11/14/13 01:24	EPA 8260B	MTC	
1,2,4-Trimethylbenzene	978		250	ug/l	11/14/13 01:24	EPA 8260B	MTC	
Benzene	6410		250	ug/l	11/14/13 01:24	EPA 8260B	MTC	
Toluene	15700		250	ug/l	11/14/13 01:24	EPA 8260B	MTC	
Ethylbenzene	1540		250	ug/l	11/14/13 01:24	EPA 8260B	MTC	
Xylenes (total)	8980		500	ug/I	11/14/13 01:24	EPA 8260B	MTC	
Isopropylbenzene	111		100	ug/l	11/14/13 14:48	EPA 8260B	MTC	
Methyl tert-butyl ether	195		100	ug/l	11/14/13 14:48	EPA 8260B	MTC	
Naphthalene	265		100	ug/I	11/14/13 14:48	EPA 8260B	MTC	
Surrogate: 4-Bromofluorobenzene		101 %	70-	130	11/13/13 05:25	EPA 8260B	MTC	
Surrogate: 1,2-Dichloroethane-d4		97.0%	70-	130	11/13/13 05:25	EPA 8260B	MTC	
Surrogate: Fluorobenzene		86.7 %	70-	130	11/13/13 05:25	EPA 8260B	MTC	

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NELAP: PA 07-062, VA 460212

89 Kristi Road Pennsdale, PA 17756 (570) 494-6380

PaDEP: PA 41-04684



State Certifications: MD 275, WV 364

Converse Project: ROSEMERGY'S

 2738 West College Avenue
 Project Number:
 11-17788-02
 Reported:

 State College PA, 16801
 Collector:
 OC
 11/20/13 10:29

Project Manager: Orion Cook Number of Containers: 24

Client Sample ID: MW-2 Date/Time Sampled: 11/08/13 12:50

Laboratory Sample ID: 3K11046-02 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
Volatile Organic Compounds by EPA	Method 8260B							
1,3,5-Trimethylbenzene	406		50.0	ug/I	11/12/13 22:33	EPA 8260B	MTC	
1,2,4-Trimethylbenzene	1200		50.0	ug/l	11/12/13 22:33	EPA 8260B	MTC	
Benzene	273		50.0	ug/l	11/12/13 22:33	EPA 8260B	MTC	
Toluene	958		50.0	ug/I	11/12/13 22:33	EPA 8260B	MTC	
Ethylbenzene	828		50.0	ug/l	11/12/13 22:33	EPA 8260B	MTC	
Xylenes (total)	1380		100	ug/I	11/12/13 22:33	EPA 8260B	MTC	
Isopropylbenzene	227		50.0	ug/l	11/12/13 22:33	EPA 8260B	MTC	
Methyl tert-butyl ether	< 50.0		50.0	ug/l	11/12/13 22:33	EPA 8260B	MTC	
Naphthalene	240		50.0	ug/l	11/12/13 22:33	EPA 8260B	MTC	
Surrogate: 4-Bromofluorobenzene		98.0 %	70-	130	11/12/13 22:33	EPA 8260B	MTC	
Surrogate: 1,2-Dichloroethane-d4		97.6%	70-	130	11/12/13 22:33	EPA 8260B	MTC	
Surrogate: Fluorobenzene		91.0%	70-	130	11/12/13 22:33	EPA 8260B	MTC	

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NELAP: PA 07-062, VA 460212

89 Kristi Road Pennsdale, PA 17756 (570) 494-6380

PaDEP: PA 41-04684



State Certifications: MD 275, WV 364

Converse Project: ROSEMERGY'S

 2738 West College Avenue
 Project Number:
 11-17788-02
 Reported:

 State College PA, 16801
 Collector:
 OC
 11/20/13 10:29

Project Manager: Orion Cook Number of Containers: 24

Client Sample ID: MW-3 Date/Time Sampled: 11/08/13 12:25

Laboratory Sample ID: 3K11046-03 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
Volatile Organic Compounds by EPA	Method 8260B							
1,3,5-Trimethylbenzene	< 5.00		5.00	ug/I	11/14/13 00:46	EPA 8260B	mte	
1,2,4-Trimethylbenzene	5.15		5.00	ug/l	11/14/13 00:46	EPA 8260B	mte	
Benzene	91.0		5.00	ug/l	11/14/13 00:46	EPA 8260B	mtc	
Toluene	< 5.00		5.00	ug/l	11/14/13 00:46	EPA 8260B	mte	
Ethylbenzene	< 5.00		5.00	ug/l	11/14/13 00:46	EPA 8260B	mte	
Xylenes (total)	<10.0		10.0	ug/I	11/14/13 00:46	EPA 8260B	mte	
Isopropylbenzene	12.6		5.00	ug/l	11/14/13 00:46	EPA 8260B	mte	
Methyl tert-butyl ether	375		5.00	ug/l	11/14/13 00:46	EPA 8260B	mte	
Naphthalene	< 5.00		5.00	ug/l	11/14/13 00:46	EPA 8260B	mte	
Surrogate: 4-Bromofluorobenzene		95.0%	70-	130	11/14/13 00:46	EPA 8260B	mte	
Surrogate: 1,2-Dichloroethane-d4		93.4 %	70	130	11/14/13 00:46	EPA 8260B	mte	
Surrogate: Fluorobenzene		87.8 %	70-	130	11/14/13 00:46	EPA 8260B	mtc	

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NELAP: PA 07-062, VA 460212

89 Kristi Road Pennsdale, PA 17756 (570) 494-6380

PaDEP: PA 41-04684



State Certifications: MD 275, WV 364

Converse Project: ROSEMERGY'S

 2738 West College Avenue
 Project Number:
 11-17788-02
 Reported:

 State College PA, 16801
 Collector:
 OC
 11/20/13 10:29

Project Manager: Orion Cook Number of Containers: 24

Client Sample ID: MW-4 Date/Time Sampled: 11/08/13 13:25

Laboratory Sample ID: 3K11046-04 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
Volatile Organic Compounds by EPA	Method 8260B							
1,3,5-Trimethylbenzene	736		10.0	ug/l	11/13/13 00:25	EPA 8260B	MTC	
1,2,4-Trimethylbenzene	2000		100	ug/l	11/14/13 00:08	EPA 8260B	MTC	
Benzene	3040		100	ug/l	11/14/13 00:08	EPA 8260B	MTC	
Toluene	2860		100	ug/l	11/14/13 00:08	EPA 8260B	MTC	
Ethylbenzene	2290		100	ug/l	11/14/13 00:08	EPA 8260B	MTC	
Xylenes (total)	5540		200	ug/I	11/14/13 00:08	EPA 8260B	MTC	
Isopropylbenzene	433		10.0	ug/l	11/13/13 00:25	EPA 8260B	MTC	
Methyl tert-butyl ether	56.9		10.0	ug/l	11/13/13 00:25	EPA 8260B	MTC	
Naphthalene	604		10.0	ug/l	11/13/13 00:25	EPA 8260B	MTC	
Surrogate: 4-Bromofluorobenzene		98.3 %	70-	130	11/13/13 00:25	EPA 8260B	MTC	
Surrogate: 1,2-Dichloroethane-d4		95.9 %	70-	130	11/13/13 00:25	EPA 8260B	MTC	
Surrogate: Fluorobenzene		89.9 %	70-	130	11/13/13 00:25	EPA 8260B	MTC	

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NELAP: PA 07-062, VA 460212

89 Kristi Road Pennsdale, PA 17756 (570) 494-6380

PaDEP: PA 41-04684



State Certifications: MD 275, WV 364

Converse Project: ROSEMERGY'S

 2738 West College Avenue
 Project Number:
 11-17788-02
 Reported:

 State College PA, 16801
 Collector:
 OC
 11/20/13 10:29

Project Manager: Orion Cook Number of Containers: 24

Client Sample ID: MW-5 Date/Time Sampled: 11/08/13 11:55

Laboratory Sample ID: 3K11046-05 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
Volatile Organic Compounds by EPA	Method 8260B							
1,3,5-Trimethylbenzene	<10.0		10.0	ug/I	11/13/13 01:03	EPA 8260B	MTC	
1,2,4-Trimethylbenzene	13.6		10.0	ug/l	11/13/13 01:03	EPA 8260B	MTC	
Benzene	89.5		10.0	ug/l	11/13/13 01:03	EPA 8260B	MTC	
Toluene	<10.0		10.0	ug/l	11/13/13 01:03	EPA 8260B	MTC	
Ethylbenzene	80.7		10.0	ug/l	11/13/13 01:03	EPA 8260B	MTC	
Xylenes (total)	<20.0		20.0	ug/I	11/13/13 01:03	EPA 8260B	MTC	
Isopropylbenzene	25.3		10.0	ug/l	11/13/13 01:03	EPA 8260B	MTC	
Methyl tert-butyl ether	12.7		10.0	ug/l	11/13/13 01:03	EPA 8260B	MTC	
Naphthalene	<10.0		10.0	ug/l	11/13/13 01:03	EPA 8260B	MTC	
Surrogate: 4-Bromofluorobenzene		94.6 %	70-	130	11/13/13 01:03	EPA 8260B	MTC	
Surrogate: 1,2-Dichloroethane-d4		96.8 %	70-	130	11/13/13 01:03	EPA 8260B	MTC	
Surrogate: Fluorobenzene		89.6 %	70-	130	11/13/13 01:03	EPA 8260B	MTC	

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NELAP: PA 07-062, VA 460212

89 Kristi Road Pennsdale, PA 17756 (570) 494-6380

PaDEP: PA 41-04684



State Certifications: MD 275, WV 364

Converse Project: ROSEMERGY'S

 2738 West College Avenue
 Project Number:
 11-17788-02
 Reported:

 State College PA, 16801
 Collector:
 OC
 11/20/13 10:29

Project Manager: Orion Cook Number of Containers: 24

Client Sample ID: MW-7 Date/Time Sampled: 11/08/13 10:50

Laboratory Sample ID: 3K11046-06 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
Volatile Organic Compounds by EPA	Method 8260B							
1,3,5-Trimethylbenzene	8.50		2.00	ug/l	11/14/13 17:55	EPA 8260B	MTC	
1,2,4-Trimethylbenzene	5.22		2.00	ug/l	11/14/13 17:55	EPA 8260B	MTC	
Benzene	7480		100	ug/I	11/16/13 02:22	EPA 8260B	MTC	
Toluene	62.7		2.00	ug/l	11/14/13 17:55	EPA 8260B	MTC	
Ethylbenzene	34.3		2.00	ug/l	11/14/13 17:55	EPA 8260B	MTC	
Xylenes (total)	31.8		4.00	ug/I	11/14/13 17:55	EPA 8260B	MTC	
Isopropylbenzene	43.0		2.00	ug/l	11/14/13 17:55	EPA 8260B	MTC	
Methyl tert-butyl ether	546		100	ug/l	11/16/13 02:22	EPA 8260B	MTC	
Naphthalene	43.7		2.00	ug/l	11/14/13 17:55	EPA 8260B	MTC	
Surrogate: 4-Bromofluorobenzene		98.6 %	70-	130	11/14/13 17:55	EPA 8260B	MTC	
Surrogate: 1,2-Dichloroethane-d4		97.1%	70-	130	11/14/13 17:55	EPA 8260B	MTC	
Surrogate: Fluorobenzene		85.8 %	70-	130	11/14/13 17:55	EPA 8260B	MTC	

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NELAP: PA 07-062, VA 460212

89 Kristi Road Pennsdale, PA 17756 (570) 494-6380

PaDEP: PA 41-04684



State Certifications: MD 275, WV 364

Converse Project: ROSEMERGY'S

 2738 West College Avenue
 Project Number:
 11-17788-02
 Reported:

 State College PA, 16801
 Collector:
 OC
 11/20/13 10:29

Project Manager: Orion Cook Number of Containers: 24

Client Sample ID: MW-8 Date/Time Sampled: 11/08/13 10:00

Laboratory Sample ID: 3K11046-07 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
Volatile Organic Compounds by EPA	Method 8260B							
1,3,5-Trimethylbenzene	< 2.00		2.00	ug/I	11/15/13 20:46	EPA 8260B	MTC	
1,2,4-Trimethylbenzene	< 2.00		2.00	ug/l	11/15/13 20:46	EPA 8260B	MTC	
Benzene	< 2.00		2.00	ug/l	11/15/13 20:46	EPA 8260B	MTC	
Toluene	< 2.00		2.00	ug/l	11/15/13 20:46	EPA 8260B	MTC	
Ethylbenzene	< 2.00		2.00	ug/l	11/15/13 20:46	EPA 8260B	MTC	
Xylenes (total)	<4.00		4.00	ug/I	11/15/13 20:46	EPA 8260B	MTC	
Isopropylbenzene	< 2.00		2.00	ug/l	11/15/13 20:46	EPA 8260B	MTC	
Methyl tert-butyl ether	2.70		2.00	ug/l	11/15/13 20:46	EPA 8260B	MTC	
Naphthalene	< 2.00		2.00	ug/l	11/15/13 20:46	EPA 8260B	MTC	
Surrogate: 4-Bromofluorobenzene	Ş	95.1%	70-	130	11/15/13 20:46	EPA 8260B	MTC	
Surrogate: 1,2-Dichloroethane-d4	8	89.8 %	70	130	11/15/13 20:46	EPA 8260B	MTC	
Surrogate: Fluorobenzene	8	33.5 %	70-	130	11/15/13 20:46	EPA 8260B	MTC	

Fairway Laboratories, Inc.

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NELAP: PA 07-062, VA 460212

89 Kristi Road Pennsdale, PA 17756 (570) 494-6380

PaDEP: PA 41-04684



State Certifications: MD 275, WV 364

Converse Project: ROSEMERGY'S

 2738 West College Avenue
 Project Number:
 11-17788-02
 Reported:

 State College PA, 16801
 Collector:
 OC
 11/20/13 10:29

Project Manager: Orion Cook Number of Containers: 24

Client Sample ID: MW-9 Date/Time Sampled: 11/08/13 10:25

Laboratory Sample ID: 3K11046-08 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
Volatile Organic Compounds by EPA	Method 8260B							
1,3,5-Trimethylbenzene	<2.00		2.00	ug/I	11/14/13 16:03	EPA 8260B	MTC	
1,2,4-Trimethylbenzene	< 2.00		2.00	ug/l	11/14/13 16:03	EPA 8260B	MTC	
Benzene	13.0		2.00	ug/l	11/14/13 16:03	EPA 8260B	MTC	
Toluene	<2.00		2.00	ug/l	11/14/13 16:03	EPA 8260B	MTC	
Ethylbenzene	< 2.00		2.00	ug/l	11/14/13 16:03	EPA 8260B	MTC	
Xylenes (total)	<4.00		4.00	ug/I	11/14/13 16:03	EPA 8260B	MTC	
Isopropylbenzene	<2.00		2.00	ug/l	11/14/13 16:03	EPA 8260B	MTC	
Methyl tert-butyl ether	8.00		2.00	ug/l	11/14/13 16:03	EPA 8260B	MTC	
Naphthalene	< 2.00		2.00	ug/l	11/14/13 16:03	EPA 8260B	MTC	
Surrogate: 4-Bromofluorobenzene		92.7 %	70-	130	11/14/13 16:03	EPA 8260B	MTC	
Surrogate: 1,2-Dichloroethane-d4		93.1 %	70	130	11/14/13 16:03	EPA 8260B	MTC	
Surrogate: Fluorobenzene		86.4 %	70-	130	11/14/13 16:03	EPA 8260B	MTC	

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NELAP: PA 07-062, VA 460212

89 Kristi Road Pennsdale, PA 17756 (570) 494-6380

PaDEP: PA 41-04684



State Certifications: MD 275, WV 364

Converse Project: ROSEMERGY'S

 2738 West College Avenue
 Project Number:
 11-17788-02
 Reported:

 State College PA, 16801
 Collector:
 OC
 11/20/13 10:29

Project Manager: Orion Cook Number of Containers: 24

Client Sample ID: MW-12 Date/Time Sampled: 11/08/13 11:35

Laboratory Sample ID: 3K11046-09 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
Volatile Organic Compounds by EPA	Method 8260B							
1,3,5-Trimethylbenzene	<2.00		2.00	ug/l	11/14/13 16:41	EPA 8260B	MTC	
1,2,4-Trimethylbenzene	< 2.00		2.00	ug/l	11/14/13 16:41	EPA 8260B	MTC	
Benzene	2.12		2.00	ug/l	11/14/13 16:41	EPA 8260B	MTC	
Toluene	6.64		2.00	ug/l	11/14/13 16:41	EPA 8260B	MTC	
Ethylbenzene	< 2.00		2.00	ug/l	11/14/13 16:41	EPA 8260B	MTC	
Xylenes (total)	4.10		4.00	ug/I	11/14/13 16:41	EPA 8260B	MTC	
Isopropylbenzene	< 2.00		2.00	ug/l	11/14/13 16:41	EPA 8260B	MTC	
Methyl tert-butyl ether	< 2.00		2.00	ug/l	11/14/13 16:41	EPA 8260B	MTC	
Naphthalene	< 2.00		2.00	ug/l	11/14/13 16:41	EPA 8260B	MTC	
Surrogate: 4-Bromofluorobenzene		93.6 %	70-	130	11/14/13 16:41	EPA 8260B	MTC	
Surrogate: 1,2-Dichloroethane-d4		96.7%	70-	130	11/14/13 16:41	EPA 8260B	MTC	
Surrogate: Fluorobenzene		86.0 %	70-	130	11/14/13 16:41	EPA 8260B	MTC	

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NELAP: PA 07-062, VA 460212

89 Kristi Road Pennsdale, PA 17756 (570) 494-6380

PaDEP: PA 41-04684



State Certifications: MD 275, WV 364

Converse Project: ROSEMERGY'S

 2738 West College Avenue
 Project Number:
 11-17788-02
 Reported:

 State College PA, 16801
 Collector:
 OC
 11/20/13 10:29

Project Manager: Orion Cook Number of Containers: 24

Client Sample ID: MW-1M Date/Time Sampled: 11/08/13 13:50

Laboratory Sample ID: 3K11046-10 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
Volatile Organic Compounds by EPA	Method 8260B							
1,3,5-Trimethylbenzene	646		10.0	ug/I	11/13/13 01:40	EPA 8260B	MTC	
1,2,4-Trimethylbenzene	1020		250	ug/l	11/14/13 02:02	EPA 8260B	MTC	
Benzene	6620		250	ug/l	11/14/13 02:02	EPA 8260B	MTC	
Toluene	16100		250	ug/l	11/14/13 02:02	EPA 8260B	MTC	
Ethylbenzene	1580		250	ug/l	11/14/13 02:02	EPA 8260B	MTC	
Xylenes (total)	9060		500	ug/I	11/14/13 02:02	EPA 8260B	MTC	
Isopropylbenzene	405		10.0	ug/l	11/13/13 01:40	EPA 8260B	MTC	
Methyl tert-butyl ether	269		10.0	ug/l	11/13/13 01:40	EPA 8260B	MTC	
Naphthalene	693		10.0	ug/l	11/13/13 01:40	EPA 8260B	MTC	
Surrogate: 4-Bromofluorobenzene		98.8 %	70-	130	11/13/13 01:40	EPA 8260B	MTC	
Surrogate: 1,2-Dichloroethane-d4		94.1 %	70-	130	11/13/13 01:40	EPA 8260B	MTC	
Surrogate: Fluorobenzene		91.2 %	70-	130	11/13/13 01:40	EPA 8260B	MTC	

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NELAP: PA 07-062, VA 460212

89 Kristi Road Pennsdale, PA 17756 (570) 494-6380

PaDEP: PA 41-04684



State Certifications: MD 275, WV 364

Converse Project: ROSEMERGY'S

 2738 West College Avenue
 Project Number:
 11-17788-02
 Reported:

 State College PA, 16801
 Collector:
 OC
 11/20/13 10:29

Project Manager: Orion Cook Number of Containers: 24

Client Sample ID: OW-1 Date/Time Sampled: 11/08/13 14:50

Laboratory Sample ID: 3K11046-11 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
Volatile Organic Compounds by EPA	Method 8260B							
1,3,5-Trimethylbenzene	< 2.00		2.00	ug/l	11/14/13 17:18	EPA 8260B	MTC	
1,2,4-Trimethylbenzene	< 2.00		2.00	ug/l	11/14/13 17:18	EPA 8260B	MTC	
Benzene	< 2.00		2.00	ug/l	11/14/13 17:18	EPA 8260B	MTC	
Toluene	< 2.00		2.00	ug/l	11/14/13 17:18	EPA 8260B	MTC	
Ethylbenzene	< 2.00		2.00	ug/l	11/14/13 17:18	EPA 8260B	MTC	
Xylenes (total)	<4.00		4.00	ug/I	11/14/13 17:18	EPA 8260B	MTC	
Isopropylbenzene	< 2.00		2.00	ug/l	11/14/13 17:18	EPA 8260B	MTC	
Methyl tert-butyl ether	< 2.00		2.00	ug/l	11/14/13 17:18	EPA 8260B	MTC	
Naphthalene	< 2.00		2.00	ug/l	11/14/13 17:18	EPA 8260B	MTC	
Surrogate: 4-Bromofluorobenzene		92.5 %	70-	130	11/14/13 17:18	EPA 8260B	MTC	
Surrogate: 1,2-Dichloroethane-d4		95.4 %	70-	130	11/14/13 17:18	EPA 8260B	MTC	
Surrogate: Fluorobenzene		86.1 %	70-	130	11/14/13 17:18	EPA 8260B	MTC	

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NELAP: PA 07-062, VA 460212

89 Kristi Road Pennsdale, PA 17756 (570) 494-6380

PaDEP: PA 41-04684



State Certifications: MD 275, WV 364

Converse Project: ROSEMERGY'S

 2738 West College Avenue
 Project Number:
 11-17788-02
 Reported:

 State College PA, 16801
 Collector:
 OC
 11/20/13 10:29

Project Manager: Orion Cook Number of Containers: 24

Client Sample ID: TB Date/Time Sampled: 11/08/13 00:00

Laboratory Sample ID: 3K11046-12 (Water/Trip Blank)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
Volatile Organic Compounds by EPA M	1ethod 8260B							
1,3,5-Trimethylbenzene	<1.00		1.00	ug/l	11/14/13 02:20	EPA 8260B	MTC	
1,2,4-Trimethylbenzene	<1.00		1.00	ug/l	11/14/13 02:20	EPA 8260B	MTC	
Benzene	<1.00		1.00	ug/l	11/14/13 02:20	EPA 8260B	MTC	
Toluene	<1.00		1.00	ug/l	11/14/13 02:20	EPA 8260B	MTC	
Ethylbenzene	<1.00		1.00	ug/l	11/14/13 02:20	EPA 8260B	MTC	
Xylenes (total)	< 2.00		2.00	ug/I	11/14/13 02:20	EPA 8260B	MTC	
Isopropylbenzene	<1.00		1.00	ug/l	11/14/13 02:20	EPA 8260B	MTC	
Methyl tert-butyl ether	<1.00		1.00	ug/l	11/14/13 02:20	EPA 8260B	MTC	
Naphthalene	<1.00		1.00	ug/l	11/14/13 02:20	EPA 8260B	MTC	
Surrogate: 4-Bromofluorobenzene		97.1 %	70-	130	11/14/13 02:20	EPA 8260B	MTC	
Surrogate: 1,2-Dichloroethane-d4		96.3 %	70-	130	11/14/13 02:20	EPA 8260B	MTC	
Surrogate: Fluorobenzene		88.9 %	70-	130	11/14/13 02:20	EPA 8260B	MTC	

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State College PA, 16801

## 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) 494-6380 PaDEP: PA 41-04684

Collector:

OC



11/20/13 10:29

State Certifications: MD 275, WV 364

Converse Project: ROSEMERGY'S

2738 West College Avenue Project Number: 11-17788-02 **Reported:** 

Project Manager: Orion Cook Number of Containers: 24

#### 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.

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.

MBAS, calculated as LAS, mol wt 320

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.

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

\* P indicates analysis performed by Fairway Laboratories, Inc. at the Pennsdale location. 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.

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.

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	GNATURE)		GNATURE)	K	GNATURE			14.65	10.87	9,40	3.96	42.3	12,48	7.82	7.36	6.73	28.2	10.89	DEPTH TO WATER (FEET) DATUM
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	ES D NO	тіме	1	Fairly love / loves			*										Short list	12008 Chlendul Gas	ANALYSIS COMMENTS

1/92

DISTRIBUTION: WHITE-WITH SHIPMENT TO LAB. CANARY-CONVERSE. PINK-RETAINED BY FIELD REP.

2738 West College Avenue State College, Pennsylvania 16801 814-234-3223 Fax 814-234-3255 **Converse Consultants** 

PROJECT NAME

Aformal

ADDRESS OWNER \_ SAMPLING PLACE

Kosemersy

lock

DATE \_

ATTENTION \_ PROJECT NO. WEATHER .

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-07

FIRM RESPONSIBLE FOR SAMPLING

Page 15 of 16

* Comments:	O Missing information:	1.3	* DEVIATION PRESENT:  ® No Ice	7		(					rojy Non- Pres		COC/Labels on bottles agree?	Custody Seals?	Received at Lab on ICE?	Date/Time of this check:	Receiver: (M	SOP FL10601-002
Ca S											H2SO4 HNO3			Intact?		1143 /5/15		Revision 16
ove T.B.		By Whom:	CLIENT CALLED: YES ()								Amoer Amber Poly H2SO4 Non- NaOH Pres.	umber and	* Correct containers for all the analysis requested?		Sample Temperature when arrived at Lab:	Sample Temperature:	Chain of Cu	
Marc W	DAIC			いまり	W				7MC	<b>て</b>	(Head Space?)		lysis requested? C		rived at Lab: La Accepta	"L'A Client:	Chain of Custody Receiving Document Page	Date: September 13, 2013
er N	Client Contact:	Will Resample Provided Information No December Proceed	CLIENT RESPONSE: Proceed with analysis;							ф *	Preserved Bacti	·	□ * Matrix:			Surga	Page of	53
	Client Contact:Date:	nation	CLIENT RESPONSE: Proceed with analysis; qualify data									Comments			* or In cool down process?	Lab # 3/4 1046	# 1	Page of
					in eye.							1			*	9	- v	

# **Chain of Custody Receiving Document**



NELAP: PA 07-062, VA 460212

89 Kristi Road Pennsdale, PA 17756 (570) 494-6380 PaDEP: PA 41-04684



www.fairwaylaboratories.com

ROSEMERGY'S Project: Converse

State Certifications: MD 275, WV 364

2738 West College Avenue Project Number: [none] Reported: State College PA, 16801 Collector: CLIENT 06/26/14 12:49

Project Manager: Orion Cook Number of Containers: 31

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Sample Type	Date Sampled	Date Received
MW-1R	4F13067-01	Water	Grab	06/12/14 09:56	06/13/14 14:35
MW-3	4F13067-02	Water	Grab	06/12/14 10:45	06/13/14 14:35
MW-4	4F13067-03	Water	Grab	06/12/14 10:57	06/13/14 14:35
MW-5	4F13067-04	Water	Grab	06/12/14 10:21	06/13/14 14:35
MW-7	4F13067-05	Water	Grab	06/12/14 09:35	06/13/14 14:35
MW-8	4F13067-06	Water	Grab	06/12/14 12:47	06/13/14 14:35
MW-9	4F13067-07	Water	Grab	06/12/14 13:15	06/13/14 14:35
MW-10	4F13067-08	Water	Grab	06/12/14 14:02	06/13/14 14:35
MW-11	4F13067-09	Water	Grab	06/12/14 14:20	06/13/14 14:35
MW-12	4F13067-10	Water	Grab	06/12/14 11:24	06/13/14 14:35
MW-13	4F13067-11	Water	Grab	06/12/14 12:25	06/13/14 14:35
MW-14	4F13067-12	Water	Grab	06/12/14 12:15	06/13/14 14:35
MW-15	4F13067-13	Water	Grab	06/12/14 11:45	06/13/14 14:35
MW-16	4F13067-14	Water	Grab	06/12/14 13:39	06/13/14 14:35
MW-16M	4F13067-15	Water	Grab	06/12/14 13:30	06/13/14 14:35
ТВ	4F13067-16	Water	Trip Blank	06/12/14 00:00	06/13/14 14:35

Fairway Laboratories, Inc.

Reviewed and Submitted by:

most

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

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.

Michael P. Tyler Laboratory Director



NELAP: PA 07-062, VA 460212

89 Kristi Road Pennsdale, PA 17756 (570) 494-6380 PaDEP: PA 41-04684



State Certifications: MD 275, WV 364

Converse Project: ROSEMERGY'S

2738 West College AvenueProject Number:[none]Reported:State College PA, 16801Collector:CLIENT06/26/14 12:49

Project Manager: Orion Cook Number of Containers: 31

Client Sample ID: MW-1R Date/Time Sampled: 06/12/14 09:56

Laboratory Sample ID: 4F13067-01 (Water/Grab)

					Date / Time			
Analyte	Result	MDL	RL	Units	Analyzed	Method	* Analyst	Note
Volatile Organic Compounds by EPA	Method 8260B							
1,3,5-Trimethylbenzene	365		50.0	ug/l	06/17/14 07:45	EPA 8260B	mte	
1,2,4-Trimethylbenzene	1300		50.0	ug/l	06/17/14 07:45	EPA 8260B	mte	
Benzene	7170		100	ug/l	06/17/14 20:54	EPA 8260B	mte	
Toluene	10200		100	ug/l	06/17/14 20:54	EPA 8260B	mte	
Ethylbenzene	1770		50.0	ug/l	06/17/14 07:45	EPA 8260B	mte	
Xylenes (total)	8640		100	ug/l	06/17/14 07:45	EPA 8260B	mtc	
Isopropylbenzene	213		50.0	ug/l	06/17/14 07:45	EPA 8260B	mte	
Methyl tert-butyl ether	82.0		50.0	ug/l	06/17/14 07:45	EPA 8260B	mte	
Naphthalene	254		50.0	ug/l	06/17/14 07:45	EPA 8260B	mte	
Surrogate: 4-Bromofluorobenzene		97.7 %	70-	130	06/17/14 07:45	EPA 8260B	mte	
Surrogate: 1,2-Dichloroethane-d4		103 %	70-	130	06/17/14 07:45	EPA 8260B	mte	
Surrogate: Fluorobenzene		98.2 %	70-	130	06/17/14 07:45	EPA 8260B	mte	

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NELAP: PA 07-062, VA 460212

89 Kristi Road Pennsdale, PA 17756 (570) 494-6380 PaDEP: PA 41-04684



www.fairwaylaboratories.com

State Certifications: MD 275, WV 364

Converse Project: ROSEMERGY'S

2738 West College Avenue Project Number: [none] Reported:
State College PA, 16801 Collector: CLIENT 06/26/14 12:49

Project Manager: Orion Cook Number of Containers: 31

Client Sample ID: MW-3 Date/Time Sampled: 06/12/14 10:45

Laboratory Sample ID: 4F13067-02 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
Volatile Organic Compounds by EPA	Mathad 9260D							
			10.0	/1	02/17/14 10:54	EDA 90Z0D		
1,3,5-Trimethylbenzene	<10.0		10.0	ug/l	06/17/14 10:54	EPA 8260B	mte	
1,2,4-Trimethylbenzene	38.5		10.0	ug/l	06/17/14 10:54	EPA 8260B	mte	
Benzene	788		10.0	ug/l	06/17/14 10:54	EPA 8260B	mte	
Toluene	62.8		10.0	ug/l	06/17/14 10:54	EPA 8260B	mte	
Ethylbenzene	56.8		10.0	ug/l	06/17/14 10:54	EPA 8260B	mte	
Xylenes (total)	122		20.0	ug/l	06/17/14 10:54	EPA 8260B	mtc	
Isopropylbenzene	44.4		10.0	ug/l	06/17/14 10:54	EPA 8260B	mte	
Methyl tert-butyl ether	1180		10.0	ug/l	06/17/14 10:54	EPA 8260B	mte	
Naphthalene	<10.0		10.0	ug/l	06/17/14 10:54	ЕРЛ 8260В	mte	
Surrogate: 4-Bromofluorobenzene		97.0 %	70-	130	06/17/14 10:54	EPA 8260B	mte	
Surrogate: 1,2-Dichloroethane-d4		103 %	70-	130	06/17/14 10:54	EPA 8260B	mte	
Surrogate: Fluorobenzene		98.3 %	70-	130	06/17/14 10:54	EPA 8260B	mtc	



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State Certifications: MD 275, WV 364

Converse Project: ROSEMERGY'S

2738 West College Avenue Project Number: [none] Reported:
State College PA, 16801 Collector: CLIENT 06/26/14 12:49

Project Manager: Orion Cook Number of Containers: 31

Client Sample ID: MW-4 Date/Time Sampled: 06/12/14 10:57

Laboratory Sample ID: 4F13067-03 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
Volatile Organic Compounds by EPA	Method 8260B							
1,3,5-Trimethylbenzene	358		20.0	ug/l	06/17/14 09:00	EPA 8260B	mte	
1,2,4-Trimethylbenzene	1250		20.0	ug/l	06/17/14 09:00	EPA 8260B	mte	
Вепzепе	301		20.0	ug/l	06/17/14 09:00	EPA 8260B	mte	
Toluene	2060		20.0	ug/l	06/17/14 09:00	EPA 8260B	mte	
Ethylbenzene	1050		20.0	ug/l	06/17/14 09:00	EPA 8260B	mte	
Xylenes (total)	4720		40.0	ug/l	06/17/14 09:00	EPA 8260B	mte	
Isopropylbenzene	178		20.0	ug/l	06/17/14 09:00	EPA 8260B	mte	
Methyl tert-butyl ether	<20.0		20.0	ug/l	06/17/14 09:00	EPA 8260B	mte	
Naphthalene	205		20.0	ug/l	06/17/14 09:00	EPA 8260B	mte	
Surrogate: 4-Bromofluorobenzene	ĺ	98.0 %	70-	130	06/17/14 09:00	EPA 8260B	mte	
Surrogate: 1,2-Dichloroethane-d4		102 %	70-	130	06/17/14 09:00	EPA 8260B	mte	
Surrogate: Fluorobenzene		98.6 %	70-	130	06/17/14 09:00	EPA 8260B	mte	



NELAP: PA 07-062, VA 460212

89 Kristi Road Pennsdale, PA 17756 (570) 494-6380

PaDEP: PA 41-04684



State Certifications: MD 275, WV 364

Project: ROSEMERGY'S Converse

2738 West College Avenue Project Number: [none] Reported: State College PA, 16801 Collector: CLIENT 06/26/14 12:49

Project Manager: Orion Cook Number of Containers: 31

Client Sample ID: MW-5 **Date/Time Sampled:** 06/12/14 10:21

> Laboratory Sample ID: 4F13067-04 (Water/Grab)

					Date / Time			
Analyte	Result	MDL	RL	Units	Analyzed	Method	* Analyst	Note
Volatile Organic Compounds by EPA	Method 8260B							
1,3,5-Trimethylbenzene	686		50.0	ug/l	06/21/14 03:50	EPA 8260B	wlm	
1,2,4-Trimethylbenzene	2270		50.0	ug/l	06/21/14 03:50	EPA 8260B	wlm	
Benzene	7300		2500	ug/l	06/21/14 03:12	EPA 8260B	wlm	
Toluene	8650		2500	ug/l	06/21/14 03:12	EPA 8260B	wlm	
Ethylbenzene	2590		50.0	ug/l	06/21/14 03:50	EPA 8260B	wlm	
Xylenes (total)	12800		100	ug/l	06/21/14 03:50	EPA 8260B	wlm	
Isopropylbenzene	322		50.0	ug/l	06/21/14 03:50	EPA 8260B	wlm	
Methyl tert-butyl ether	447		50.0	ug/l	06/21/14 03:50	EPA 8260B	wlm	
Naphthalene	502		50.0	ug/l	06/21/14 03:50	EPA 8260B	wlm	
Surrogate: 4-Bromofluorobenzene		111 %	70-	130	06/19/14 18:56	EPA 8260B	wlm	
Surrogate: 1,2-Dichloroethane-d4		93.3 %	70-	130	06/19/14 18:56	EPA 8260B	wlm	
Surrogate: Fluorobenzene		90.0 %	70-	130	06/19/14 18:56	EPA 8260B	wlm	



89 Kristi Road Pennsdale, PA 17756 (570) 494-6380

PaDEP: PA 41-04684



State Certifications: MD 275, WV 364

Project: ROSEMERGY'S Converse

2738 West College Avenue Project Number: [none] Reported: State College PA, 16801 Collector: CLIENT 06/26/14 12:49

Orion Cook Project Manager: Number of Containers: 31

Client Sample ID: MW-7 **Date/Time Sampled:** 06/12/14 09:35

> Laboratory Sample ID: 4F13067-05 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
Volatile Organic Compounds by EPA	Method 8260B							
1,3,5-Trimethylbenzene	<20.0		20.0	ug/l	06/17/14 09:39	EPA 8260B	mte	
1,2,4-Trimethylbenzene	40.4		20.0	ug/l	06/17/14 09:39	EPA 8260B	mte	
Веплепе	390		20.0	ug/l	06/17/14 09:39	EPA 8260B	mte	
Toluene	<20.0		20.0	ug/l	06/17/14 09:39	EPA 8260B	mte	
Ethylbenzene	<20.0		20.0	ug/l	06/17/14 09:39	EPA 8260B	mte	
Xylenes (total)	96.8		40.0	ug/l	06/17/14 09:39	EPA 8260B	mtc	
Isopropylbenzene	<20.0		20.0	ug/l	06/17/14 09:39	EPA 8260B	mtc	
Methyl tert-butyl ether	<20.0		20.0	ug/l	06/17/14 09:39	EPA 8260B	mte	
Naphthalene	<20.0		20.0	ug/l	06/17/14 09:39	EPA 8260B	mte	
Surrogate: 4-Bromofluorohenzene		98.5 %	70-	130	06/17/14 09:39	EPA 8260B	mte	
Surrogate: 1,2-Dichloroethane-d4		102 %	70-	130	06/17/14 09:39	EPA 8260B	mte	
Surrogate: Fluorobenzene		99.0 %	70-	130	06/17/14 09:39	EPA 8260B	mte	

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89 Kristi Road Pennsdale, PA 17756 (570) 494-6380

PaDEP: PA 41-04684



State Certifications: MD 275, WV 364

Project: ROSEMERGY'S Converse

2738 West College Avenue Project Number: [none] Reported: State College PA, 16801 Collector: CLIENT 06/26/14 12:49

Project Manager: Orion Cook Number of Containers: 31

Client Sample ID: MW-8 **Date/Time Sampled:** 06/12/14 12:47

> 4F13067-06 (Water/Grab) Laboratory Sample ID:

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
Volatile Organic Compounds by EPA	Method 8260B							
1,3,5-Trimethylbenzene	<1.00		1.00	ug/l	06/21/14 13:39	EPA 8260B	wlm	
1,2,4-Trimethylbenzene	<1.00		1.00	ug/l	06/21/14 13:39	EPA 8260B	wlm	
Benzene	<1.00		1.00	ug/l	06/21/14 13:39	EPA 8260B	wlm	
Toluene	<1.00		1.00	ug/l	06/21/14 13:39	EPA 8260B	wlm	
Ethylbenzene	<1.00		1.00	ug/l	06/21/14 13:39	EPA 8260B	wlm	
Xylenes (total)	< 2.00		2.00	ug/l	06/21/14 13:39	EPA 8260B	wlm	
Isopropylbenzene	<1.00		1.00	ug/l	06/21/14 13:39	EPA 8260B	wlm	
Methyl tert-butyl ether	<1.00		1.00	ug/l	06/21/14 13:39	EPA 8260B	wlm	
Naphthalene	<1.00		1.00	ug/l	06/21/14 13:39	EPA 8260B	wlm	
Surrogate: 4-Bromofluorobenzene		94.1 %	70-	130	06/21/14 13:39	EPA 8260B	wlm	
Surrogate: 1,2-Dichloroethane-d4		127 %	70-	130	06/21/14 13:39	EPA 8260B	wlm	
Surrogate: Fluorobenzene		107 %	70-	130	06/21/14 13:39	EPA 8260B	wlm	



NELAP: PA 07-062, VA 460212

89 Kristi Road Pennsdale, PA 17756 (570) 494-6380 PaDEP: PA 41-04684



State Certifications: MD 275, WV 364

Project: ROSEMERGY'S Converse

2738 West College Avenue Project Number: [none] Reported: State College PA, 16801 Collector: CLIENT 06/26/14 12:49

Project Manager: Orion Cook Number of Containers: 31

Client Sample ID: MW-9 **Date/Time Sampled:** 06/12/14 13:15

> 4F13067-07 (Water/Grab) Laboratory Sample ID:

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
Volatile Organic Compounds by EPA	Method 8260B							
1,3,5-Trimethylbenzene	<1.00		1.00	ug/l	06/21/14 08:16	EPA 8260B	wlm	
1,2,4-Trimethylbenzene	<1.00		1.00	ug/l	06/21/14 08:16	EPA 8260B	wlm	
Benzene	58.3		1.00	ug/l	06/21/14 08:16	EPA 8260B	wlm	
Toluene	2.24		1.00	ug/l	06/21/14 08:16	EPA 8260B	wlm	
Ethylbenzene	1.96		1.00	ug/l	06/21/14 08:16	EPA 8260B	wlm	
Xylenes (total)	< 2.00		2.00	ug/l	06/21/14 08:16	EPA 8260B	wlm	
Isopropylbenzene	5.73		1.00	ug/l	06/21/14 08:16	EPA 8260B	wlm	
Methyl tert-butyl ether	5.88		1.00	ug/l	06/21/14 08:16	EPA 8260B	wlm	
Naphthalene	<1.00		1.00	ug/l	06/21/14 08:16	EPA 8260B	wlm	
Surrogate: 4-Bromofluorobenzene		99.1 %	70-	130	06/21/14 08:16	EPA 8260B	wlm	
Surrogate: 1,2-Dichloroethane-d4		111 %	70-	130	06/21/14 08:16	EPA 8260B	wlm	
Surrogate: Fluorobenzene		96.5 %	70-	130	06/21/14 08:16	EPA 8260B	wlm	



89 Kristi Road Pennsdale, PA 17756 (570) 494-6380 PaDEP: PA 41-04684



State Certifications: MD 275, WV 364

Project: ROSEMERGY'S Converse

2738 West College Avenue Project Number: [none] Reported: State College PA, 16801 Collector: CLIENT 06/26/14 12:49

Project Manager: Orion Cook Number of Containers: 31

Client Sample ID: MW-10 **Date/Time Sampled:** 06/12/14 14:02

> Laboratory Sample ID: 4F13067-08 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
Volatile Organic Compounds by EPA	Method 8260B							
1,3,5-Trimethylbenzene	<1.00		1.00	ug/l	06/21/14 10:29	EPA 8260B	wlm	
1,2,4-Trimethylbenzene	<1.00		1.00	ug/l	06/21/14 10:29	EPA 8260B	wlm	
Benzene	<1.00		1.00	ug/l	06/21/14 10:29	EPA 8260B	wlm	
Toluene	<1.00		1.00	ug/l	06/21/14 10:29	EPA 8260B	wlm	
Ethylbenzene	<1.00		1.00	ug/l	06/21/14 10:29	EPA 8260B	wlm	
Xylenes (total)	< 2.00		2.00	ug/l	06/21/14 10:29	EPA 8260B	wlm	
Isopropylbenzene	<1.00		1.00	ug/l	06/21/14 10:29	EPA 8260B	wlm	
Methyl tert-butyl ether	<1.00		1.00	ug/l	06/21/14 10:29	EPA 8260B	wlm	
Naphthalene	<1.00		1.00	ug/l	06/21/14 10:29	EPA 8260B	wlm	
Surrogate: 4-Bromofluorobenzene	į	93.5 %	70-	130	06/21/14 10:29	EPA 8260B	wlm	
Surrogate: 1,2-Dichloroethane-d4		121 %	70-	130	06/21/14 10:29	EPA 8260B	wlm	
Surrogate: Fluorobenzene	Í	97.7 %	70-	130	06/21/14 10:29	EPA 8260B	wlm	



NELAP: PA 07-062, VA 460212

89 Kristi Road Pennsdale, PA 17756 (570) 494-6380

PaDEP: PA 41-04684



State Certifications: MD 275, WV 364

Project: ROSEMERGY'S Converse

2738 West College Avenue Project Number: [none] Reported: State College PA, 16801 Collector: CLIENT 06/26/14 12:49

Orion Cook Project Manager: Number of Containers: 31

Client Sample ID: MW-11 **Date/Time Sampled:** 06/12/14 14:20

> 4F13067-09 (Water/Grab) Laboratory Sample ID:

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
Volatile Organic Compounds by EPA	Method 8260B							
1,3,5-Trimethylbenzene	<1.00		1.00	ug/l	06/21/14 11:07	EPA 8260B	wlm	
1,2,4-Trimethylbenzene	<1.00		1.00	ug/l	06/21/14 11:07	EPA 8260B	wlm	
Benzene	<1.00		1.00	ug/l	06/21/14 11:07	EPA 8260B	wlm	
Toluene	<1.00		1.00	ug/l	06/21/14 11:07	EPA 8260B	wlm	
Ethylbenzene	<1.00		1.00	ug/l	06/21/14 11:07	EPA 8260B	wlm	
Xylenes (total)	< 2.00		2.00	ug/l	06/21/14 11:07	EPA 8260B	wlm	
Isopropylbenzene	<1.00		1.00	ug/l	06/21/14 11:07	EPA 8260B	wlm	
Methyl tert-butyl ether	<1.00		1.00	ug/l	06/21/14 11:07	EPA 8260B	wlm	
Naphthalene	<1.00		1.00	ug/l	06/21/14 11:07	EPA 8260B	wlm	
Surrogate: 4-Bromofluorobenzene		90.9 %	70-	130	06/21/14 11:07	EPA 8260B	wlm	
Surrogate: 1,2-Dichloroethane-d4		125 %	70-	130	06/21/14 11:07	EPA 8260B	wlm	
Surrogate: Fluorobenzene		106 %	70-	130	06/21/14 11:07	EPA 8260B	wlm	



89 Kristi Road Pennsdale, PA 17756 (570) 494-6380

PaDEP: PA 41-04684



State Certifications: MD 275, WV 364

Project: ROSEMERGY'S Converse

2738 West College Avenue Project Number: [none] Reported: State College PA, 16801 Collector: CLIENT 06/26/14 12:49

Project Manager: Orion Cook Number of Containers: 31

Client Sample ID: MW-12 **Date/Time Sampled:** 06/12/14 11:24

> 4F13067-10 (Water/Grab) Laboratory Sample ID:

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
Volatile Organic Compounds by EPA	Method 8260B							
1,3,5-Trimethylbenzene	<1.00		1.00	ug/l	06/20/14 15:08	EPA 8260B	wlm	
1,2,4-Trimethylbenzene	<1.00		1.00	ug/l	06/20/14 15:08	EPA 8260B	wlm	
Вепzепе	1.43		1.00	ug/l	06/20/14 15:08	EPA 8260B	wlm	
Toluene	3.12		1.00	ug/l	06/20/14 15:08	EPA 8260B	wlm	
Ethylbenzene	1.48		1.00	ug/l	06/20/14 15:08	EPA 8260B	wlm	
Xylenes (total)	6.35		2.00	ug/l	06/20/14 15:08	EPA 8260B	wlm	
Isopropylbenzene	<1.00		1.00	ug/l	06/20/14 15:08	EPA 8260B	wlm	
Methyl tert-butyl ether	<1.00		1.00	ug/l	06/20/14 15:08	EPA 8260B	wlm	
Naphthalene	<1.00		1.00	ug/l	06/20/14 15:08	ЕРЛ 8260В	wlm	
Surrogate: 4-Bromofluorobenzene		95.6 %	70-	130	06/20/14 15:08	EPA 8260B	wlm	
Surrogate: 1,2-Dichloroethane-d4		117 %	70	130	06/20/14 15:08	EPA 8260B	wlm	
Surrogate: Fluorobenzene		105 %	70	130	06/20/14 15:08	EPA 8260B	wlm	



NELAP: PA 07-062, VA 460212

89 Kristi Road Pennsdale, PA 17756 (570) 494-6380 PaDEP: PA 41-04684



State Certifications: MD 275, WV 364

Converse Project: ROSEMERGY'S

2738 West College AvenueProject Number:[none]Reported:State College PA, 16801Collector:CLIENT06/26/14 12:49

Project Manager: Orion Cook Number of Containers: 31

Client Sample ID: MW-13 Date/Time Sampled: 06/12/14 12:25

Laboratory Sample ID: 4F13067-11 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
Volatile Organic Compounds by EPA	Method 8260B							
1,3,5-Trimethylbenzene	<1.00		1.00	ug/l	06/20/14 15:46	EPA 8260B	wlm	
1,2,4-Trimethylbenzene	<1.00		1.00	ug/l	06/20/14 15:46	EPA 8260B	wlm	
Benzene	<1.00		1.00	ug/l	06/20/14 15:46	EPA 8260B	wlm	
Toluene	102		10.0	ug/l	06/25/14 19:35	EPA 8260B	wlm	
Ethylbenzene	<1.00		1.00	ug/l	06/20/14 15:46	EPA 8260B	wlm	
Xylenes (total)	< 2.00		2.00	ug/l	06/20/14 15:46	EPA 8260B	wlm	
Isopropylbenzene	<1.00		1.00	ug/l	06/20/14 15:46	EPA 8260B	wlm	
Methyl tert-butyl ether	<1.00		1.00	ug/l	06/20/14 15:46	EPA 8260B	wlm	
Naphthalene	<1.00		1.00	ug/l	06/20/14 15:46	EPA 8260B	wlm	
Surrogate: 4-Bromofluorobenzene	Ç	3.7 %	70-	130	06/20/14 15:46	EPA 8260B	wlm	
Surrogate: 1,2-Dichloroethane-d4		112 %	70	130	06/20/14 15:46	EPA 8260B	wlm	
Surrogate: Fluorobenzene		103 %	70	130	06/20/14 15:46	EPA 8260B	wlm	

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Converse

# 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) 494-6380 PaDEP: PA 41-04684

Project:

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LABORATORIES

2738 West College Avenue Project Number: [none] Reported:

State Certifications: MD 275, WV 364

State College PA, 16801 Collector: CLIENT 06/26/14 12:49

Project Manager: Orion Cook Number of Containers: 31

Client Sample ID: MW-14 Date/Time Sampled: 06/12/14 12:15

Laboratory Sample ID: 4F13067-12 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
	7. F. C.							
Volatile Organic Compounds by EPA	Method 8260B							
1,3,5-Trimethylbenzene	<1.00		1.00	ug/l	06/20/14 16:26	EPA 8260B	wlm	
1,2,4-Trimethylbenzene	<1.00		1.00	ug/l	06/20/14 16:26	EPA 8260B	wlm	
Benzene	<1.00		1.00	ug/l	06/20/14 16:26	EPA 8260B	wlm	
Toluene	<1.00		1.00	ug/l	06/20/14 16:26	EPA 8260B	wlm	
Ethylbenzene	<1.00		1.00	ug/l	06/20/14 16:26	EPA 8260B	wlm	
Xylenes (total)	< 2.00		2.00	ug/l	06/20/14 16:26	EPA 8260B	wlm	
Isopropylbenzene	<1.00		1.00	ug/l	06/20/14 16:26	EPA 8260B	wlm	
Methyl tert-butyl ether	<1.00		1.00	ug/l	06/20/14 16:26	EPA 8260B	wlm	
Naphthalene	<1.00		1.00	ug/l	06/20/14 16:26	EPA 8260B	wlm	
Surrogate: 4-Bromofluorobenzene		91.1 %	70-	130	06/20/14 16:26	EPA 8260B	wlm	
Surrogate: 1,2-Dichloroethane-d4		117%	70-	130	06/20/14 16:26	EPA 8260B	wlm	
Surrogate: Fluorobenzene		105 %	70-	130	06/20/14 16:26	EPA 8260B	wlm	



89 Kristi Road Pennsdale, PA 17756 (570) 494-6380 PaDEP: PA 41-04684



State Certifications: MD 275, WV 364

Converse Project: ROSEMERGY'S

2738 West College Avenue Project Number: [none] Reported:
State College PA, 16801 Collector: CLIENT 06/26/14 12:49

Project Manager: Orion Cook Number of Containers: 31

Client Sample ID: MW-15 Date/Time Sampled: 06/12/14 11:45

Laboratory Sample ID: 4F13067-13 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
Timiyee	resart	V (100,000)						
Volatile Organic Compounds by EPA	Method 8260B							
1,3,5-Trimethylbenzene	<1.00		1.00	ug/l	06/20/14 17:04	EPA 8260B	wlm	
1,2,4-Trimethylbenzene	<1.00		1.00	ug/l	06/20/14 17:04	EPA 8260B	wlm	
Benzene	<1.00		1.00	ug/l	06/20/14 17:04	EPA 8260B	wlm	
Toluene	2.35		1.00	ug/l	06/20/14 17:04	EPA 8260B	wlm	
Ethylbenzene	<1.00		1.00	ug/l	06/20/14 17:04	EPA 8260B	wlm	
Xylenes (total)	2.91		2.00	ug/l	06/20/14 17:04	EPA 8260B	wlm	
Isopropylbenzene	<1.00		1.00	ug/l	06/20/14 17:04	EPA 8260B	wlm	
Methyl tert-butyl ether	<1.00		1.00	ug/l	06/20/14 17:04	EPA 8260B	wlm	
Naphthalene	<1.00		1.00	ug/l	06/20/14 17:04	EPA 8260B	wlm	
Surrogate: 4-Bromofluorobenzene		96.2 %	70-	130	06/20/14 17:04	EPA 8260B	wlm	
Surrogate: 1,2-Dichloroethane-d4		120 %	70-	130	06/20/14 17:04	EPA 8260B	wlm	
Surrogate: Fluorobenzene		104 %	70-	130	06/20/14 17:04	EPA 8260B	wlm	

Fairway Laboratories, Inc.

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89 Kristi Road Pennsdale, PA 17756 (570) 494-6380 PaDEP: PA 41-04684



State Certifications: MD 275, WV 364

Converse Project: ROSEMERGY'S

2738 West College Avenue Project Number: [none] Reported:
State College PA, 16801 Collector: CLIENT 06/26/14 12:49

Project Manager: Orion Cook Number of Containers: 31

Client Sample ID: MW-16 Date/Time Sampled: 06/12/14 13:39

Laboratory Sample ID: 4F13067-14 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
Volatile Organic Compounds by EPA	Method 8260B							
1,3,5-Trimethylbenzene	<1.00		1.00	ug/l	06/20/14 17:43	EPA 8260B	wlm	
1,2,4-Trimethylbenzene	<1.00		1.00	ug/l	06/20/14 17:43	EPA 8260B	wlm	
Benzene	<1.00		1.00	ug/l	06/20/14 17:43	EPA 8260B	wlm	
Toluene	<1.00		1.00	ug/l	06/20/14 17:43	EPA 8260B	wlm	
Ethylbenzene	<1.00		1.00	ug/l	06/20/14 17:43	EPA 8260B	wlm	
Xylenes (total)	<2.00		2.00	ug/l	06/20/14 17:43	EPA 8260B	wlm	
Isopropylbenzene	<1.00		1.00	ug/l	06/20/14 17:43	EPA 8260B	wlm	
Methyl tert-butyl ether	3.02		1.00	ug/l	06/20/14 17:43	EPA 8260B	wlm	
Naphthalene	<1.00		1.00	ug/I	06/20/14 17:43	ЕРЛ 8260В	wlm	
Surrogate: 4-Bromofluorobenzene	Ģ	02.1 %	70	130	06/20/14 17:43	EPA 8260B	wlm	
Surrogate: 1,2-Dichloroethane-d4		116 %	70	130	06/20/14 17:43	EPA 8260B	wlm	
Surrogate: Fluorobenzene	g	08.0 %	70-	130	06/20/14 17:43	EPA 8260B	wlm	



89 Kristi Road Pennsdale, PA 17756 (570) 494-6380 PaDEP: PA 41-04684



State Certifications: MD 275, WV 364

Project: ROSEMERGY'S Converse

2738 West College Avenue Project Number: [none] Reported: State College PA, 16801 Collector: CLIENT 06/26/14 12:49

Orion Cook Project Manager: Number of Containers: 31

Client Sample ID: MW-16M **Date/Time Sampled:** 06/12/14 13:30

> 4F13067-15 (Water/Grab) Laboratory Sample ID:

	£ \$.	3.657	***		Date / Time		*	2.7
Analyte	Result	MDL	RL	Units	Analyzed	Method	Analyst	Note
	1 00 / 0 P							
Volatile Organic Compounds by EPA	Method 8260B							
1,3,5-Trimethylbenzene	<1.00		1.00	ug/l	06/20/14 18:21	EPA 8260B	wlm	
1,2,4-Trimethylbenzene	<1.00		1.00	ug/l	06/20/14 18:21	EPA 8260B	wlm	
Benzene	<1.00		1.00	ug/l	06/20/14 18:21	EPA 8260B	wlm	
Toluene	<1.00		1.00	ug/l	06/20/14 18:21	EPA 8260B	wlm	
Ethylbenzene	<1.00		1.00	ug/l	06/20/14 18:21	EPA 8260B	wlm	
Xylenes (total)	<2.00		2.00	ug/l	06/20/14 18:21	EPA 8260B	wlm	
Isopropylbenzene	<1.00		1.00	ug/l	06/20/14 18:21	EPA 8260B	wlm	
Methyl tert-butyl ether	3.42		1.00	ug/l	06/20/14 18:21	EPA 8260B	wlm	
Naphthalene	<1.00		1.00	ug/l	06/20/14 18:21	EPA 8260B	wlm	
Surrogate: 4-Bromofluorobenzene	g	1.6 %	70-	130	06/20/14 18:21	EPA 8260B	wlm	
Surrogate: 1,2-Dichloroethane-d4		119 %	70-	130	06/20/14 18:21	EPA 8260B	wlm	
Surrogate: Fluorobenzene		105 %	70-	130	06/20/14 18:21	EPA 8260B	wlm	

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NELAP: PA 07-062, VA 460212

89 Kristi Road Pennsdale, PA 17756 (570) 494-6380 PaDEP: PA 41-04684



Converse Project: ROSEMERGY'S

State Certifications: MD 275, WV 364

2738 West College Avenue Project Number: [none] Reported:
State College PA, 16801 Collector: CLIENT 06/26/14 12:49

Project Manager: Orion Cook Number of Containers: 31

Client Sample ID: TB Date/Time Sampled: 06/12/14 00:00

Laboratory Sample ID: 4F13067-16 (Water/Trip Blank)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
Volatile Organic Compounds by EPA	Method 8260B							
1,3,5-Trimethylbenzene	<1.00		1.00	ug/l	06/20/14 12:37	EPA 8260B	wlm	
1,2,4-Trimethylbenzene	<1.00		1.00	ug/l	06/20/14 12:37	EPA 8260B	wlm	
Benzene	<1.00		1.00	ug/l	06/20/14 12:37	EPA 8260B	wlm	
Toluene	<1.00		1.00	ug/l	06/20/14 12:37	EPA 8260B	wlm	
Ethylbenzene	<1.00		1.00	ug/l	06/20/14 12:37	EPA 8260B	wlm	
Xylenes (total)	< 2.00		2.00	ug/l	06/20/14 12:37	EPA 8260B	wlm	
Isopropylbenzene	<1.00		1.00	ug/l	06/20/14 12:37	EPA 8260B	wlm	
Methyl tert-butyl ether	<1.00		1.00	ug/l	06/20/14 12:37	EPA 8260B	wlm	
Naphthalene	<1.00		1.00	ug/l	06/20/14 12:37	EPA 8260B	wlm	
Surrogate: 4-Bromofluorobenzene		90.8 %	70-	130	06/20/14 12:37	EPA 8260B	wlm	
Surrogate: 1,2-Dichloroethane-d4		112 %	70-	130	06/20/14 12:37	EPA 8260B	wlm	
Surrogate: Fluorobenzene		94.3 %	70-	130	06/20/14 12:37	EPA 8260B	wlm	

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89 Kristi Road Pennsdale, PA 17756 (570) 494-6380 PaDEP: PA 41-04684



State Certifications: MD 275, WV 364

Converse Project: ROSEMERGY'S

2738 West College Avenue Project Number: [none] Reported:

State College PA, 16801 Collector: CLIENT 06/26/14 12:49

Project Manager: Orion Cook Number of Containers: 31

#### **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.

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.

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.

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

\* P indicates analysis performed by Fairway Laboratories, Inc. at the Pennsdale location. 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.

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.

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Converse Consultants FIRM RESPONSIBLE FOR SAMPLING

2738 West College Avenue State College, Pennsylvania 16801 814-234-3223 Fax 814-234-3255

PROJECT NAME KOSINGIA

ATTENTION OBC OF DUS

PROJECT NO.

DATE 6/12/14

WEATHER INTERNATION, SO

ADDRESS Hawky, PA

OWNER

B 4 PROJECT NAME KOCKING SAMPLING PLACE ROSCIELLY ADDRESS MW- 16M RELINQUISHED BY (SIGNATURE) ₹ 55 E RELINQUISHED BY 9 ALLINOUISHED BY (SIGNATURE) STATION NO. OR SAMPLE IDENT Hawley PA ሤ (y TIME (SIGNATURE) ij DEPTH TO WATER 높 (FEET) DATUM SAMPLING, CHAIN OF CUSTODY AND ANALYSES RECORD FOR SOIL, GROUNDWATER AND AIR MONITORING PURGING METHOD Rue D E V 16/13/14 SAMPLE DEPTH (FT.) INTERVAL DATE PATE 6.5 S.S 3 AMOUNT PURGED TIME T ME TIME (GALS) Baller RECEIVED BY (SIGNATURE) RECEIVED BY (SIGNATURE) RECEIVED BY (SIGNATURE) 4 SAMPLING METHOD P118119 40 ML HCI CC FIELD REP SAC TOT **←** ν WEATHER Intermittent fain, SQ. ATTENTION OBC OF DWS PROJECT NO June CONTAINER DESCRIPTION Z RECEIVING LABORATORY ACCEPTED BY LIST SAMPLES MISSING/DAMAGED ALL SAMPLES REC'D. INTACT DATE RECEIVED 5411 8.8 9 рΗ 138 SPECIFIC 35 CONDUCTANCE (µ mohs/cm.) בינו TEMP, °C □ YES 2008 Unleuded ANALYSIS REQUEST Short List 2738 West College Avenue State College, Pennsylvania 16801 814-234-3223 Fax 814-234-3255 **Converse Consultants** FIRM RESPONSIBLE FOR SAMPLING COMMENTS bas

1/92

DISTRIBUTION: WHITE-WITH SHIPMENT TO LAB. CANARY-CONVERSE PINK-TO OWNER. GOLDENBOO-RETAINED BY FIELD REP

Page 21 of 21

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*	* or In cool down process?		* Sample Temperature when arrived at Lab: 0. ? Acceptab	Lab: <u>O</u>	rived at	when ar	rature	Тетре	Sample	*	E ? 🗡	Received at Lab on ICE ? 🗡	Receiv
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NELAP: PA 07-062, VA 460212

89 Kristi Road Pennsdale, PA 17756 (570) 494-6380 PaDEP: PA 41-04684



www.fairwaylaboratories.com

State Certifications: MD 275, WV 364

Project: ROSEMERGY'S Converse

2738 West College Avenue Project Number: 11-17788-02 Reported: State College PA, 16801 Collector: CLIENT 05/12/14 12:01

Project Manager: Orion Cook Number of Containers:

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Sample Type	Date Sampled	Date Received
MW-13	4E01063-01	Water	Grab	04/29/14 14:12	05/01/14 15:15
MW-14	4E01063-02	Water	Grab	04/29/14 13:40	05/01/14 15:15
MW-15	4E01063-03	Water	Grab	04/29/14 13:05	05/01/14 15:15
MW-16	4E01063-04	Water	Grab	04/29/14 14:43	05/01/14 15:15
ТВ	4E01063-05	Water	Trip Blank	04/29/14 00:00	05/01/14 15:15

Fairway Laboratories, Inc.

Reviewed and Submitted by:

most

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Converse

# 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) 494-6380 PaDEP: PA 41-04684



Project: ROSEMERGY'S

State Certifications: MD 275, WV 364

2738 West College Avenue Project Number: 11-17788-02 Reported:

State College PA, 16801 Collector: CLIENT 05/12/14 12:01

Project Manager: Orion Cook Number of Containers: 9

Client Sample ID: MW-13 Date/Time Sampled: 04/29/14 14:12

Laboratory Sample ID: 4E01063-01 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
Valadia Ossania Cossana da la EDA	Madkad 93/0D							
Volatile Organic Compounds by EPA			1001004040	(98)	Company of the Compan		1994	
1,3,5-Trimethylbenzene	<1.00		1.00	ug/l	05/03/14 06:09	EPA 8260B	wlm	
1,2,4-Trimethylbenzene	<1.00		1.00	ug/l	05/03/14 06:09	EPA 8260B	wlm	
Benzene	<1.00		1.00	ug/l	05/03/14 06:09	EPA 8260B	wlm	
Toluene	66.1		1.00	ug/l	05/03/14 06:09	EPA 8260B	wlm	
Ethylbenzene	<1.00		1.00	ug/l	05/03/14 06:09	EPA 8260B	wlm	
Xylenes (total)	< 2.00		2.00	ug/l	05/03/14 06:09	EPA 8260B	wlm	
Isopropylbenzene	<1.00		1.00	ug/l	05/03/14 06:09	EPA 8260B	wlm	
Methyl tert-butyl ether	<1.00		1.00	ug/l	05/03/14 06:09	EPA 8260B	wlm	
Naphthalene	<1.00		1.00	ug/l	05/03/14 06:09	EPA 8260B	wlm	2e
Surrogate: 4-Bromofluorobenzene		97.7 %	70-	130	05/03/14 06:09	EPA 8260B	wlm	
Surrogate: 1,2-Dichloroethane-d4		114 %	70-	130	05/03/14 06:09	EPA 8260B	wlm	
Surrogate: Fluorobenzene		97.3 %	70-	130	05/03/14 06:09	EPA 8260B	wlm	



NELAP: PA 07-062, VA 460212

89 Kristi Road Pennsdale, PA 17756 (570) 494-6380 PaDEP: PA 41-04684



State Certifications: MD 275, WV 364

Converse Project: ROSEMERGY'S

2738 West College AvenueProject Number:11-17788-02Reported:State College PA, 16801Collector:CLIENT05/12/14 12:01

Project Manager: Orion Cook Number of Containers: 9

Client Sample ID: MW-14 Date/Time Sampled: 04/29/14 13:40

Laboratory Sample ID: 4E01063-02 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
Volatile Organic Compounds by EPA	Method 8260B							
1,3,5-Trimethylbenzene	<1.00		1.00	ug/l	05/03/14 07:25	EPA 8260B	wlm	
1,2,4-Trimethylbenzene	<1.00		1.00	ug/l	05/03/14 07:25	EPA 8260B	wlm	
Benzene	<1.00		1.00	ug/l	05/03/14 07:25	EPA 8260B	wlm	
Toluene	<1.00		1.00	ug/l	05/03/14 07:25	EPA 8260B	wlm	
Ethylbenzene	<1.00		1.00	ug/l	05/03/14 07:25	EPA 8260B	wlm	
Xylenes (total)	< 2.00		2.00	ug/l	05/03/14 07:25	EPA 8260B	wlm	
Isopropylbenzene	<1.00		1.00	ug/l	05/03/14 07:25	EPA 8260B	wlm	
Methyl tert-butyl ether	<1.00		1.00	ug/l	05/03/14 07:25	EPA 8260B	wlm	
Naphthalene	<1.00		1.00	ug/l	05/03/14 07:25	ЕРЛ 8260В	wlm	2e
Surrogate: 4-Bromofluorobenzene	Ģ	7.8 %	70-	130	05/03/14 07:25	EPA 8260B	wlm	
Surrogate: 1,2-Dichloroethane-d4		114 %	70-	130	05/03/14 07:25	EPA 8260B	wlm	
Surrogate: Fluorobenzene	g	7.0 %	70-	130	05/03/14 07:25	EPA 8260B	wlm	



89 Kristi Road Pennsdale, PA 17756 (570) 494-6380

PaDEP: PA 41-04684



State Certifications: MD 275, WV 364

Project: ROSEMERGY'S Converse

2738 West College Avenue Project Number: 11-17788-02 Reported: State College PA, 16801 Collector: CLIENT 05/12/14 12:01

Project Manager: Orion Cook Number of Containers:

Client Sample ID: MW-15 **Date/Time Sampled:** 04/29/14 13:05

> 4E01063-03 (Water/Grab) Laboratory Sample ID:

		V.	***		Date / Time		*	2.7
Analyte	Result	MDL	RL	Units	Analyzed	Method	Analyst	Note
Volatile Organic Compounds by EPA	Mathad 9260B							
1,3,5-Trimethylbenzene	<1.00		1.00	ug/l	05/03/14 08:02	EPA 8260B	wlm	
1,2,4-Trimethylbenzene	<1.00		1.00	ug/l	05/03/14 08:02	EPA 8260B	wlm	
Benzene	<1.00		1.00	ug/l	05/03/14 08:02	EPA 8260B	wlm	
Toluene	<1.00		1.00	ug/l	05/03/14 08:02	EPA 8260B	wlm	
Ethylbenzene	<1.00		1.00	ug/l	05/03/14 08:02	EPA 8260B	wlm	
Xylenes (total)	< 2.00		2.00	ug/l	05/03/14 08:02	EPA 8260B	wlm	
Isopropylbenzene	<1.00		1.00	ug/l	05/03/14 08:02	EPA 8260B	wlm	
Methyl tert-butyl ether	<1.00		1.00	ug/l	05/03/14 08:02	EPA 8260B	wlm	
Naphthalene	<1.00		1.00	ug/l	05/03/14 08:02	EPA 8260B	wlm	2e
Surrogate: 4-Bromofluorobenzene		98.0 %	70-	130	05/03/14 08:02	EPA 8260B	wlm	
Surrogate: 1,2-Dichloroethane-d4		114 %	70-	130	05/03/14 08:02	EPA 8260B	wlm	
Surrogate: Fluorobenzene		96.7 %	70-	130	05/03/14 08:02	EPA 8260B	wlm	

Fairway Laboratories, Inc.

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89 Kristi Road Pennsdale, PA 17756 (570) 494-6380 PaDEP: PA 41-04684



State Certifications: MD 275, WV 364

Converse Project: ROSEMERGY'S

2738 West College Avenue Project Number: 11-17788-02 **Reported:**State College PA, 16801 Collector: CLIENT 05/12/14 12:01

Project Manager: Orion Cook Number of Containers: 9

Client Sample ID: MW-16 Date/Time Sampled: 04/29/14 14:43

Laboratory Sample ID: 4E01063-04 (Water/Grab)

	Date / Time Analyzed	* Analyst	Note
08:41 EPA 8260B	05/03/14 08:41	wlm	
08:41 EPA 8260B	05/03/14 08:41	wlm	
08:41 EPA 8260B	05/03/14 08:41	wlm	
08:41 EPA 8260B	05/03/14 08:41	wlm	
08:41 EPA 8260B	05/03/14 08:41	wlm	
08:41 EPA 8260B	05/03/14 08:41	wlm	
08:41 EPA 8260B	05/03/14 08:41	wlm	
08:41 EPA 8260B	05/03/14 08:41	wlm	
08:41 EPA 8260B	05/03/14 08:41	wlm	2e
08:41 EPA 8260B	05/03/14 08:41	wlm	
08:41 EPA 8260B	05/03/14 08:41	wlm	
08:41 EPA 8260B	05/03/14 08:41	wlm	



NELAP: PA 07-062, VA 460212

89 Kristi Road Pennsdale, PA 17756 (570) 494-6380 PaDEP: PA 41-04684



State Certifications: MD 275, WV 364

Converse Project: ROSEMERGY'S

2738 West College Avenue Project Number: 11-17788-02 **Reported:**State College PA, 16801 Collector: CLIENT 05/12/14 12:01

Project Manager: Orion Cook Number of Containers: 9

Client Sample ID: TB Date/Time Sampled: 04/29/14 00:00

Laboratory Sample ID: 4E01063-05 (Water/Trip Blank)

	D	) (DI	DI	TT.	Date / Time	7.F.A 1	*	31
Analyte	Result	MDL	RL	Units	Analyzed	Method	Analyst	Note
Volatile Organic Compounds by EPA	Method 8260B							
1,3,5-Trimethylbenzene	<1.00		1.00	ug/l	05/03/14 06:47	EPA 8260B	wlm	
1,2,4-Trimethylbenzene	<1.00		1.00	ug/l	05/03/14 06:47	EPA 8260B	wlm	
Benzene	<1.00		1.00	ug/l	05/03/14 06:47	EPA 8260B	wlm	
Toluene	<1.00		1.00	ug/l	05/03/14 06:47	EPA 8260B	wlm	
Ethylbenzene	<1.00		1.00	ug/l	05/03/14 06:47	EPA 8260B	wlm	
Xylenes (total)	< 2.00		2.00	ug/l	05/03/14 06:47	EPA 8260B	wlm	
Isopropylbenzene	<1.00		1.00	ug/l	05/03/14 06:47	EPA 8260B	wlm	
Methyl tert-butyl ether	<1.00		1.00	ug/l	05/03/14 06:47	EPA 8260B	wlm	
Naphthalene	<1.00		1.00	ug/l	05/03/14 06:47	EPA 8260B	wlm	2e
Surrogate: 4-Bromofluorobenzene		95.8 %	70-	130	05/03/14 06:47	EPA 8260B	wlm	
Surrogate: 1,2-Dichloroethane-d4		114 %	70-	130	05/03/14 06:47	EPA 8260B	wlm	
Surrogate: Fluorobenzene		97.0 %	70-	130	05/03/14 06:47	EPA 8260B	wlm	



Converse

#### 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) 494-6380 PaDEP: PA 41-04684

Project:

ROSEMERGY'S



State Certifications: MD 275, WV 364

2738 West College Avenue Project Number: 11-17788-02 Reported:

State College PA, 16801 Collector: CLIENT 05/12/14 12:01

Project Manager: Orion Cook Number of Containers: 9

#### Notes

2e CCV was outside the QC range. Data accepted based on additional batch QC.

#### 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.

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.

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.

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

\* P indicates analysis performed by Fairway Laboratories, Inc. at the Pennsdale location. 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.

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.

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Page 9 of 9



2738 West College Avenue

Converse

# 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) 494-6380 PaDEP: PA 41-04684



State Certifications: MD 275, WV 364

ROSEMERGY'S Project:

Project Number: 11-17788-02

OC

19

Reported: 03/19/14 09:55

State College PA, 16801 Collector: Project Manager: Orion Cook Number of Containers:

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Sample Type	Date Sampled	Date Received
MW-1R	4C10045-01	Water	Grab	03/07/14 16:20	03/10/14 15:30
MW-2	4C10045-02	Water	Grab	03/07/14 15:45	03/10/14 15:30
MW-5	4C10045-03	Water	Grab	03/07/14 16:40	03/10/14 15:30
MW-8	4C10045-04	Water	Grab	03/07/14 13:35	03/10/14 15:30
MW-9	4C10045-05	Water	Grab	03/07/14 13:55	03/10/14 15:30
MW-10	4C10045-06	Water	Grab	03/07/14 14:20	03/10/14 15:30
MW-11	4C10045-07	Water	Grab	03/07/14 14:40	03/10/14 15:30
MW-12	4C10045-08	Water	Grab	03/07/14 15:15	03/10/14 15:30
MW-1M	4C10045-09	Water	Grab	03/07/14 16:30	03/10/14 15:30
TB	4C10045-10	Water	Trip Blank	03/07/14 00:00	03/10/14 15:30

Fairway Laboratories, Inc.

Reviewed and Submitted by: most

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NELAP: PA 07-062, VA 460212

89 Kristi Road Pennsdale, PA 17756 (570) 494-6380

PaDEP: PA 41-04684



State Certifications: MD 275, WV 364

Project: ROSEMERGY'S Converse

2738 West College Avenue Project Number: 11-17788-02 Reported: State College PA, 16801 Collector: OC 03/19/14 09:55

Project Manager: Orion Cook Number of Containers: 19

Client Sample ID: MW-1R **Date/Time Sampled:** 03/07/14 16:20

> Laboratory Sample ID: 4C10045-01 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
Volatile Organic Compounds by EPA	Method 8260B							
1,3,5-Trimethylbenzene	618		100	ug/l	03/13/14 17:58	EPA 8260B	bag	
1,2,4-Trimethylbenzene	1900		100	ug/l	03/13/14 17:58	EPA 8260B	bag	
Benzene	7740		100	ug/l	03/13/14 17:58	EPA 8260B	bag	
Toluene	12900		200	ug/l	03/15/14 02:01	EPA 8260B	bag	
Ethylbenzene	2710		100	ug/l	03/13/14 17:58	EPA 8260B	bag	
Xylenes (total)	14000		200	ug/l	03/13/14 17:58	EPA 8260B	bag	
Isopropylbenzene	336		100	ug/l	03/13/14 17:58	EPA 8260B	bag	
Methyl tert-butyl ether	<100		100	ug/l	03/13/14 17:58	EPA 8260B	bag	
Naphthalene	194		100	ug/l	03/13/14 17:58	ЕРЛ 8260В	bag	
Surrogate: 4-Bromofluorobenzene		99.4 %	70-	130	03/13/14 17:58	EPA 8260B	bag	
Surrogate: 1,2-Dichloroethane-d4		98.1 %	70-	130	03/13/14 17:58	EPA 8260B	bag	
Surrogate: Fluorobenzene		99.8 %	70-	130	03/13/14 17:58	EPA 8260B	bag	



89 Kristi Road Pennsdale, PA 17756 (570) 494-6380 PaDEP: PA 41-04684



State Certifications: MD 275, WV 364

Project: ROSEMERGY'S Converse

2738 West College Avenue Project Number: 11-17788-02 Reported: State College PA, 16801 Collector: OC 03/19/14 09:55

Project Manager: Orion Cook Number of Containers: 19

Client Sample ID: MW-2 **Date/Time Sampled:** 03/07/14 15:45

> Laboratory Sample ID: 4C10045-02 (Water/Grab)

					Date / Time			
Analyte	Result	MDL	RL	Units	Analyzed	Method	Analyst	Note
Volatile Organic Compounds by EPA	Method 8260B							
1,3,5-Trimethylbenzene	255		10.0	ug/l	03/13/14 18:16	EPA 8260B	bag	
1,2,4-Trimethylbenzene	612		10.0	ug/l	03/13/14 18:16	EPA 8260B	bag	
Benzene	115		10.0	ug/l	03/13/14 18:16	EPA 8260B	bag	
Toluene	298		10.0	ug/l	03/13/14 18:16	EPA 8260B	bag	
Ethylbenzene	391		10.0	ug/l	03/13/14 18:16	EPA 8260B	bag	
Xylenes (total)	586		20.0	ug/l	03/13/14 18:16	EPA 8260B	bag	
Isopropylbenzene	153		10.0	ug/l	03/13/14 18:16	EPA 8260B	bag	
Methyl tert-butyl ether	<10.0		10.0	ug/l	03/13/14 18:16	EPA 8260B	bag	
Naphthalene	160		10.0	ug/l	03/13/14 18:16	EPA 8260B	bag	
Surrogate: 4-Bromofluorobenzene		99.2 %	70-	130	03/13/14 18:16	EPA 8260B	bag	
Surrogate: 1,2-Dichloroethane-d4		96.7 %	70-	130	03/13/14 18:16	EPA 8260B	bag	
Surrogate: Fluorobenzene		98.5 %	70-	130	03/13/14 18:16	EPA 8260B	bag	

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89 Kristi Road Pennsdale, PA 17756 (570) 494-6380 PaDEP: PA 41-04684 FAIRWAY LABORATORIES

www.fairwaylaboratories.com

State Certifications: MD 275, WV 364

Converse Project: ROSEMERGY'S

 2738 West College Avenue
 Project Number:
 11-17788-02
 Reported:

 State College PA, 16801
 Collector:
 OC
 03/19/14 09:55

Project Manager: Orion Cook Number of Containers: 19

Client Sample ID: MW-5 Date/Time Sampled: 03/07/14 16:40

Laboratory Sample ID: 4C10045-03 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
Volatile Organic Compounds by EPA	Method 8260B							
1,3,5-Trimethylbenzene	<2.00		2.00	ug/l	03/14/14 14:26	EPA 8260B	wlm	
1,2,4-Trimethylbenzene	< 2.00		2.00	ug/l	03/14/14 14:26	EPA 8260B	wlm	
Benzene	< 2.00		2.00	ug/l	03/14/14 14:26	EPA 8260B	wlm	
Toluene	<2.00		2.00	ug/l	03/14/14 14:26	EPA 8260B	wlm	
Ethylbenzene	<2.00		2.00	ug/l	03/14/14 14:26	EPA 8260B	wlm	
Xylenes (total)	<4.00		4.00	ug/l	03/14/14 14:26	EPA 8260B	wlm	
Isopropylbenzene	< 2.00		2.00	ug/l	03/14/14 14:26	EPA 8260B	wlm	
Methyl tert-butyl ether	< 2.00		2.00	ug/l	03/14/14 14:26	EPA 8260B	wlm	
Naphthalene	< 2.00		2.00	ug/l	03/14/14 14:26	ЕРЛ 8260В	wlm	
Surrogate: 4-Bromofluorobenzene		97.7 %	70-	130	03/14/14 14:26	EPA 8260B	wlm	
Surrogate: 1,2-Dichloroethane-d4	\$	96.1 %	70-	130	03/14/14 14:26	EPA 8260B	wlm	
Surrogate: Fluorobenzene		98.5 %	70-	130	03/14/14 14:26	EPA 8260B	wlm	



89 Kristi Road Pennsdale, PA 17756 (570) 494-6380 PaDEP: PA 41-04684



State Certifications: MD 275, WV 364

Converse Project: ROSEMERGY'S

2738 West College Avenue Project Number: 11-17788-02 **Reported:**State College PA, 16801 Collector: OC 03/19/14 09:55

Project Manager: Orion Cook Number of Containers: 19

Client Sample ID: MW-8 Date/Time Sampled: 03/07/14 13:35

Laboratory Sample ID: 4C10045-04 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
Volatile Organic Compounds by EPA	Method 8260B							
1,3,5-Trimethylbenzene	<1.00		1.00	ug/l	03/11/14 08:29	EPA 8260B	wlm	
1,2,4-Trimethylbenzene	<1.00		1.00	ug/l	03/11/14 08:29	EPA 8260B	wlm	
Benzene	<1.00		1.00	ug/l	03/11/14 08:29	EPA 8260B	wlm	
Toluene	<1.00		1.00	ug/l	03/11/14 08:29	EPA 8260B	wlm	
Ethylbenzene	<1.00		1.00	ug/l	03/11/14 08:29	EPA 8260B	wlm	
Xylenes (total)	< 2.00		2.00	ug/l	03/11/14 08:29	EPA 8260B	wlm	
Isopropylbenzene	<1.00		1.00	ug/l	03/11/14 08:29	EPA 8260B	wlm	
Methyl tert-butyl ether	<1.00		1.00	ug/l	03/11/14 08:29	EPA 8260B	wlm	
Naphthalene	<1.00		1.00	ug/l	03/11/14 08:29	EPA 8260B	wlm	
Surrogate: 4-Bromofluorobenzene		103 %	70-	130	03/11/14 08:29	EPA 8260B	wlm	
Surrogate: 1,2-Dichloroethane-d4		122 %	70-	130	03/11/14 08:29	EPA 8260B	wlm	
Surrogate: Fluorobenzene		109 %	70-	130	03/11/14 08:29	EPA 8260B	wlm	



NELAP: PA 07-062, VA 460212

89 Kristi Road Pennsdale, PA 17756 (570) 494-6380 PaDEP: PA 41-04684

-6380 41-04684

FAIRWAY LABORATORIES

www.fairwaylaboratories.com

State Certifications: MD 275, WV 364

Converse Project: ROSEMERGY'S

 2738 West College Avenue
 Project Number:
 11-17788-02
 Reported:

 State College PA, 16801
 Collector:
 OC
 03/19/14 09:55

Project Manager: Orion Cook Number of Containers: 19

Client Sample ID: MW-9 Date/Time Sampled: 03/07/14 13:55

Laboratory Sample ID: 4C10045-05 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
Volatile Organic Compounds by EPA	Method 8260B							
1,3,5-Trimethylbenzene	<1.00		1.00	ug/l	03/11/14 08:57	EPA 8260B	wlm	
1,2,4-Trimethylbenzene	<1.00		1.00	ug/l	03/11/14 08:57	EPA 8260B	wlm	
Benzene	96.1		1.00	ug/l	03/11/14 08:57	EPA 8260B	wlm	
Toluene	<1.00		1.00	ug/l	03/11/14 08:57	EPA 8260B	wlm	
Ethylbenzene	3.18		1.00	ug/l	03/11/14 08:57	EPA 8260B	wlm	
Xylenes (total)	< 2.00		2.00	ug/l	03/11/14 08:57	EPA 8260B	wlm	
Isopropylbenzene	5.48		1.00	ug/l	03/11/14 08:57	EPA 8260B	wlm	
Methyl tert-butyl ether	9.41		1.00	ug/l	03/11/14 08:57	EPA 8260B	wlm	
Naphthalene	<1.00		1.00	ug/l	03/11/14 08:57	EPA 8260B	wlm	
Surrogate: 4-Bromofluorobenzene		103 %	70-	130	03/11/14 08:57	EPA 8260B	wlm	
Surrogate: 1,2-Dichloroethane-d4		117 %	70-	130	03/11/14 08:57	EPA 8260B	wlm	
Surrogate: Fluorobenzene		106 %	70-	130	03/11/14 08:57	EPA 8260B	wlm	



89 Kristi Road Pennsdale, PA 17756 (570) 494-6380 PaDEP: PA 41-04684



State Certifications: MD 275, WV 364

Project: ROSEMERGY'S Converse

2738 West College Avenue Project Number: 11-17788-02 Reported: State College PA, 16801 Collector: OC 03/19/14 09:55

Project Manager: Orion Cook Number of Containers: 19

Client Sample ID: MW-10 **Date/Time Sampled:** 03/07/14 14:20

> Laboratory Sample ID: 4C10045-06 (Water/Grab)

70 23	a .		9250	1222112	Date / Time	PARAMENT NATE NATE	*	12/12
Analyte	Result	MDL	RL	Units	Analyzed	Method	Analyst	Note
Volatile Organic Compounds by EPA	Method 8260B							
1,3,5-Trimethylbenzene	<1.00		1.00	ug/l	03/11/14 09:25	EPA 8260B	wlm	
1,2,4-Trimethylbenzene	<1.00		1.00	ug/l	03/11/14 09:25	EPA 8260B	wlm	
Benzene	<1.00		1.00	ug/l	03/11/14 09:25	EPA 8260B	wlm	
Toluene	<1.00		1.00	ug/l	03/11/14 09:25	EPA 8260B	wlm	
Ethylbenzene	<1.00		1.00	ug/l	03/11/14 09:25	EPA 8260B	wlm	
Xylenes (total)	< 2.00		2.00	ug/l	03/11/14 09:25	EPA 8260B	wlm	
Isopropylbenzene	<1.00		1.00	ug/l	03/11/14 09:25	EPA 8260B	wlm	
Methyl tert-butyl ether	<1.00		1.00	ug/l	03/11/14 09:25	EPA 8260B	wlm	
Naphthalene	<1.00		1.00	ug/l	03/11/14 09:25	EPA 8260B	wlm	
Surrogate: 4-Bromofluorobenzene		102 %	70-	130	03/11/14 09:25	EPA 8260B	wlm	
Surrogate: 1,2-Dichloroethane-d4		120 %	70-	130	03/11/14 09:25	EPA 8260B	wlm	
Surrogate: Fluorobenzene		110 %	70-	130	03/11/14 09:25	EPA 8260B	wlm	



NELAP: PA 07-062, VA 460212

89 Kristi Road Pennsdale, PA 17756 (570) 494-6380 PaDEP: PA 41-04684



Converse Project: ROSEMERGY'S

State Certifications: MD 275, WV 364

 2738 West College Avenue
 Project Number:
 11-17788-02
 Reported:

 State College PA, 16801
 Collector:
 OC
 03/19/14 09:55

Project Manager: Orion Cook Number of Containers: 19

Client Sample ID: MW-11 Date/Time Sampled: 03/07/14 14:40

Laboratory Sample ID: 4C10045-07 (Water/Grab)

	6- S		****	Name of the	Date / Time		*	725.72
Analyte	Result	MDL	RL	Units	Analyzed	Method	Analyst	Note
Volatile Organic Compounds by EPA	Method 8260B							
1,3,5-Trimethylbenzene	<1.00		1.00	ug/l	03/11/14 09:53	EPA 8260B	wlm	
1,2,4-Trimethylbenzene	<1.00		1.00	ug/l	03/11/14 09:53	EPA 8260B	wlm	
Benzene	<1.00		1.00	ug/l	03/11/14 09:53	EPA 8260B	wlm	
Toluene	<1.00		1.00	ug/l	03/11/14 09:53	EPA 8260B	wlm	
Ethylbenzene	<1.00		1.00	ug/l	03/11/14 09:53	EPA 8260B	wlm	
Xylenes (total)	< 2.00		2.00	ug/l	03/11/14 09:53	EPA 8260B	wlm	
Isopropylbenzene	<1.00		1.00	ug/l	03/11/14 09:53	EPA 8260B	wlm	
Methyl tert-butyl ether	<1.00		1.00	ug/l	03/11/14 09:53	EPA 8260B	wlm	
Naphthalene	<1.00		1.00	ug/l	03/11/14 09:53	EPA 8260B	wlm	
Surrogate: 4-Bromofluorobenzene		104 %	70-	130	03/11/14 09:53	EPA 8260B	wlm	
Surrogate: 1,2-Dichloroethane-d4		119 %	70-	130	03/11/14 09:53	EPA 8260B	wlm	
Surrogate: Fluorobenzene		108 %	70-	130	03/11/14 09:53	EPA 8260B	wlm	

Fairway Laboratories, Inc.

l'airway 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.



89 Kristi Road Pennsdale, PA 17756 (570) 494-6380 PaDEP: PA 41-04684



State Certifications: MD 275, WV 364

Project: ROSEMERGY'S Converse

2738 West College Avenue Project Number: 11-17788-02 Reported: State College PA, 16801 Collector: OC 03/19/14 09:55

Project Manager: Orion Cook Number of Containers: 19

Client Sample ID: MW-12 **Date/Time Sampled:** 03/07/14 15:15

> Laboratory Sample ID: 4C10045-08 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
Volatile Organic Compounds by EPA	Method 8260B							
1,3,5-Trimethylbenzene	<1.00		1.00	ug/l	03/11/14 10:21	EPA 8260B	wlm	
1,2,4-Trimethylbenzene	<1.00		1.00	ug/l	03/11/14 10:21	EPA 8260B	wlm	
Benzene	<1.00		1.00	ug/l	03/11/14 10:21	EPA 8260B	wlm	
Toluene	<1.00		1.00	ug/l	03/11/14 10:21	EPA 8260B	wlm	
Ethylbenzene	<1.00		1.00	ug/l	03/11/14 10:21	EPA 8260B	wlm	
Xylenes (total)	< 2.00		2.00	ug/l	03/11/14 10:21	EPA 8260B	wlm	
Isopropylbenzene	<1.00		1.00	ug/l	03/11/14 10:21	EPA 8260B	wlm	
Methyl tert-butyl ether	<1.00		1.00	ug/l	03/11/14 10:21	EPA 8260B	wlm	
Naphthalene	<1.00		1.00	ug/l	03/11/14 10:21	EPA 8260B	wlm	
Surrogate: 4-Bromofluorobenzene		102 %	70-	130	03/11/14 10:21	EPA 8260B	wlm	
Surrogate: 1,2-Dichloroethane-d4		121 %	70-	130	03/11/14 10:21	EPA 8260B	wlm	
Surrogate: Fluorobenzene		111 %	70-	130	03/11/14 10:21	EPA 8260B	wlm	



NELAP: PA 07-062, VA 460212

89 Kristi Road Pennsdale, PA 17756 (570) 494-6380 PaDEP: PA 41-04684



State Certifications: MD 275, WV 364

Converse Project: ROSEMERGY'S

 2738 West College Avenue
 Project Number:
 11-17788-02
 Reported:

 State College PA, 16801
 Collector:
 OC
 03/19/14 09:55

Project Manager: Orion Cook Number of Containers: 19

Client Sample ID: MW-1M Date/Time Sampled: 03/07/14 16:30

Laboratory Sample ID: 4C10045-09 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
Volatile Organic Compounds by EPA	Method 8260B							
1,3,5-Trimethylbenzene	662		100	ug/l	03/14/14 07:38	EPA 8260B	bag	
1,2,4-Trimethylbenzene	2100		100	ug/l	03/14/14 07:38	EPA 8260B	bag	
Benzene	8210		100	ug/l	03/14/14 07:38	EPA 8260B	bag	
Toluene	14500		200	ug/l	03/15/14 02:38	EPA 8260B	bag	
Ethylbenzene	2760		100	ug/l	03/14/14 07:38	EPA 8260B	bag	
Xylenes (total)	14400		200	ug/l	03/14/14 07:38	EPA 8260B	bag	
Isopropylbenzene	364		100	ug/l	03/14/14 07:38	EPA 8260B	bag	
Methyl tert-butyl ether	<100		100	ug/l	03/14/14 07:38	EPA 8260B	bag	
Naphthalene	209		100	ug/l	03/14/14 07:38	EPA 8260B	bag	
Surrogate: 4-Bromofluorobenzene		103 %	70	130	03/14/14 07:38	EPA 8260B	bag	
Surrogate: 1,2-Dichloroethane-d4		99.0 %	70	130	03/14/14 07:38	EPA 8260B	bag	
Surrogate: Fluorobenzene		104 %	70	130	03/14/14 07:38	EPA 8260B	bag	

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NELAP: PA 07-062, VA 460212

89 Kristi Road Pennsdale, PA 17756 (570) 494-6380 PaDEP: PA 41-04684



State Certifications: MD 275, WV 364

Project: ROSEMERGY'S Converse

2738 West College Avenue Project Number: 11-17788-02 Reported: State College PA, 16801 Collector: OC 03/19/14 09:55

Project Manager: Orion Cook Number of Containers: 19

Client Sample ID: TB **Date/Time Sampled:** 03/07/14 00:00

> 4C10045-10 (Water/Trip Blank) Laboratory Sample ID:

					Date / Time		*	
Analyte	Result	MDL	RL	Units	Analyzed	Method	Analyst	Note
Volatile Organic Compounds by EPA	Method 8260B							
1,3,5-Trimethylbenzene	<1.00		1.00	ug/l	03/11/14 10:50	EPA 8260B	wlm	
1,2,4-Trimethylbenzene	<1.00		1.00	ug/l	03/11/14 10:50	EPA 8260B	wlm	
Benzene	<1.00		1.00	ug/l	03/11/14 10:50	EPA 8260B	wlm	
Toluene	<1.00		1.00	ug/l	03/11/14 10:50	EPA 8260B	wlm	
Ethylbenzene	<1.00		1.00	ug/l	03/11/14 10:50	EPA 8260B	wlm	
Xylenes (total)	< 2.00		2.00	ug/l	03/11/14 10:50	EPA 8260B	wlm	
Isopropylbenzene	<1.00		1.00	ug/l	03/11/14 10:50	EPA 8260B	wlm	
Methyl tert-butyl ether	<1.00		1.00	ug/l	03/11/14 10:50	EPA 8260B	wlm	
Naphthalene	<1.00		1.00	ug/I	03/11/14 10:50	EPA 8260B	wlm	
Surrogate: 4-Bromofluorobenzene		103 %	70-	130	03/11/14 10:50	EPA 8260B	wlm	
Surrogate: 1,2-Dichloroethane-d4		120 %	70-	130	03/11/14 10:50	EPA 8260B	wlm	
Surrogate: Fluorobenzene		110 %	70-	130	03/11/14 10:50	EPA 8260B	wlm	



#### 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) 494-6380 PaDEP: PA 41-04684



State Certifications: MD 275, WV 364

Converse Project: ROSEMERGY'S

2738 West College Avenue Project Number: 11-17788-02 Reported:

State College PA, 16801 Collector: OC 03/19/14 09:55

Project Manager: Orion Cook Number of Containers: 19

#### **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.

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.

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.

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

\* P indicates analysis performed by Fairway Laboratories, Inc. at the Pennsdale location. 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.

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 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.

こっていりて

PA

SAMPLING, CHAIN OF CUSTODY AND ANALYSES RECORD FOR SOIL, GROUNDWATER AND AIR MONITORING

OWNER LAND OF 7	DATE 3-7-14
ADDRESS	WEATHER P. Claudy 40
Hawley, MA	PROJECT NO. 11-12788 -02
PROJECT NAME	ATTENTION DUS & ORC

2738 West College Avenue State College, Pennsylvania 16801 814-234-3223 Fax 814-234-3255 FIRM RESPONSIBLE FOR SAMPLING

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DISTRIBUTION: WHITE-WITH SHIPMENT TO LAB. CANARY-CONVERSE, PINK-RETAINED BY FIELD REP.

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# Chain of Custody Receiving Document



NELAP: PA 07-062, VA 460212

89 Kristi Road Pennsdale, PA 17756 (570) 494-6380

PaDEP: PA 41-04684



www.fairwaylaboratories.com

ROSEMERGY'S Project: Converse

2738 West College Avenue Project Number: 11-17788-02 Reported:

State Certifications: MD 275, WV 364

State College PA, 16801 Collector: OC 02/18/14 10:21

Project Manager: Orion Cook Number of Containers:

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Sample Type	Date Sampled	Date Received
MW-10	4B07082-01	Water	Grab	02/04/14 15:09	02/07/14 15:10
MW-11	4B07082-02	Water	Grab	02/04/14 15:45	02/07/14 15:10
SW-8	4B07082-03	Water	Grab	02/04/14 16:20	02/07/14 15:10
SW-12	4B07082-04	Water	Grab	02/04/14 15:56	02/07/14 15:10
ТВ	4B07082-05	Water	Trip Blank	02/04/14 00:00	02/07/14 15:10

Fairway Laboratories, Inc.

MAT

Reviewed and Submitted by:

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



NELAP: PA 07-062, VA 460212

89 Kristi Road Pennsdale, PA 17756 (570) 494-6380 PaDEP: PA 41-04684



**FAIRWAY** 

LABORATORIES

State Certifications: MD 275, WV 364

Converse Project: ROSEMERGY'S

2738 West College Avenue Project Number: 11-17788-02 Reported:

State College PA, 16801 Collector: OC 02/18/14 10:21

Project Manager: Orion Cook Number of Containers: 9

Client Sample ID: MW-10 Date/Time Sampled: 02/04/14 15:09

Laboratory Sample ID: 4B07082-01 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
Volatile Organic Compounds by EPA	Method 8260B							
1,3,5-Trimethylbenzene	< 2.00		2.00	ug/l	02/10/14 18:53	EPA 8260B	mte	
1,2,4-Trimethylbenzene	< 2.00		2.00	ug/l	02/10/14 18:53	EPA 8260B	mte	
Benzene	< 0.24		0.24	ug/l	02/10/14 18:53	EPA 8260B	mte	2m
Toluene	< 2.00		2.00	ug/l	02/10/14 18:53	EPA 8260B	mte	
Ethylbenzene	< 2.00		2.00	ug/l	02/10/14 18:53	EPA 8260B	mte	
Xylenes (total)	<4.00		4.00	ug/l	02/10/14 18:53	EPA 8260B	mtc	
Isopropylbenzene	< 2.00		2.00	ug/l	02/10/14 18:53	EPA 8260B	mte	
Methyl tert-butyl ether	< 2.00		2.00	ug/l	02/10/14 18:53	EPA 8260B	mte	
Naphthalene	< 2.00		2.00	ug/l	02/10/14 18:53	EPA 8260B	mte	
Surrogate: 4-Bromofluorobenzene		93.1 %	70-	130	02/10/14 18:53	EPA 8260B	mte	
Surrogate: 1,2-Dichloroethane-d4		99.3 %	70-	130	02/10/14 18:53	EPA 8260B	mte	
Surrogate: Fluorobenzene		98.0 %	70-	130	02/10/14 18:53	EPA 8260B	mte	

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NELAP: PA 07-062, VA 460212

89 Kristi Road Pennsdale, PA 17756 (570) 494-6380 PaDEP: PA 41-04684



State Certifications: MD 275, WV 364

Converse Project: ROSEMERGY'S

 2738 West College Avenue
 Project Number:
 11-17788-02
 Reported:

 State College PA, 16801
 Collector:
 OC
 02/18/14 10:21

Project Manager: Orion Cook Number of Containers: 9

Client Sample ID: MW-11 Date/Time Sampled: 02/04/14 15:45

Laboratory Sample ID: 4B07082-02 (Water/Grab)

					Date / Time		Ou.	
Analyte	Result	MDL	RL	Units	Analyzed	Method	Λnalyst	Note
Volatile Organic Compounds by EPA	Method 8260B							
1,3,5-Trimethylbenzene	< 2.00		2.00	ug/l	02/10/14 19:30	EPA 8260B	mte	
1,2,4-Trimethylbenzene	< 2.00		2.00	ug/l	02/10/14 19:30	EPA 8260B	mte	
Benzene	0.30		0.24	ug/l	02/10/14 19:30	EPA 8260B	mte	2m
Toluene	<2.00		2.00	ug/l	02/10/14 19:30	EPA 8260B	mte	
Ethylbenzene	< 2.00		2.00	ug/l	02/10/14 19:30	EPA 8260B	mte	
Xylenes (total)	<4.00		4.00	ug/l	02/10/14 19:30	EPA 8260B	mtc	
Isopropylbenzene	< 2.00		2.00	ug/l	02/10/14 19:30	EPA 8260B	mte	
Methyl tert-butyl ether	< 2.00		2.00	ug/l	02/10/14 19:30	EPA 8260B	mte	
Naphthalene	< 2.00		2.00	ug/l	02/10/14 19:30	EPA 8260B	mte	
Surrogate: 4-Bromofluorobenzene		94.4 %	70-	130	02/10/14 19:30	EPA 8260B	mte	
Surrogate: 1,2-Dichloroethane-d4		103 %	70-	130	02/10/14 19:30	EPA 8260B	mte	
Surrogate: Fluorobenzene		97.6 %	70-	130	02/10/14 19:30	EPA 8260B	mte	

Fairway Laboratories, Inc.

l'airway 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.



NELAP: PA 07-062, VA 460212

89 Kristi Road Pennsdale, PA 17756 (570) 494-6380 PaDEP: PA 41-04684



State Certifications: MD 275, WV 364

Converse Project: ROSEMERGY'S

 2738 West College Avenue
 Project Number:
 11-17788-02
 Reported:

 State College PA, 16801
 Collector:
 OC
 02/18/14 10:21

Project Manager: Orion Cook Number of Containers: 9

Client Sample ID: SW-8 Date/Time Sampled: 02/04/14 16:20

Laboratory Sample ID: 4B07082-03 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
Volatile Organic Compounds by EPA	Method 8260B							
1,3,5-Trimethylbenzene	<1.00		1.00	ug/l	02/10/14 14:50	EPA 8260B	mte	
1,2,4-Trimethylbenzene	<1.00		1.00	ug/l	02/10/14 14:50	EPA 8260B	mte	
Benzene	<1.00		1.00	ug/l	02/10/14 14:50	EPA 8260B	mte	
Toluene	<1.00		1.00	ug/l	02/10/14 14:50	EPA 8260B	mte	
Ethylbenzene	<1.00		1.00	ug/l	02/10/14 14:50	EPA 8260B	mte	
Xylenes (total)	< 2.00		2.00	ug/l	02/10/14 14:50	EPA 8260B	mtc	
Isopropylbenzene	<1.00		1.00	ug/l	02/10/14 14:50	EPA 8260B	mte	
Methyl tert-butyl ether	<1.00		1.00	ug/l	02/10/14 14:50	EPA 8260B	mte	
Naphthalene	<1.00		1.00	ug/l	02/10/14 14:50	EPA 8260B	mte	
Surrogate: 4-Bromofluorobenzene	Ģ	04.4 %	70	130	02/10/14 14:50	EPA 8260B	mte	
Surrogate: 1,2-Dichloroethane-d4		105 %	70	130	02/10/14 14:50	EPA 8260B	mte	
Surrogate: Fluorobenzene		101 %	70	130	02/10/14 14:50	EPA 8260B	mte	

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NELAP: PA 07-062, VA 460212

89 Kristi Road Pennsdale, PA 17756 (570) 494-6380

PaDEP: PA 41-04684



State Certifications: MD 275, WV 364

Converse Project: ROSEMERGY'S

 2738 West College Avenue
 Project Number:
 11-17788-02
 Reported:

 State College PA, 16801
 Collector:
 OC
 02/18/14 10:21

Project Manager: Orion Cook Number of Containers: 9

Client Sample ID: SW-12 Date/Time Sampled: 02/04/14 15:56

Laboratory Sample ID: 4B07082-04 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
					7650			
Volatile Organic Compounds by EPA	Method 8260B							
1,3,5-Trimethylbenzene	<1.00		1.00	ug/l	02/10/14 15:27	EPA 8260B	mte	
1,2,4-Trimethylbenzene	<1.00		1.00	ug/l	02/10/14 15:27	EPA 8260B	mte	
Benzene	<1.00		1.00	ug/l	02/10/14 15:27	EPA 8260B	mte	
Toluene	<1.00		1.00	ug/l	02/10/14 15:27	EPA 8260B	mte	
Ethylbenzene	<1.00		1.00	ug/l	02/10/14 15:27	EPA 8260B	mte	
Xylenes (total)	< 2.00		2.00	ug/l	02/10/14 15:27	EPA 8260B	mtc	
Isopropylbenzene	<1.00		1.00	ug/l	02/10/14 15:27	EPA 8260B	mte	
Methyl tert-butyl ether	<1.00		1.00	ug/l	02/10/14 15:27	EPA 8260B	mte	
Naphthalene	<1.00		1.00	ug/l	02/10/14 15:27	EPA 8260B	mte	
Surrogate: 4-Bromofluorobenzene		95.2 %	70-	130	02/10/14 15:27	EPA 8260B	mte	
Surrogate: 1,2-Dichloroethane-d4		109 %	70-	130	02/10/14 15:27	EPA 8260B	mte	
Surrogate: Fluorobenzene		104 %	70-	130	02/10/14 15:27	EPA 8260B	mte	

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NELAP: PA 07-062, VA 460212

89 Kristi Road Pennsdale, PA 17756 (570) 494-6380 PaDEP: PA 41-04684



State Certifications: MD 275, WV 364

Project: ROSEMERGY'S Converse

2738 West College Avenue Project Number: 11-17788-02 Reported: State College PA, 16801 Collector: OC 02/18/14 10:21

Project Manager: Orion Cook Number of Containers:

Client Sample ID: TB **Date/Time Sampled:** 02/04/14 00:00

> 4B07082-05 (Water/Trip Blank) Laboratory Sample ID:

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
Volatile Organic Compounds by EPA	Method 8260B							
1,3,5-Trimethylbenzene	<1.00		1.00	ug/l	02/10/14 16:05	EPA 8260B	mte	
1,2,4-Trimethylbenzene	<1.00		1.00	ug/l	02/10/14 16:05	EPA 8260B	mte	
Benzene	<1.00		1.00	ug/l	02/10/14 16:05	EPA 8260B	mte	
Toluene	<1.00		1.00	ug/l	02/10/14 16:05	EPA 8260B	mte	
Ethylbenzene	<1.00		1.00	ug/l	02/10/14 16:05	EPA 8260B	mte	
Xylenes (total)	< 2.00		2.00	ug/l	02/10/14 16:05	EPA 8260B	mtc	
Isopropylbenzene	<1.00		1.00	ug/l	02/10/14 16:05	EPA 8260B	mte	
Methyl tert-butyl ether	<1.00		1.00	ug/l	02/10/14 16:05	EPA 8260B	mte	
Naphthalene	<1.00		1.00	ug/l	02/10/14 16:05	EPA 8260B	mte	
Surrogate: 4-Bromofluorobenzene		95.3 %	70-	130	02/10/14 16:05	EPA 8260B	mte	
Surrogate: 1,2-Dichloroethane-d4		107 %	70-	130	02/10/14 16:05	EPA 8260B	mte	
Surrogate: Fluorobenzene		102 %	70-	130	02/10/14 16:05	EPA 8260B	mte	

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



#### 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) 494-6380 PaDEP: PA 41-04684



State Certifications: MD 275, WV 364

Converse Project: ROSEMERGY'S

2738 West College Avenue Project Number: 11-17788-02 **Reported:**State College PA, 16801 Collector: OC 02/18/14 10:21

Project Manager: Orion Cook Number of Containers: 9

#### Notes

2m This analysis has been reported to the MDL; therefore it is an estimated value.

#### 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.

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.

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.

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

\* P indicates analysis performed by Fairway Laboratories, Inc. at the Pennsdale location. 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.

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

ADDRESS SAMPLING PLACE POSEMERS & Hawley 18 SAMPLING, CHAIN OF CUSTODY AND ANALYSES RECORD FOR SOIL, GROUNDWATER AND AIR MONITORING PA

SAMPLING, CHAIN OF CUSTODY AND ANALYSES RECORD FOR SOIL, GROUNDWATER AND AIR MONITORING PA

PACE 2-4-14

DATE 2-4-14 WEATHER SUMMY 2 FIRM RESPONSIBLE FOR SAMPLING
Converse Consultants

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ATTENTION DUS

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Fax 814-234-3255	State College, Pennsylvania 16801 814-234-3223	2738 West College Avenue

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This is a date sensitive document and may not be current after January 21, 2014.

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13	10.5		0.0/0.0										
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10-				0	1 	water a	at 15 to 18 <sup>t</sup>					—Sand
13-	14.3		4.0/5.0	ō								Screen
16 — 17 — 18 —	14.4.											
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纫	2738 State	Wes Col	st Colle llege, F	ge A1 A 16	TANTS venue 801			WE	ELL L	.OG		BORING NO.: MW-13
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0 — -	Sam	Blov	Rec		nscs	Dark brow	n SILT with	ı some gı	avel fill			Concrete
1-	ngg ni		الا جواري			Gray silty	CLAY with	brown m	ottles		···	— Bentonite
3-	13.1		4.0/5.0			moist 2 inche	s gray sand	stone col	oble			
7						Brown SII dry	_T with gray	and red	mottles			—Casing
5 - 6 - 7 - 8 - 9 - 10 - 10 - 10 - 10 - 10 - 10 - 10	13.2		5.0/5.0	0		Gray clay wet	ey SILT witl	n some fi	ne sand			——Sand ——Screen
11:-	13.3		5,0/5.0			dry	T with red		mottles			
15-16-17-18-	13.4		4:0/5:0	·O		wet						
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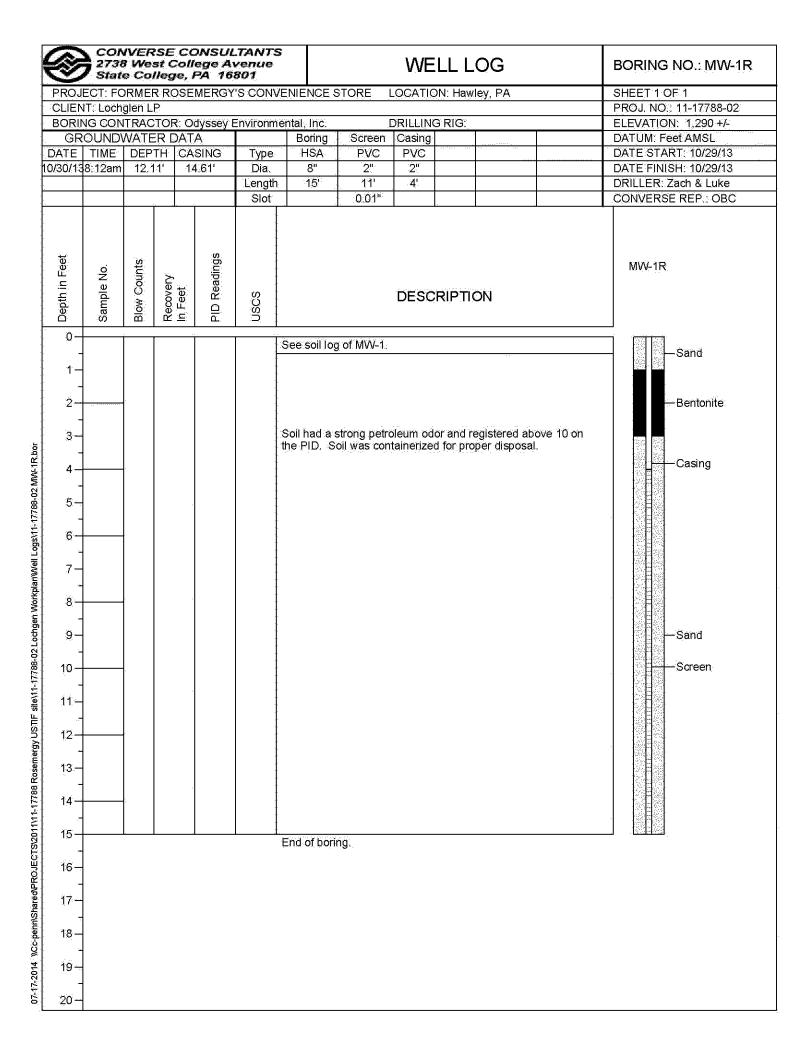
₹¥Ø	2738 State	Ve:	st Coll llege, l	ege At PA 16	venue 801			VVE	ELL L	.OG	BORING NO.: MW-1
PROJE						/ENIENCE	STORE	LOCATI	ON: Hav	vley, PA	 SHEET 1 OF 1
	T. Loch										PROJ. NO.: 11-17788-02
					Environm	ental, Inc.	1	DRILLIN		7822DT	ELEVATION: 1,290 +/-
			R DAT			Boring	11 11 11 11		[·]		DATUM: Feet AMSL
	TIME		TH CA	SING 1.73'	Type Dia	HSA 8"	PVC 2"	PVC 2"	ļ		 DATE START: 1/21/14  DATE FINISH: 1/21/14
/21/141 /21/14 2		2.9		1.7-0	Length		10"				DRILLER: Zach & Luke
174 17.0. <del>7</del>   2	2.00pm.		2.		Slot	1.0	0.01				CONVERSE REP.: OBC
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0			•		OL	TOP SOI	L ORGAN	ICS, damp	<u>.                                    </u>		 Concrete
1 ]	11.1					<del></del>					
٠	1-1,11				:						
2				:0:		Sandy SI	LT, reddis	h brown, d	amp.		- Bentonite
4					ML						
3-	11.2										
4											
4+				0							———Casing
. 1						e Garage Santa Santa Santa Santa Santa Santa Santa Santa Santa Santa Santa Santa Santa Santa Santa Santa Santa S					- Casing
5—	11.3				CL	Silty CLA	Y, gray, d	amp.			
1											
6+				0		Sandy SI	LT, brown	damp.			
_ 1	22.0										
7-	11.4										
8-]				٠Ö							
١ ،											
9-	11.5					<u> </u>	. — —				
~~ <u> </u>	1.2777					Silty GRA	VEL layer				
10				:0		—	. — —.			·	
. 4					ML						Screen
11-	11.6				:						
12				Ö		some c	obbles.				
1											
13 –	11.7										
14				<u>;</u> Ö.							
1. <del>4</del> ]	11.8			,υ.							
15 🕂	11.0										
- 4						End of bo	oring.				
16-											
4											
17:-											
4											
18 —											
١ ا											
19—											
13											

	2738	We	st Col	lege A <sup>.</sup> PA 16	TANT: venue 801			VVE	ELL L	_OG	6	ORING NO.: MW-10
PROJ	4.4					/ENIENCE	STORE	LOCATI	ON: Hav	wley, PA	s	HEET 1 OF 1
	IT. Loch											ROJ. NO.: 11-17788-02
					nvironn	nental, Inc.				7822DT		LEVATION: 1,290 +/-
	OUND				T	Boring		Casing				ATUM: Feet AMSL
DATE	TIME 1:35pm	3.0	TH CA	4.25'	Type Dia	HSA 8"	PVC 2"	PVC 2"	<del> </del>			ATE START: 1/21/14 ATE FINISH: 1/21/14
	2:06pm	2.7		4.20.	Length		10"	5'				RILLER: Zach & Luke
174 17.3.1	2.00р				Slot	1,0	0.01"	1	+			ONVERSE REP.: OBC
Depth in Feet	Sample No.	Blow Counts	Recovery In Feet	PID Readings	SOSO			DESC	CRIPT	ION		MVV-10
0-	i			<u> </u>		L LTOD COU	ODGANIC	<del></del>				Congrete
4					OL		_ORGANIC D, brown, da					—Concrete
1-	10.1					Olity SAN	المفرض المنافض	vi ib:				
2				:0:								- Bentonite
	ايممدا											
3-	10.2											
4				0 0								
*]				.9								Casing
5-	10.3											
- 4					SM	more si	lt.					
6-				0								
-4												
7-	10.4											
-												
8				Ö		very sa	turated					
9-	10.5											Sand
40												
10				10		Sandy SII	_T, brown, d	amp, wil	h clay.			Screen
11:-	10.6											
]	10,0				] :							
12				0								
- 4					ML.	hard, dı	.у. <sub>.</sub>					
13 —	10.7					-						
4					] :	-						
14		:		0								
	10.8				:							
15			1	.1		End of bo	ring.			1-		, <u>G.APT 374</u> .
16-												
- 17:-												
-												
18 –												
19 —												
20 —												

<b>②</b>	<b>7</b> 2738 State	Ve. Co	st Coll llege, l	ege A PA 16	_TANTS venue 801					VVE	ELL L	_OG		BORIN	G NO.: MW-9
				MERGY	'S CON\	ENIE	NCE S	STOF	RE L	OCATI	ON: Hav	vley, PA		SHEET 1	
	۱T. Loch													1.00	O:: 11-17788-02
					nvironm			1		RILLIN		4			ON: 1,290 +/-
	OUND						oring	4	creen	Casing					Feet AMSL
DATE	TIME		TH CA		Туре	1	HSA 8"	<u> </u>	PVC 2"	PVC 2"	-				ART: 10/29/13
	11:38am 9:20am	14.1 5.1		4.65'	Dia.	-	8" 15'	<u> </u>	_2;; 11¹	4'	-				NISH: 10/29/13
1/30/13	9.Zuam	(O. 1s	ડ:		Length Slot		1:0:		):01"	4					Zach & Luke SE REP : OBC
			. <u>I</u> .		SIOT			<u>j. 34</u>	);UT"					I CONVER	(SE REP.) OBG.
Depth in Feet	Sample No.	Blow Counts	Recovery In Feet	PID Readings	ÜSCS					DESC	CRIPTI	ON		MVV-9	
10	ĺ					ORC	SANIC	S.							Concrete
-									T, dam	p.		••		(2) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4	
1-	9.1								.,	1.1.5					
_						Grav	/el, dry	<b>!</b> -:							—Bentonite
2				:0:		Ligh	t brown	n, silt	y SAN	D with c	ravel, v	ery damp.	·		
٦ ٦															
3-	9,2				:									18.74 18.74 18.74	
٦ ٦						Y			caresal sacis						Casing
4				0		Less	damp	, red	dish-br	own.					
5-	9.3														
	9.5														
6				l o	:	Very	damp	, sati	urated.						
~ _				"		_								- 154 U.S. - 154 U.S. - 154 U.S.	
7-	9.4				:										6 6
						er da e	Vall (Parce)	سرعاء الماد	والكوابة المحا	lia ai					
8				Ö			.,		ırd drilli		esames a sé Ì				<u> </u>
-					:	Dark	orowr	n, sar	nay SiL	T, with	gravei,				
9-	9.5				:										—Sand
						Cobl	ble.								
10				0	:	Very	dense	e.dan	1p.						Screen
11:-	9.6														
12				0											
	[														
13 –	9.7														
4.4.	<u> </u>			0.											6). 2
14	9.8			.,υ.											
15	9:0				]										() 일
1.5						End	of bori	ng.							
16-															
-															
17-															
· 4															
18-															
19 –															
4	-														
20 -	-														

€%	2738 State	Ve Co	st Coll llege, l	ege A PA 16	venue 801				WE	LL L	.OG	BOR	ING NO.: MW-8
PROJE						/ENIENCE	STO	RE I	LOCATION	ON: Hav	vley, PA	SHEE	T 1 OF 1
	T. Loch												NO: 11-17788-02
					nvironm	ental, Inc.			DRILLIN				ATION: 1,290 +/-
			R DAT		T. W	Boring		Screen	Casing				M: Feet AMSL
	TIME	DEP 7:7	TH CA	5ING 1.62'	Type Dia	HSA 8"	+	PVC 2"	PVC 2"				START: 10/28/13 FINISH: 10/28/13
	3:52pm 8:56am	6.8		1.02	Length		+	∠. 11'	4'				ER: Zach & Luke
	9:01am	6.7			Slot		+	0.01"	-				ERSE REP.: OBC
5.05.715	<u> </u>		·		9101	l - - -	<u></u>	0,0,		l.			
Depth in Feet	Sample No.	Blow Counts	Recovery In Feet	PID Readings	nscs				DESC	RIPTI	ON	MV	V-8:
.0						ORGANI	CS						—Concrete
{						Brown, si		ND: da	imp.				301101010
1-	8.1					: a.v.i.ve 📆 ·		_, _, _,	, and t				·
				_									—Bentonite
2				:0		Light bro	wn, sa	andy SII	LT, very	damp.		 	
<u>,</u> 1	0.76					<del></del>		<del>.</del> .	The state of the				
3-	8.2				;							(A-1) (A-1) (A-1) (A-1)	
, =													Casing
4				0								3	
5-	8:3:				:	Gravel.							
J	J.J.												13
6				0									
~ _				-		Silty SAN	ID, so	me gra	vel.				日 華俊 [3] 然間
7-	8.4											200	
					:							(%) (a)	
8				Ö									
4						Saturated	1.						
9-	8.5												—Sand
4						Rock. Re	efusal					1 <u>8</u> 8 982	
10				:0		Brown, s	andv.	SII T wi	fh clay 7	lamn			Screen
							arius.	or⊏i A∧i	ar oray, t	anijp,		lad Sa	
11-	8.6												
12				0									
												967 233	
13 –	8.7											(34) (34)	
ا ا <sub>ند ند</sub>				-								Acc.	
14 —	0:0:			0.									
15	8.8		<u> </u>			·							
						End of bo	oring.					 -	
16-													
17:-													
· 4													
18 –													
. 4													
19 —													
4													
20 —													

€				lege At PA 16		WELL LOG	BORING NO.: MW-7
				MERGY	'S CONV	NIENCE STORE LOCATION: Hawley, PA	SHEET 1 OF 1
	IT: Loch			duccour	Environm	ntal, Inc. DRILLING RIG:	PROJ. NO.: 11-17788-02 ELEVATION: 1,290 +/-
	OUND				=11V.II,OHH1 	Boring   Screen   Casing	DATUM: Feet AMSL
	TIME	DEF		SING	Туре	HSA PVC PVC	DATE START: 10/29/13
	3:52pm	D		5.62'	Dia.	8" 2" 2"	DATE FINISH: 10/29/13
)/30/13	8:45am	Dr	y 1	4.99'	Length	16' 11' 5'	DRILLER: Zach & Luke
					'Slot	0.010	CONVERSE REP.: OBC
Depth in Feet	Sample Ño.	Blow Counts	Recovery In Feet	PID Readings	nscs	DESCRIPTION	MVV-7
0-						SPHALT.	Sand
1-	7.1					GRAVEL FILL:	- Saliu
	.19.6					Silty SAND with gravel, red, dry.	:
2-				:0			
-							— Bentonite
3-	7:2					Sandy SILT, some gravel, light brown, damp.	
						and provide gravity again browns admits.	
4 —				0			Casing
5-	7						
.5.—	7:3						
6-				0			
77-	7.4:						
-							
8 —				Ö	1	silty SAND, some gravel, light brown, damp.	
_	221.2.						
9-	7.5						
10-				0			Sand
ίο				"			Janu
11:-	7.6						Screen
-				-			
12 –				7.2			
13 —	7.7					Saturated, more sand.	
a.a.				36.5			
14 —		,		13.8			
15 <b>–</b>	7.8					Damp, cobble.	
16 —			<u> </u>	<u> </u>	<u> </u>	Tool of blacked	
-						nd of boring.	
17 —							
18 —							
19 —							
IЗ 							
20 —							



# Soil Boring # 008; Soil Boring Log

	Rlues	tone Envi	ronmental li	nc	SOIL BORIN	GLOGS
Project	Rosemergy			.10.1	Date Started: 13 March 2012	<u> </u>
Client: N	∕ls. Jan Hoa	dlev	111 01010		Date Finished: 13 March 2012	
	: Site Chara			***************************************		······································
	tor: Bluesto		nental Inc.,		Boring Number: SB - 008	
	Odyssey Env		•		Job Number:	
	st: David Sv				Sheet: 1	
		Begin	Finish	Depth		
Time	· Log	1040	1110	15' ft bgs	S.W.L. Elevation TOC	TOC/GL Surface
Depth (feet)	Sample/ Sieeve #	Blow Counts		/isual Log escription	Lithologic Description	Notes
0 1 2 3 4 5	1		Recover PID : 0.9 sub base	ed: low recovery ppm @ 6" of	0-5' bgs mostly gravel and stone @ 6'' of sub base, brown-silty sand/ gravel;	
5 6 7 8 9 10	2		Recover PID: 149 1291 @	8 ppm @10',	5'-10' bgs Top 2' gray/brown wet slity sand, bottom half of sand more silty and wet	
10 11 12 13 14 15	3			ed: Full '2 ppm @ 10'- 40 ppm @12'.5"-	10'-12'.5"- sandy, gray wet; 12'.5"-15' - Glacial fill, bottom slity and wet Pebble size: ¾ to 1mm	Sampled @ 5-7' bgs
15 16 17 18 19 20						

## Soil Boring # 009; Soil Boring Log

	Blues	tone Enviro	nmental l	nc	SOIL BORIN	IG LOGS	
Project:		s Convenient			Date Started: 13 March 2012		
	vis. Jan Hoad				Date Finished: 13 March 2012		
	e: Site Chara			***************************************			
		ne Environme	ntal Inc.,		Boring Number: SB - 009		
	Odyssey Env				Job Number:		
Geologi	st: David Sw				Sheet: 1	······································	
		Begin	Finish	Depth	S.W.L.	TOC/GL	
Time	: Log	1110	1145	15' ft bgs	Elevation TOC	Surface	
Depth (feet)	Sample/ Sleeve #s	Blow Counts		/isual Log escription	Lithologic Description	Notes	
0 1 2 3 4 5	4		Recover PID: 72	ed: 3" 0 ppm @ 2-4"	0-6" asphalt sub base @ 6"-3" red brown sand @ 3"-5" silty gray sand		
5 6 7 8 9 10	2		Recovered: 5'.5" PID: 1779 ppm @ 0-2', 1750 ppm @ 2-5'		5-7' silty sand, wet 7-10' brown, sandy, small wet gravel		
10 11 12 13 14 15 16 17 18 19 20	3	PID: 1410 ppm @ 1 35 ppm @ 18-20		0 ppm @ 15-17', @ 18-20'	10-12' - very wet, brown and sandy 12-13' - sandy, wet, brown with rock 13-15' - brown, silty glacial till	Sample collected @ 10' bgs	

# Soil Boring # 010; Soil Boring Log

	Rlues	tone Enviro	nmental I	nc	SOIL BORING LOGS			
Project:		's Convenient		140.1	Date Started: 13 March 2012			
Client: I	์ปร. Jan Hoa	dley			Date Finished: 13 March 2012			
	e: Site Chara		*					
		ne Environme	ntal Inc.,		Boring Number: SB - 010			
	Odyssey Env				Job Number			
Geologi	<b>st</b> : David Sv				Sheet: 1			
	_	Begin	Finish	Depth	S.W.L.	TOC/GL		
Time	:Log	1145	1225	15' feet bgs	Elevation TOC	Surface		
Depth (feet)	Sample/ Sleeve #s	Blow Counts		Visual Log Description	Lithologic Description	Notes		
0 1 2 3 4 5	1		Recover PID: 138	red: 40" 30 ppm @ 4-5'	0-6"- sub base/asphalt 6"-4'- reddish glacial till, small, hard, dry gravel 4'-5'- sandy brown/gray, wet			
5 6 7 8 9 10	2			red: 40" 00 ppm @ 5-7' 5 ppm @ 7-10'	5-7'- very wet, sandy, gray; some gravel 7-10' - brownish gray, some gravel, sandy silt, till			
10 11 12 13 14 15	3			red: 4' ) ppm @ 10.6"- ppm @ 14-15'	10-10.6" - sandy, wet, gravel 10.6"-13' - hard 13-14'- loose sandy gray/brown 14-15'- brownish till, gravel, some clay, sandy	Sample collected @ 8-10' bgs @ 1210		
15 16 17 18 19 20		-,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						

# Soil Boring # 011; Soil Boring Log

	Blues	tone Envi	ronmental l	nc.,	SOIL BORING LOGS			
	Rosemergy	's Convenie			Date Started: 13 March 2012			
	/ls. Jan Hoa			***********************************	Date Finished: 13 March 2012			
	: Site Chara tor: Bluesto		sontal Inc		Boring Number: SB - 011			
	Ddyssey Env		nentai inc.,		Job Number:			
	st: David Sv				Sheet: 1			
		Begin	Finish	Depth				
Time	Loa 🗀				S.W.L.	TOC/GL		
	•	1225 1250		15' feet bgs	Elevation TOC	Surface		
Depth	Sample/	Blow		/isual Log	Lithologic			
(feet)	Sleeve	Counts		escription	Description	Notes		
1.00.7	#s				2 company			
o	1		Recover	red: 36" 30 ppm @ 3'-5'	0-6" – asphalt, sub base material 6"- 3' – brownish till, small gravel,			
1 1			12,05,146	o bhiti @: 5 -5	hard	1		
2					3'-5' – grayish/brown sandy silt, some			
3					clay, small amount of organic			
4					material; most/wet			
5						]		
					† -			
						]		
_								
5	2		Recover		5-6' – silty, sandy, gray, some gravel,	]		
6				30 ppm @ 5-6'	wet			
7			and 826	ppm @ 6-10'	6-10° – brownish, sandy till, hard, wet			
8								
9 10								
10								
				فيفرق والفراق فالمعاملة فالمسترق والمستوا				
10	۾ ا		Danavas	and: 40°	10/40/E" descriptible/schools   bassi	Caranta sallastiad & C. Olikas		
11	3		Recover	ed: 40 51 ppm @ 0-2.5'	10'-12' 5" – brownish/gray till, hard, sandy, wet with some gravel	Sample collected @ 6'-8' bgs @ 1235		
12				ppm @ 2.5'-5'	12'.5"-15' - brownish/gray till, hard,	1 200		
13					wet			
14								
15					1	]		
					‡			
15								
16					‡	]		
17					‡			
18					1			
19					<u> </u>			
20								
	,	, , , , , , , , , , , , , , , , , , , ,						
			-1		.1.			

# Soil Boring # 012; Soil Boring Log

	Rlues	tone Enviro	onmental I	nc	SOIL BORING LOGS			
Project:		's Convenien		110.,	Date Started: 13 March 2012			
Client: I	∕ls. Jan Hoa	dley			Date Finished: 13 March 2012			
	e: Site Chara				T. 22 - 22 - 22 - 22 - 22 - 22 - 22 - 22			
		ne Environme	ental Inc.,		Boring Number: SB - 012			
	Odyssey Env				Job Number			
Geologi	st: David Sv				Sheet: 1			
		Begin	Finish	Depth	S.W.L.	TOC/GL		
lime	:Log	1250	1335	15' feet bgs	Elevation TOC	Surface		
Depth (feet)	Sample/ Sleeve #'s	Blow Counts		Visual Log Description	Lithologic Description	Notes		
0 1 2 3 4 5	1		Recover PID: 355	red: 40" 5 ppm @ 3'.5"-5'	0-1' – asphalt sub bsae 1'-3.5' – brownish gray till, some gravel 3'.5"-5' – dry down to 4.5"-5'			
5 6 7 8 9	2			ed: 36" 60 ppm @ 5'-7'.5" 0 ppm @ 7'.5"-10'	5'-7'.5" – grayish, silty, sandy, wet, some gravel 7'.5"-10' – grayish, brownish till, silt, sandy, wet			
10 11 12 13 14 15	3			red: 40" 2 ppm @ 10'- nd 10 ppm @	10'-11'.5" – grayish brown, silty sand with gravel, wet 11.5"-15' – brownish till with gravel, wet	Sample collected @ 8-10 bgs @1310		
15 16 17 18 19 20								

# Soil Boring # 013; Soil Boring Log

	Blues	tone Envi	ronmental li	nc.,	SOIL BORIN	G LOGS	
	Rosemergy	's Convenie			Date Started: 13 March 2012		
	/ls. Jan Hoa				Date Finished: 13 March 2012		
	s: Site Chara t <b>or</b> : Bluesto		nental Inc		Boring Number: SB - 013		
	Odyssey Env		nemarmo.;		Job Number:		
	<b>st</b> : David Sv				Sheet: 1		
		Begin	Finish	Depth	22.000		
Time	TimeLon				S.W.L. Elevation TOC	TOC/GL Surface	
	- 15' feet bgs			15 reet bgs	Lievaton 100	Can indee	
Depth (feet)	Sample/ Sieeve #s	Blow Counts		'isual Log escription	Lithologic Description	Notes	
0 1 2 3 4 5	1		Recover	ed: 30" ppm @ 0.6"-5'	0-6" – asphalt sub bsae 6"-5' – reddish till, some gravel, wet @ 4.5'		
5 6 7 8 9 10	2			ed: 40" :0 ppm @ 5-7.5" O ppm @ 7.5"-10'	5'-7'.5" – sandy till, brownish gray 7'.5"-10' – silty clay, somce sand, reddish brown		
10 11 12 13 14 15	3			ppm @ 10'- d 260 ppm @	10'-12'.5" – wet silty till, brownish, gravel, some sand and clay 12'.5"-15' – wet silty till, brownish, some gravel, less sand, clay tightly packed	Sample collected @ 5'-7' bgs	
15 16 17 18 19 20							

## Soil Boring #014; Soil Boring Log

	Blues	tone Envir	onmental l	nc.,	SOIL BORIN	G LOGS		
		's Convenier	nt Store		Date Started: 13 March 2012			
	/Is. Jan Hoad e: Site Chara			·····	Date Finished: 13 March 2012			
		ne Environm	ental Inc.		Boring Number: SB - 014	Boring Number: SB - 014		
	Odyssey Env		erraar me.,		Job Number:			
	st: David Sv				Sheet: 1			
		Begin	Finish	Depth	200 KPT	T65.60		
Time	Log 🗀	1350	1420	15' feet bgs	S.W.L. Elevation TOC	TOC/GL Surface		
		1000	1420	l D leet bys				
Depth (feet)	Sample/ Sleeve #s	Blow Counts		/isual Log escription	Lithologic Description	Notes		
0 1 2 3 4 5	1		Recover PID: 11	ed: 36" ppm @ 3'.5"-5'	0-6" – sub base/asphalt 6"-3'.5" – reddish till, stone, gravel 3'.5"-5' – grayish/brown, sandy, stone, gravel			
5 6 7 8 9 10	2		Recover PID: 130 and 540	ed: 48" 00 ppm @ 5'-7'.5" ppm @ 7'.5"-10'	5'-7'.5" – brownish till, sandy, silt-less 7'.5"-10' – brownish till, less sandy, more silt and clay			
10 11 12 13 14 15	3			ed: 40" 5 ppm @ 10'-12' pm @ 12'.5"-15'	10'-12' - brownish till, tight silt, clay, wet 12'-12.5 – rock, sandstone, light gray color 12'.5"-15 – sandy, wet, some silt	Sample collected @ 5'-7' bgs		
15 16 17 18 19 20		-,,.						

## Soil Boring # 015; Soil Boring Log

	Blues	tone Enviro	nmental l	nc.,	SOIL BORING LOGS			
	Rosemergy	's Convenient			Date Started: 13 March 2012			
	/ls. Jan Hoad		······································		Date Finished: 13 March 2012			
Contrac	Site Chara	icterization ne Environmei	otal las		Danies Noveless 6B 002			
	Ddyssey Env		niai inc.;		Boring Number: SB - 015 Job Number:			
	st: David Sv				Sheet: 1			
000,09	or bana or	Begin	Finish	Depth				
Time	uloa 🗀	Degin.	THION		S.W.L.	TOC/GL		
111110		1420	1445	15' feet bgs	Elevation TOC	Surface		
Depth (feet)	Sample/ Sleeve #s	Blow Counts		/isual Log Jescription	Lithologic Description	Notes		
0 1 2 3 4 5	1		Recover PID: 5 p	ed:: 36" pm @ 3'.5"-5'	0-6" – sub base, asphalt 6"-3',5" – reddish till, gravel, some silt 3',5"-5' – grayish/brown, sandy silt, some gravel			
5 6 7 8 9 10	2			ed: 48" ppm @ 5'-6'.5" ppm @ 6'.5"-10'	5'-6'.5" – wet, sandy, silt, some gravel 6'.5"-10' – brownish/gray till with silt, sand, and hard, wet clay			
10 11 12 13 14 15	:3 <sub>.</sub>			ed: 60" pm @:10-13' and @ 13'-15'	10'-13' — brownish/reddish till, gravel, some dry sand 13'-15' — brownish till, some silt, clay, little sand	Sample collected @ 5'-7' bgs @ 1440		
15 16 17 18 19 20		,	. ,					

# Soil Boring # 016; Soil Boring Log

	Blues	tone Envir	onmental l	nc.,	SOIL BORING LOGS			
Project:	Rosemergy	's Convenien			Date Started: 13 March 2012			
	/ls. Jan Hoa		· · · · · · · · · · · · · · · · · · ·		Date Finished: 13 March 2012			
	Site Chara	acterization ne Environm	ental Inc		Boring Number: SB - 016			
	Odyssey Env		entar inc.;		Job Number:			
	<b>st</b> : David Sv				Sheet: 1			
		Begin	Finish	Depth				
Time	Log	1445 1520 <b>15' feet bgs</b>			S.W.L. Elevation TOC	TOC/GL Surface		
Depth (feet)	Sample/ Sleeve #s	Blow Counts		Visual Log Description	Lithologic Description	Notes		
0 1 2 3 4 5	1		Recove PID:569	red::30" ppm @ 4'.5" bgs	0-1' – asphalt sub base 1'-3'.5" brownish/reddish till, gravel, some sand, dry 3'.5"-5' – gray/brown sand, silt, little clay, wet			
5 6 7 8 9 10	2			2 ppm @ 5-7' 5" 1556 ppm @	5'-7'.5" gray/brownish, silty, sand, wet, some gravel 7'.5"-10' – brownish till, some sand @ 4', wet silt and tight clay material			
10 11 12 13 14 15	3			red: 40"  4 ppm @ top, 225  bottom, 0-5' bgs	10-15 — brownish till, sandy silt dry/tight	Sample collected @ 8'-10' bgs @ 1515		
15 16 17 18 19 20		-,,,,,						

# Soil Boring # 017; Soil Boring Log

	Blues	tone Envi	ronmental l	nc.,	SOIL BORING LOGS			
Project:	Rosemergy	's Convenie			Date Started: 13 March 2012			
	/ls. Jan Hoa				Date Finished: 13 March 2012			
	Site Chara	acterization ne Environm	ontal Inc		Boring Number: SB - 017			
	Ddyssey Env		ientai illo.;		Job Number:			
	st: David Sv				Sheet: 1			
		Begin	Finish	Depth				
Time	Log				S.W.L.	TOC/GL		
		1520	1600	15' feet bgs	Elevation TOC	Surface		
Depth (feet)	Sample/ Sleeve #s	Blow Counts		Visual Log Description	Lithologic Description	Notes		
0 1 2 3 4 5	11		Recove PID: 38	red: 30" 4 ppm @ 4'-5' bgs	0-1' – asphalt sub base material 1'-4' – reddish till with gravel silt, some sandy stone 4'-5' – gray/brownish sandy silt			
5 6 7 8 9 10	2			35 ppm @ 5'-7'.5" 1889 ppm @	5'-7'.5" – wet, sandy, more silt, loose material; grayish/brown 7'.5"-10 – wet, sandy, more silt/clay/tight material			
10 11 12 13 14 15	3			4 ppm @ 10'- nd 164 ppm @	10'-13'.5" – brownish, wet, sandy/silt till with clay 13'.5"-15' – brownish wet fill, tight with clay	Sampled @ 8'-10' @ 1545		
15 16 17 18 19 20		-,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						

# Soil Boring # 018; Soil Boring Log

	Blues	tone Enviro	nmental l	nc.,	SOIL BORING LOGS			
Project:	Rosemergy	's Convenient	Store		Date Started: 14 March 2012			
	/ls. Jan Hoad e: Site Chara		·	***************************************	Date Finished: 14 March 2012			
		ne Environme	ntal Inc.		Boring Number: SB - 018			
	Odyssey Env		11001-1110-1		Job Number:			
	st: David Sv				Sheet: 1			
		Begin	Finish	Depth	*XXXXX	TÖD/01		
Time	Log	0800	0830	15' feet bgs	S.W.L. Elevation TOC	TOC/GL Surface		
Depth (feet)	Sample/ Sieeve #s	Blow Counts		/isual Log Jescription	Lithologic Description	Notes		
0 1 2 3 4 5	শ		Recover PID: 184	ed: 40" 1 ppm @ 3'.5"-5"	0-6" – sub base asphalt 6"-3'.5" – reddish till, dry, gravel 3'.5"-5' – grayish/brown, sandy, some silt, clay, wet @ 4'.5"	Changed over geo-probe to larger boring		
5 6 7 8 9 10	2			ed: 54" \$5 ppm @ 5'-7'.5" 2704 @ 7'.5"-10'	5'-7'.5" – brownish gray sand, silty, clay; wet 7'.5"-10' – brownish gray sand, silt, clay, tight and wet			
10 11 12 13 14 15	3			ed: 60" 60 ppm @ 10'- gs and 20.1"	10'-12'.5" – brownish/gray sand, silt, clay, wet tight 12'.5"-15' – brownish till, some gravel	Sample collected @ 0815 @ 8'-10'bgs		
15 16 17 18 19 20		-24852	. 4,24,					

# Soil Boring # 019; Soil Boring Log

	Blues	tone Envir	onmental l	nc.,	SOIL BORING LOGS			
	Rosemergy	's Convenier			Date Started: 14 March 2012			
	/ls. Jan Hoa			· · · · · · · · · · · · · · · · · · ·	Date Finished: 14 March 2012			
	Site Chara	ne Environm	ontal Inc		Boring Number: SB - 019			
	Odyssey Env		entar (no.;		Job Number:			
	st: David Sv				Sheet: 1			
		Begin	Finish	Depth				
Time	Loa				S.W.L.	TOC/GL		
	-	0830	0850	15' feet bgs	Elevation TOC	Surface		
Depth (feet)	Sample/ Sleeve #s	Blow Counts		Visual Log Description	Lithologic Description	Notes		
0 1 2 3 4 5	1		Recove PID: 47	red: 36" 5 ppm @ 0-6" bgs	0-6" – asphalt sub base 6"-3'.5" – reddish till, gravel, some silt 3'.5"-5' – black/gray sand, moist, some silt	In front of building door		
5 6 7 8 9 10	2			06 ppm @ 5'-7'.5" 2325 ppm @	5'-7'.5" – Gray/brown sand, silt, little clay, some gravel 7'-10' – brownish sand, silt, little clay, some gravel			
10 11 12 13 14 15	3			red: 48" 48 ppm @ 10'-12' ppm 12'-15' bgs	10'-12' – brownish sandy, silt, more clay, moist 12'-15' – brownish till, gravel, tight, some sand	Sample collected @ 5'-7' bgs @0840		
15 16 17 18 19 20								

## Soil Boring # 020; Soil Boring Log

	Blues	tone Envir	onmental l	nc.,	SOIL BORING LOGS			
		s Convenien	t Store		Date Started: 14 March 2012			
	/ls. Jan Hoad e: Site Chara			·····	Date Finished: 14 March 2012			
		ne Environme	ental Inc.		Boring Number: SB - 020			
	Odyssey Env		on and three i		Job Number:			
	<b>st</b> : David Sv				Sheet: 1			
		Begin	Finish	Depth	S.W.L.	TOC/GL		
Time	Log	0850	0918	15' feet bgs	Elevation TOC	Surface		
Depth (feet)	Sample/ Sleeve #s	Blow Counts		/isual Log rescription	Lithologic Description	Notes		
0 1 2 3 4 5	भ		Recover	ed: 21 ppm @ 2'.5"-5'	0-6" – substrate asphalt 6"-2'.5" – reddish till, gravel 2'.5"-5' – grayish/brown sand, silt, some clay' moist at 4'.5" bgs			
5 6 7 8 9 10	.2			ed: 48" 7 ppm @ 5'-6' 2894 ppm @ 6'-	5'-6' – grayish/brown sand, silt, some clay 6'-10' – brownish sand, silt, clay, some gravel, moist and wet			
10 11 12 13 14 15	3			ed: 36" 0 ppm @ 10'-14' 804 ppm @14'-	10'-14' – brownish sand, silt, clay, tight gravel, moist 14'-15' – brownish till, tight, some gravel, moist	Sample collected @ 4'-5' bgs @ 0910		
15 16 17 18 19 20		,						

# Soil Boring # 021; Soil Boring Log

	Rlues	tone Enviro	nmental l	nc	SOIL BORIN	GLOGS
Project:		's Convenient		:1 <b>-</b>	Date Started: 14 March 2012	0 2000
	∕ls. Jan Hoa				Date Finished: 14 March 2012	
	e: Site Chara			***************************************		
		ne Environme	ntal Inc.,		Boring Number: SB - 021	
Driller: (					Job Number	
Geologi	<b>st</b> : David Sv				Sheet: 1	
		Begin	Finish	Depth	S.W.L.	TOC/GL
Time	Log	0918	0950	11'.5" feet bgs	Elevation TOC	Surface
Depth (feet)	Sample/ Sleeve #'s	Blow Counts		/isual Log Jescription	Lithologic Description	Notes
0 1 2 3 4 5	1		Recover PID: 328	ed: 36" 39 ppm 2'-5' bgs	0-6" – asphalt sub base 6"-2' – reddish fill, gravel, dry 2'-5' – grayish/brown sandy, silt, some organics; wet @ 4.5 bgs, some gravel	About 15' back from SB-020
5 6 7 8 9 10	2		Recover PID: 331 bgs and 10'	ed: 40"  7 ppm.@ 5'-6'  2296 ppm @ 6'-	5'-6' – grayish brown sandy silt, some gravel. 6'-10' – brownish sand, silty clay, very wet, some gravel, tight	
10 11 12 13 14 15	3		Recover PID: 231 11'.5" bo	3 ppm @ 10'-	10'-11.5" – brownish, sandy, silty, some clay, gravel, wet	Refusal @ 11.5 bgs Sample collected from 5'-7' bgs @0935
15 16 17 18 19 20			- Pangacasaa			

# Soil Boring # 022; Soil Boring Log

	Blues	tone Envir	onmental l	nc.,	SOIL BORIN	NG LOGS		
		's Convenien	t Store		Date Started: 14 March 2012			
Client: N	/Is. Jan Hoa : Site Chara	dley		·	Date Finished: 14 March 2012			
		ne Environm	ental Inc.		Boring Number: SB - 022			
Driller: (			ontar mon		Job Number:			
	<b>st</b> : David Sv	vetland			Sheet: 1			
		Begin	Finish	Depth	S.W.L.	TOC/GL		
Time	Log	0950	1015	16' feet bgs	Elevation TOC	Surface		
Depth (feet)	Sample/ Sieeve #s	Blow Counts		/isual Log Description	Lithologic Description	Notes		
0 1 2 3 4 5	শ		Recover	red: 36" 31 ppm @ 4.5 bgs	0-6" – sub base asphalt 6"-2.5' – reddish till, gravel, some sand, dry 2'.5"-5' – grayish/brown sand silt, some clay, wet, @ 4'.5"bgs some gravel			
5 6 7 8 9 10	2		Recover PID: 338 and 168 bgs	ed:36" 34 ppm @ 0-2'.5" 3 ppm @ 2'.5"-5'	5'-10' – gray/brown, wet sand, silt, clay, some gravel			
10 11 12 13 14 15	3		Recover PID:173	red:10' 0 ppm @ 0-6" bgs	10'-16' – brown sand, silt, more clay' tigh and moist	Recovery refusal @ 11' Sample collected @ 5'-7' bgs @ 1000		
15 16 17 18 19 20		-,,,,,,,						

# Soil Boring # 023; Soil Boring Log

	Blues	tone Envi	ronmental li	nc.	SOIL BORIN	GLOGS	
Project	Rosemergy			1	Date Started: 14 March 2012		
Client N	/ls. Jan Hoad	lev 1	nt Otoro		Date Finished: 14 March 2012		
	: Site Chara			· ······	pate (money, 1 march 2012		
	tor: Bluesto		nental Inc		Boring Number: SB - 023		
Driller: 0		io: Entytrollfi	nonter-mos		Job Number:		
	st: David Sv	etland			Sheet: 1		
Scologi	SE DAVID OV	Begin	Finish	Depth	SONOGE 1		
Time	Log	1015	1035	15' feet bgs	S.W.L. Elevation TOC	TOC/GL Surface	
Depth (feet)	Sample/ Sleeve #s	Blow Counts		i /isual Log escription	Lithologic Description	Notes	
	#5						
0 1 2 3 4 5	1	PID: 2614 ppm @0-2'.5" and 2544 @ 4'-5' bgs		4 ppm @0-2'.5"	0-6" — asphalt sub base 6"-2' .5" — reddish till, geavel, dry, some silt 2' .5"-5' — brownish sand, silt, gravel, some clay, and wet @ 2614ppm	15' west of SB-020 alongside RT. 590	
5 6 7 8 9 10	.2		Recover PID: 248	ed: 40" 6 @ 2'.5" bgs	0-7'.5" — brownish sand/silt, gravel, some clay		
10 11 12 13 14 15 15	3	Recovered: 60" PID: 341 ppm @ 0-2" bgs and 56 ppm @ 4'-5' bgs			10'-12' – Brownish, very wet sandy silt with clay; some gravel  12'-14' – brownish till, very tight, some gravel, dry  14'-15' – brownish sandy silt, some clay, wet	Sample collected 5'-7' bgs @1030	
17 18 19 20		-,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					

# Soil Boring # 024; Soil Boring Log

	Blues	tone Envi	ronmental l	nc.,	SOIL BORING	G LOGS
Project:	Rosemergy	's Convenie			Date Started: 14 March 2012	
	∕ls. Jan Hoa			***************************************	Date Finished: 14 March 2012	
Contrac	Site Chara tor: Bluesto	cterization	anstal Inc		Boring Number: SB - 024	
Driller: (						
		dyssey Job Number: t: David Swetland Sheet: 1				
<u> </u>	OL DAVIG O	Begin	Finish	Depth		
Time	Log	- Jogni		, , , , , , , , , , , , , , , , , , ,	S.W.L. Elevation TOC	TOC/GL Surface
Depth (feet)	Sample/ Sleeve #s	Blow Counts		/isual Log ⊅escription	Lithologic Description	Notes
0 1 2 3 4 5	4		Recover PID: 819 bgs	red: 36" 9 ppm @ 3',5"-5'	0-6" – asphalt sub base 6"-3'.5" – reddish till with gravel, dry 3'.5" – gray/brown sand, silty, some wet clay @4'.5"	
5 6 7 8 9 10	2			09 ppm @ 0-2'.5" 2516 ppm @	5'-7'.5" – brownish gray sand, silt, with some clay, wet, gravel, some organics 7'.5"-10' – brownish/gray sand, silty, some clay and wet gravel	
10 11 12 13 14 15	3			red: 30" 79 ppm @ 0-2'.5" 571 ppm @ 2'.5"-	10'-12'.5" – brownish sand, silt, some clay, wet, some gravel 12'.5"-15' – brownish till, hard, tight, some gravel, dry	Sample collected @ 5'-7' bgs @ 1045
15 16 17 18 19 20		-,-,-,				

# Soil Boring # 025; Soil Boring Log

	Blues	tone Envir	onmental l	nc.,	SOIL BORIN	IG LOGS		
	Rosemergy	's Convenien		•	Date Started: 14 March 2012			
	/ls. Jan Hoad				Date Finished: 14 March 2012			
	Site Chara		a esta l'Illa a		Boring Number: SB - 025			
	Contractor: Bluestone Environmental Inc., Boring Number: SB - 025  Driller: Odyssey Job Number:							
Geologist: David Swetland Sheet: 1								
<u></u>		Begin	Finish	Depth		······································		
Time	Loa 🗀				S.W.L.	TOC/GL		
		1100	1120	15' feet bgs	Elevation TOC	Surface		
Depth (feet)	Sample/ Sleeve #s	Blow Counts		/isual Log description	Lithologic Description	Notes		
0 1 2 3 4 5	1		Recover PID: 271 logs	red::36" 19 ppm @ 3':5-5'	0-6" – asphalt sub base 6"-3'.5" – reddish till, gravel, dry 3'.5"-5' – grayish sand, silt, some organics, clay and moist at 4'.5" bgs			
5 6 7 8 9 10	2			26 ppm @ 0-2:5" 2250 ppm @	5'-7'.5" – grayish brown sand, silty, more clay, some gravel, moist 7'.5"-10' – brownish, sandy silt, tight, more clay, some gravel			
10 11 12 13 14 15	3			red: 48" 51 ppm @ 0-1' ppm @ 1'-5' bgs	10'-11' – brownish, sandy silt with clay, tight moist, some gravel 11'-15' – brownish till, very tight, dry, some gravel	Sample collected @ 5'-7' bgs @ 1115		
15 16 17 18 19 20								

# Soil Boring # 026; Soil Boring Log

	Rlues	tone Envir	onmental I	nc	SOIL BORIN	G LOGS	
Project:		's Convenien		(AC-1)	Date Started: 14 March 2012	<u> </u>	
Client: N	∕ls. Jan Hoa	dley			Date Finished: 14 March 2012		
	: Site Chara						
		ne Environme	ental Inc.,		Boring Number: SB - 026		
Driller: (			Job Number:				
Geologi	<b>st</b> : David Sv				Sheet: 1		
		Begin	Finish	Depth	s.w.L.	TOC/GL	
Time	: Log	1120	1145	15' feet bgs	Elevation TOC	Surface	
Depth (feet)	Sample/ Sleeve #s	Blow Counts		/isual Log rescription	Lithologic Description	Notes	
0 1 2 3 4 5	4		Recover PID: 13. bgs	red: 24" 6 ppm @ 1'-5'	0-1' — asphalt sub base 1'-5' — brownish/red till, gravel; larger sandstone rock, dry		
5 6 7 8 9 10	2			35 ppm @ 0-2'.5" I 2791 ppm @	5'-7'.5" – brownish/gray sand, moist, some silt and clay; gravel 7'.5"-10" – brownish sand, moist, silt and clay; some gravel		
10 11 12 13 14 15	3		PID: 276	red: recovery 61 ppm @ 0-2' 50.6 ppm @ 2'-5'	10'-12' – brownish sand, silty, with some clay and gravel; moist 12'-15' – brown till, very tight with some gravel; dry	Sample collected @ 8'-10' bgs 1140	
15 16 17 18 19 20							

# Soil Boring # 027; Soil Boring Log

	Rlues	tone Envi	ronmental li	nc.	SOIL BORIN	GLOGS		
Project	Rosemergy			· · · · · · · · · · · · · · · · · · ·	Date Started: 14 March 2012			
Client N	vis. Jan Hoad	Jav	iii Oloje		Date Started: 14 March 2012			
	Site Chara			***************************************	Date i illisired. 14 Marcii 2012	**		
	tor: Bluesto		ental Inc		Boring Number: SB - 027			
Driller: (		TIC. LIVIIOTIT	ici)tai mo.;		Job Number:			
	<b>st</b> : David Sv	vetland			Sheet: 1			
CCOIOGI	St. Bavia Gv	Begin	Finish	Depth	GREEK 1			
Time	· Log	1145	1200	15' feet bgs	S.W.L. Elevation TOC	TOC/GL Surface		
Depth (feet)	Sample/ Sleeve #s	Blow Counts		/isual Log escription	Lithologic Description	Notes		
0 1 2 3 4 5	1	Recovered: 40" PID; 39.3 ppm @ 4'-5' bgs			0-6" – asphalt sub base 6"-4' – brownish sand, silt with gravel; hand till dry 4'-5' – brownish/gray sand, less clay, wet at bottom	5 feet east of island in parking lot		
5 6 7 8 9 10	2			94 ppm @ 0-2'.5" 2601 ppm @	5'-10" — brownish sand, silt, some clay and gravel, some gravel, wet			
10 11 12 13 14 15	3	Recovered: 40" PID: 2359 ppm @ 0-2' bgs and 369 ppm @ 2'-5'		9 ppm @ 0-2'	10'-12' — brown till, tight with some gravel' wet 12'-15' — brownish sandy till, with some clay, wet, drier than top, tight material	Sample collected at 5'-7' bgs @ 1200		
15 16 17 18 19 20		-,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						

# Soil Boring # MW1; Soil Boring Log

	Blues	tone Enviro	nmental I	nc.	SOIL BORIN	IG LOGS	
Project:		's Convenient			Date Started: 14 March 2012		
Client: N	∕ls. Jan Hoad	dley			Date Finished: 14 March 2012		
Purpose	: Site Chara	cterization	77 - 3 - 9		T 20 10 100 00 00 00 00 00 00 00 00 00 00 0		
		ne Environme	ntal Inc.,		Boring Number: SB – MW1 Job Number:		
Driller: (							
Geologist: David Swetland					Sheet: 1		
Time Log		Begin	Finish	Depth	⊣ s.w.L.	TOC/GL	
Time		1240	1630	14' feet bgs	Elevation TOC	Surface	
Depth (feet)	Sample/ Sleeve #s	Blow Counts		/isual Log Jescription	Lithologic Description	Notes	
0 1 2 3 4 5	4.		Recover PID: 14.	red: 48" 8 ppm @ 0-6" bgs	0-6" – asphalt sub base 6"-5' – brown sand with silt, some gravel; slighty moist at 5'		
5 6 7 8 9 10	2		Recover	ed: 36"  9 ppm @ 10' bgs	Brownish/gray sand; rock frag @ 8'; moist throughout	Depths not recorded	
10 11 12 13 14 15 15 16 17 18	3		PID: 226	red: refused @ 14' 61 ppm @ 13' bgs 5 ppm @ 14' bgs	Brown sand, wet throughout	Depths not recorded  1345 – augured to 20' bgs 1430 – spoke to Dave Swetland and decided to set screen @ 15' bgs, up to 3' bgs 1600 – used 2 bags of sand to backfill to 15' bgs and 8 bags of sand to fill well to 2' bgs 1630 – off site; Odyssey completed concrete clean up	
20		-5***					

# Soil Boring # MW2; Soil Boring Log

	Blues	stone Enviro	nmental l	nc.,	SOIL BORING LOGS		
Project:	Rosemergy	s Convenient	Store		Date Started: 15 March 2012		
Client: I	VIs. Jan Hoa	dley			Date Finished: 15 March 201	2	
Purpose	e: Site Char	acterization			The state of the s		
Contrac	tor: Bluesto	ne Environme	ental Inc.,		Boring Number: SB - MW2		
Driller: (	Odyssey				Job Number:		
Geologi	i <b>st</b> : David Si	wetland			Sheet: 1		
		Begin	Finish	Depth	S.W.L.	TOC/GL	
Time	eLog	0730 (0830		20' feet bgs	Elevation TOC	Surface	
Depth (feet)	Sample/ Sleeve #s	Blow Counts		Visual Log Description	Lithologic Description	Notes	

0 1 2 3 4 5	1	Recovered: 24" PID: 98.4 ppm @ 4'-5' bgs	0-5" – asphalt sub base 6"-5' – reddish till with gravel, loose material	In front of store building; soil boring down to 20' bgs
5 6 7 8 9 10	2	 Recovered: 40" PID: 1187 ppm @ 0-2'.5" bgs and 1725 ppm @ 2'.5"-5'	0-7'.5" – grayish sandy silt, some gravel and clay 7'.5"-10' – some organic material/wood, wet at top and throughout	
10 11 12 13 14 15	3	 Recovered: 36" PID: 24.5 ppm @ 12'-13' bgs	10'-12' – gray/brown sand, silt, some clay, wet 12'-13' – brown till, tight, some gravel	Refusal @ 13' bgs w/geo probe; switched rig to augers  0830 – switched rig to augers to drill out well  0915 – drilled to 15' bgs  0930 – Dave Swetland on site;  0945 – screen set and began
15 16 17 18 19 20		 		sand pack 1030 – sand packed to 2'bgs; used a total of 8 bags of sand 1035 – set up on MW-3 and began auger

# Soil Boring # MW6; Soil Boring Log

	Pluce	tono Envir	onmental l	ne	SOIL BORIN	e i nes		
Project		s Convenien		16.,	Date Started: 19 March 2012	9 1000		
	VIs. Jan Hoad		Date Finished: 19 March 2012					
	e: Site Chara		·······					
		ne Environme	ental Inc.,		Boring Number: SB – MW6			
	Odyssey				Job Number			
Geologi	i <b>st</b> : David Sv	<i>v</i> etland			Sheet: 1			
		Begin	Finish	Depth	S.W.L.	TOC/GL		
Time	eLog	0830	-	20' feet bgs	Elevation TOC	Surface		
Depth (feet)	Sample/ Sleeve #s	Blow Counts		/isual Log escription	Lithologic Description	Notes		
0 1 2 3 4 5	4.		Recover PID: 20.1 bgs	ed: 40" 8 ppm @ 1'-1'.5"	0-1' – back fill/ sub base stone 1'-1'.5" – brownish till , tight, some gravel, dry	Location moved 10' west due to possible addition to building in future  Geoprobe boring to 15'		
5 6 7 8 9 10	2			ed: 55" 1 ppm @ top of 9.7ppm @	5'-9'.5" – brownish till, dry, tight, some gravel, fine sand, and stone; gray/brown in color 9'.5"-10' – brown sandy material with small gravel; moist			
10 11 12 13 14 15	3		Recover PID: 20. boring a	ed: 24" 7 ppm@ top of nd 10.4 @ bottom	10'-15' – brown fine sand; some clay; wet gravel			
15 16 17 18 19 20	4		Recover	ed: 12' 8 ppm @ 0-1bgs	15'-16' – brown fine sand, wet, some gravel	Refusal @ 16' Set well @ 18' bgs w/ 15' of screen		



343 King Street, Myerstown, PA 17067

PA DEP Facility Permit# 301333 Expires May 2022

# CERTIFICATE OF DISPOSAL

Generator Name: LochGen Lp

Manifest Document #: LG-042414

Date Received: 05/01/2014

Material Received: 7 x 55gal

Material Weight: 5394lbs

Material Description: Drill Cuttings

Broker Name: Bluestone Environmental

Approval Code: LFI-18144 Date Disposed: 05/01/2014 Material Disposed: 7 x 55gal

Material Weight: 5394lbs

On the above date the material described was accepted and disposed at the Waste Recovery Solutions facility for the purpose of treatment (OWI), landfill disposal (LFI) or incineration (INI). All materials accepted are managed in accordance with federal, state and local regulations.

### Soil Gas Data Unit Conversion

The analytical method measures constituent concentrations in ppbv or parts per million per volume (ppmv). Concentrations in mg/m³ are calculated using the following formula:

```
1 ppmv = (MW/ATCF) (mg/m^3)
```

where:

MW = molecular weight of the compound

ATCF = appropriate temperature conversion factor (ATCF).

The ATCF is temperature dependent, and calculated using the ideal gas law:

```
ATCF = °K x 0.0821
```

where:

 $^{\circ}$ C = (5/9)( $^{\circ}$ F-32)

°K = °C + 273

An example calculation for a hypothetical sample is presented below. Benzene was reported at concentrations of 2.5 ppbv and 8  $\mu$ g/m<sup>3</sup> (0.008 mg/m<sup>3</sup>).

lf:

Benzene = 2.5 ppbv (0. 0025 ppmv)

Benzene MW = 78.11 grams per mole

Laboratory assumed sample temperature = 20°C

then:

°K =20°C + 273 = 293°K

 $ATCF = 293^{\circ}K \times 0.0821 = 24.06$ 

 $0.0025 \text{ ppmv} = 0.0025 (78.11/24.06) \text{ mg/m}^3 = 0.00811 \text{ mg/m}^3.$ 

However, the laboratory assumed temperature is generally not the temperature at the time or location of sample collection. The sampling temperature is assumed to be 11.1°C, the average soil temperature used by PADEP as an input parameter for the Johnson and Ettinger Model (PADEP, 2004: Table 8). Using the average assumed temperature, the benzene concentration in mg/m³ is:

11-17788-02
Former Rosemergy's Store/Garage – Site Characterization Report Appendix F

°K =11.10C + 273 = 284.1°K ATCF = 284.1°K x 0.0821 = 23.32 0.0025 ppmv = 0.0025 (78.11/23.32) mg/m<sup>3</sup> = 0.00837 mg/m<sup>3</sup>.

The calculated concentration in mg/m³ using the assumed average soil temperature is greater than the calculated concentration using the laboratory assumed sample temperature. The calculations demonstrate an inverse relationship between temperature and calculated concentrations. However, the temperature corrected result is only 3 percent different than the reported concentration.

No reported concentration was within 3 percent of the RMSC<sub>SG</sub>.



TEMPORARY ACCESS AGREEMENT

THIS AGREEMENT dated this 20 day of November, 2013, by and between Larry Jensen and Wanetta Jensen or assign ("Grantor") and Converse Consultants ("Grantee"). Grantor is the Owner of the property located adjacent to 1623 Route 590, Hawley, Pike County, PA being tax parcel # 12.00-01-18 ("Property"). Grantee is an environmental consulting firm.

In consideration of the above and the mutual covenants and agreements contained in this Agreement, the Grantor and Grantee agree as follows:

- 1. Purpose of Temporary Access. In support of completing a cleanup under the Land Recycling and Environmental Remediation Standards Act ("Act 2") of the Former Rosemergy Convenient Store facility located at 1623 Route 590, Hawley, Pike County, PA ("Site") in accordance with the requirements of the Pennsylvania Department of Environmental Protection ("PADEP"), Grantee intends to perform site characterization activities in accordance with the PADEP approved Work Plan and subsequent discussions that have completed with PADEP and the Pennsylvania Underground Storage Tank Indemnification Fund (USTIF). Grantee intends to perform such characterization activities and monitoring to obtain a release of liability under Act 2. Activities are expected to include installation of monitoring wells, collection of groundwater samples, and other related activities ("Assessment Activities").
- 2. Grant of Authority and Temporary Access. The Grantor represents and warrants that they alone have the authority and agree to grant temporary access to the Property for Grantee or its agents and/or representatives to complete the Assessment Activities on the Property. The Grantor hereby authorizes temporary access to the Property to Grantee and its agents and/or representatives for the purpose of conducting the Assessment Activities.
- 3. <u>Notice and Reports</u>. Grantee and its agents and/or representatives shall give Grantor advance notice of Assessment Activities to be performed on the Property. In addition, Grantor shall be timely provided with a copy of all data submitted to PADEP.
- 4. <u>Term of Agreement</u>. The term of this Agreement will continue until such time as the Assessment Activities have been completed or two (2) years, whichever is shorter.
- 5. <u>Performance of Site Activities</u>. Grantee agrees that the Assessment Activities conducted on the Property shall be performed in an orderly manner by properly qualified workers in conformity with a generally accepted standard of care for this type of work. Grantee and its agents/representatives will conduct the work at reasonable times of the day and in a manner which does not unreasonably interfere with Grantor's activities at the Property. Upon completion of the Assessment Activities, Grantee will properly abandon wells and soil borings, and will remove any equipment and return the portions of the



Property on which it conducted its Assessment Activities to its prior condition, unless otherwise approved by Grantor. All expenses incurred in performing the Assessment Activities will be borne by Grantee and/or its client.

- 6. <u>Indemnification</u>. Grantee will indemnify Grantor from and against property damage and/or personal injury that is caused by the negligence of Grantee or its agents/representatives in the performance of the Assessment Activities on the Property.
- 7. <u>Successors and Assigns</u>. This Agreement shall be binding on Grantor and Grantee, and their respective heirs, successors and assigns.
- 8. <u>Entire Agreement</u>. This Agreement constitutes the entire agreement between Grantor and Grantee with respect to the Assessment Activities on the Property.

IN WITNESS WHEREOF, the Parties hereto enter into this Agreement. Each person signing this Agreement represents and warrants that he or she has been duly authorized to enter into this Agreement by the company or entity on whose behalf it is indicated that the person is signing.

GRANTEE

Name

Title: ou

Date:

GRANTOR

Name:

Title:

Date: 11/25

h/h0

# **Converse Consultants**

2738 West College Avenue State College, PA 16801

Phone: 814-234-3223

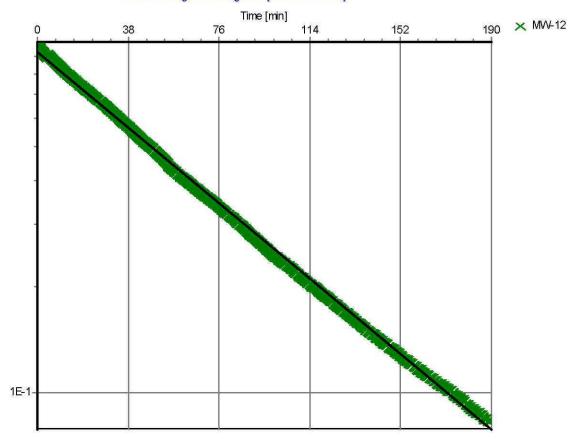
Slug Test Analysis Report

Project: Rosemergy Slug Tests

Number: 11-17788-02

Client: Woodgen, LP.

MW-12 Rising Head Slug Test [Bouw er & Rice]



Slug Test: MW-12 Rising Head Slug Test

Boring radius:

Analysis Method: Bouwer & Rice

Analysis Results: Conductivity: 1.47E-2 [ft/d]

<u>Test parameters:</u> Test Well: MW-12 Aquifer Thickness: 20 [ft]

0.25 [ft]

Casing radius: 0.083 [ft] Gravel Pack Porosity (%) 25

\* \* \* \*

Screen length: 10.65 [ft]

r(eff): 0.144 [ft]

Comments:

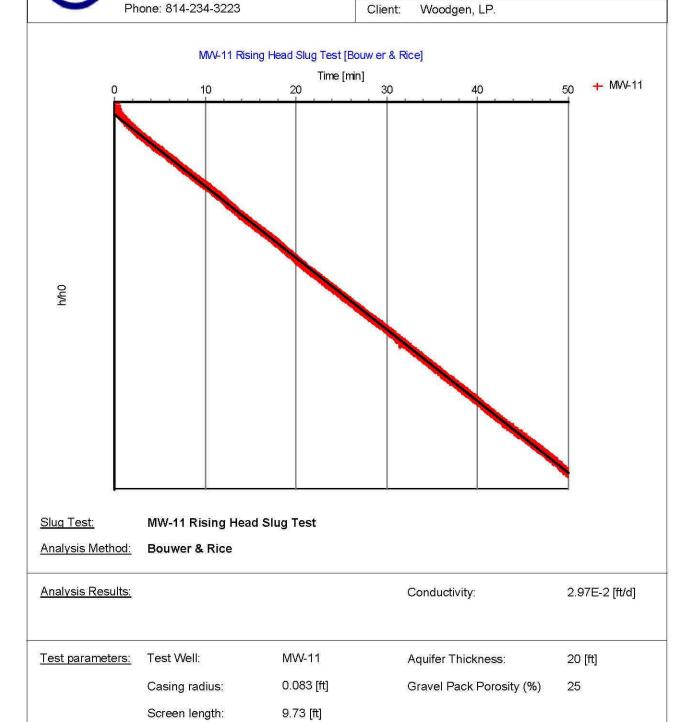
Evaluated by: OBC
Evaluation Date: 3/4/2014

# Converse Consultants 2738 West College Avenue State College, PA 16801

Slug Test Analysis Report

Project: Rosemergy Slug Tests

Number: 11-17788-02



Comments:

Boring radius:

r(eff):

0.25 [ft]

0.144 [ft]

Evaluated by: OBC
Evaluation Date: 3/4/2014

h/h0

## **Converse Consultants**

2738 West College Avenue State College, PA 16801

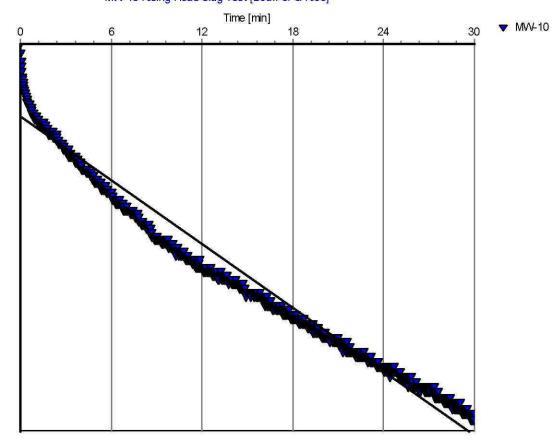
Phone: 814-234-3223

Slug Test Analysis Report

Project: Rosemergy Slug Tests

Number: 11-17788-02 Client: Woodgen, LP.

MVV-10 Rising Head Slug Test [Bouw er & Rice]



Slug Test: MW-10 Rising Head Slug Test

Analysis Method: Bouwer & Rice

Analysis Results: Conductivity: 3.06E-2 [ft/d]

<u>Test parameters:</u> Test Well: MW-10 Aquifer Thickness: 20 [ft]

0.25 [ft]

Casing radius: 0.083 [ft] Gravel Pack Porosity (%) 25

Screen length: 9.25 [ft]

r(eff): 0.144 [ft]

Comments:

Boring radius:

Evaluated by: OBC

Evaluation Date: 3/4/2014

# 2738 State

h/h0

# **Converse Consultants**

2738 West College Avenue State College, PA 16801

Phone: 814-234-3223

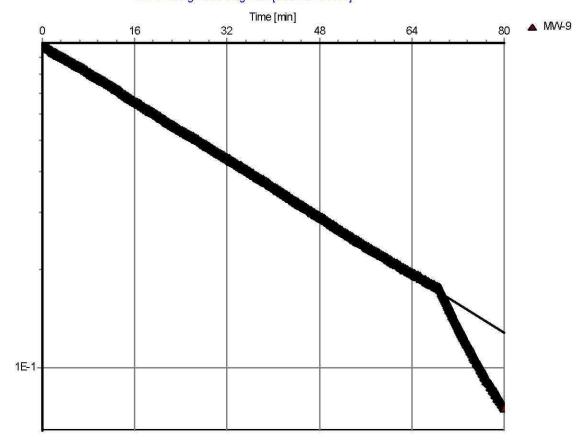
Slug Test Analysis Report

Project: Rosemergy Slug Tests

Number: 11-17788-02

Client: Woodgen, LP.

MW-9 Rising Head Slug Test [Bouw er & Rice]



Slug Test: MW-9 Rising Head Slug Test

Analysis Method: Bouwer & Rice

Analysis Results: Conductivity: 3.14E-2 [ft/d]

<u>Test parameters:</u> Test Well: MW-9 Aquifer Thickness: 20 [ft]

Casing radius: 0.083 [ft] Gravel Pack Porosity (%) 25

Screen length: 10.65 [ft]

Boring radius: 0.25 [ft]

r(eff): 0.144 [ft]

Comments:

Evaluated by: OBC

Evaluation Date: 3/4/2014

# **Converse Consultants**

2738 West College Avenue State College, PA 16801

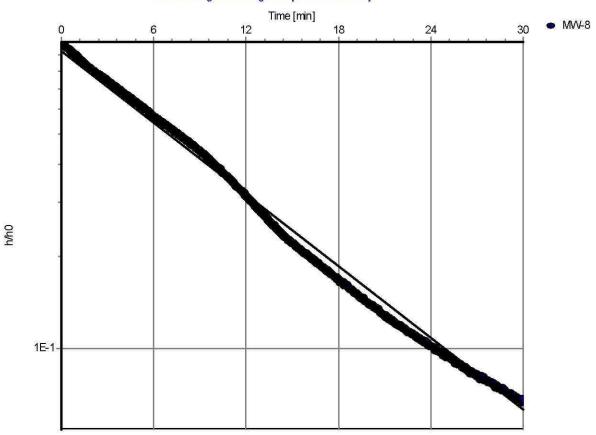
Phone: 814-234-3223

Slug Test Analysis Report

Project: Rosemergy Slug Tests

Number: 11-17788-02 Client: Woodgen, LP.





Slug Test: MW-8 Rising Head Slug Test

Analysis Method: Bouwer & Rice

Analysis Results: Conductivity: 1.07E-1 [ft/d]

Test Well: MW-8 Test parameters: Aquifer Thickness: 20 [ft]

> 0.083 [ft] Casing radius: Gravel Pack Porosity (%) 25

Screen length: 10.62 [ft]

Boring radius: 0.25 [ft]

r(eff): 0.144 [ft]

Comments:

Evaluated by: OBC Evaluation Date: 3/4/2014

h/h0

# **Converse Consultants**

2738 West College Avenue State College, PA 16801

Phone: 814-234-3223

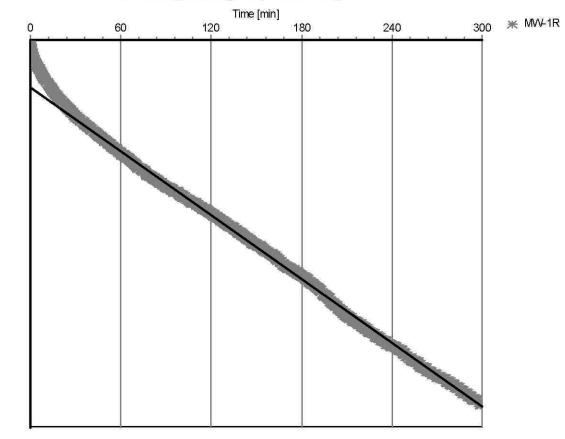
Slug Test Analysis Report

Project: Rosemergy Slug Tests

Number: 11-17788-02

Client: Woodgen, LP.

# MW-1R Rising Head Slug Test [Bouw er & Rice]



Slug Test: MW-1R Rising Head Slug Test

Boring radius:

Analysis Method: Bouwer & Rice

Analysis Results: Conductivity: 3.43E-3 [ft/d]

<u>Test parameters:</u> Test Well: MW-1R Aquifer Thickness: 20 [ft]

0.25 [ft]

Casing radius: 0.083 [ft] Gravel Pack Porosity (%) 25

\* \* \* \*

Screen length: 10.61 [ft]

r(eff): 0.144 [ft]

Comments:

Evaluated by: OBC
Evaluation Date: 3/4/2014