SITE CHARACTERIZATION REPORT/ REMEDIAL ACTION PLAN

Liberty Oil #38 700 North Railroad Street Tamagua, Pennsylvania 18252

PA DEP Facility ID #54-51586 USTIF Claim No. 2008-0122

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EXECUTIVE SUMMARY

Center Point Tank Services, Inc. (CPTS), on behalf of Liberty Oil Company and Mr. Norwood Klotz, has prepared this Site Characterization Report (SCR) and Remedial Action Plan (RAP) for the Liberty Oil #38 facility, located at 700 North Railroad Street, Tamaqua Borough, Schuylkill County, Pennsylvania, hereafter referred to as site or the site. This report includes available historical information and detailed site characterization activities, which includes an assessment of soil and groundwater quality.

The site is currently a used automobile sales lot located at 700 N. Railroad Street, in Tamaqua, Pennsylvania. Previously, Liberty Oil #38 was present at the property, and the facility was operated as a retail fuel station. According to the United States Geologic Survey 7.5 minute series, Tamaqua Quadrangle topographic map, the site is situated at an approximate elevation of 820 feet above mean sea level. Site topography is generally flat, but locally slopes gently downward towards the Little Schuylkill River, where it abruptly drops off to the water.

The Liberty 38 facility is located in a mixed use area zoned highway commercial and is currently owned by Liberty Oil Company, Inc. The subject property was purchased in November, 1992 and was operated as a retail fuel station until the storage tanks were taken out of service in 2002, and ultimately closed by removal in 2008.

Several buildings exist onsite; however, none have been determined to be receptors with regard to vapor intrusion into buildings. The site is served with potable water from the Tamaqua Area Water Authority. Portable electric heaters are utilized in occupied buildings onsite, and electricity is supplied to the site via overhead lines.

One diesel fuel and four gasoline underground storage tanks (USTs) ranging in capacity from 3,000 to 6,000-gallon and one diesel UST were removed from the site by CPTS in August 2008. Upon removal, the USTs were inspected and found to be in generally good condition; however, the product piping was found to have several corrosion holes. This corrosion resulted in a release of unleaded gasoline and/or diesel fuel to shallow subsurface soils and ultimately to groundwater which is present in an unconfined overburden aquifer at depths between three and nine feet below grade in the source area. Unleaded gasoline and diesel constituents were detected at concentrations exceeding the SHS in 11 samples collected during the soil boring investigations. In these samples benzene, ethylbenzene, naphthalene, 1,2,4-Trimethylbenzene (TMB), 1,3,5-TMB and Xylenes were present at concentrations exceeding their respective SHS. As such, those are the contaminants of concern (COCs) in soil.

The current monitoring well network consists of 13 monitoring wells which are sampled on a quarterly basis for leaded and unleaded gasoline constituents as the unleaded gasoline list incorporates the entire diesel shortlist. The dissolved phase groundwater impact has spread downgradient towards the Little Schuylkill River along a plume centerline running from the source area through MW-10 and MW-9. Benzene, Methyl tertiary butyl ether (MTBE), Naphthalene, and 1,2,4-TMB are the COCs in groundwater. Samples collected from the river over the course of five quarters did not contain leaded, unleaded, or diesel constituents at detectable levels.

Throughout the course of groundwater monitoring activities, separate phase hydrocarbons (SPH) has been observed on top of water in five monitoring wells: MW-3, MW-4, MW-7, MW-8, and MW-12. SPH thicknesses have ranged from a discontinuous sheen at MW-12 to 0.73 feet in MW-7. Through the completion of interim remedial actions which included the removal of over 200 tons of impacted soil from the source area; high vacuum extraction events where over 3,000 gallons of SPH and water were removed from the site; and the maintenance of oil absorbing socks in SPH bearing monitoring wells, no measureable SPH is present onsite at this time. Additionally concentrations of dissolved phase COCs in groundwater have either decreasing or stable trends over time.

Given the history of mining in the area, the absence of lead in groundwater, and the absence of the lead scavengers based on soil and groundwater sampling, there is no evidence to support a leaded gasoline release onsite that would necessitate regulatory action at this time under the storage tank regulations. Any leaded gasoline compounds (with the exception of lead in groundwater samples collected from MW-6) were limited to the area in the vicinity of MW-8 and MW-13, have not been detected in groundwater samples collected from the most highly impacted wells, have not been detected in the groundwater samples collected from MW-8 since 2011, and are not driving the characterization or remediation activities at the site.

As the intent is to close the release incident under the site specific standard (SSS) for both soil and groundwater, CPTS intends to perform pathway elimination to ultimately demonstrate attainment of the standard. CPTS will also continue to monitor groundwater quality and maintain oil absorbent socks in the SPH bearing wells as a preventative measure and monitor for the presence of product on at least a quarterly basis. If measurable amounts of SPH are observed in the monitoring well network, CPTS will implement additional vacuum extraction events as necessary to control the transport of additional impact.

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1.0 INTRODUCTION

Center Point Tank Services, Inc. (CPTS), on behalf of Mr. Norwood Klotz and Liberty Oil Company, Inc. has prepared this Site Characterization Report (SCR) and Remedial Action Plan (RAP) for the Liberty Oil #38 facility located at 700 North Railroad Street, Tamaqua Borough, Schuylkill County, Pennsylvania. The purpose of the investigation is to present a site characterization and a remedial action plan in compliance with Title 25, Chapters §245.309, §245.310 and §245.311, to efficiently address subsurface hydrocarbon compounds at the site.

During fieldwork, CPTS personnel followed all appropriate guidelines as per United States Environmental Protection Agency (EPA) guidelines and Occupational Safety and Health Administration (OSHA) HAZWOPER regulations located in 29 CFR 1910.120. All operations were conducted using modified Level D protection measures with proper respiratory protection equipment and additional protective clothing readily available if site conditions warranted an upgrade to Level C protection.

Site Specific Plans for sample collection Quality Assurance/Quality Control (QA/QC) and waste disposal procedures are included in **Appendix A**.

2.0 SITE DESCRIPTION AND BACKGROUND INFORMATION

2.1 Facility Description

The site is currently a used automobile sales lot located at 700 N. Railroad Street (Route 309 South), Tamaqua Borough, Schuylkill County, Pennsylvania. Previously, Liberty Oil #38 (Liberty 38, site) was present at the property, and the facility was operated as a retail fuel station. According to the United States Geologic Survey 7.5 minute series, Tamaqua Quadrangle topographic map, the site is situated at an approximate elevation of 820 feet above mean sea level. Site topography is generally flat, but locally slopes gently downward towards the Little Schuylkill River, where it abruptly drops off to the water. A Topographic Site Location Map is included as **Figure 1**. A Site Plan including monitoring well locations and other pertinent site features is included as **Figure 2**.

The Liberty 38 facility is located in a mixed use area zoned highway commercial and is currently owned by Liberty Oil Company, Inc. The subject property was purchased in November, 1992 and was operated as a retail fuel station until the storage tanks were taken out of service in 2002, and ultimately closed by removal in 2008.

Several buildings currently exist on site: a storage shed, a small concrete block, slab on grade building with a bathroom which is used for storage, a modular office building, a storage trailer, and a pole barn garage with a car port. None of the site buildings have basements, and currently only the office is inhabited during the work day. The modular office building is not in contact with soil at the site, rather, stone backfill was placed beneath the structure. No skirting is in place between the bottom of the building and grade level.

One diesel fuel and four gasoline underground storage tanks (USTs) ranging in capacity from 3,000 to 6,000-gallon and one diesel UST were removed from the site by CPTS in August 2008. Upon removal, the USTs were inspected and found to be in generally good condition; however, the product piping was found to have several corrosion holes.

According to the current owner, Mr. Klotz, the site is served with potable water from the Tamaqua Area Water Authority. Portable electric heaters are utilized in occupied buildings onsite, and electricity is supplied to the site via overhead lines.

2.2 Local Land Use

Land use near the site is predominantly industrial, commercial and residential. Surrounding properties include the Little Schuylkill River to the north and east, a car dealership to the northeast, Thorn's ATV and Cycle to the southeast, and the Reading and Northern Railroad to the south and west as illustrated on the Site Plan, **Figure 2**.

2.3 UST Closure

CPTS was retained by Liberty Oil Company to remove and dispose of four UST systems at the Liberty 38 facility. Prior to their removal, the UST systems were not in service for several years. According to information supplied by Mr. Klotz the USTs were emptied of fuel and taken out of operation in 2002. CPTS conducted the tank removal and closure during the week of August 12, 2008, and submitted a UST Closure Report dated October 17, 2008. The Closure Report documents the UST closure activities and confirmatory soil sample results for the facility. Based on the Liberty 38 UST Closure Report, one diesel and three gasoline USTs, five dispensers, three pump islands, and their associated piping systems were permanently closed by removal at the site. Based on a review of the tank handling summary report, none of the confirmatory soil samples from the UST excavation areas contained gasoline or diesel constituents at concentrations that exceeded the statewide health standards (SHS); however, the soil samples collected in the gasoline dispenser and piping areas had combinations of one or more unleaded gasoline constituents at concentrations that exceeded the SHS.

CPTS verbally notified the DEP of the suspected release on August 15, 2008. A follow-up written Notification of Contamination (NOC) concerning the suspected release was submitted to the DEP on August 20, 2008. Based on the reported impact, an additional site investigation was required in accordance with the Department of Environmental Protection (DEP) Storage Tank regulations. A copy of the UST Closure Report is included in **Appendix B**, and a summary of the soil sample analytical results are included in **Table 1**.

2.5 Potentially Sensitive Receptors

The site was evaluated for the potential to impact ecological receptors using the screening process described in §250.311. No additional evaluation for potential impacts to ecological receptors is required, as per §250.311(b)(1), because the only constituents on-site are those related to diesel fuel and gasoline, light petroleum products.

As the site is being evaluated for the site specific standard (SSS), CPTS conducted a sensitive receptor survey in the general area of the site to identify any potential receptors that could be impacted by petroleum hydrocarbons in the soil or groundwater. The following is a summary of CPTS's findings during the sensitive receptor survey:

- The subject site is located in a mixed use area consisting of commercial, industrial, and residential properties. The site buildings do not have basements.
- According to a search of the PA Groundwater Inventory System (PAGWIS) via the DEP's eMapPA website, no potable wells are located within one mile of the site.
- Municipal water is supplied to the site and surrounding properties by the Tamaqua Area Municipal Authority.

• The nearest surface water body to the site is the Little Schuylkill River which is located to the north and east of the site, and flows generally to the south and east in the vicinity of the site. Although groundwater flow is generally to the northeast towards the river, surface water flow is generally to the south and east, and five consecutive quarters of samples were collected both upstream and downstream of the site, with no detections of leaded or unleaded gasoline or diesel fuel constituents.

3.0 SITE CHARACTERIZATION ACTIVITIES

CPTS was contracted by Mr. Norwood Klotz of Liberty Oil Company to perform site characterization activities. Site characterization activities performed by CPTS included but were not limited to: a soil quality investigation, monitoring well installation, groundwater sampling, surface water sampling, and soil gas sampling.

3.1 Soil Quality Investigation

To determine the extent of the soil impact that was discovered during the onsite UST removal 65 soil samples were collected from 69 soil borings that were installed throughout the site between 2009 and 2018 via Geoprobe® direct-push drilling techniques. Each soil boring was logged by a CPTS scientist and screened using a photoionization detector (PID) for the relative presence of volatile organic compounds (VOCs) which may be indicative of petroleum hydrocarbon impact.

3.1.1 Soil Sample Locations, Methodology, and Saturation

Soil samples were collected using slightly different methodology during the course of the investigation dependent on the data available at the time and the Professional Geologist designing and/or implementing the sampling plan. Soil samples collected during the initial characterization phase of this investigation (identified as "GP") were selected based on PID readings and field observations. Generally, soil samples were not collected from areas where the PID readings were very high, as it was assumed that these soils would have hydrocarbon concentrations in excess of the SHS; rather, samples were collected in an attempt to delineate the extent of soil impact both horizontally and vertically prior to the installation of the monitoring well network. As a result, many of the deeper soil samples were collected below what is now understood to be the seasonal low water table. Based on review of the laboratory analytical results, these soils were not saturated at the time of sample collection. Three of these samples had less than 80% solids; however, they were all collected from soils located above the high water table. Soil borings installed during the next phase (identified as "LO") were collected on a general grid pattern to further define the extent of soil impact onsite. Soil samples were collected from each of these borings from the area that exhibited the highest PID readings, soil beneath the observed elevated PID readings, and/or the base of the boring as appropriate; if no elevated PID readings were observed throughout the soil column a sample was collected at the base of the boring, or above the water table. Although groundwater elevation data indicates that several of these samples were also collected from below the low water table, none of these soil samples were saturated based on field observations and laboratory analytical results. One sample had less than 80% solids; however, it was collected from above the high water table. Soil samples collected from borings and monitoring wells installed during the most recent phases of site characterization (identified as "SB") were installed to complete the delineation of the extent of soil impact at the site, and are generally located near the edge of the previous soil boring locations and to determine the presence of soil impact off site. Soil samples were collected from these borings in the area exhibiting the highest PID reading and from an area below the high PID reading and above the low If no elevated PID readings were observed, one sample was collected from a representative area above the low water table (as estimated with existing data). Upon analysis of groundwater elevations offsite in MW-12 and MW-13, the water table is higher than anticipated. Using data collected from monitoring wells MW-1 through MW-10, the low water table at MW-12 and MW-13 was anticipated to be between 8.5 and 11 feet below grade. In the time since their installation; however, the depth to groundwater has been between four and six feet below grade, likely due to abnormally high precipitation and snow melt. Groundwater elevations across the monitoring well network during this same time period have been at or near historic high levels. As such, using the current data at monitoring wells MW-12 and MW-13, the soil sample collected from MW-12 (7.5 feet) and the deeper sample collected from MW-13 (6.5 feet) are both below the low water table. Consistent with the previous rounds of soil sampling, none of these samples was saturated based on laboratory analytical data. Soil boring and monitoring well locations are illustrated on Figure 3.

3.1.2 Soil Quality and Area of Impact

A total of 65 soil samples were collected from 69 soil borings and placed in laboratory supplied bottleware and submitted under proper chain of custody documentation for laboratory analysis of the UST leaded and unleaded gasoline short lists, as the diesel fuel short list is included within the unleaded gasoline short list. The samples were analyzed for benzene, ethylbenzene, toluene, xylene, naphthalene, isopropylbenzene (cumene), methyl-tertiary-butyl-ether (MTBE), 1,2,4-Trimethylbenzene (TMB), 1,3,5-TMB, 1,2-dibromoethane (EDB), 1,2-dichloroethane (EDC), and lead. Soil boring and monitoring well logs are included in **Appendix C**.

Based on a review of laboratory soil quality data and observations made during the installation of soil borings and monitoring wells, one area of soil impact exists onsite. This area is located surrounding the former product piping and gasoline dispenser area; extends northward to the vicinity of MW-8 and southward several feet beyond MW-3 as illustrated on **Figure 3**. No soil samples were collected during the installation of MW-9 and MW-10; however, PID readings remained at background levels above the water table. As such, CPTS is not considering the soil impact to extend offsite beyond Route 309 South in this direction

The following description of soil quality considers only soil samples collected above the seasonal low water table. All analyzed soil samples are presented in **Table 1**; however, those collected from below the seasonal low water table are compared to Direct Contact values for risk assessment purposes, and are not being utilized to determine the area of soil impact, nor demonstrate attainment of a standard.

Gasoline and diesel constituents were detected in several soil samples collected on and offsite. When considering analyzed constituents that could be attributed to leaded gasoline (lead, EDB, and EDC), while there are several soil samples where the laboratory reporting limit exceeds their respective SHS, no concentrations of EDB or EDC were detected above the laboratory reporting limits in any soil sample collected. Lead was detected in each soil sample, and was present at a concentration above the SHS in two soil samples. These sample locations (LO-7 and GP-23); however, do not correlate to the areas where petroleum hydrocarbons are detected at concentrations exceeding the SHS and as such, have not been attributed to a release of leaded gasoline.

Unleaded gasoline and diesel constituents were detected at concentrations exceeding the SHS in 11 samples collected during the soil boring investigations. In these samples benzene, ethylbenzene, naphthalene, 1,2,4-TMB, 1,3,5-TMB and xylenes were present at concentrations exceeding their respective SHS. As such, those are the contaminants of concern (COCs) in soil.

As soil samples were collected to delineate the unleaded gasoline plume both horizontally and vertically, and each of the soil samples that exhibited concentrations of unleaded gasoline and/or diesel constituents at concentrations exceeding the SHS have been bounded below by either the low water table or by soil samples with concentrations of unleaded gasoline constituents below the SHS, and above by at least two feet of un-impacted soil, CPTS has collected sufficient data to delineate the extent of soil impact on site. A soil boring location map which includes an illustration of the area of soil impact is presented as **Figure 3**. Soil boring analytical data is summarized in **Table 1** and the laboratory analytical data sheets are presented in **Appendix D**.

3.2 Monitoring Well Installation and Development

Thirteen monitoring wells were installed on and off site between 2009 and 2018. Monitoring wells were installed to investigate the groundwater quality within the first water bearing zone. Each well was constructed using either two or four inch diameter PVC 0.020 inch slotted well screen, two or four inch diameter solid PVC riser, #2 filter sand pack, and completed to grade using a flush mounted protective casing with a locking well cap. The wells are screened entirely above the soil/bedrock interface and have a minimum of a one foot hydrated bentonite seal above the filter sand pack. Monitoring Well Logs are included as **Appendix C**, and documentation confirming the disposal of soil cuttings generated during monitoring well installation is included as **Appendix E**.

Upon completion of monitoring well installation activities, each new well was developed via pump and surge techniques. The purpose of development is to remove residual soil and rock particles from the well, to enhance hydraulic communication between the wells and the aquifer, and to ensure the future collection of more representative groundwater samples. The water generated during well development was treated with granular activated carbon prior to being discharged to the ground surface.

3.3 Groundwater/Surface Water Sampling

Groundwater samples have been collected from the monitoring well network on generally a quarterly basis since February 2009. Prior to collection of groundwater samples, the depth to water in each monitoring well was measured. These data along with the total well depths and top of casing elevations were used to calculate the volume of groundwater within each well and the groundwater elevation and hydraulic gradient across the site, respectively. Each monitoring well was then purged of three to five well volumes to ensure a representative sampling matrix. During well purging, purge water was treated with granular activated carbon prior to being discharged to the ground surface. Groundwater samples were then placed into laboratory supplied bottleware and submitted to Test America Laboratory of King of Prussia, PA or Edison, New Jersey for analysis of the PA UST short list for leaded and unleaded gasoline constituents EPA Methods 8260C, 8011, and 200.8. Groundwater elevation contour maps

were prepared for each quarter and submitted to the DEP on a quarterly basis. The most recent two years of Groundwater Elevation Contour Maps are included as **Figures 4 through 14**.

Review of the laboratory analytical results indicates that several unleaded gasoline constituents have historically been detected in groundwater samples collected from many of the monitoring wells. Groundwater quality is summarized on **Table 2** and described below:

- Since the 4th quarter 2009, at monitoring wells MW-1, MW-2, or MW-5, and since its installation in 1st quarter of 2016 at MW-11 no leaded or unleaded gasoline constituents have been detected in the groundwater samples collected at concentrations exceeding their respective SHS.
- Cumene, xylenes and 1,3,5-TMB have not been detected at concentrations exceeding their respective SHS in any of the groundwater quality samples collected.
- Toluene has not been detected in groundwater at concentrations exceeding its SHS since 3rd quarter 2012 in any of the groundwater samples collected from the monitoring well network.
- Ethylbenzene has not been detected in groundwater at concentrations exceeding its SHS since 3rd quarter 2014 in any of the groundwater samples collected from the monitoring well network.
- Over the last eight quarters of groundwater monitoring, unleaded gasoline constituents have generally been detected at concentrations exceeding the SHS in groundwater samples collected from MW-3, MW-4, MW-7, MW-8, MW-10, MW-12, and MW-13 as illustrated on the Isoconcentration contour maps included as Figures 15 through 29.
- Benzene was the only constituent detected at a concentration exceeding the SHS in the groundwater samples collected from MW-9 over the last eight quarters of monitoring; and on only three occasions. MTBE and cumene were also detected; however, at concentrations below their respective SHS.
- The highest dissolved phase concentrations of unleaded gasoline constituents are typically centered around MW-7, MW-8, and MW-10.
- Recent groundwater samples collected from the historically separate phase hydrocarbon (SPH) bearing wells MW-3, MW-7, and MW-8 indicate that the unleaded constituents previously detected in groundwater samples collected from MW-3 have decreased to below detectable levels when the groundwater level is greater than 6 feet from grade, and benzene is the only constituent present exceeding the SHS when groundwater levels are shallow (less than six feet below grade). Benzene and 1,2,4-TMB are present at concentrations exceeding the SHS in the groundwater samples from both MW-7 and MW-8, and MTBE and Naphthalene are also present at a concentration exceeding the SHS at MW-7.
- Lead is the only leaded gasoline, unleaded gasoline, or diesel constituent ever detected in groundwater samples collected from MW-6. Throughout the course of the project, lead has only been detected in groundwater samples collected from other monitoring wells on three other occasions, and at concentrations below the SHS.
- Based on the groundwater flow direction (to the north and east), the location of the former fuel system (to the southeast of MW-6), and the results of the soil sampling conducted at the property (no lead at concentrations exceeding the SHS between the former fuel system and MW-6), CPTS has concluded that the lead in the groundwater samples from MW-6 is not

- resultant of a leaded gasoline release, but rather is likely due to the coal mining derived fill material present underlying the site.
- No leaded or unleaded gasoline constituents were detected in surface water samples collected either upstream or downstream of the dissolved phase plume.
- Benzene, MTBE, Naphthalene, and 1,2,4-TMB are the COCs in groundwater.

Water has historically seeped into the basement of the Thorn's facility, and CPTS collected a sample of this water on November 12, 2009. Based on a review of the laboratory analytical results, no leaded or unleaded gasoline constituents were detected.

Based on data collected during the groundwater monitoring events it appears that groundwater flow is generally to the northeast towards the Little Schuylkill River.

As the river is nearly inaccessible especially in the spring and summer months; and the stream bed and banks are comprised largely of rock, in lieu of installing a rain gauge and stream piezometers on site as requested in the SCR disapproval letter from 2009, CPTS has been gauging the surface of the Little Schuylkill River from a fixed, surveyed point on the upstream site of the bridge. The stream levels have been consistent with the groundwater elevation contours, and rainfall data is available online for the Tamaqua area via a personal weather station network which can be accessed through the Weather Underground website (wunderground.com).

As groundwater flow at the site is towards the river, CPTS collected surface water samples from locations both upstream and downstream from the site. Due to accessibility issues (the river is located within a steep valley) the samples were collected from the upstream and downstream sides of the Route 309 Bridge. Surface water samples were collected for five consecutive quarters and were also analyzed for both leaded and unleaded gasoline. Review of the laboratory analytical results indicates that no leaded or unleaded gasoline constituents were detected in any of the surface water samples. As such, CPTS petitioned the DEP to cease sampling, and the request was approved by the DEP via email dated June 16, 2015, with the understanding that the river would continue to be gauged on a quarterly basis and if there was visual evidence of a release, samples would be collected. As of the date of this report, no evidence of a diesel fuel, leaded or unleaded gasoline release to the Little Schuylkill River has been observed. DEP personnel had previously indicated that orange staining was observed on the bank of the river; however, CPTS has not observed staining in this area of the river. though it has been prevalent approximately 1.5 miles downstream from the site; however, two other streams have also merged in with the River by this point. Based on the surface water sampling results CPTS suspects that the orange staining is not due to petroleum hydrocarbon impact, but rather iron oxidation from soil and bedrock, or from acid mine drainage as the site is located within an area that has undergone many years of coal mining. According to the DEP's eMapPA website, a mine seep is located approximately one mile upstream of the site, and the site is located within an area mapped as abandoned mine land. Groundwater and surface water laboratory analytical data are included in Appendix F.

3.4 Source Product Rationale

Based on the UST numbering scheme, it appears that the tanks that were removed in 2008 were the same ones that were originally registered at the site in 1989; therefore, it is possible that these USTs may have once contained leaded gasoline; however, the UST Closure Report indicates that only either unleaded gasoline or diesel fuel was stored in the onsite USTs. Please note that leaded gasoline has not been sold in this area since the 1980s. Based on soil sampling conducted during the UST closure, and the poor condition of the product piping, the source of the release was determined to emanate from the product piping as opposed to the USTs themselves. The product piping was a suction system and in the condition that it was found (severely corroded) it would be very unlikely that leaded gasoline was released as the fuel dispensing system would not have functioned properly for over 20 years with compromised piping.

As detailed in previous sections of this report, of all of the soil samples collected during the UST closure activities, the only soil samples where concentrations of leaded or unleaded gasoline constituents (specifically benzene, ethylbenzene, naphthalene, toluene, 1,2,4-TMB, 1,3,5-TMB and/or xylenes) were present at concentrations exceeding the SHS were from the dispenser areas and piping runs. No leaded gasoline, unleaded gasoline, or diesel constituents were detected at concentrations exceeding the SHS in samples collected in the vicinity of any of the USTs. Due to the very high concentrations of unleaded gasoline constituents in the former piping and dispenser areas, those samples were analyzed at high dilutions, and detection limits for EDB, and EDC were generally elevated to levels exceeding the SHS; however, lead concentrations in these samples were all well below the SHS.

The soil in the vicinity of the former dispenser island was excavated and disposed of off-site in 2011. Post excavation samples (Figure 30) indicate that although impacted soils remain in the area, the concentrations are much improved from the samples collected during UST removal, SPH is no longer detected in the adjacent monitoring well MW-4, and only benzene and 1,2,4-TMB were detected at concentrations exceeding the SHS in the post excavation soil samples. No EDB or EDC were detected in the post excavation soil samples; however, MTBE was detected at concentrations below the SHS, which is characteristic of an unleaded gasoline release.

Of the 89 soil samples collected and analyzed, EDC was not detected above the laboratory reporting limits in any samples collected, and EDB was detected in two samples, both below the seasonal low water table. In sample location LO-9 (which was installed in very close proximity to former unleaded gasoline UST #003) EDB was detected at 50.4 micrograms per kilogram (ug/kg), lead was detected at a concentration below even the saturated soil SHS, and EDC was not detected at an order of magnitude below the soil to groundwater SHS. At soil sample location MW-12, EDB was detected at a concentration exceeding the Soil to Groundwater standard; however, it was also collected from below what is currently understood to be the low water table, and the detection is also several orders of magnitude below the Direct Contact value.

When considering analyzed constituents that could be attributed to leaded gasoline (lead, EDB, and EDC), while there are several soil samples where the laboratory reporting limit exceeds their respective SHS, no concentrations of EDB or EDC were detected above the laboratory reporting limits in any soil

sample collected. Lead was detected in each soil sample, and was present at a concentration above the SHS in two soil samples. These sample locations (LO-7 and GP-23); however, do not correlate to the areas where petroleum hydrocarbons are detected at concentrations exceeding the SHS and as such, have not been attributed to a release of leaded gasoline.

Soil boring LO-7 is located directly upgradient of MW-2, and GP-23 is adjacent to MW-8. Lead has never been detected in the groundwater samples collected from either of these monitoring wells.

Given the absence of leaded gasoline constituents EDB and EDC in soil above the water table, the presence of coal mining derived fill material, and information provided on the release location (piping) and history of the UST system operation, CPTS has focused on the characterization and remediation of unleaded gasoline constituents in soil, as that short list includes the compounds included on the short list for diesel fuel as well.

- The highest dissolved phase concentrations of unleaded gasoline and/or diesel fuel constituents
 are typically centered around MW-7, MW-8, and MW-10 as illustrated on the Isoconcentration
 contour maps included as Figures 15 through 29.
- Lead is the only leaded gasoline, unleaded gasoline, or diesel constituent ever detected in groundwater samples collected from MW-6. Throughout the course of the project, lead has only been detected in groundwater samples collected from other monitoring wells on three other occasions, and at concentrations below the SHS ranging from 0.41 to 0.88 micrograms per Liter (ug/L), and has not been detected beyond MW-6 since 2012.
- Based on the groundwater flow direction (to the north and east), the location of the former fuel system (to the southeast of MW-6), and the results of the soil sampling conducted at the property (no lead at concentrations exceeding the SHS between the former fuel system and MW-6), CPTS has concluded that the lead in the groundwater samples from MW-6 is not resultant of a leaded gasoline release, but rather is likely due to the coal mining derived fill material present underlying the site.
- No leaded or unleaded gasoline constituents were detected in surface water samples collected either upstream or downstream of the dissolved phase plume.
- Leaded gasoline has not been sold in this area since the 1980s.
- There is no documentation confirming the sale of leaded gasoline onsite.
- Leaded gasoline constituents were not detected in the UST closure soil samples, with the exception of lead at a concentration below the SHS.

EDB was detected in groundwater samples from MW-8 in three consecutive quarters between late 2010 and mid-2011, and has not been detected in the seven samples collected from MW-8 since that time, or in groundwater samples from any other monitoring wells.

EDC has been detected at a concentration below the SHS in groundwater samples collected from MW-3 and MW-13 on March 27, 2018, and at a concentration exceeding the SHS in the groundwater sample collected form MW-10 on September 20, 2017.

Given the soil and groundwater characterization data summarized above, CPTS has determined that EDB, EDC and Lead are not contaminants of concern, and that the source products of concern are related to unleaded gasoline and diesel fuel.

3.5 Aquifer Testing

On February 16, 2009 CPTS performed slug testing at monitoring wells MW-1, MW-2, and MW-3. Both rising and falling head tests were conducted and an average hydraulic conductivity (K) was calculated using the rising head test results for MW-1 and MW-2 only as the data collected from MW-3 indicates that the water table may not have fully equilibrated prior to the end of the test. The average K value onsite is 1.61 feet per day. The Aquifer test results and analysis are included in **Appendix G**.

3.6 Site-Specific Geology and Hydrogeology

Based on the US Department of Agriculture (USDA) web soil survey, the site is underlain directly by Urban Land - Udults complex soils which are described as human transported soils, pavement, buildings, and other artificially covered areas. To the north of the site, Dekalb-Rubble land association soils are present. These soils are described as very gravelly to very channery sandy loam which is comprised of residuum weathered from sandstone and shale. To the west are soils described as Udorthents, strip mine. These soils are described as very channery sandy to silty clay loam; man made and altered materials from mixed rock types. Based on personal observation and boring logs, there is a shallow layer of coal silt and sand fill material present likely left over from former local coal mining/processing operations in the area and utilized as backfill and/or grading material along with colluvium and gravel fill material. Additionally, the site is mapped on the DEP eMapPA website as a portion of the abandoned Farley Mine with an abandoned strip mine also present to the west of the facility.

According to the PA Department of Conservation and Natural Resources (DCNR) web mapping application, the site is underlain by the Llewellyn Formation (PI). The Llewellyn Formation is described in Engineering Characteristics of Rocks and Minerals of Pennsylvania (Geyer and Wilshusen, 1982) as interbedded sandstone, siltstone, and conglomerate, which is medium to coarse grained and light gray to brown in color. The Llewellyn contains coal and dark-gray to black shales. There is a reported maximum thickness of 830 feet. Bedding in the Llewellyn is described as moderately well-developed where coal and shale facies are thin. Sandstone, siltstone and conglomeratic areas may be thick to massive. Joints are moderately developed and moderately abundant with a blocky pattern, moderately spaced, regularly sequenced and are described as open and steeply dipping. The Llewellyn formation exhibits slight to moderate weathering at shallow to moderate depth, depending on lithology. Rubble consists of small to medium, flat, elongate fragments to large blocky fragments. The overlying mantle has thin to moderate thickness.

Areas underlain by the Llewellyn express topography with low ridges and valleys in rolling terrain, natural slopes and are stable at moderate angles. There is good surface drainage. The total effective porosity is moderate with a moderate to low permeability. Groundwater yields from wells in the

Llewellyn average 38 gallons per minute (gpm) and high iron and acidity are common aquifer quality problems.

Based on published reports, the subject property and Tamaqua Borough regionally are underlain by the Minersville Synclinorium. The published reports contain a geologic cross section based on a north-south section line through the Synclinorium which runs through Tamaqua proper. Based on the evaluation of this cross section, Tamaqua and the subject property are underlain by a series of east-west trending, southward dipping faults that lie within the synclinorium. Based on the maps, the site lies between the Greenwood and Newkirk Faults within the Llewellyn Formation part of the synclinorium.

A reconnaissance was conducted to look for measureable, accessible outcrops near the site. A large outcrop wall of the Llewellyn shale (IPI), was found near the parking lot at the Tamaqua Railroad Station parking located a couple of blocks south of the site property. A structural measurement made of the outcrop indicated an orientation of N70E/68N. This northeasterly strike is in close agreement with the published strike and dip of the Llewellyn Formation (N77E/72S) measured near the site. Most of the published dips on the geologic map are oriented south in accordance with the southward dipping, faulted synclinorium. CPTS' structural measurement with a northern dip must have been taken from the northern flank of one of the also mapped mini-anticlines rather than from one of the principal synclinorium structures.

Depth to water measurements collected from the monitoring well network between February 2009 and March 2018 ranged from 1.48 feet bgs in MW-1 to 16.45 feet bgs in MW-6. The groundwater elevation at the site is highly influenced by precipitation, and intersects with the level of the Little Schuylkill River northeast of the site. This influence decreases onsite with distance from the river, with an average variation in groundwater elevation of approximately one and one-half feet at MW-5 and MW-9 as compared to approximately four feet over the same time period at MW-1 and MW-3. Historical groundwater elevation data is summarized in **Table 2**. The most recent two years of Groundwater Elevation Contour Maps have been prepared and are included as **Figures 4 through 13** respectively. Based on data collected during the quarterly groundwater gauging and sampling events, it appears that groundwater flow is generally towards the northeast at an average gradient of 0.11 ft/ft.

The calculated K value for the site based on rising head data collected from slug tests at MW-1 and MW-2 is 1.61 feet per day (ft/day) which is consistent with conductivities observed in silty sands and fine sands (2.8 to 0.02 ft/day). As the subsurface materials at the site are generally poorly sorted and consist largely of silt, sand, and gravel, these values are appropriate for the site.

3.7 Separate-Phase Hydrocarbons

Throughout the course of groundwater monitoring activities, SPH has been observed on top of water in five monitoring wells: MW-3, MW-4, MW-7, MW-8, and MW-12. SPH thicknesses have ranged from a discontinuous sheen at MW-12 to 0.73 feet in MW-7.

SPH was detected intermittently on top of groundwater in MW-4 between September 2009 and May 2011. SPH was initially detected at a thickness of 0.53 feet in September 2009, then was not measurable again until the June 2, 2010 groundwater sampling event. Between June 2010 and May 2011 the SPH thickness ranged from 0.03 feet to 0.17 feet. As described in Section 3.6 of this report, in late May 2011 hydrocarbon impacted soils were excavated from the former dispenser area adjacent to MW-4. SPH has not been observed in MW-4 since the completion of the soil excavation, and concentrations of dissolved phase hydrocarbons in groundwater have generally decreased by an order of magnitude in the groundwater samples collected from MW-4 when pre and post excavation samples are compared.

During the course of site characterization and interim remedial actions at the site, SPH has generally been persistent on top of groundwater in monitoring wells MW-3, MW-7 and MW-8. With the exception of times when CPTS was monitoring the SPH bearing wells for recharge following high vacuum extraction (HVE) events (described in Section 3.8), oil absorbing socks have been maintained in these wells since December 2012.

A total of approximately 5.7 gallons of SPH has been recovered via oil absorbing socks between December 2012 and March 2018. No measureable SPH has been observed on top of groundwater since the last vacuum extraction event in November 2015, and only 0.87 gallons of SPH has been recovered since then.

Based on the decreasing amounts of SPH observed and removed from the monitoring well network, current observations indicate that the SPH has largely been removed (0.42 gallons removed in 2016, 0.36 gallons in 2017, and 0.10 gallons to date in 2018), and appears to be controlled by the oil absorbing socks in place. As stated above, the socks are checked on at least a quarterly basis and replaced as needed. Currently, socks are maintained in monitoring wells MW-3, MW-7, MW-8, and MW-12. The socks in monitoring wells MW-7, MW-8, and MW-12 are replaced as needed and are generally ½ to ½ full. A sock continues to be maintained in MW-3; however, only an intermittent sheen has been observed in this location since April of 2016, and no SPH has been absorbed by the socks in that well.

3.8 Interim Remedial Actions

Several Interim remedial actions have been performed at the site during site characterization activities to address the presence of SPH on top of groundwater. These actions have included the maintenance of oil absorbing socks in SPH bearing monitoring wells, several HVE events, and soil removal in the source area.

As detailed in the previous section, given the continued presence of SPH on top of groundwater, CPTS has maintained oil absorbent socks in the SPH bearing wells which are generally monitored on a quarterly basis, unless site conditions warranted more frequent monitoring. A total of approximately 5.7 gallons of SPH has been recovered via oil absorbing socks between December 2012 and March 2018.

Four HVE events have been conducted to date. These events were conducted with a vacuum truck which was fitted with a PVC pipe and rubber Fernco attachment appropriately sized for each monitoring well. The PVC attachment is attached to the hose on the vacuum truck and the vacuum is activated. The 10 foot pipe is then lowered into the monitoring well from the top to preferentially remove SPH on top of the groundwater surface. As the well dewaters, the attachment is lowered into the well and the rubber Fernco fitting is placed on the top of the well casing, creating a sealed environment. This seal allows for the vacuum to not only pull in SPH and impacted water but also pulls vapors from the vadose zone. Once the vacuum stops pulling water from the well, the vacuum is deactivated, and the process begins on the next well while the first recharges. Each well is purged several times during the event. The first event was conducted on October 20, 2009, and was only conducted at MW-4, as at that time it was the only SPH bearing monitoring well. The most recent three events conducted on May 25, 2012, November 19, 2014, and November 13, 2015 due to the presence of a measureable amount of SPH. These three events were conducted at MW-3, MW-7, and MW-8 to remove as much residual SPH and impacted groundwater as possible, and MW-4 in an effort to remove additional impacted groundwater in the source area while MW-3, MW-7 and MW-8 recharged. The oil absorbent socks were not replaced immediately following the HVE events in an effort to gauge SPH rebound as discussed above. A review of the gauging data indicates that no measurable SPH has been observed in any of the monitoring wells since the last HVE event in November 2015. Since that time, the SPH has been controlled by oil absorbing socks, the SPH recovery has dramatically decreased, and has not been absorbed by the socks placed in MW-3 since August, 2016. A total of 3,821 gallons of SPH and impacted groundwater were removed and properly disposed of off-site during the HVE events. Disposal documentation is provided in Appendix E.

Impacted soil was removed from the area surrounding the northern end of the former dispenser island during May, 2011. Elevated PID readings and odors began at approximately 3 feet below grade and were observed throughout the excavation activities. The potable water line was encountered during the excavation, and it was suspected to be leaking; however, the water company indicated that it was groundwater present in the piping sheath. A total of 1,126 gallons of water were vacuumed from the excavation and properly disposed of offsite. Confirmatory soil samples were collected following excavation activities from the excavation bottom and sidewalls. Review of the analytical results from the post excavation soil sampling indicates that although impacted soil was able to be removed, benzene and 1,2,4-TMB impacted soils remain in this area. A total of 205.85 tons of soil were removed from the site and were transported to Clean Earth's Hagerstown, MD facility for proper disposal. Figure 30 illustrates the soil sample locations, the laboratory results are summarized in Table 1 identified as "EX", and the soil disposal documentation is provided in Appendix E.

Since the completion of the soil excavation in 2011, no SPH has been detected in MW-4. This observation combined with the disappearance of measurable SPH at MW-3 and decreasing amounts of

SPH being recovered by the oil absorbing socks since the completion of the HVE events, indicates that the interim remedial actions have been successful in controlling the SPH onsite.

3.9 Fate and Transport Analysis

Due to the success of the interim remedial actions described above, the potential for both gasoline and diesel impact to groundwater, and the potential presence of an offsite source, a numerical model was not utilized to describe the fate and transport of the dissolved COCs at the site (benzene, MTBE, naphthalene, and 1,2,4–TMB).

As detailed in the Conceptual Site Model (Section 3.11 of this report), a release of gasoline and/or diesel fuel occurred onsite, emanating from the former product piping and dispenser islands. This product was released prior to their removal in 2008; however, a specific time that the release began is unknown. The product piping was a suction system, and would not have operated properly in the condition that it was observed to be in in 2008. Based on the soil quality data, the release impacted shallow subsurface soils beginning around three feet below grade and the impact has migrated to groundwater. Figures 15 through 29 are Isoconcentration maps that illustrate the dissolved phase plume over the past two years. The centerline of the plume appears to be centered on the former dispenser island, and pass through MW-10 where unleaded gasoline constituents remain elevated, to MW-9 where benzene is the only leaded or unleaded gasoline or diesel constituent which is intermittently present at a concentration exceeding the SHS.

A Mann-Kendall analysis was conducted for each of the COCs in each well where it has been detected at a concentration exceeding the SHS over the most recent eight quarters to determine if trends are apparent in the concentrations. No trends for COCs present in the groundwater samples collected from MW-12 and MW-13 could be determined as only two sampling events have been conducted. The following is a description of the results of the trend analysis:

- Benzene is the most widespread contaminant present in groundwater samples collected over the last eight quarters at concentrations exceeding the SHS in monitoring wells MW-3, MW-4, MW-7, MW-8, MW-9, MW-10, MW-12 and MW-13. According to the results of the trend analysis the concentration of benzene is stable at MW-7, decreasing at MW-3, MW-4, MW-8 and MW-9, and probably decreasing at MW-10 all at high confidence levels.
- MTBE concentrations have exceeded the SHS in groundwater samples collected from several
 monitoring wells; however, it was only detected above the SHS during the last eight quarters of
 monitoring in groundwater samples collected from MW-4, MW-7, MW-10, and, MW-12. The
 trend analysis indicates that the concentration of MTBE is decreasing at MW-4, MW-7, and MW10 at a high confidence factor.
- Naphthalene concentrations have exceeded the SHS at some point over the last eight quarters in MW-7, MW-8, MW-10, and MW-12. According to the analysis, the trends are stable at MW-7 and MW-8 which are historically SPH bearing. The confidence factor is low due to the lack of data collected over time. The trend at MW-10 is decreasing to a high confidence factor.
- Concentrations of 1,2,4-TMB have exceeded the SHS at some point over the last eight quarters in MW-4, MW-7, MW-8, MW-10, MW-12, and MW-13. According to the analysis, the trends are

stable at MW-7 and MW-8 which are historically SPH bearing. The confidence factor is low due to the lack of data collected over time. The trends at MW-4 and MW-10 are decreasing to a high confidence factor.

Copies of the Mann Kendall analysis spreadsheets are provided as **Appendix H**. An analysis of the fate and transport of unleaded gasoline constituents will be reevaluated and/or revised as needed as new data is collected and resubmitted with the Remedial Action Completion Report (RACR).

3.10 Vapor Intrusion Assessment

There are several considerations to determine if the vapor intrusion pathway is a potential concern:

- Inhabited buildings must be close (within 30 horizontal feet, or five vertical feet for petroleum products) to a volatile source;
- There must be at least five feet of soil-like material
- The source concentration must be above some threshold or screening concentration;
- The presence of preferential pathways; and
- The presence of SPH.

There are several buildings present on the former Liberty 38 property. These buildings include storage sheds, an elevated storage trailer, the small concrete block building which is occupied by a bathroom and storage space, a pole barn garage, and a modular building that is currently used as an office. Of these buildings, only the office is an occupied building. This building is a wood frame building of modular construction. The office building has no skirting, and is not in contact with the ground surface, but rather sits atop gravel. The base of the building is open to the air on two sides allowing for fresh air to flow between the ground surface and the floor of the building. Given this, there are no potential receptors onsite, and the vapor intrusion into buildings pathway was not deemed to be a concern at the site for either soil or groundwater.

Offsite, the Thorne's Cycle and ATV building is a two-story concrete block structure with a basement which may be a potential receptor; however, the indoor air quality at the Thorne's site is impacted by site operations which include automotive repairs, vehicles running inside the building, the storage of various hydrocarbons for use in vehicle repairs, and the operation of a coal stove. Additionally, gasoline was previously sold at the facility, and there are two storage tanks onsite still located within 30 feet of the site building. The property owner was unaware of their existence, and no information is available to indicate if the USTs are empty and/or properly closed in place. Based on historic photography, the Thorn's facility also appeared to previously be a gasoline station at one time. Based on a file review conducted by CPTS in 2014, no information was present regarding these USTs. This would indicate that they were not registered and would have likely pre-dated the registration process. It is also likely based on the presumed age of the tanks that they may have contained leaded gasoline. Water has historically seeped into the basement of the Thorn's facility, and CPTS collected a sample of this water on November 12, 2009. Based on a review of the laboratory analytical results, no leaded or unleaded gasoline constituents were detected.

The following table indicates the maximum concentrations observed in groundwater samples collected offsite on the Thorn's property for VOCs as compared to the groundwater screening values (SV_{gw}) for protection of indoor air in a non-residential setting as referenced in Table 1 of the Vapor Intrusion into Buildings from Groundwater and Soil under Act 2 (DEP, January 18, 2017).

Regulated Substance	Maximum Observed Concentration (µg/L)	Non-Residential SHS Vapor Intrusion Screening Values (μg/L)
Benzene	560	350
Toluene	150	430,000
Ethylbenzene	520	860
Total Xylenes	720	12,000
MTBE	29	96,000
Isopropylbenzene	79	24,000
Naphthalene	160	1,300
1,2,4-Trimethylbenzene	550	750
1,3,5-Trimethylbenzene	180	1,200
1,2-Dibromoethane	ND <0.020	44
1,2-Dichloroethane	2.4	510

Note: ND= Non Detect

Based on the above screening, benzene was the only constituent detected at a concentration exceeding its respective SV_{gw}. As such, the groundwater to indoor air pathway may be complete.

The following table indicates the maximum concentrations of VOCs observed in soil samples collected above the currently observed low water table offsite on the Thorn's property as compared to the soil screening values (SV_{soil}) for protection of indoor air in a non-residential setting as referenced in Table 2 of the Vapor Intrusion into Buildings from Groundwater and Soil under Act 2 (DEP, January 18, 2017).

Regulated Substance	Maximum Observed Concentration (μg/Kg)	Non-Residential SHS Vapor Intrusion Screening Values (µg/Kg)
Benzene	ND <30.0	130
Toluene	80.5	44,000
Ethylbenzene	155	46,000
MTBE	ND <30.0	1,400
Total Xylenes	348	990,000
Isopropylbenzene	41.5	2,500,000
Naphthalene	67.9	25,000

Regulated Substance	Maximum Observed Concentration (µg/Kg)	Non-Residential SHS Vapor Intrusion Screening Values (µg/Kg)
1,2,4-Trimethylbenzene	525	35,000
1,3,5-Trimethylbenzene	192	210,000
1,2-Dibromoethane	ND <4.93	1.3
1,2-Dichloroethane	ND <300	100

Note: ND= Non Detect;

Based on the above screening, no leaded or unleaded gasoline constituents were detected at concentrations exceeding their respective SV_{soil}. As such, the soil to indoor air pathway is incomplete.

3.11 Conceptual Site Model

The site is currently a used automobile sales lot located at 700 N. Railroad Street, in Tamaqua, Pennsylvania. Previously, Liberty Oil #38 was present at the property, and the facility was operated as a retail fuel station. According to the United States Geologic Survey 7.5 minute series, Tamaqua Quadrangle topographic map, the site is situated at an approximate elevation of 820 feet above mean sea level. Site topography is generally flat, but locally slopes gently downward towards the Little Schuylkill River, where it abruptly drops off to the water.

The Liberty 38 facility is located in a mixed use area zoned highway commercial and is currently owned by Liberty Oil Company, Inc. The subject property was purchased in November, 1992 and was operated as a retail fuel station until the storage tanks were taken out of service in 2002, and ultimately closed by removal in 2008.

Several buildings exist onsite; however, none have been determined to be receptors with regard to vapor intrusion into buildings. The site is served with potable water from the Tamaqua Area Water Authority. Portable electric heaters are utilized in occupied buildings onsite, and electricity is supplied to the site via overhead lines.

One diesel fuel and four gasoline USTs ranging in capacity from 3,000 to 6,000-gallons and one diesel UST were removed from the site by CPTS in August 2008. Upon removal, the USTs were inspected and found to be in generally good condition; however, the product piping was found to have several corrosion holes. This corrosion resulted in a release of unleaded gasoline and/or diesel fuel to shallow subsurface soils and ultimately to groundwater which is present in an unconfined overburden aquifer at depths between three and nine feet below grade in the source area. The dissolved phase groundwater impact has spread downgradient towards the Little Schuylkill River along a plume centerline running from the source area through MW-10 and MW-9. Samples collected from the river over the course of five quarters did not contain leaded, unleaded, or diesel constituents at detectable levels.

Monitoring well MW-9 is the furthest downgradient well along the centerline of the plume. Leaded and unleaded gasoline and diesel constituents are all below their respective SHS with the exception of benzene which is intermittently present at concentrations exceeding the SHS.

Two monitoring wells were installed on the Thorn's Cycle and ATV property across Route 309 from the site. During a geophysical investigation prior to their installation two USTs were identified on the Thorne's property. It is not clear if they have been appropriately closed in place, and due to their age, would have likely contained leaded gasoline. MW-12 is located within approximately 10 feet of these USTs, and it is unknown if the impact observed in that monitoring well is at least in part related to the USTs on that property. Due to the concentration of benzene in groundwater at MW-12, vapor intrusion into the Thorn's building is a potentially complete pathway.

Throughout the course of groundwater monitoring activities, SPH has been observed on top of water in five monitoring wells: MW-3, MW-4, MW-7, MW-8, and MW-12. SPH thicknesses have ranged from a discontinuous sheen at MW-12 to 0.73 feet in MW-7. A total of 205.85 tons of impacted soil was removed from the area surrounding the northern end of the former dispenser island during May, 2011, and SPH has not been detected in groundwater at MW-4 since that time. Oil absorbing socks are maintained in MW-3, MW-7, MW-8, and MW-12 to remove SPH and to inhibit its migration. Additionally, four HVE events were conducted onsite, and a total of 3,821 gallons of SPH and water were removed. These HVE events have significantly reduced the amount of SPH remaining onsite as well as the dissolved phase hydrocarbons present in groundwater both onsite and off-site as evidenced by the disappearance of measureable SPH, the reduced capture of SPH in oil absorbent socks, and the stable and/or decreasing trends in dissolved phase COCs.

3.12 Baseline Risk Assessment

Using DEP-approved EPA and ASTM guidance, this assessment identified potential current and future exposure pathways for human receptors, as per Pennsylvania Code §250.402. Where appropriate, incomplete exposure pathways and constituents that were not found in environmental media exceeding the Statewide Health criteria were eliminated from further consideration. Risk was assessed under a non-residential scenario because the current and future property use is commercial. In this section all potential exposure pathways are reviewed, followed by a baseline risk assessment for the pathways applicable to the site.

3.12.1 Exposure Pathway Assessment

Human and ecological receptors can be exposed to COCs through four major pathway categories: 1) air, 2) groundwater, 3) soil, and 4) surface water. Within each pathway category are specific exposure pathway scenarios. The following is a description of each possible exposure pathway. Pathways pertinent to the site are identified.

3.12.2 Air Exposure Pathways

 Inhalation of vapors volatilized from subsurface soils to the ambient air: Concentrations of several unleaded gasoline constituents are present in soil above the SHS; however, a minimum of two feet of un-impacted soils are present between impacted soils and ambient air, which restricts volatilized vapor from entering the breathing zone. Considering these factors, this pathway was not considered relevant for this site and was not considered in the risk assessment.

- Inhalation of vapors volatilized from groundwater to the ambient air: Groundwater is not utilized at the site and surrounding properties, rather potable water is supplied by the Tamaqua Area Water Authority, therefore groundwater would not be in contact with ambient air. Several feet of soils are also present between the water table and ambient air which further restricts the volatilization of petroleum hydrocarbons to the breathing zone. As such, this pathway was not considered relevant for the site.
- Inhalation of vapors volatilized from subsurface soil into an enclosed space: This scenario
 includes vapors entering basements, crawl spaces or subsurface utility vaults, and in some
 situations, enclosed buildings. According to the Vapor Intrusion Assessment, concentrations of
 unleaded gasoline constituents in soil within proximity to a receptor are not above their
 respective soil vapor screening, and as such, this pathway is incomplete.
- Inhalation of vapors volatilized from groundwater into an enclosed space: No receptors are present onsite which would be expected to be impacted by vapor intrusion into buildings; however, one occupied building with a basement is present at the offsite Thorn's Cycle and ATV property. None of the observed concentrations of unleaded gasoline parameters exceed their respective Volatilization to Indoor Air Screening values offsite with the exception of benzene. Therefore, this pathway is potentially complete.

3.12.3 Groundwater Exposure Pathways

- Ingestion of groundwater through a water supply well: Potable water is supplied to the site and surrounding properties via the Tamaqua Area Municipal Authority. Given this, this pathway is deemed incomplete and has not been further considered in this characterization.
- Dermal contact with impacted groundwater: As stated above, water is supplied via the Tamaqua
 Area Municipal Authority to the site and surrounding properties. As such, this pathway is
 incomplete and has not been considered further in this investigation.

3.12.4 Soil Exposure Pathways

• Dermal contact and direct ingestion of contaminated soils: There have not been any indications of impact to surface soils as part of this investigation. As such, the surface soils act as a cover to prevent contact with impacted subsurface soils making this pathway incomplete. Furthermore, no leaded or unleaded gasoline constituents were detected at concentrations exceeding the Act 2 Direct Contact values with the exception of 1,2,4-TMB concentrations in some of the piping and/or dispenser island samples. The impacted soils (above the Direct Contact values) located at the northern end of the former dispenser island were later excavated and properly disposed of offsite. Soils with concentrations of 1,2,4-TMB present at concentrations exceeding the Direct Contact values were not removed from the southern portion

of the former dispenser island or the southern piping run; however, later samples in the general vicinity of these samples at similar depths indicates that the concentration of 1,2,4-TMB had either decreased over time or was very isolated to those specific sample locations.

3.12.5 Surface Water Exposure Pathways

- Contact with surface water contaminated by runoff from impacted surface soil: No surface soils
 were determined to be impacted by the release. Therefore, this pathway is deemed irrelevant
 and is not considered in the risk assessment.
- Contact with surface water impacted by groundwater discharge: To assess this potential pathway, CPTS collected five consecutive quarters of samples from accessible areas both upstream and downstream of observed groundwater impact. Laboratory analysis of the surface water samples indicates that no leaded or unleaded gasoline constituents were detected at concentrations exceeding their laboratory reporting limits. As such, no impact to the nearest surface water body (the Little Schuylkill River) has been observed and this pathway has been deemed incomplete.

3.12.6 Summary of Exposure Scenarios

After evaluating all of the potential exposure pathways for the site, inhalation of vapors volatilized from groundwater into an enclosed space (indoor air), is a potential exposure pathway for the offsite property, Thorn's Cycle and ATV. Additional assessment will be necessary based on the presence of USTs on the Thorn's property, and the presence of petroleum hydrocarbons within the building.

4.0 SELECTION OF REMEDIATION STANDARDS

4.1 Soil

Although the SSS is being sought for site soils, CPTS used the SHS values for initial comparison to characterize the presence/extent of impact to soil at this site. The applicable SHS values were determined based on the following criteria:

Non-Residential - Previous, current, and future use of the site is commercial therefore the non-residential standard has been selected.

<u>Used aquifer</u> – The site and surrounding properties are provided with potable water via the Tamaqua Area Municipal Authority; however, the more conservative used aquifer values have been selected.

<u>Total Dissolved Solids</u> – Total dissolved solids (TDS) are assumed to be less than or equal to 2,500 parts per million (ppm).

Sample Depth - Soil samples were collected from subsurface (>2') locations.

Soil Saturation - Soil samples were collected from both saturated and non-saturated soil.

Based on the above criteria, the below-listed Non-Residential Soil to Groundwater (TDS less than or equal to 2,500 ppm) numeric values were determined to be the applicable Statewide Health Standards for the contaminants of concern. Saturated standards were utilized for comparison where applicable. Concentrations of leaded and unleaded gasoline in soil samples collected below the seasonal low water table are considered potential groundwater issues, and were not compared to any numerical standard other than Direct Contact for purposes of risk evaluation. These standards are also included in **Table 1**.

Compound	Statewide Health Standard (µg/kg)	Saturated Statewide Health Standard (ug/kg)
Benzene	500	500
Toluene	100,000	100,000
Ethylbenzene	70,000	70,000
Total Xylenes	1,000,000	1,000,000
MTBE	2,000	2,000
Isopropylbenzene	2,500,000	350,000
Naphthalene	25,000	10,000
1,2,4-Trimethylbenzene	35,000	6,200
1,3,5-Trimethylbenzene	120,000	210,000
EDB	5	5
EDC	500	500
Lead	450,000	45,000

4.2 Groundwater

Although the SSS is being sought for site groundwater, CPTS used the SHS values for initial comparison to characterize the presence/extent of impact at this site. The SHS for groundwater at this site was determined based on the following criteria:

Non-Residential - Previous, current, and future use of the site is commercial; therefore the non-residential standard has been selected.

<u>Used aquifer</u> – The site and surrounding properties are provided with potable water via the Tamaqua Area Municipal Authority; however, the more conservative used aquifer values have been selected.

Total Dissolved Solids - TDS are assumed to be less than or equal to 2,500.

Based on the above criteria, the Non-Residential Used Aquifer (TDS less than or equal to 2,500) values were determined to be the applicable Statewide Health Standards for the contaminants of concern. These standards are also included in **Table 2**.

Compound	Statewide Health Standard (µg/L)
Benzene	5
Toluene	1,000
Ethylbenzene	700
Total Xylenes	10,000
MTBE	20
Isopropylbenzene	3,500
Naphthalene	100
1,2,4-Trimethylbenzene	62
1,3,5-Trimethylbenzene	1,200
EDB	0.05
EDC	5
Lead	5

5.0 REMEDIAL ACTION PLAN

As the intent is to close the release incident under the SSS, CPTS intends to perform pathway elimination to ultimately demonstrate attainment of the standard. As detailed in previous sections of this report, groundwater levels have been near historic highs at this site (and across eastern PA) in 2018 as of the date of this report. Additional data will need to be collected from the new off-site monitoring wells to better determine the smear zone and ultimately the extent of the soil impact off site. This data will need to be collected over the course of several additional quarters as the groundwater levels change seasonally. As this data is collected, potential impacts and pathways for exposure (including vapor intrusion into buildings) will be reevaluated. Should the need arise for additional remedial actions to be performed, CPTS will prepare a revised RAP at that time.

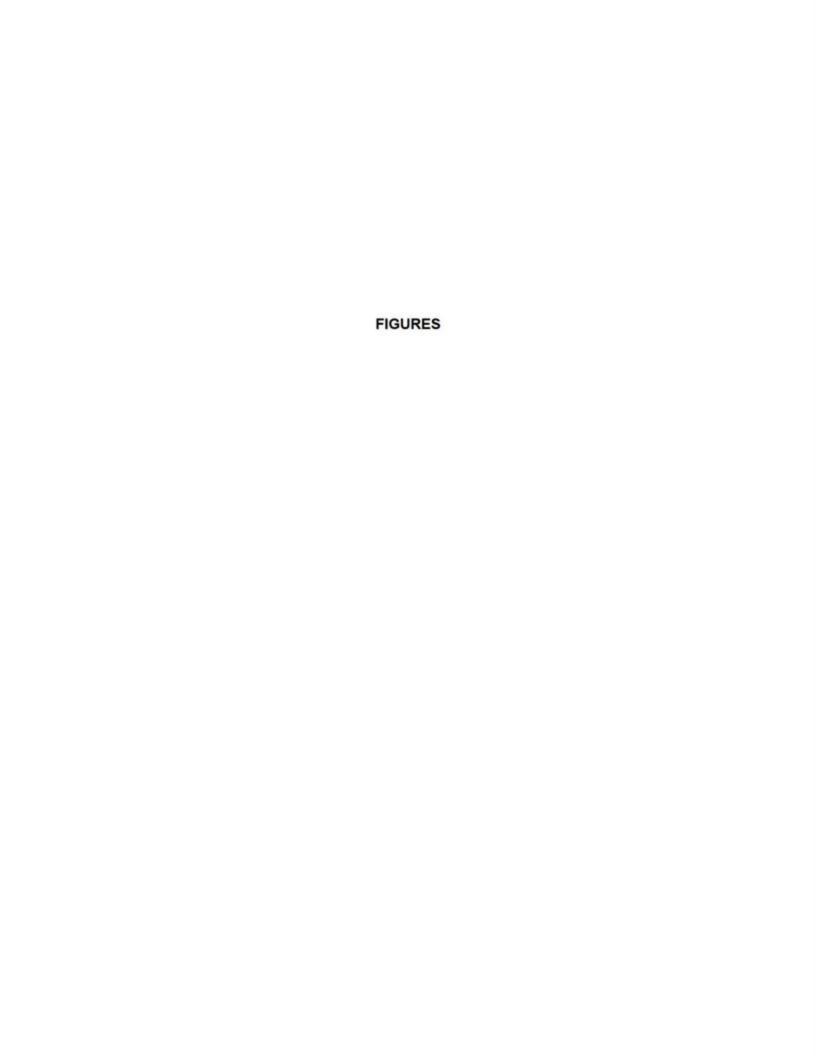
CPTS will also continue to monitor groundwater quality and maintain oil absorbent socks in the SPH bearing wells as a preventative measure and monitor product thicknesses on at least a quarterly basis. If measurable amounts of SPH are observed in the monitoring well network, CPTS will implement additional vacuum extraction events as necessary to control the transport of additional impact.

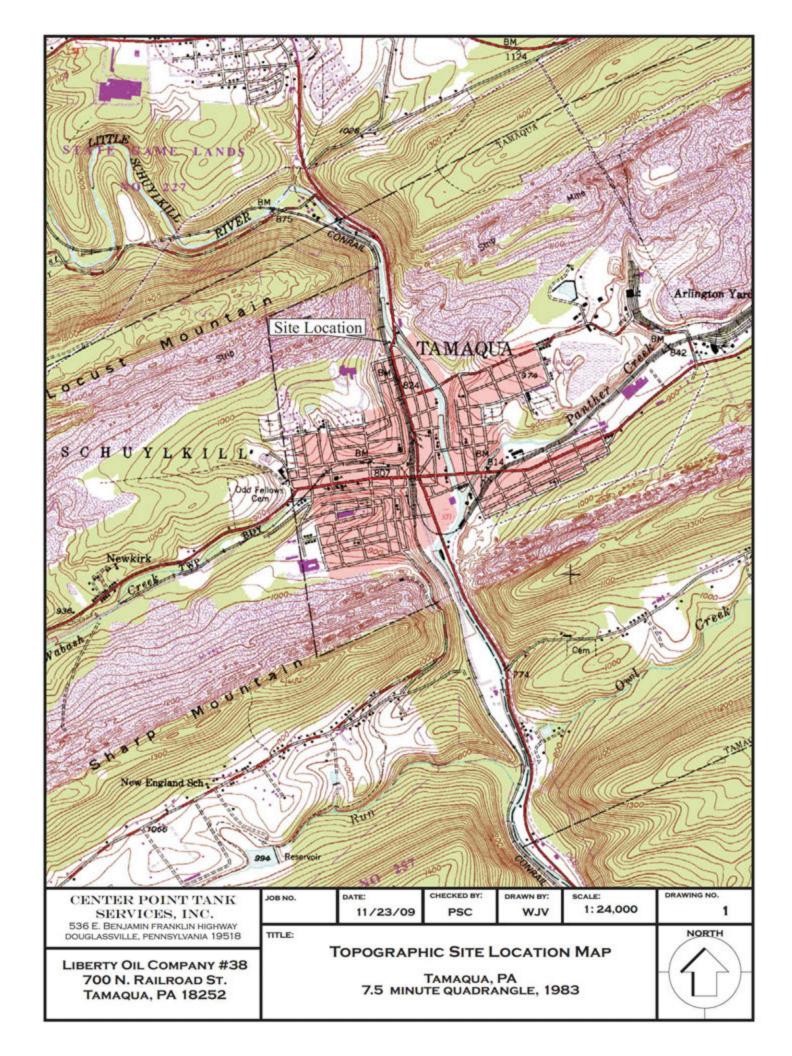
6.0 REQUEST TO DISCONTINUE SAMPLING FOR LEADED GASOLINE CONSTITUENTS

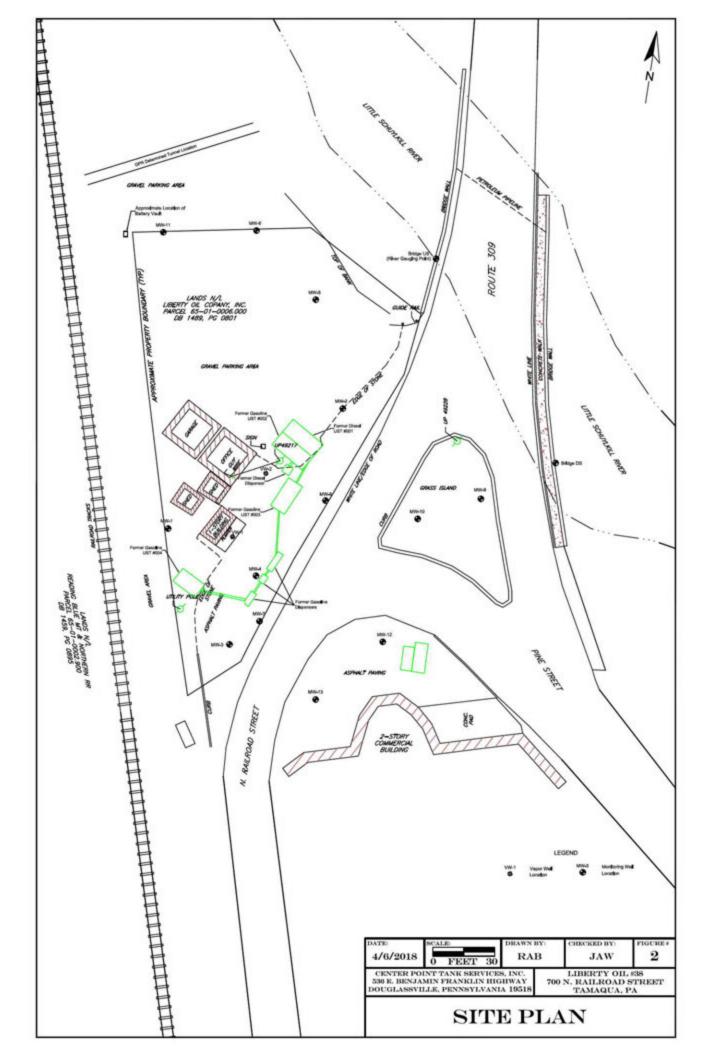
Given the soil and groundwater sampling conducted onsite to date, CPTS, on behalf of Liberty Oil Co. and Mr. Norwood Klotz, is respectfully requesting to discontinue sampling soil and water for leaded gasoline constituents based on the following rationale:

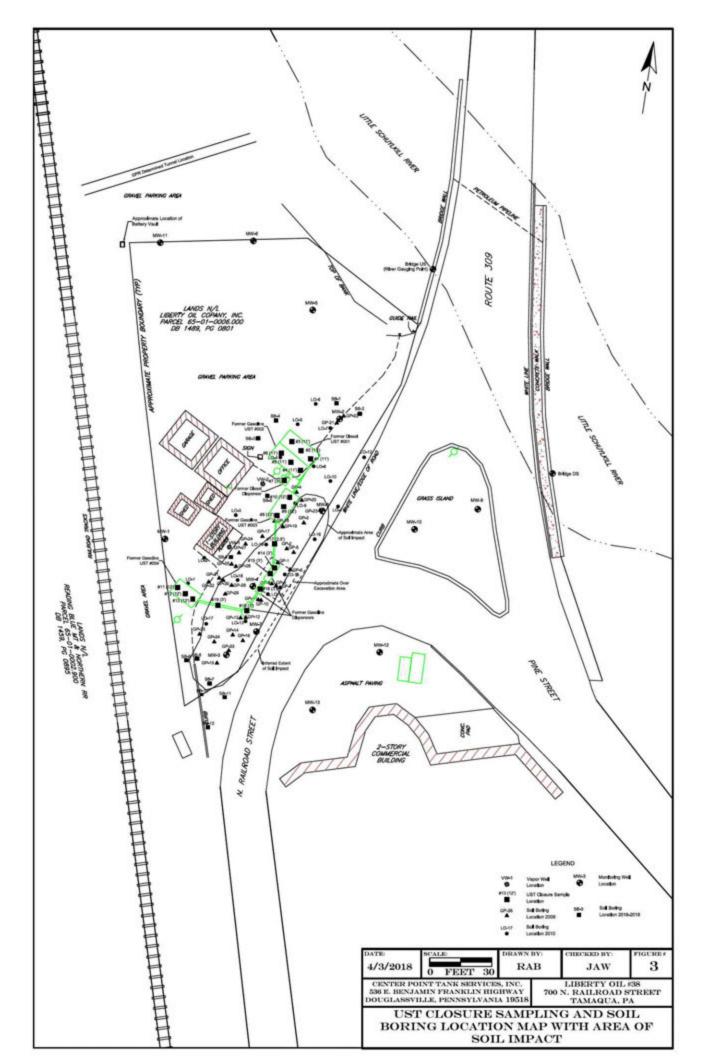
- Leaded gasoline has not been sold in this area since the 1980s.
- There is no documentation confirming the sale of leaded gasoline onsite.
- Leaded gasoline constituents were not detected in the UST closure soil samples, with the exception of lead at a concentration below the SHS.
- The product piping that was in use at the site was a suction system, would not have functioned for over 20 years given the extent of corrosion observed at removal, and therefore would not have released leaded gasoline (if it was in fact dispensed on the site historically).
- EDC has not been detected in any soil samples across the site, and EDB was detected in two soil samples which were both collected below the low water table.
- EDC has been detected at a concentration below the SHS in groundwater samples collected from MW-3 and MW-13 on March 27, 2018, and at a concentration exceeding the SHS in the groundwater sample collected from MW-10 on September 20, 2017.
- EDB was detected in groundwater samples from MW-8 in three quarters between late 2010 and mid-2011, and has not been detected in the five samples collected from MW-8 since that time, or in groundwater samples collected from any other monitoring wells.
- Lead has been detected in soil and in one groundwater sampling location. Given the
 preponderance of coal mining derived fill material observed across the site, the history of mining
 in the area, and the absence of EDB and EDC in these sampling locations, the lead impact
 observed onsite has not been determined to be related to releases form any storage tanks or
 associated piping and/or dispensers.

Given the above observations, the history of mining in the area, the absence of lead in groundwater, and the absence of the lead scavengers EDB and EDC based on soil and groundwater sampling, there is no evidence to support a leaded gasoline release onsite that would necessitate regulatory action at this time under the storage tank regulations. Any leaded gasoline compounds (with the exception of lead in groundwater samples collected from MW-6) were limited to the area in the vicinity of MW-8 and MW-13, have not been detected in groundwater samples collected from the most highly impacted wells, have not been detected in the groundwater samples collected from MW-8 since 2011, and are not driving the characterization or remediation activities at the site.





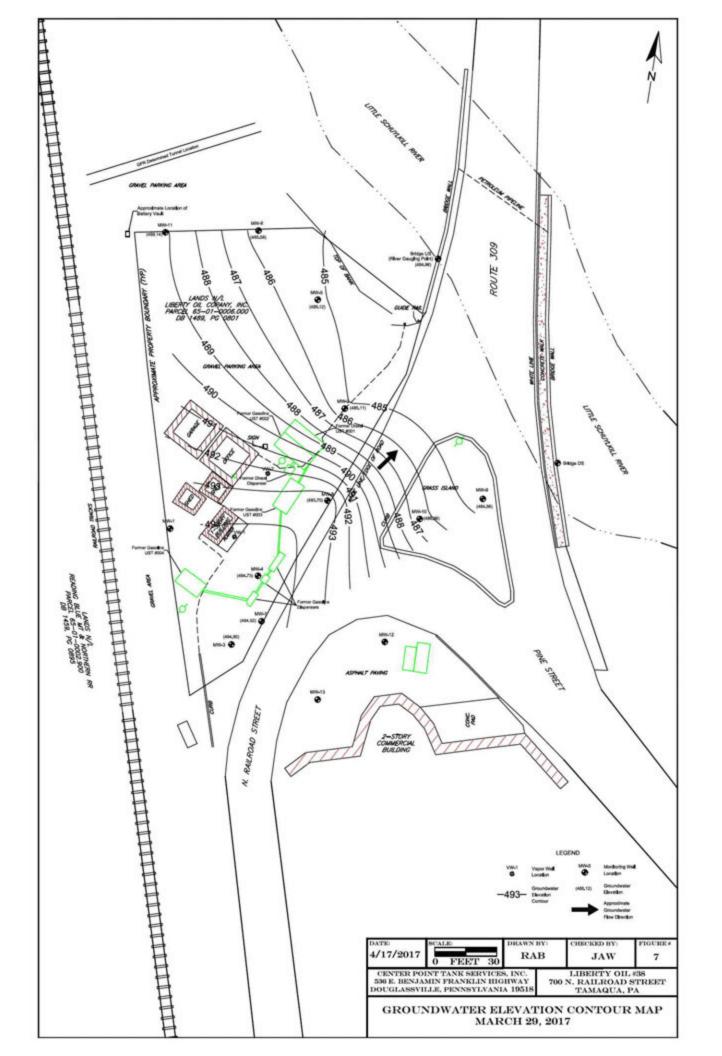




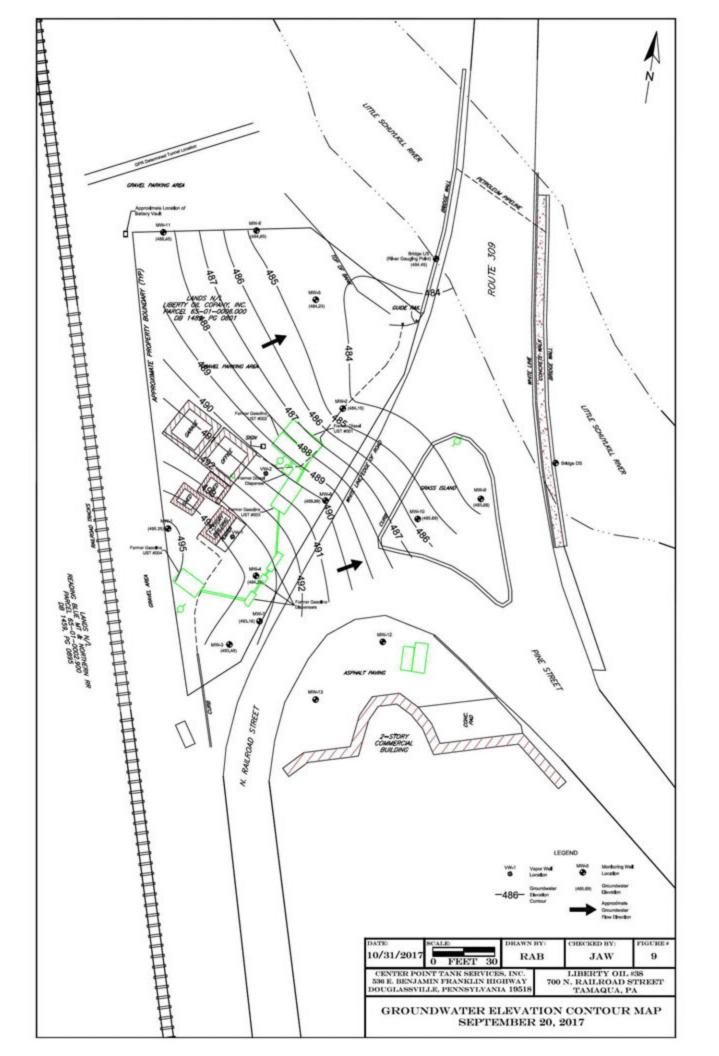








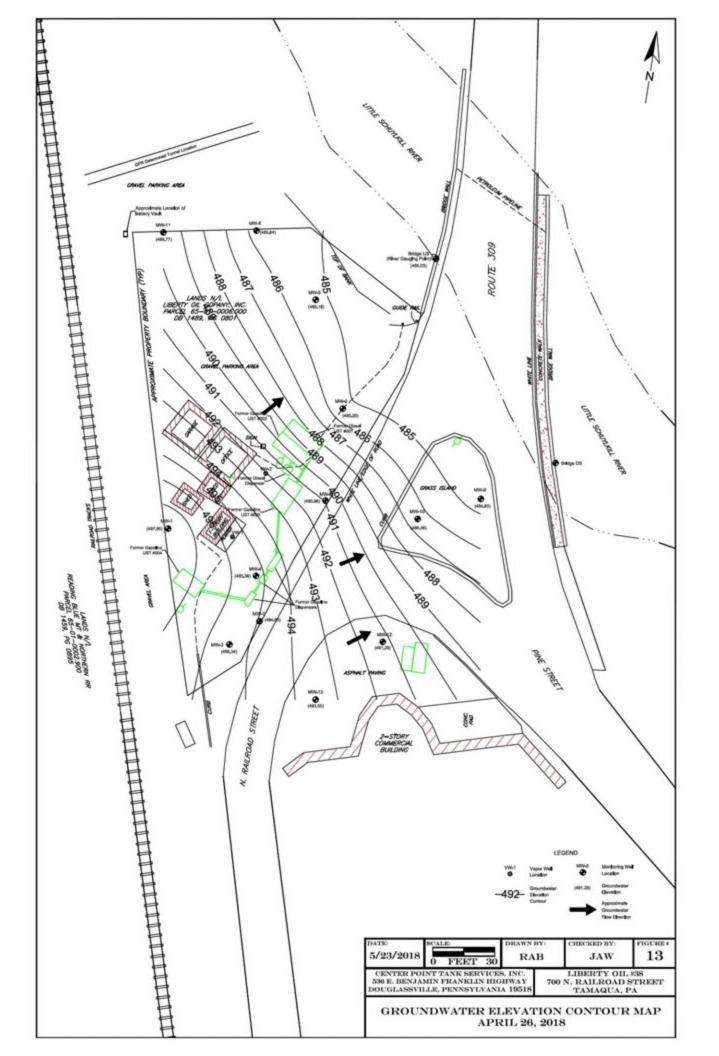


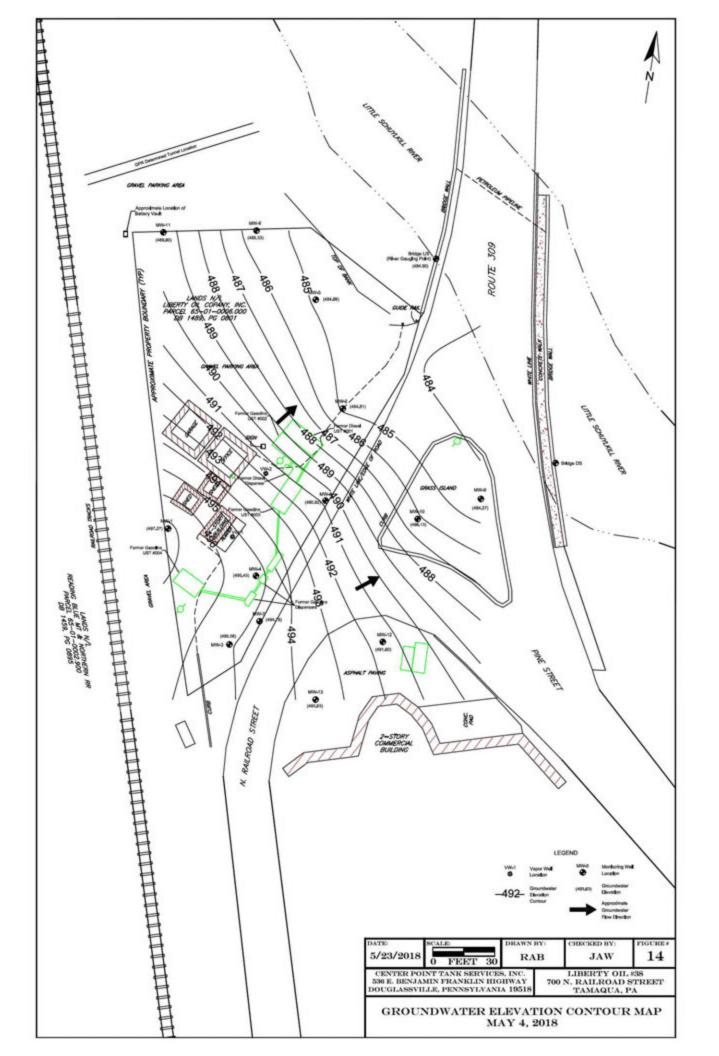


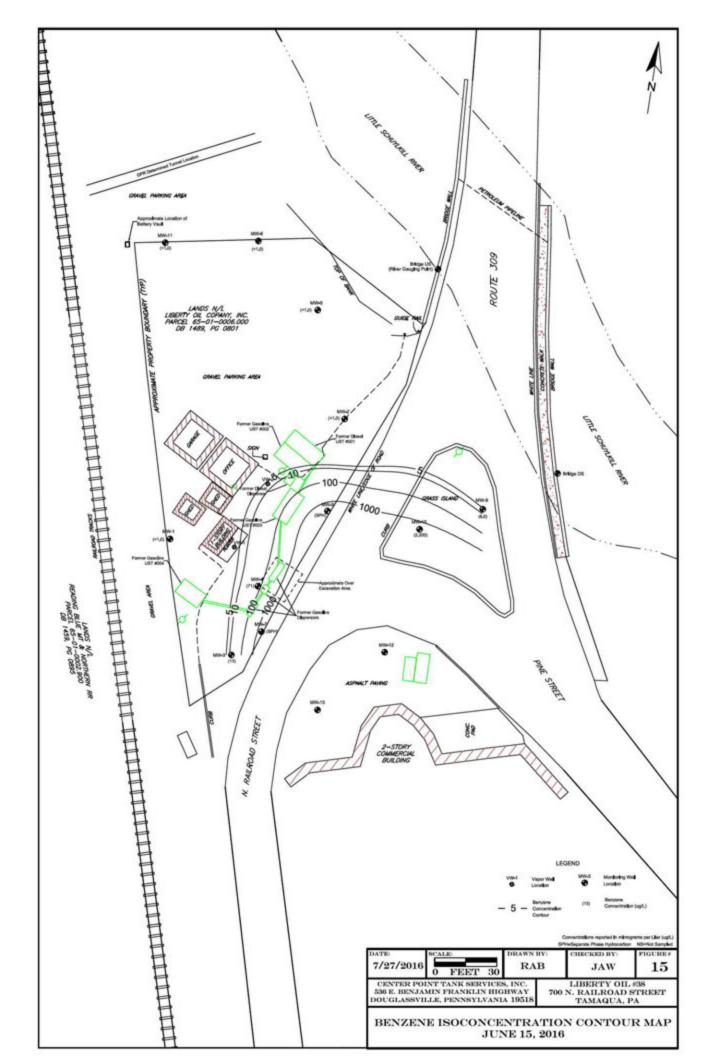


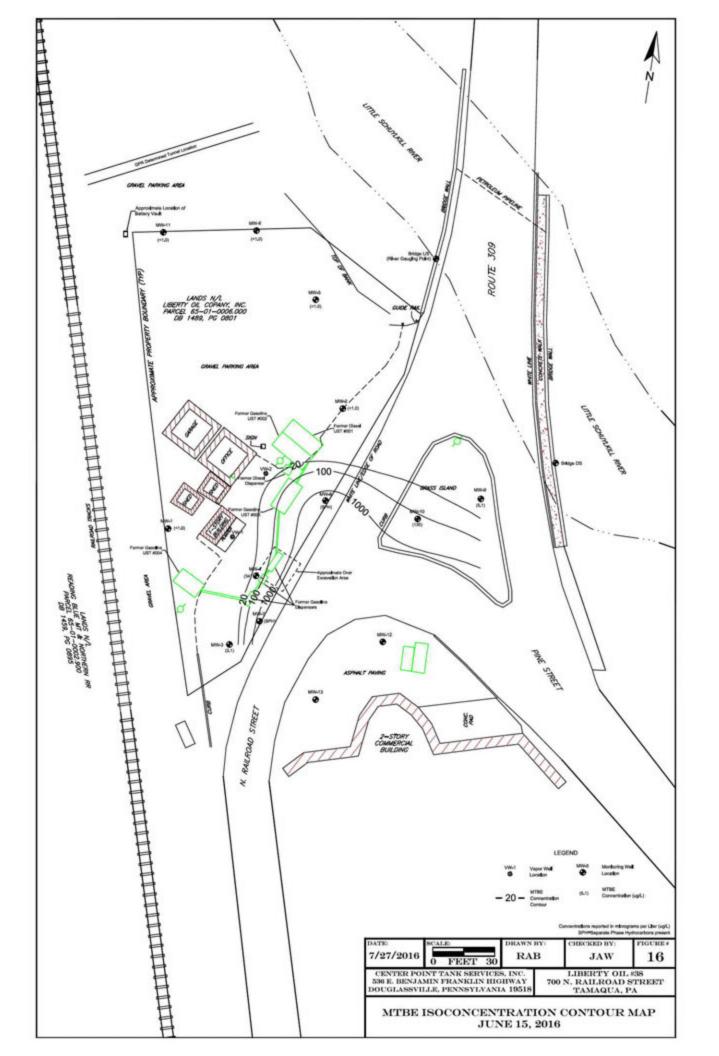


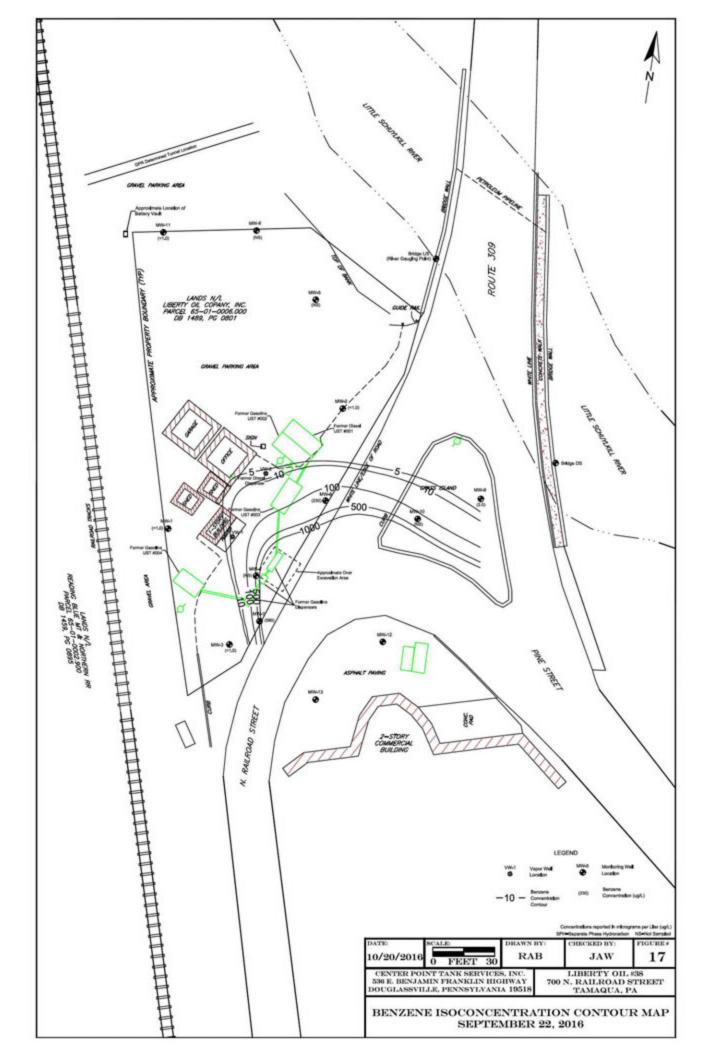


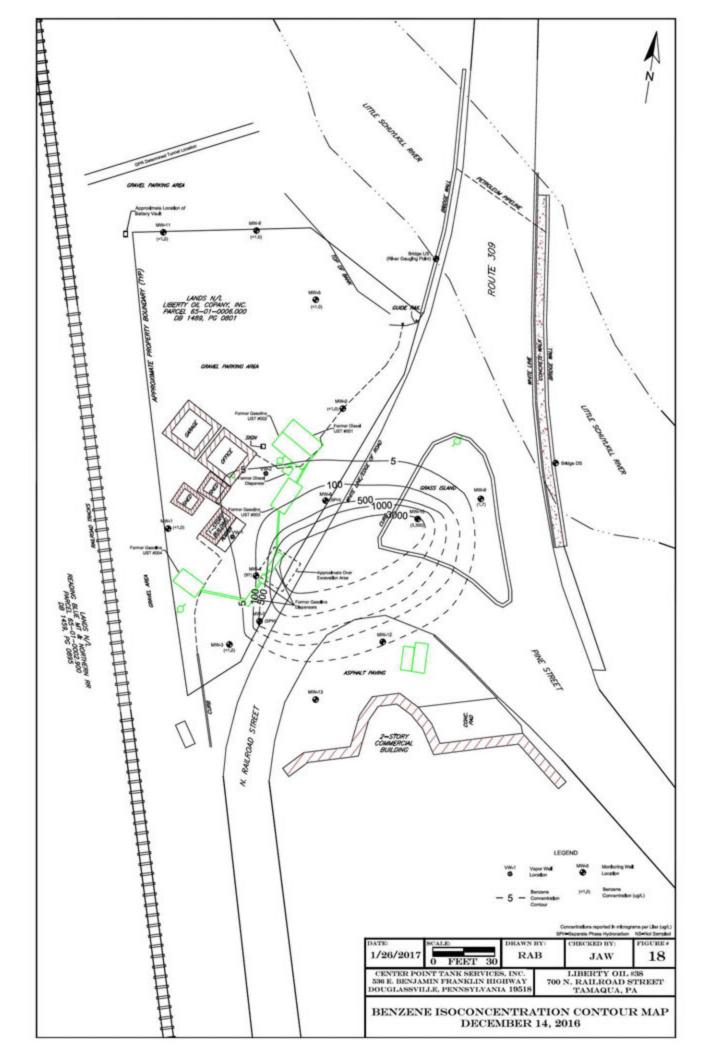


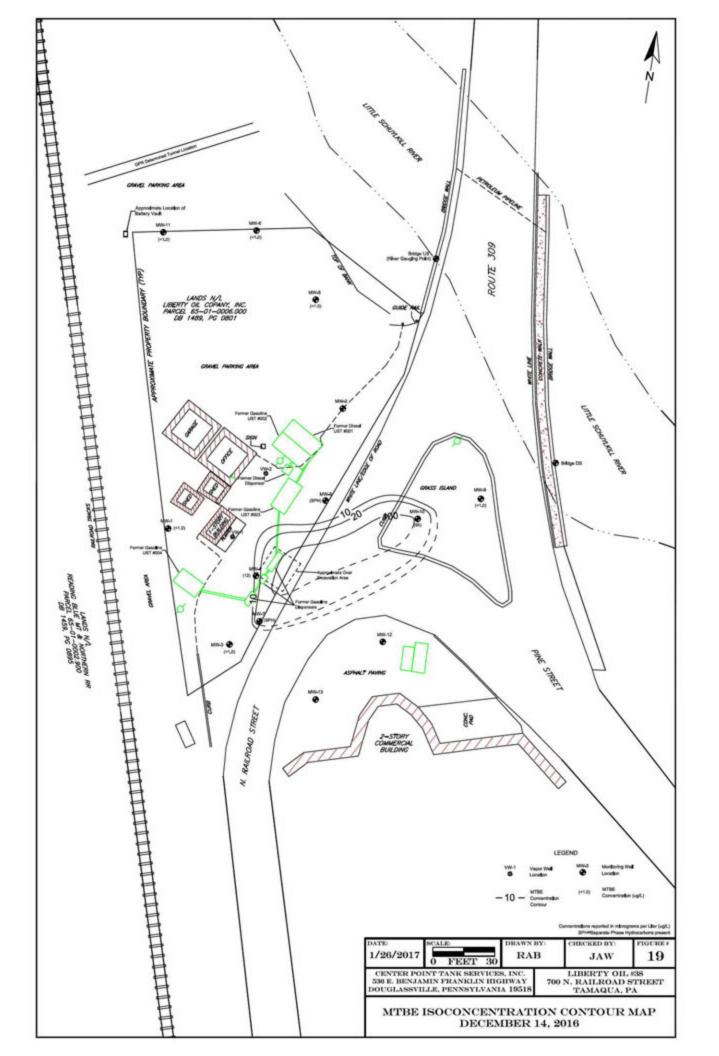


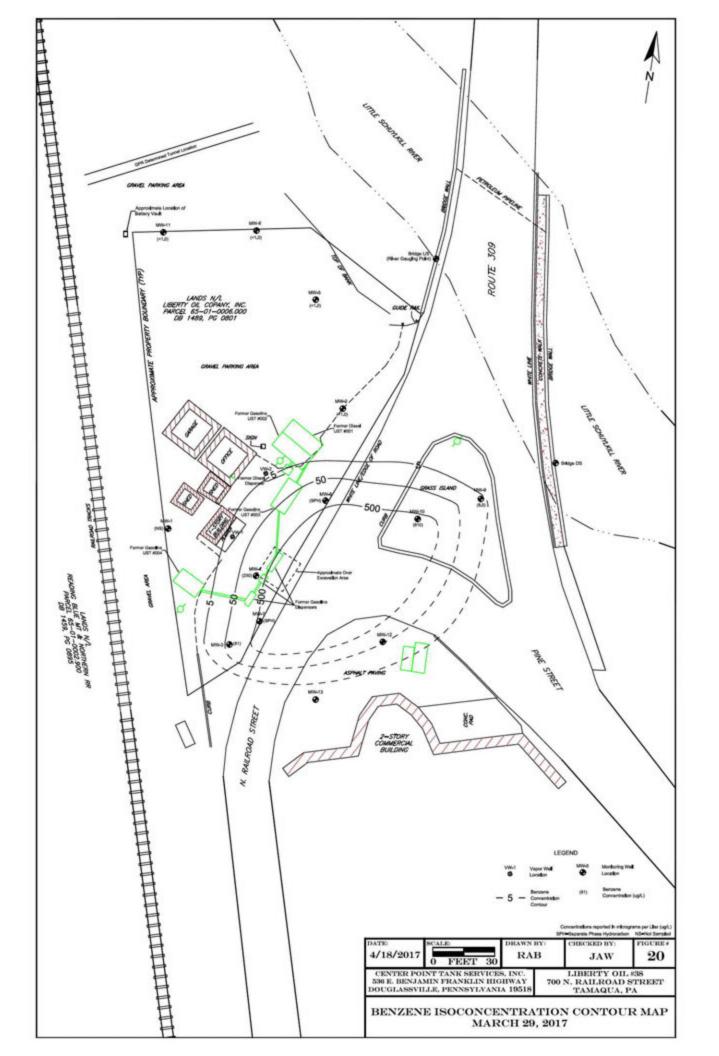


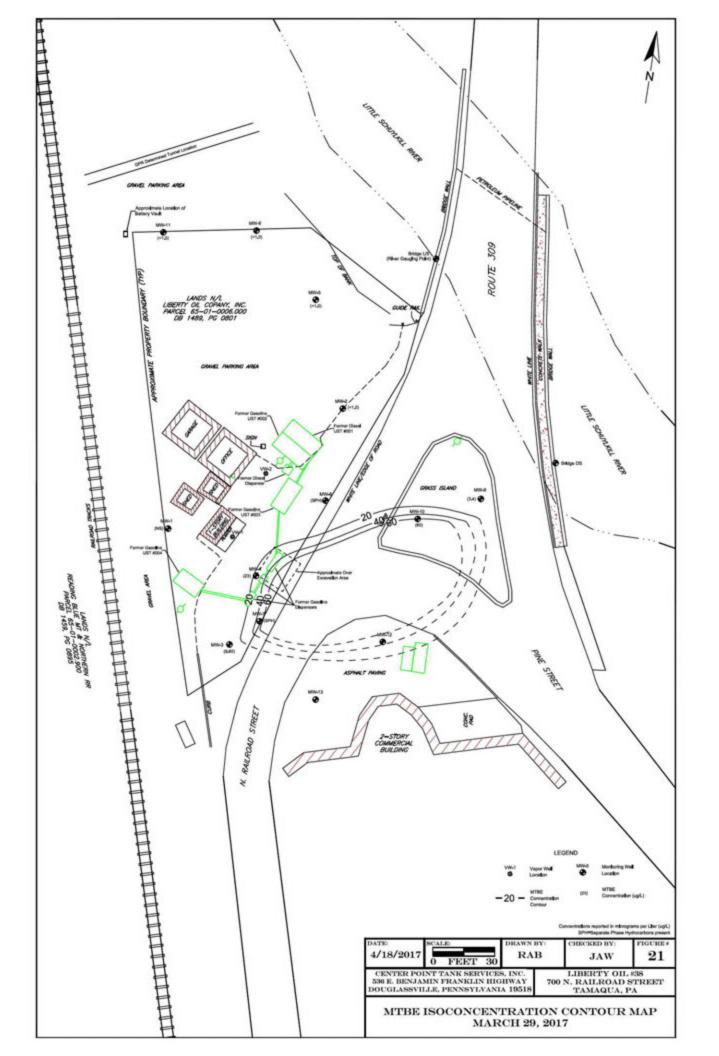


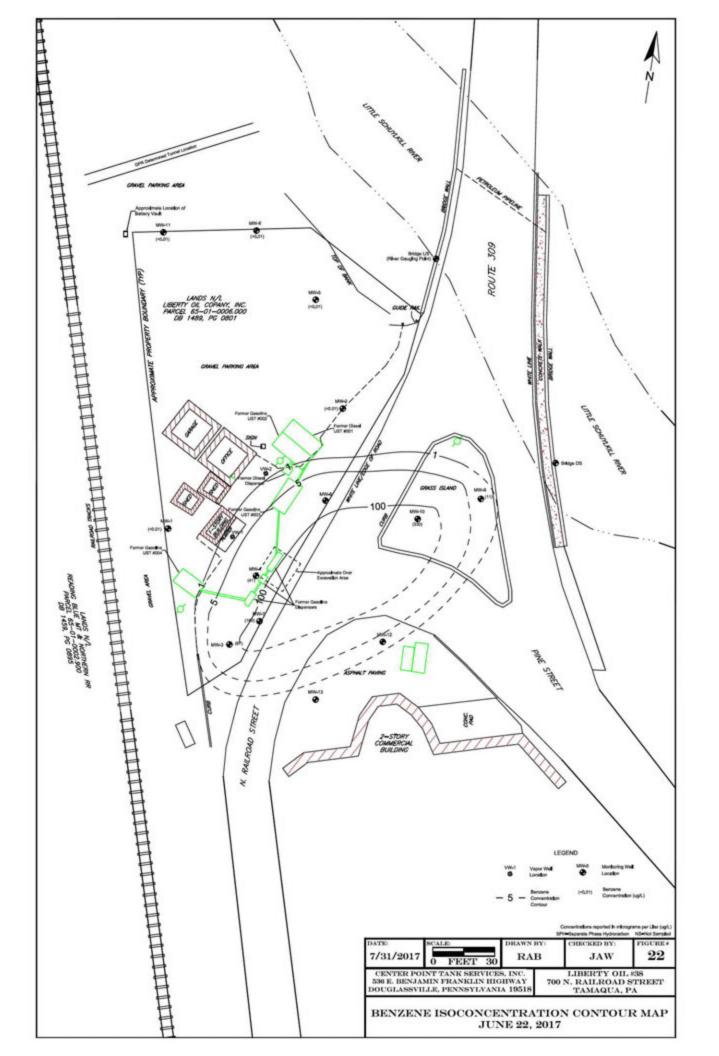


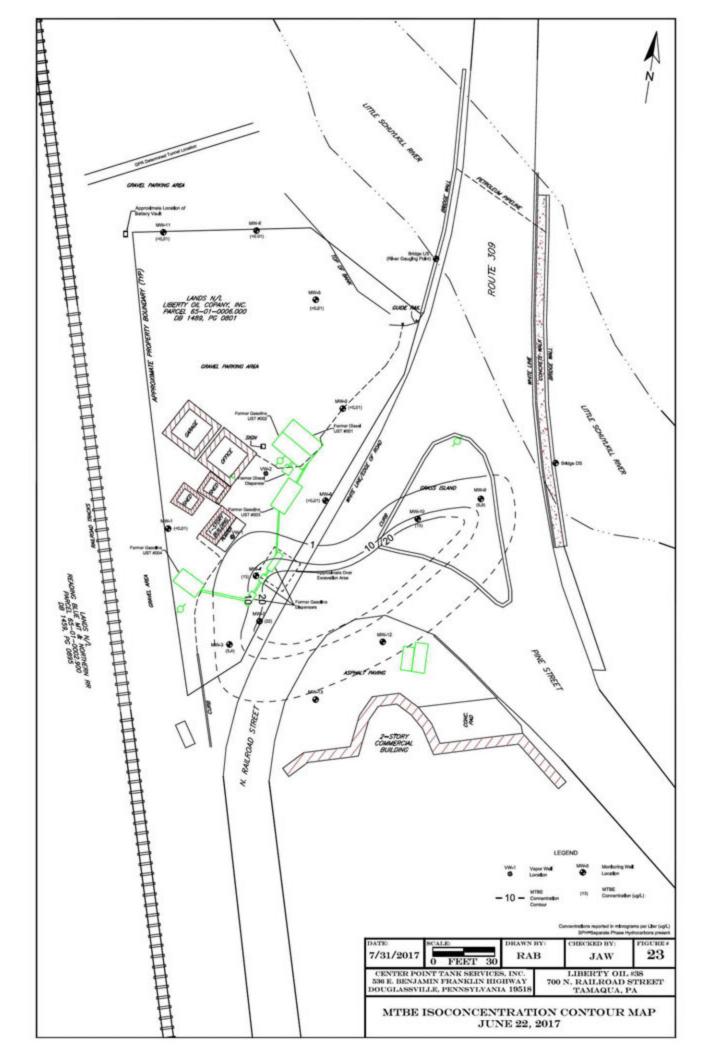


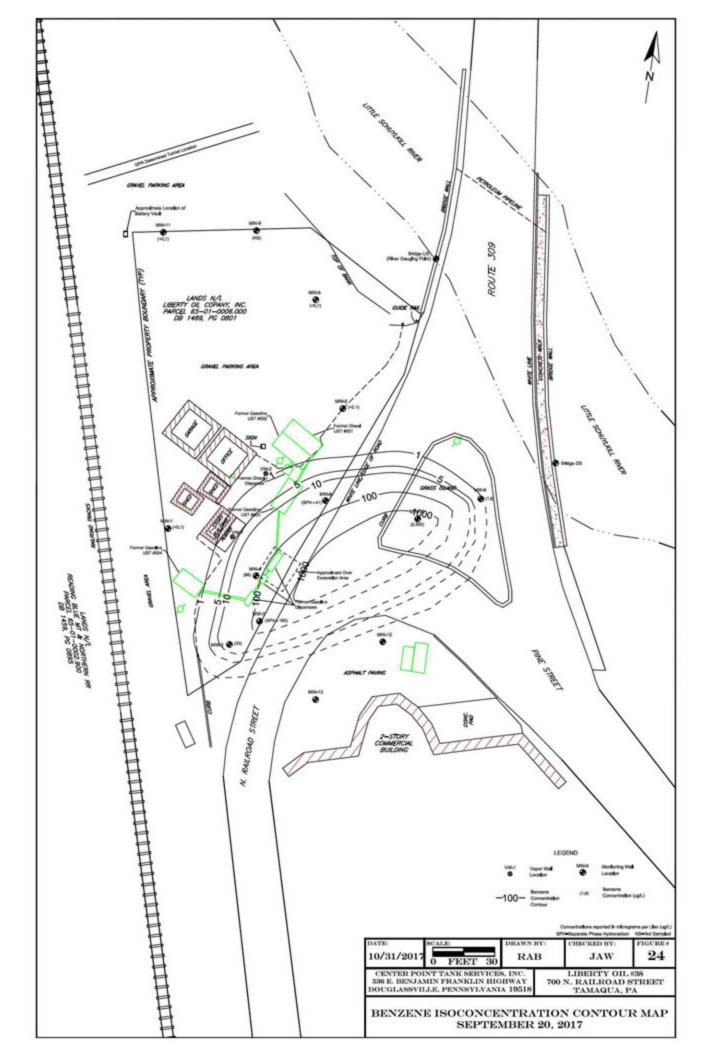


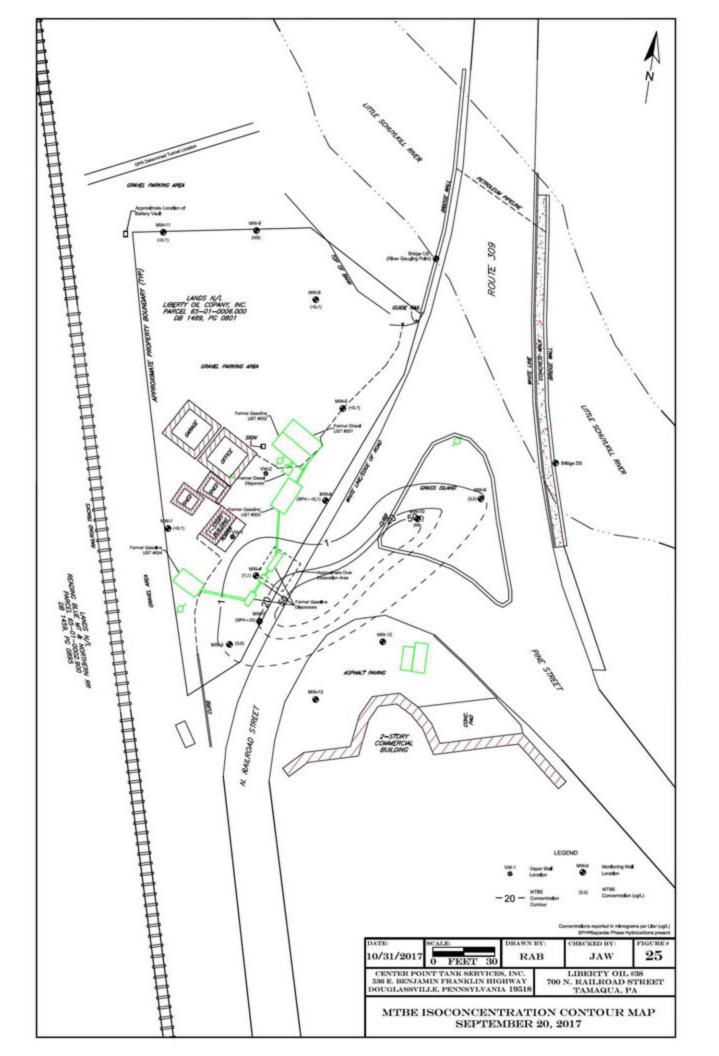


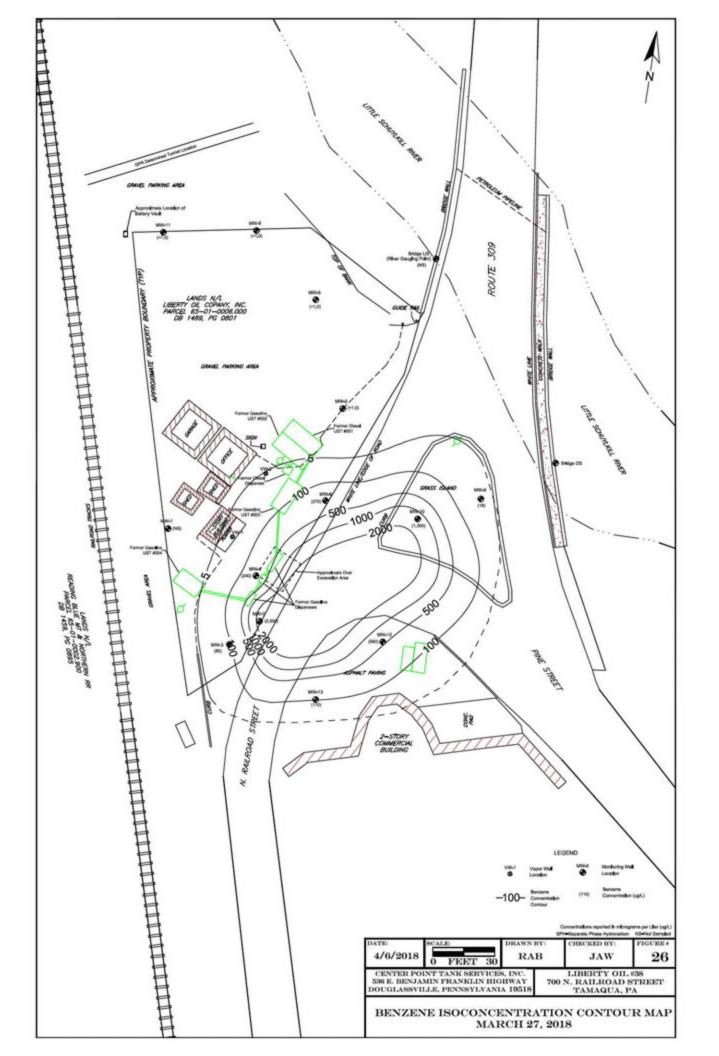


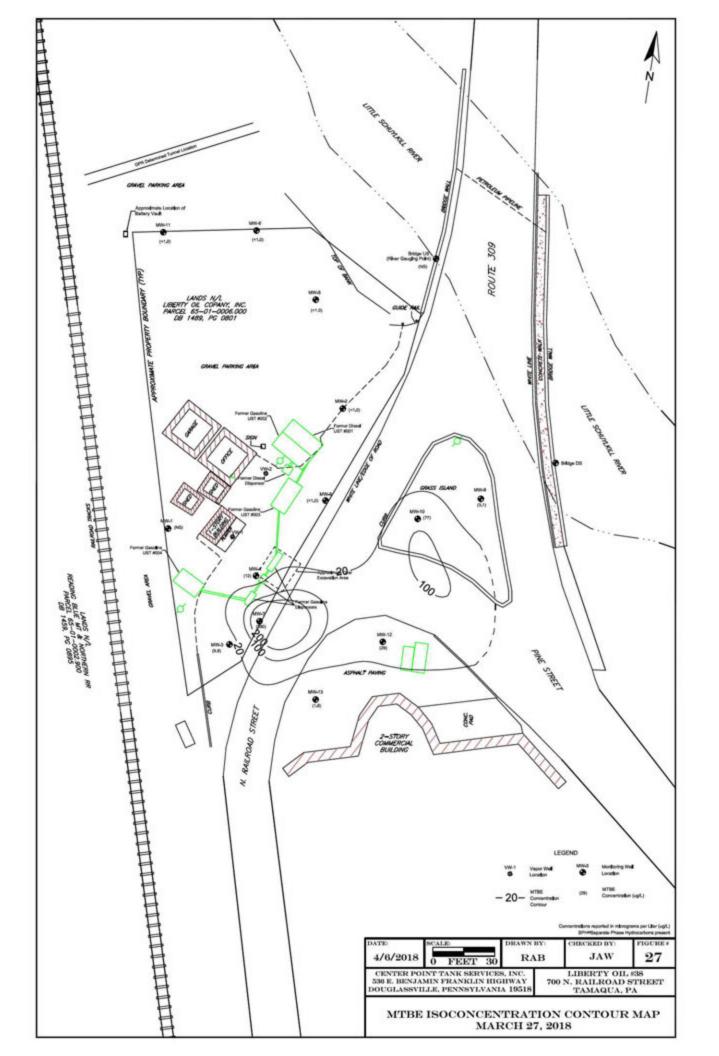


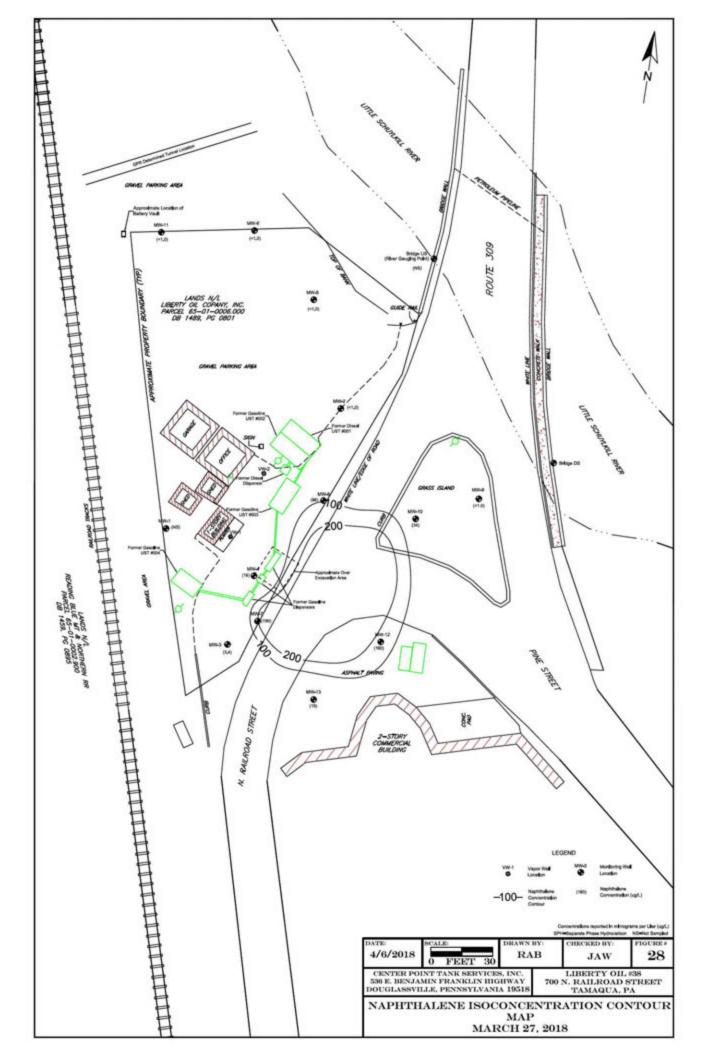


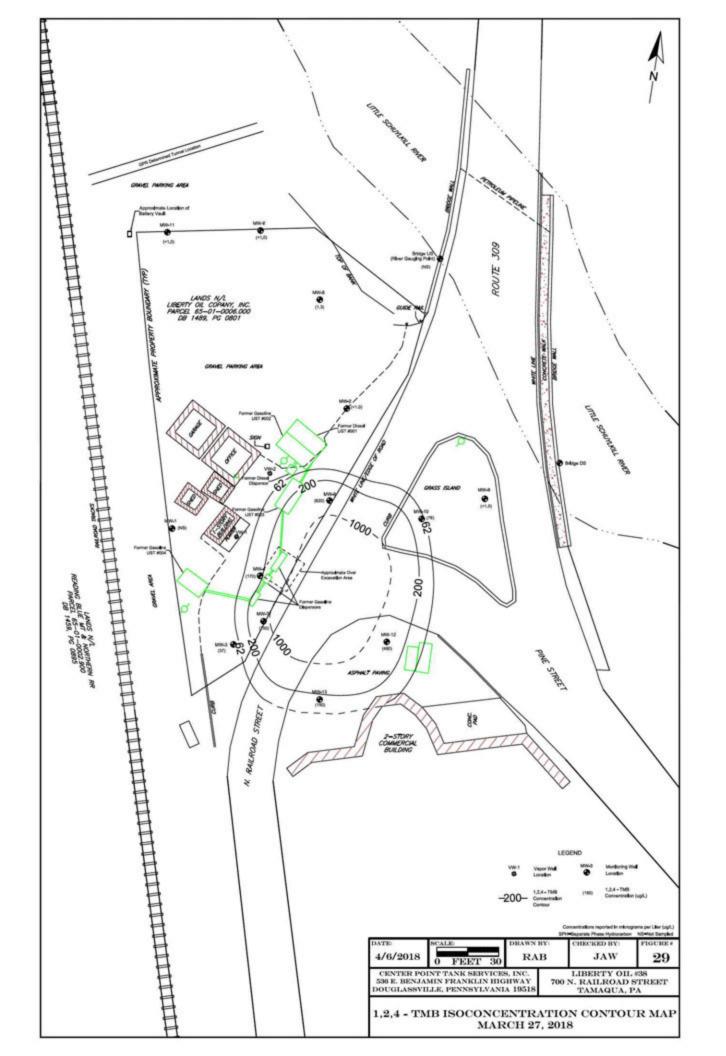


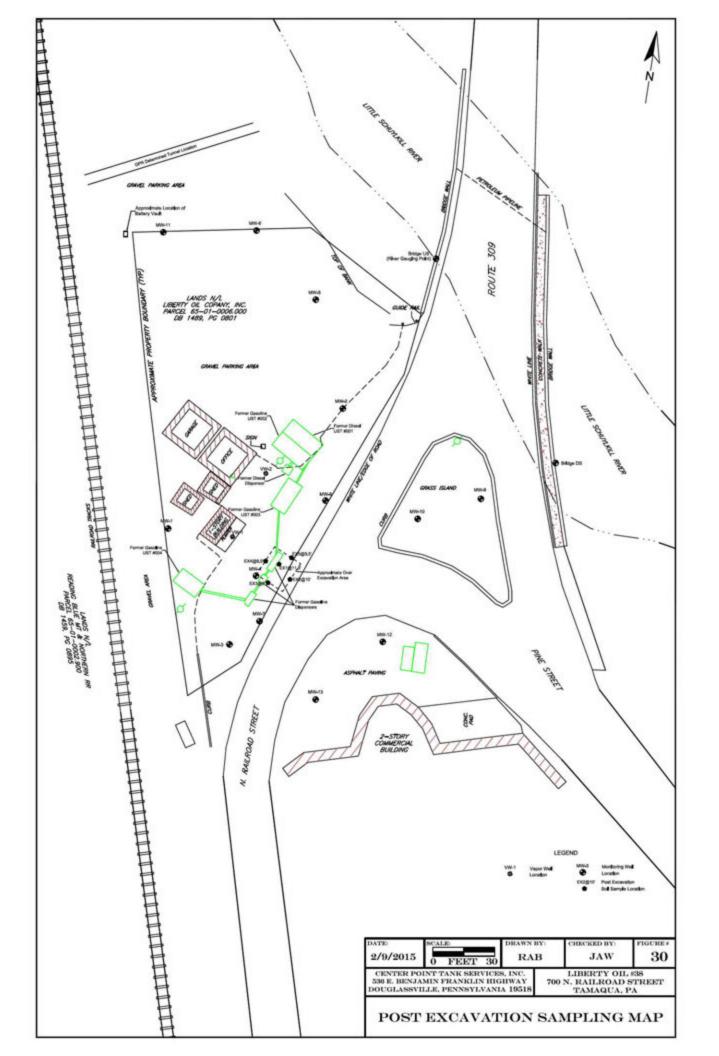












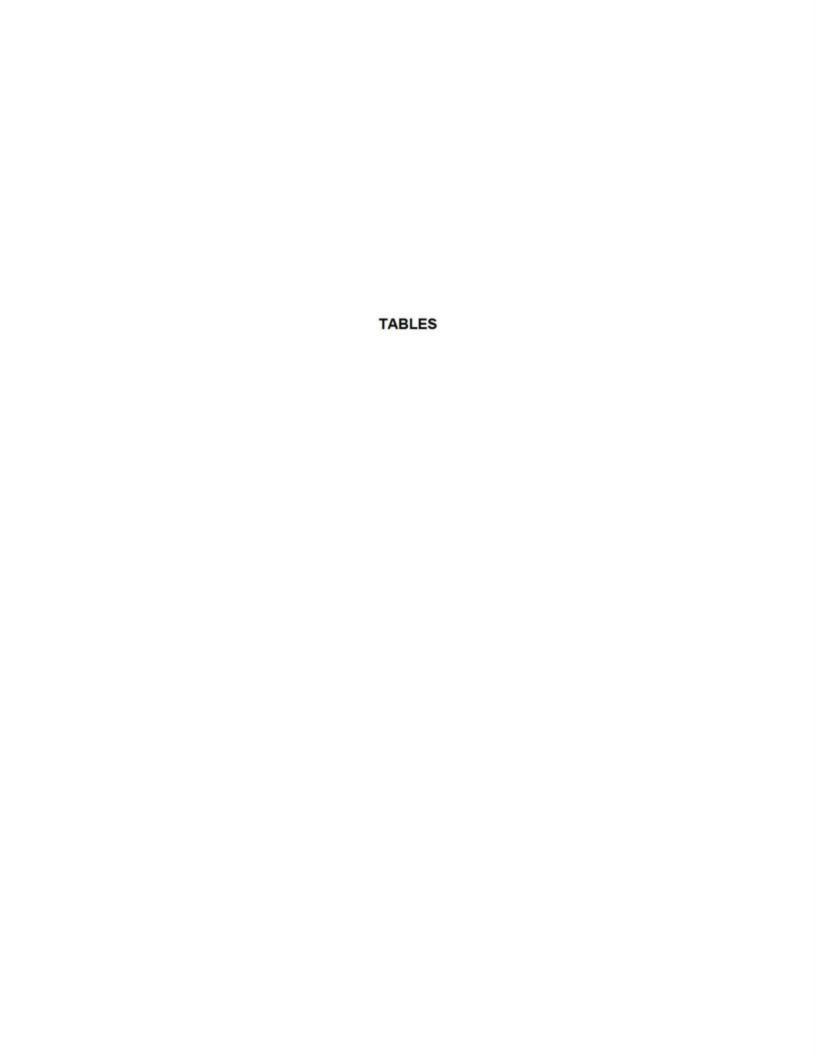


TABLE 1 SOIL SAMPLING DATA SUMMARY

LIBERTY OIL 408 700 N. RAILBOAD STREET TAMAQUA, PA

Boring ID	Date	Standard for Comparison	Beautes (eg/kg)	Edylbeares (eg/kg)	Ingrapyfloases (og kg)	MTBE (seks)	Naphrholese (ng/kg)	Tolorae (sq/kg)	LLATAS (velus)	LUA-TAGS (selle)	Xylean (ng/kg)	EDS (relig)	EDC (ve kg)	Lend (sg/kg)	Na Sadid
Non-Residential Direct of for Organic Regulated Soil		DC	530,000	1,000,000	26,000,000	1,500,000	190,000,000	10,000,000	640,000	38,800,000	9,304,000	43,000	75,000	194,004,000	NA
Saturated Non-Residen Organic Regulated Sub		SAT	100	79,000	350,000	2,600	18,000	100,000	6,206	120,000	1,000,000	8	200	45,000	NA
Non-Recidential MSC: Regulated Substan		585	500	79,000	2,500,000	2,800	25,000	100,000	35,000	230,000	1,000,000	6	500	400,000	NA
#1 Fill End (E17)	B122008	SAT	<200	<200	-250	-200	-250	<200	<300	-200	NA	NA.	NA.	NA.	92.5
#23646e (11)	\$12,2008	SAT	<200	<200	<200	<200	<250	<200	<300	<200	NA.	NA.	NA	NA	92.2
45 End (11)	\$12/2008	SAT	< 200	<200	<200	-290	<250	<200	-200	<200	NA	NA	NA.	NA.	92.8
44 Fill End (11)	813/2006	SAT	4.6	36	26	-4.0	87	25	3,200	300	340	+4.0	44.0	13,000	91.0
#5 Middle (117)	\$13/2008	SAT	-4.0	-4.0	+4.0	14.0	×5.0	-14.0	-4.0	-40	+12	<4.0	+4.0	13,000	36.4
#6 End (317)	\$13/2006	SAT	-4.0	<4.0	×4.0	-4.0	×5.0	-4.0	-4.0	5.5	<13	+4.0	-4.0	19,000	85.3
#7 Diesel Island (I')	\$15/2008	5265	<250	<250	<250	<250	<320	<250	<250	<250	NA	NA.	NA	NA	79.2
#8 Section End (12)	\$18/2006	DC	-4.0	-200	<300	14.0	<250	-40	<300	<200	< 600	14.0	-4.0	4,700	80.5
49 Fill Middle (12)	\$15/2008	DC	42	20	5.6	14.0	1.9	16	33	17	39	<4.0	<4.0	27,000	87.3
#10 Vest End (12)	818/2008	DC	9.3	6.7	-4.0	14.0	-5.0	8.3	6.8	4.5	16	-4.0	-4.0	30,000	\$6.3
#11 Vest End (12)	\$19/2006	DC	150	210	38	-4.0	26	18	250	160	400	-4.0	-4.0	45,000	85.1
#12 Fill Middle (12)	819/2008	DC	260	350	60	-160	40	3,100	440	190	1,500	<4.0	<4.0	31,000	85.0
#13 Section End (12)	\$19/200E	SIS	2,396	59 48,000	36 11,000	<2.000	20,000	39,000	230	140	250 540,000	<2.000	<2.000	28,000 110,000	85.7 81.7
#14 Gas. Pump (31)	\$19:2005 \$19:2005	5365	1,500	3,390	+20,000	<200	53,000	8.200	890,000	\$25,000	440,000	<2,000	<200	61,000	83.5
#15 Gat Pump (7) #16 Gat Pump (7)	\$19:2008 \$19:2008	5265	2,300	21,000	9,300	<550	118,000	6.400	430,000	170,000	190,000	<550	<500	160,000	72.4
#17 Piping Gm (2.5)	\$20,2008	SIES	23	<4.0	<4.0	-4.0	46	44	27,000	24,000	1,100	-4.0	-40	51,000	92.0
#18 Gas Johns (1)	\$20,2008	5265	32,000	138,800	36,000	<20,000	116,000	475,000	27,000	300,000	1,500,000	<28,000	-26,800	85,000	81.6
#19 Gas Piping (7)	\$20,2008	5385	28,000	168,800	47,000	<2,680	94,000	740,000	\$60,000	228,000	1,800,000	<2.600	<2.600	88,000	75.9
GP-1 (3-4)	61/15/09	526	7,790	\$4,000	17,000	<260	44,500	111,000	380,500	130,000	740,000	<560	<360	79,000	78.0
GP-3 (14-14.5)	00/13/09	DC	110	5,300	190	-4.0	400	66	22,000	7.390	15,000	-4.0	-4.0	8.300	90.4
GP-5 (13-10)	00/13/09	DC	230	150	28	47	70	56	530	160	710	-4.0	140	13,000	90.2
GP-4 (15-15.5)	05/15/09	DC	100	52	-4.0	59	34	-70	77	23	150	-4.0	-4.0	6,600	90.7
GP-9 (8-9)	00/13/09	SAT	945	180	9.4	300	110	2.700	1,100	330	1,100	-4.0	-40	11,000	88.7
GP-11 (12-12-9)	00/13/09	DC	28,000	66,000	14,000	500	36,000	190,000	260,000	95,000	470,000	<200	<200	10,000	88.7
GP-13 (11-12)	6013/09	DC	-200	71	11	72	41	<200	380	160	730	-4.0	-4.0	6,500	10.4
GP-14 (9-10)	00/13/09	DC	-4.0	44.0	-4.0	11	-5.0	8.4	14	4.4	17	+1.0	-1.0	8,900	90.1
GP-15 (11-12)	00/13/09	nc	-4.0	-6.0	<4.0	-4.0	<5.0	-dD	-4.0	-06.D	×12	<4.0	106.0	11,000	85.6
GP-16 (2-3)	01/13/09	5285	42,000	100,000	21,000	320	46,000	349,600	362,000	110,000	670,000	<200	-200	20,000	90.3
GP-17 (12-13.5)	00/27/09	DC	-c4.0	×4.0	<4.0	-04.0	<5.0	<4.0	<4.0	<4.0	<12	<4.0	104.0	11,000	20.0
GP-18 (3-6)	00/27/09	SHS	+5.4	-5.4	+5.4	3.4	-6.5	-54	-54	-5.4	-14	-6.4	+3.4	96,000	73.5
GP-19 (12-13)	01/27/09	DC	-200	3,000	4,200	<200	1,900	-200	58,000	23,000	11.000	-200	-200	7,700	89.6
GP-21 (1-6)	65/27/09	SHS	<4.0	-4.0	-4.0	-:AD	<250	-4.D	<200	<300	<12	<8.0	<4.0	13,000	20.0
GP-23 (8-9)	60/27/09	SAT	-4.0	-4.0	14.0	-06.0	-50	-14.0	A.D	-4.0	-12	-4.0	<4.0	79,000	50
GP-34 (14-15.5)	00/27/09	DC	-4.0	6.4	-4.0	43	<5.0	-40	-40	-4.0	<12	-4.0	-40	6.600	160
GP-27 (13-14)	61/27/09	DC DC	4.1	7.8	140	-40	6.0	160	5.0	-44.0	+12	4.0	-40	9.000	90.6
GP-28-(14-15.5)	00/2709	DC I	85	270	12	2.400	20	34	190	60	610	-4.0	-4.0	7,900	88.7
GP-29 (9-10.5)	05/27/09	DC DC	140	48	-4.0	510	30	-4.0	20	12	95	-4.0	-4.0	7,500	90
GP-31 (1-0)	86/27/09	SIS	100	94	91	200	<5.0	12	1.600	130	2,100	<4.0	<4.0	7,400	83
GP-32 (3-4)	65/27/09	525	150	63	36	610	<310	14	250	<250	790	-5.0	-5.0	6,300	79.1
	95/27/09			78											
GP-33-(12-13.5)	00/2709 00/2709	DC SAT	35 -4.0	-4.0	31 -4.0	-08.0 21	-5.0	210	530	160	560	<4.0	<4.0	\$,500 21,000	91

TABLE 1 SOIL SAMPLING DATA SUMMARY

LIBERTY OIL 408 700 N. RAILROAD STREET TAMAQUA, PA

Boring ID	Diste	Standard for Comparison	Bearer (rekg)	Ediyibearene (sg/kg)	Impropyfirmanne (seg/kg)	MTRE (relig)	Naphthaleae (sg/kg)	Toluene (sg/kg)	1,2,4 TMB (sg/kg)	LUA-TMB (selle)	Xylean (ag/kg)	EDS (relig)	EDC (ve/kg)	Lend (sg/kg)	% Sali
Son Residential Direct for Organic Regulated Soil		DC	330,000	1,800,800	10,000,000	9,990,000	190,000,000	10,000,000	640,000	38,000,000	9,100,000	45,000	75,000	194,804,800	NA
Saturated Non-Reside Organic Regulated Sul		SAT	100	70,000	360,000	2,600	10,000	100,000	6,206	120,000	1,000,000		200	45,000	NA
Non-Residential MSC Regulated Substan		5885	500	79,000	2,500,000	2,800	25,000	100,000	38,000	230,000	1,000,000	6	500	400,000	NA
10-10-6	1/14/2010	SAT	63.0	84.3	35.4	7.1	160	107	3,750	1,710	394	<13	<13	21,000	93.0
10-1(74)	1/14/2010	SAT	<1.7	<1.7	<1.7	437	×1.7	<2.7	<1.7	<1.7	<5.0	<1.7	<1.7	9,800	860
LO-1 (10.5-11.2)	1/14/2010	DC	41	120	7.0	+1.4	114	22.5	906	38.6	2,390	<1.4	<1.4	5,300	56.
LO-2 (8.5-7)	1/14/2010	SAT	<1.6	<1.6	<1.6	-1.6	<1.6	41.6	<1.6	<1.6	<4.7	<1.6	<1.6	7,600	90.
LO-3 (11-12)	1/14/2010	DC	41.5	-15	41.5	<1.5	<1.5	1.6	<1.5	4.5	14.6	<2.5	45	6,900	82
104(54)	1/14/2010	2882	-2.2	<2.2	42	<2.2	<2.2	11.2	<2.2	<12	<6.7	<2.2	422	139,000	80
LO-5 (7-B)	1/14/2010	SHS	5.7	<2.8	<2.8	+2.6	<2.8	3.5	-28	<2.8	<8.5	<2.8	-2.6	25,300	93
10-6(5-6)	1/14/2010	SHS	<2.5	<23	<2.3	+23	<2.3	3.2	<2.3	<23	<6.9	<2.5	<23	11,300	96
LO-7 (14-15) LO-8 (6.5-7.5)	1/14/2010	SAT	42.0	<2.2 <2.0	<2.2 <2.0	-22 -20	+2.2 +2.0	16.0	33	-20	9.4	-2.2 -2.0	<22	\$1,900 110,000	93
10-9 (11-12)	1/14/2010	DC	<38.7	105	539	<38.7	-273.5	<34.7	6,360	4,630	<116	50.4	<38.7	11,600	90
10-10/5-60	1/14/2010	205	<3.1	<3.1	<3.1	<0.1	<3.1	5.6	411	<3.1	-93	<3.1	<11	9.300	54
10-13 (3-6)	1/14/2010	505	23,160	49,300	11,900	<2,246	17,400	183,000	158,000	52,800	334,000	<2,240	<2,240	62,200	1 23
10-13-01-120	1/14/2010	DC	1.2	<1.5	<1.3	36.5	<1.5	3.7	+1.5	-1.5	4.5	41.5	-15	7,700	90
10-14 (9-10)	1/14/2010	DC	85,900	146,000	29,900	-829	44,800	605,000	434,000	150,000	884,000	-829	-829	35,100	1
10-14-02-170	1/14/2010	DC	29.4	108	25.8	75.9	71.1	146	359	155	565	<1.8	-1.8	7,100	90
LO-15 (3-4)	1/14/2010	5255	34,100	105,000	21,700	<1,300	43,600	296,000	F13,000	176,000	686,000	<1,200	<1,200	62,900	- 80
LO-16 (5-6)	1/14/2010	585	6,079	49,600	4,960	-376	15,000	141,000	123,000	38,000	271,000	+376	-376	13,600	- 84
10-16(11-12)	1/14/2010	DC	19,900	58,600	5,730	<422	13,600	156,000	130,000	59,000	290,000	<422	-422	9,400	90
LO-17 (3-4)	1/14/2010	SAT	6,880	70,400	22,500	.4401	33,969	39,500	399,000	136,000	603,000	<401	-400	34,900	90
1.0-17 (5-4)	1/34/2010	SAT	42.7	24.4	12.5	349	6.9	3.3	1,060	62.4	302	+0.78	-0.76	18,600	87
LO-18 (4-5)	1/14/2010	SAT	3,200	9,960	3,600	<394	2,890	2,450	69,800	25,100	43,600	<394	<194	16,100	83
10-19 (3-6)	1/14/2010	SHS	5,390	7,650	224	242	72	107	201	2,370	17,600	-2.7	+2.7	144,000	73
EX18113	5/25/2011	DC	33	-22	-0.2	3.0	-21	4.3	-2.2	-22	-6.7	-2.2	-2.2	7,100	- 83
E00816.	5/25/2011	DC	8,110	1,300	7.0	4,020	5.8	10,300	192	68.2	2,870	<4.7	41.7	15,400	- N
EXHIB	5/25/2011	SAT	1,650	14,500	2,190	22.4	4,410 3,220	22,100 4,080	54,690	17,700	86,100	41.5	41.5	9,700	10
EXAGES EXAGES	5/25/2011 5/25/2011	SAT	114	4,870	211	12.7	5,360	27,800	15,900	6,010	29,500	-22	-22	9,700	1 2
58-1(11.5)	3/23/2016	526	-0.36	-0.23	-0.22	-0.22	-0.16	0.343	-0.44	-0.17	-6.14	-0.16	-6.14	9,000	93
58-2 (17)	3/22/2016	SAT	0.16.7	-0.14	<0.13	(0.13	-6.091	0.21.7	-0.26	×0.099	0.089.7	+0.091	-0.084	41,000	90
58-5 (17)	3/22/2016	SAT	<0.16	-0.15	<0.14	+0.14	-1.099	<0.16	-0.26	<0.11	<0.091	<0.099	-0.091	7,400	85
58-4 (11)	3/22/2016	SAT	<0.15	-014	<0.13	<0.15	0.357	0.18.7	-0.26	×0.10	<0.084	<0.092	<0.084	9,500	96
538-5 (OP)	3/22/2016	SAT	<0.14	<0.13	-0.12	<0.12	-0.085	+0.13	-0.24	-0.092	-0.078	<0.085	-0.078	12.000	50
58-6 (7)	3/22/2016	SAT	-0.15	-0.13	-0.13	-0.13	-0.089	-0.14	+0.25	< 0.096	-0.081	-0.089	+0.081	8,400	10
58-705	5/22/2016	SAT	1,900	9,900	5,800	<19	9,300	2,400	1,200	1,200	8,200	~28	<36	44,000	8
58-7(0)	3/22/2016	SAT	<0.15	<0.14	<0.15	0.16.7	+5.091	0.15.7	+9.26	<0.09E	<0.063	<0.091	<0.063	7,500	31
584(6)	3/23/2016	SAT	2,400	1,790	150	110	700	3,400	4,400	2,100	12,000	<20	154	26,000	85
MW-11 (7)	3/22/2016	SHS	<0.27	<9.24	< 0.25	<0.23	<0.16	0.25 7	<9.45	<9.17	<0.15	<0.16	<0.15	110,000	78
MW-11 (11.5)	3/22/2016	SAT	+9.15	-0.16	<0.16	-9.16	-0.11	+6.17	-0.51	-9.12	-0.10	<0.11	-9.10	E.100	90
MW-12 (7.5)	1/25/2618	DC	171	3,970	861	<22.7	2,060	95.8	21,500	4,770	3,720	11.8	-227	57,600	- E
MW-13 (7)	1/21/2018	SHS	<30.0	155 2.94	41.5 1.41	<30.0	67.9 +25.8	\$0.5 <25.8	525 131	192 44.5	348	<4.95	<300	33,500 15,000	84
MW-13 (6.5)	1/25/2018		-0.536	-0.556	-0.156	<0.384 -0.336	<25.8	<25.E	-0.556	-0.556	<1.11	-0.091	-3.56	7,850	87
SB-9 (3.5)	1/25/2018	SAT	-0.538	+0.556	-0.556	+0.558 +0.558	-25.9	-25.9	-0.558 -0.558	+0.558 +0.558	*1.11 *1.12	-0.091	-5.58	9,630	80
SB-10 (3.5) SB-11 (4)	1/25/2018	SAT	291	107	28.4	-0.558 -28.4	342	225	153	116	467	-0.09E	-284	41,800	9
58-11 (7)	1/25/2018	SAT	-0.547	+0.547	-0.547	-0.547	<22.6	<22.6	<0.547	<0.547	<1.09	-0.090	<5.47	15,100	100
538-12 (2)	1/26/2018	5385	146	112	64.0	-639	91.2	252	346	303	997	<7.19	-439	34,600	1 5
Marie (x)	N. Carlotte	3053	3.46	144	99.0	-40.5	71.4	434	240	,000	391	41.45	-0010	74,000	1 4

Note:

Statewide Blaikh Standard values as per certains effective August 27, 2016

Statewide Blaikh Standard values as per certains effective August 27, 2016

Stangline collected within the same of secondal prombinator fluctuation in the wells season the boring are compared to the interested said standards Stangline collected below the average secondal low water table in the wells season the boring are compared to the Desert Contact values.

MTMS

Trimstyle baseaux

aging

Micrograms kingsyne (spirit) per hillion)

at Land that the Desertion Limit of 6

81.4 Saids are concentration exceeds the Non-Residential FADEP Statewish Haalth Standard

Composition are observed in the seasonal low between the method desertion limit and the reporting limit and in estimated in Sangles collected below the seasonal low water table.

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	GW Elevation (ft)	Depth to Product (ft)	Product Thickness (ft)	Groundwater Elevation (ft)	Benzene (ygt.)	Ethyl benzene (µg/L)	Isopropyt benzene (µg/L)	Totuene (ug1.)	Xylenes (µg/L)	MTBE (vg/L)	Naphthalene (µg/L)	1,2,4-TMB (PQT.)	1,3,5-TMB (Jegl)	EDC (up/L)	EDB (yg/L)	Lead (ugl.)
ASCs for Use	d. Non-Resid	dental Aquife	-				0.00	5	700	3,500	1,000	10,000	20	100	62	1,200	5	0.05	5
MW-1	2/15/09	100.00	4.24	95.76	ND			1.3	2.4	-2.0	<2.0	~6.0	<2.0	<5.0	<2.0	<2.0	<1.0	-0.05	<0.36
7403000	3/25/09	100.00	4.90	95.10	ND	201		2.2	3.6	-2.0	-2.0	-6.0	<2.0	+5.0	<2.0	<2.0	<1.0	<0.05	< 0.36
	9/24/09	100.00	4.18	95.82	ND	4.		6.2	3.2	<2.0	<2.0	<6.0	<2.0	8.1	<2.0	<2.0	<1.0	<0.05	<0.36
	11/12/09	100.00	3.83	96.17	ND	- 60	+	=1.0	<2.0	-2.0	+2.0	-6.0	~2.0	-8.0	<2.0	<2.0	<1.0	=0.05	-0.36
	3/26/10	100.16	3.56	96.60	ND	+33		<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<1.0	<1.0	<1.0	+0.020	<2.0
	6/2/10	100.16	4.78	95.38	ND	60		<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.020	<2.0
	9/1/10	100.16	6.92	93.24	ND	60		<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<1.0	<1.0	<1.0	-0.020	-2.0
	12/2/10	100.16	2.40	97.76	ND			<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.021	<2.0
	3/4/11	100.16	3.37	96.79	ND	800		<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.019	<2.0
	5/6/11	100.16	2.82	97.34	ND.	833	* 1	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.021	<2.0
	9/9/11	100.16	1.48	98.68	ND	+11		=1.0	<2.0	<2.0	<2.0	≪6.0	<2.0	<8.0	<2.0	<2.0	<1.0	-0.050	<0.48
	12/6/11	100.16	2.01	98.15	ND	**		~1.0	~2.0	<2.0	-2.0	-6.0	<2.0	-8.0	<2.0	<2.0	<1.0	<0.051	<0.48
	3/27/12	100.16	4.73	95.43	ND	5		~1.0	<2.0	<2.0	<2.0	×6.0	<2.0	<8.0	<2.0	<2.0	<1.0	<0.050	0.88
	6/6/12	500.19	2.80	497.39	ND	6.7		<1.0	<2.0	<2.0	<2.0	<6.0	<2.0	<8.0	<2.0	<2.0	<1.0	<0.038	<0.48
	9/6/12	500,19	5.25	494.94	ND:	+0.		<1.0	<2.0	<2.0	<2.0	<6.0	<2.0	-8.0	<2.0	<2.0	<1.0	<0.020	*1.5
	12/4/12	500.19	4.51	495.68	ND	**	17.	<1.0	<2.0	<2.0	<2.0	<6.0	<2.0	<8.0	<2.0	<2.0	<1.0	<0.020	<1.5
	3/15/13	500.19	2.77	497.42	ND	5.7		<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020	<1.5
	6/25/13	500.19	3.96	496.23	ND .	50	+	<0.080	<0.10	<0.080	<0.15	<0.13	<0.14	<0.29	<0.13	<0.15	<0.19	<0.020	<1.5
	9/13/13	500.19	5.66	494.53	ND	*:	+	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020	*1.5
	12/11/13	500.19	5.65	494.54	ND	***	-	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020	<1.5
	3/20/14	500,19	3.15	497.04	ND	600	14.1	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020	*1.5
	5/27/14	500.19	2.71	497.48	ND.	83	*	~1.0	<1.0	<1.0	<1.0	-2.0	<1.0	<1.0	<1.0	<1.0	<1.0	-0.020	<1.5
	9/19/14	500.19	6.19	494.00	ND	W(5)	14	~1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020	<1.5
	12/26/14	500.19	5.00	495.19	ND	90	100	≺1.0	11.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020	<1.5
	3/13/15	500.19	NM	NM	NM	80	-	NS	NS	NS.	NS	NS	NS	NS	NS	NS	NS	NS .	NS
	6/29/15	500.19	2.96	497.23	ND:	2.5		<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020	<1.5
	9/18/15	500.19	5.41	494.78	ND	* .	7	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020	<1.5
	12/11/15	500.19	5.17	495.02	ND	89	+0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020	<1.5
	4/6/16	500.19	2.57	497.62	ND .	90	+	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020	<1.5
	6/15/16	500.19	4.44	495.75	ND	*)		<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020	<1.5
	9/22/16	500.19	6.31	493.88	ND	* 0		<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020	<1.5
	12/14/16	500.19	6.31	493.88	ND	**	*	-1.0	-1.0	≺1.0	≺1.0	-2.0	×1.0	<1.0	1.0	<1.0	<1.0	-0.020	<1.5
	3/29/17	500.19	NM	NM	NM	**		NS	NS	NS	NS	NS	NS	NS	NS.	NS	NS	NS	NS
	6/22/17	500.19	3.53	496.66	ND	85	*	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	11.0	<1.0	<1.0	<1.0	<0.020	<1.5
	9/20/17	500.19	4.96	495.23	ND	*0	-	~1.0	≺1.0	<1.0	<1.0	-2.0	+1.0	×1.0	+1.0	<1.0	<1.0	-0.020	*1.5
	12/22/17	500.19	6.35	493.84	ND			<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	~1.0	<0.020	*1.5
	3/6/18	500.19	2.13	498.06	ND	* 1		NS	NS	NS -	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3/27/18	500.19	NM	NM	NM	80	*	NS	NS	NS	NS	NS	NS	NS NS	NS	NS	NS	NS	NS
	4/26/18	500.19	2.24	497.95	ND	*0		N3	NS	NS	NS.	NS:	NS	NS.	NS	NS	NS	NS	NS.
	5/4/18	500.19	2.92	497.27	ND	¥33		NS	NS	NS	NS.	NS.	NS	NS -	NS	NS	NS	NS	NS

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	GW Elevation (ft)	Depth to Product (ft)	Product Thickness (ft)	Correctes Groundwater Elevation (ft)	Benzene (ygt.)	Ethyl benzene (pg/L)	Isopropyt benzene (µg/L)	Totuene (µg1.)	Xylenes (µg1.)	MTBE (Vg/L)	Naphthalene (µg/L)	1,2,4-TMB (993.)	1,3,5-TMB (pgl.)	EDC (sgl.)	EDB (ygl.)	Lead (ugl.)
ASCs for Use	d, Non-Resid	dental Aquife	r	Carlo Carlo	S 07 (4)	0.70,800 9	20 05000 30	5	700	3,500	1,000	10,000	20	100	62	1,200	5	0.05	5
MW-2	2/16/09	99.93	15.39	84.54	ND	-		1.4	2.0	<2.0	<2.0	<6.0	<2.0	<5.0	11	<2.0	<1.0	<0.05	<0.36
1,44,659	3/25/09	99.93	15.64	84.29	ND			5.7	12	8.0	<2.0	<6.0	<2.0	9.7	110	<2.0	<1.0	<0.05	< 0.36
	9/24/09	99.93	15.69	84.24	ND	M1.5		2.9	5.8	3.8	<2.0	<6.0	<2.0	<8.0	44	<2.0	<1.0	<0.05	<0.36
	11/12/09	99.93	15.43	84.50	ND	80	.6	-1.0	<2.0	<2.0	+2.0	-6.0	<2.0	-8.0	<2.0	<2.0	<1.0	<0.05	< 0.36
	3/26/10	100.07	14.99	85.08	ND:	400		<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.021	<2.0
	6/2/10	100.07	15.60	84,47	ND:	+17		<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<1.0	<1.0	<1.0	+0.020	<2.0
	9/1/10	100.07	15.71	84.36	ND	80		<1.0	<1.0	<1.0	41.0	<3.0	<1.0	<2.0	1.3	<1.0	-1.0	-0.021	=4.0
	12/2/10	100.07	13.06	87.01	ND:	*		<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.021	=2.0
	3/4/11	100.07	14.98	85.09	ND.	800	4.1	<1.0	<1.0	<1.0	<1.0	<3.0	6.0	<2.0	<1.0	<1.0	<1.0	<0.019	-2.0
	5/6/11	100.07	15.83	84.24	ND .	975		<1.0	<1.0	<1.0	-1.0	<3.0	6.7	<2.0	<1.0	<1.0	<1.0	-0.021	<2.0
	9/9/11	100.07	15.83	84.24	ND	400	4.1	<1.0	<2.0	<2.0	<2.0	<6.0	<2.0	<8.0	<2.0	<2.0	<1.0	<0.050	<0.48
	12/8/11	100.07	13.87	86.20	ND:	40		<1.0	<2.0	<2.0	<2.0	46.0	<2.0	<8.0	<2.0	<2.0	<1.0	< 0.051	<0.48
	3/27/12	100.07	15.62	84.45	ND	477	(4)	<1.0	<2.0	<2.0	<2.0	<6.0	<2.0	<8.0	<2.0	<2.0	<1.0	<0.049	<0.48
	6/8/12	500.05	14.98	485.07	ND	400		-1.0	<2.0	<2.0	<2.0	-6.0	<2.0	<8.0	<2.0	<2.0	<1.0	<0.038	<0.48
	9/6/12	500.05	15.67	484.38	ND:	4:		<1.0	<2.0	<2.0	<2.0	<6.0	<2.0	<8.0	<2.0	<2.0	<1.0	<0.020	<1.5
	12/4/12	500.05	15.64	484.41	ND	40		<1.0	<2.0	<2.0	<2.0	<6.0	<2.0	<8.0	<2.0	<2.0	<1.0	<0.020	<1.5
	3/15/13	500.05	14.75	485.30	ND.	+0.2		×1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<1.0	+1.0	-0.020	*1.5
	6/25/13	500.05	15.65	484.40	ND	+0.5		<0.080	<0.10	-0.080	<0.15	<0.13	-0.14	< 0.29	<0.13	<0.15	-0.19	<0.020	<1.5
	9/13/13	500.05	15.42	484.63	ND	**	+	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020	<1.5
	12/11/13	500.05	15.56	484.49	ND	400		<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<1.0	=1.0	-0.020	<1.5
	3/20/14	500.05	15.32	484.73	ND	+0.5	+.	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020	<1.5
	5/27/14	500.05	15.14	484.91	ND	400	* .	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020	<1.5
	9/19/14	500.05	15.78	484.27	ND.	40	*	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020	<1.5
	12/26/14	500.05	15.17	484.88	ND	*1		<1.0	<1.0	<1.0	<1.0	-2.0	<1.0	<1.0	≺1.0	<1.0	<1.0	<0.020	<1.5
	3/13/15	500.05	15.30	484.75	ND	407	(4)	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020	<1.5
	6/29/15	500.05	15.21	484.84	ND	8.5		<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020	<1.5
	9/18/15	500.05	15.98	484.07	ND:	600		×1.0	<1.0	1.6	11.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020	<1.5
	12/11/15	500.05	15.65	464.40	ND	÷27		<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	+0.020	<1.5
	4/9/16	500.05	15.05	485.00	ND	*	* 1	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020	*1.5
	6/15/16	500.05	15.90	484.15	ND:	400		<1.0	≺1.0	1.4	≈1.0	-2.0	<1.0	<1.0	<1.0	<1.0	<1.0	-0.020	<1.5
	9(22/16	500.05	16.01	484.04	ND	90		<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020	<1.5
	12/14/16	500.05	15.83	484.22	ND	#C7		<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020	<1.5
	3/29/17	500.05	14.94	485.11	ND	40	*	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020	<1.5
	6/22/17	500.05	15.47	484.58	ND	+1	*	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020	<1.5
	9/20/17	500.05	15.90	484.15	ND	40.7		<1.0	<1.0	1.1	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020	<1.5
	12/22/17	500.05	15.96	484.09	ND	* 1		<1.0	<1.0	<1.0	<1.0	<2.0	+1.0	<1.0	<1.0	<1.0	<1.0	<0.020	<1.5
	3/6/18	500.05	14.35	485.70	ND:	603		NS	NS.	NS .	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3/27/18	500.05	15.49	464.56	ND:	- 23		<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	+0.020	<1.5
	4/26/18	500.05	14.85	485.20	ND	¥0.0	+	NS	NS	NS.	NS.	NS:	NS	NS:	NS	NS	NS	NS NS	NS
	5/4/18	500.05	15.24	484.81	ND	200	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	GW Elevation (ft)	Depth to Product (ft)	Product Thickness (ft)	Groundwater Elevation (ft)	Benzene (µg1.)	Ethyl benzene (yg/L)	Isopropyt benzene (µg1.)	Totuene (ug1.)	Xylenes (µg/L)	MTBE (vg/L)	Naphthalene (µg/L)	1,2,4-TMB (µg/L)	1,3,5-TMB (a)Q(.)	EDC (vg/L)	EDB (pg/L)	Lead (ygl.)
ASCs for Use	d. Non-Resid	dental Aquife	1	0.00	75.74	0.1.11	0.000	5	700	3,500	1,000	10,000	20	100	62	1,200	5	0.05	5
MW-3	2/16/09	99.13	5.05	94.08	NO	-	-	240	54	5.6	97	170	330	7.5	40	14	<1.0	<0.05	<0.36
1.000	3/25/09	99.13	5.80	93.33	ND			130	28	6.3	6.9	31	120	13	9.9	9.1	<1.0	<0.05	< 0.36
	9/24/09	99.13	5.03	94.10	ND	- 20		280	52	6.1	84	160	160	16	81	29	<1.0	<0.05	<0.36
	11/12/09	99.13	4.60	94.53	ND	22		770	250	26	490	820	390	38	270	68	<1.0	<0.05	<0.36
	3/26/10	99.31	4.31	95.00	ND	20		511	379	51.9	359	1,470	231	77.4	628	205	<5.0	<0.020	<2.0
	6/2/10	99.31	5.69	93.62	ND	200		96.9	23.2	3.5	24.7	68.3	58.8	5.1	39.4	14.5	<1.0	+0.020	*2.0
	9/1/10	99.31	7.43	91.88	ND	135	2.5	18.6	2.1	-1.0	5.7	26.9	18.4	<2.0	10.8	3.6	=1.0	-0.021	-20
	12/2/10	99.31	4.04	95.27	ND	200		101	25.6	<1.0	35.0	135	37.6	<2.0	26.6	18,1	41.0	+0.021	-2.0
	3/4/11	99.31	4.58	94.73	4.54	0.04	94.76	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
	5/6/11	99.31	4.24	95.07	4.10	0.14	95.17	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
	9911	99.31	2.81	96.50	2.79	0.02	96.51	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
	12/8/11	99.31	3.55	95.76	3.49	0.06	95.80	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
	3/27/12	99.31	6.73	92.58	sheen	0.06	6.17.5	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
	6/8/12	499.29		495.47	sheen		1	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	
			3.82			0.00	100000000000000000000000000000000000000												SPH
	9/6/12	499.29	6.13	493.16	6.11	0.02	493.17	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
	12/4/12	499.29	5.50	493.79	sheen			SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
	3/15/13	499.29	3.80	495.49	sheen	733		SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
	6/25/13	499.29	4.80	494.49	sheen	-2.		SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
	9/13/13	499,29	6.26	493.03	6.25	0.01	493,04	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
	12/11/13	499.29	6.24	493.05	sheen	*33		SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
	3/20/14	499.29	4.36	494.93	sheen	*00		SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
	5/27/14	499.29	3.71	495.58	sheen	50	*	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
	9/19/14	499.29	6.65	492.64	sheen	*	(4)	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
253.	12/26/14	499.29	5.77	493.52	sheen	**	*	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
	3/13/15	499.29	6.16	493.13	sheen	*57	(4)	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
*	6/29/15	499.29	4.37	494.92	sheen	6.5		SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
	9/18/15	499.29	6.20	493.09	sheen			SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
	12/11/15	499.29	5.98	493.31	5.96	-0.01		SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
*	4/8/16	499.29	4.46	494.83	ND .		*	100	85	21	8.4	29	13	11	91	6.1	<1.0	<0.020	*1.5
	6/15/16	499.29	5.52	493.77	ND:	- 63	-	13	1.7	1.3	1.0	2.4	2.1	≺1.0	1.4	<1.0	~1.0	<0.020	<1.5
	9(22/16	499.29	6.92	492.37	ND	91		<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020	<1.5
	12/14/16	499.29	6.74	492.55	ND	400	*	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020	<1.5
*	3/29/17	499.29	4.39	494.90	ND	400	*	81	34	6.4	7.0	24	9.6	2.8	34	<1.0	<1.0	<0.020	<1.5
	6/22/17	499.29	4.76	494.53	ND	+	*	67	14	2.6	11	17	5.4	1.4	9.1	1.4	<1.0	-0.020	<1.5
	9/20/17	499.29	5.81	493.48	ND.	*		33	<1.0	<1.0	1.4	<2.0	3.5	<1.0	<1.0	<1.0	<1.0	<0.020	<1.5
	12/22/17	499.29	6.93	492.36	ND			<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020	<1.5
	3/6/18	499.29	3.40	495.89	sheen	+0.0		NS	NS	NS	NS	NS	NS	NS	NS.	NS	NS	NS	NS
	3/27/18	499.29	4.54	494.75	sheen	- 2		85	26	5.8	2.2	17	9.6	3.4	37	1.3	1.0	+0.020	*1.5
	4/26/18	499.29	3.95	495.34	sheen	- 60	***	NS.	NS	NS	NS.	NS:	NS	NS .	NS	NS	NS	N3	NS
	5/4/18	499.29	4.23	495.06	sheen	200		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	GW Elevation (ft)	Depth to Product (ft)	Product Thickness (ft)	Groundwater Elevation (ft)	Benzene (µg1.)	Ethyl benzene (µg/L)	Isopropyt benzene (µg1.)	Totuene (µg1.)	Xylenes (µg/L)	MTBE (vg/L)	Naphthalene (µg/L)	1,2,4-TMS (99%)	1,3,5-TMB (pgl.)	EDC (pgl.)	EDB (pg/L)	Lead (ug/L)
ASCs for Use	d, Non-Resid	dental Aquifer		Constitution (8 35 36.7	200	3 12 24 60	5	700	3,500	1,000	10,000	20	100	62	1,200	5	0.05	5
MW-4	9/24/09	99.34	5.43	93.91	4.90	0.53	94.30	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
1,000,000	11/12/09	99.34	4.70	94.64	ND		*	4,500	2,100	120	8,400	9,400	970	440	2,000	620	<1.0	<0.05	0.41
- 1	3/26/10	99.66	4.83	94.83	ND	40.1		5,560	1,770	74.2	11,200	9,900	1,620	343	2,060	465	<5.0	<0.021	<2.0
- 1	6/2/10	99.66	6.22	93.44	6.18	0.04	93.47	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
- 1	9/1/10	99.66	8.19	91.47	8.02	0.17	91.59	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
- 1	12/2/10	99.66	4.46	95.20	4.43	0.03	95.22	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
- 1	3/4/11	99.66	5.29	94.37	5.20	0.09	94.44	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
- 1	5/6/11	99.66	4.58	95.08	4.48	0.10	95.15	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
- 1	9/9/11	99.66	3.50	96.16	ND			350	360	27	200	480	40	68	300	140	<1.0	< 0.050	<0.48
- 1	12/8/11	99.66	4.36	95.30	ND.	200		560	310	43	120	260	180	93	300	38	<1.0	<0.051	<0.48
- 1	3/27/12	99.66	9.14	90.52	ND	40	4.1	960	420	33	520	820	200	94	350	100	<1.0	<0.050	<0.48
- 1	6/8/12	499.65	4.17	495.48	ND:	200		480	240	21	30	150	89	30	140	<20	<10	<0.038	<0.48
- 1	9/6/12	499.65	6.18	493.47	ND	47	(4)	340	300	41	430	1,000	92	120	410	130	<1.0	<0.020	<1.5
- 1	12/4/12	499.65	5.95	493.70	ND	4.7		500	360	31	320	950	140	77	340	110	<1.0	-0.020	<1.5
- 1	3/15/13	499.65	4.48	495.17	ND:	4.1	14.1	300	68	2.6	220	290	100	11	86	19	<1.0	<0.020	<1.5
- 1	6/25/13	499.65	5.12	494.53	ND	40		300	220	18	19	52	80	7.0	110	3.7	< 0.19	<0.020	<1.5
- 1	9/13/13	499.65	6.79	492.86	ND.	433		230	230	18	170	720	51	47	350	84	<2.0	<0.020	*1.5
- 1	12/11/13	499.65	6.70	492.95	ND	400		260	160	13	240	420	49	29	220	50	<2.0	<0.020	<1.5
- 1	3/20/14	499.65	4.90	494.75	ND	**	-	160	160	11	170	350	40	17	110	25	<1.0	< 0.020	<1.5
- 1	5/27/14	499.65	3.39	496.26	ND	400	2.7	240	110	10	3.0	46	29	7.6	90	4.7	<1.0	-0.020	<1.5
- 1	9/19/14	499.65	7.06	492.59	ND	400	-	54	89	12	28	130	<1.0	16	130	28	<1.0	<0.020	<1.5
- 1	12/26/14	499.65	6.38	493.27	ND	40		160	100	9.9	100	170	28	7.6	83	18	<1.0	<0.020	<1.5
- 1	3/13/15	499.65	6.82	492.83	ND	61		160	160	13	160	230	32	13	100	27	<1.0	<0.020	<1.5
- 1	6/29/15	499.65	4.57	495 DB	ND	41		120	130	12	17	57	22	6.2	34	1.3	<1.0	<0.020	<1.5
- 1	9/18/15	499.65	6.37	493.28	ND	40		42	44	8.3	15	58	19	6.7	52	11	<1.0	< 0.020	<1.5
- 1	12/11/15	499.65	6.25	493.40	ND	W.C.	4.	270	140	16	190	250	28	19	80	17	<1.0	<0.020	<1.5
- 1	4/8/16	499.65	4.90	494.67	ND:	43		260	190	13	54	110	29	13	31	5.0	<2.0	-0.020	<1.5
- 1	6/15/16	499.65	5.66	493.99	ND	÷33	-	71	39	6.9	10	45	34	2.9	19	2.9	<1.0	<0.020	<1.5
- 1	9/22/16	499.65	7.25	492.40	ND	40	+	N3	NS	NS	NS.	NS.	NS	NS.	NS	NS	NS	NS.	NS
- 1	12/14/16	499.65	7.00	492.65	ND:	200		97	50	14	75	150	12	21	67	18	<1.0	<0.020	<1.5
- 1	3/29/17	499.65	4.92	494.73	ND	40		230	140	16	160	260	23	9.9	57	13	<1.0	<0.020	<1.5
- 1	6/22/17	499.65	4.92	494.73	ND	400	16.7	41	2.8	2.7	<1.0	<2.0	13	1.4	1.3	<1.0	<2.0	<0.020	<1.5
- 1	9/20/17	499.65	5.81	493.84	ND	400		66	17	3.4	26	23	7.1	2	6.9	<1.0	<1.0	< 0.020	<1.5
- 1	12/22/17	499.65	7.19	492.46	ND		*	53	24	13	19	65	8.0	25	47	9.9	<1.0	<0.020	*1.5
- 1	3/6/18	499.65	3.54	496.11	ND.	4.1		NS	NS	NS	NS	NS	NS	NS	NS.	NS	NS	NS	NS.
- 1	3/27/18	499.65	4.55	495.10	ND	- 2		240	140	17	24	220	12	16	170	50	<1.0	<0.020	<1.5
- 1	4/26/18	499.65	4.29	495.36	ND.	2.5		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS.
- 1	5/4/18	499.65	4.22	495.43	ND:	233	20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	GW Elevation (ft)	Depth to Product (ft)	Product Thickness (ft)	Groundwater Elevation (ft)	Benzene (pgt.)	Ethyl benzene (pg/L)	Isopropyt benzene (µg1.)	Totuene (ug1.)	Xylenes (µg/L)	MTBE (Vg/L)	Naphthalene (µg/L)	1,2,4-TMB (99%)	1,3,5-TMB (Jel)	EDC (yg/L)	EDB (yg/L)	Lead (ug1.)
SCs for Use	d. Non-Resid	Sental Aquife			100	0.00	0.000	5	700	3,500	1,000	10,000	20	100	62	1,200	5	0.05	5
MW-5	92409	100.00	15.59	84.41	ND	-	-	<1.0	<2.0	<2.0	<2.0	<6.0	<2.0	<8.0	<2.0	<2.0	<1.0	<0.05	<0.36
-	11/12/09	100.00	15.37	84.63	ND	400		<1.0	<2.0	<2.0	<2.0	<6.0	<2.0	<8.0	<2.0	<2.0	<1.0	<0.05	< 0.36
	3/26/10	100.00	14.93	85.07	ND			<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.020	<2.0
	6/2/10	100.00	15.53	84.47	ND			~1.0	-1.0	<1.0	<1.0	<3.0	<1.0	-20	×1.0	<1.0	<1.0	<0.020	<2.0
	9/1/10	100.00	15.64	84.36	ND	200		<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.020	<2.0
	12/2/10	100.00	13.07	86.93	ND	20		<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<1.0	<1.0	<1.0	+0.020	<2.0
	3/4/11	100.00	14.97	85.03	ND	200	4.3	<1.0	<1.0	<1.0	41.0	<3.0	<1.0	<2.0	<1.0	<1.0	-1.0	-0.019	-2.0
	5/6/11	100.00	14.81	85.19	ND .	***		<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.020	=2.0
	9/9/11	100.00	12.73	87.27	ND	200	2	<1.0	<2.0	<2.0	<2.0	<6.0	<2.0	<8.0	2.1	<2.0	<1.0	<0.050	+0.4
	12/9/11	100.00	13.90	86.10	ND .	233		<1.0	<2.0	<2.0	<2.0	-6.0	<2.0	<8.0	<2.0	<2.0	-10	-0.050	-0.4
	3/27/12	100.00	15.55	84.45	ND	43		<1.0	<2.0	<2.0	<2.0	<6.0	<2.0	<8.0	<2.0	<2.0	<1.0	<0.050	<0.4
	6/8/12	499.96	14.92	485.04	ND	60		<1.0	<2.0	<2.0	<2.0	<6.0	<2.0	<8.0	<2.0	<2.0	<1.0	<0.038	<0.4
	9/6/12	499.96	15.62	484.34	ND:			<1.0	<2.0	<2.0	<2.0	<6.0	<2.0	<8.0	<2.0	<2.0	<1.0	<0.020	<1.5
	12/4/12	499.96	15.55	484.41	ND			<1.0	<2.0	<2.0	<2.0	-6.0	<2.0	≺8.0	<2.0	<2.0	<1.0	<0.020	417
	3/15/13	499.96	14.75	485.21	ND	- 2		<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020	<1.5
	6/25/13	499.96	15.56	484.40	ND	27		<0.080	<0.10	<0.080	<0.15	<0.13	< 0.14	< 0.29	<0.13	<0.15	< 0.19	<0.020	<1.5
	9/13/13	499.96	15.40	404.56	ND	2.3	4.3	×1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<1.0	<1.0	-0.020	+1.5
	12/11/13	499.96	15.47	484.49	ND.	- 22	+	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	41.0	<1.0	<1.0	<0.020	41.5
	3/20/14	499.96	15.24	484.72	ND:	23		<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	-0.020	*1.5
	5/27/14	499.96	15.06	484.90	ND	22		<1.0	<1.0	<1.0	-1.0	-2.0	<1.0	₹1.0	<1.0	<1.0	<1.0	-0.020	41.5
	9/19/14	499.96	15.69	484.27	ND		43	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020	<1.5
	12/26/14	499.96	15.11	484.85	ND	200		<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020	<1.5
	3/13/15	499.96	NM	NM	NM	40		NS.	NS	NS.	NS	NS.	NS	NS	NS	NS	NS	NS	NS
	6/29/15	499.96	15.17	484.79	ND	4.0		~1.0	<1.0	×1.0	<1.0	-2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020	<1.5
	9/18/15	499.96	15.85	484.11	ND	2.5		<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020	<1.5
	12/11/15	499.96	15.54	484.42	ND			<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020	<1.5
	4/8/16	499.96	15.01	484.95	ND	- 80	+	~1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020	<1.5
	6/15/16	499.96	15.78	404.18	ND:	¥8		<1.0	<1.0	<1.0	<1.D	<2.0	<1.0	<1.0	=1.0	<1.0	<1.0	<0.020	<1.5
	9/22/16	499.96	15.88	484.08	ND			N3	NS	NS	NS	NS:	NS	NS	NS	NS	NS	NS.	NS
	12/14/16	499.96	15.71	484.25	ND	20	+1	<1.0	<1.0	11.0	₹1.0	-2.0	<1.0	<1.0	<1.0	<1.0	-1.0	-0.020	41.5
	3/29/17	499.96	14.85	485.11	ND:	+ :	+	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020	41.5
	6/22/17	499.96	15.38	484.58	ND	93		<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020	<1.5
	9/20/17	499.96	15.76	484.20	ND	*0	-	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020	<1.5
- 1	12/22/17	499.96	15.83	484.13	ND	- 20		<1.0	<1.0	<1.0	11.0	<2.0	<1.0	<1.0	11.0	<1.0	<1.0	<0.020	×1.5
	3/6/18	499.96	14.39	485.57	ND	200		NS	NS	NS	NS	NS	NS	NS	NS.	NS	NS	NS	NS
	3/27/18	499.96	15.38	484.58	ND.			<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	1.3	<1.0	<1.0	+0.020	<1.5
	4/26/18	499.96	14.80	485.16	ND	- 23		NS	NS	NS	NS.	NS	NS	NS.	NS	NS	NS	NS	NS
	5/4/18	499.96	15.10	404.06	ND	- 2	+	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

MW-6		Casing (ft)	Water (ft)	GW Elevation (ft)	Depth to Product (ft)	Product Thickness (ft)	Groundwater Elevation (ft)	Benzene (µg1.)	Ethyl benzene (µg/L)	benzene (µg/L)	Totuene (ug/L)	Xylenes (µg/L)	MTBE (Hg/L)	Naphthalene (µg/L)	1,2,4-TMB (99%)	1,3,5-TMB (/g/L)	EDC (yg/L)	EDB (upt)	Lead (ygl)
MW-6	d, Non-Resid	dental Aquife	1	(Level) a S	5 07 16.7	OUTLINE ?	0.00	5	700	3,500	1,000	10,000	20	100	62	1,200	5	0.05	5
	90409	99.41	16.15	83.26	NO	-		<1.0	<2.0	<2.0	<2.0	<6.0	<2.0	<8.0	<2.0	<2.0	<1.0	<0.05	<0.36
120000	11/12/09	99.41	15.92	83.49	ND			<1.0	<2.0	<2.0	<2.0	<6.0	<2.0	<8.0	<2.0	<2.0	<1.0	<0.05	0.64
	3/26/10	100.59	15.49	85.10	ND.	40.0		<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.021	<2.0
	6/2/10	100.59	16.11	84.48	ND .	40	-	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.020	40
	9/1/10	100.59	16.21	84.38	ND	40.0		<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<1.0	<1.0	<1.0	-0.021	65
	12/2/10	100.59	13.62	86.97	ND	23		<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.020	2.5
	3/4/11	100.59	15.53	85.06	ND	23		<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.019	<2.0
	5/6/11	100.59	15.36	85.23	ND	4.		<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0	<1.0	<1.0	<1.0	<0.020	4.6
	9/9/11	100.59	13.18	87.41	ND	20	-	<1.0	<2.0	<2.0	<2.0	×6.0	<2.0	-8.0	<2.0	<2.0	<1.0	<0.050	2.4
	12/9/11	100.59	14.40	86.19	ND	- 257	-	-1.0	<2.0	<2.0	<2.0	×6.0	<2.0	-8.0	<2.0	<2.0	<1.0	<0.050	5.0
	3/27/12	100.59	16.11	84.48	ND	23		<1.0	<2.0	<2.0	<2.0	<6.0	<2.0	<8.0	<2.0	<2.0	<1.0	<0.051	44
	6/8/12	500.98	15.48	485.50	ND	63	4	×1.0	<2.0	-2.0	-2.0	-6.0	<2.0	-8.0	<2.0	<2.0	<1.0	-0.038	12
	9/6/12	500.98	16,19	484.79	ND	- 20	47	-10	<2.0	-2.0	<2.0	-6.0	<2.0	-8.0	<2.0	<2.0	<1.0	+0.020	16
	12/4/12	500.98	16.12	484.86	ND	200		<1.0	<2.0	<2.0	<2.0	<6.0	<2.0	<8.0	<2.0	<2.0	<1.0	<0.020	12
	3/15/13	500.98	15.32	485.66	ND			<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<1.0	<1.0	-0.020	5.1
	6/25/13	500.96	16.13	484.85	ND	1.1		-0.080	<0.10	-0.080	<0.15	<0.13	<0.14	<0.29	<0.13	<0.15	<0.19	-0.020	27
	9/13/13	500.98	15.96	485.02	ND	23		<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020	52
	12/11/13	500.98	16.03	484.95	ND	- 23		<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020	35
	3/20/14	500.98	15.79	485.19	ND	23	1	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	*1.0	<1.0	=1.0	<0.020	18
	5/27/14	500.98	15.61	485.37	ND	20	13	⊲1.0	<1.0	<1.0	-1.0	-2.0	41.0	₹1.0	11.0	<1.0	=1.0	<0.020	3.9
	9/19/14	500.98	16.25	484.73	ND	27	1.5	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020	13
	12/26/14	500.98	15.67	485.31	ND:	20		<1.0	<1.0	<1.0	<1.0	*2.0	<1.0	-1.0	*1.0	<1.0	<1.0	-0.020	11
	3/13/15	500.96	15.77	485.21	ND	233		11.0	<1.0	11.0	41.0	-2.0	41.0	-10	<1.0	-1.0	<1.0	-0.020	28
	6/29/15	500.98	15.74	485.24	ND	130		<1.0	<1.0	<1.0	<1.0	<2.0	*1.0	<1.0	<1.0	<1.0	<1.0	-0.020	38
	9/18/15	500.98	16.43	484.55	ND	23		NS	NS:	NS	NS:	NS.	NS	NS	NS	NS	NS	NS	NS
	12/11/15	500.98	16.12	484.86	ND	23	-	<1.0	<1.0	*1.0	<1.0	<2.0	=1.0	*1.0	<1.0	-1.0	<1.0	<0.020	39
	4/8/16	500.98	15.56	485.42	ND	20		<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020	11
	6/15/16	500.98	16.35	484.63	ND	27		NS	NS	NS	NS.	NS	NS	NS	NS.	NB	NS	NS	NS
	9/22/16	500.98	16.45	484.53	ND	20		NS.	NS	NS	NS.	NS	NS	NS NS	NS NS	NS-	NS	NS	NS
	12/14/16	500.96	16.28	484.70	ND:	299	100	11.0	11.0	11.0	<1.0	-2.0	*1.0	11.0	*1.0	<1.0	<1.0	<0.020	40
	3/29/17	500.98	15.40	485.58	ND.	20	23	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020	15
	6/22/17	500.98	15.94	485.04	ND	20	100	×1.0	<1.0	×1.0	<1.0	<2.0	×1.0	-1.0	<1.0	<1.0	<1.0	-0.020	22
	9/20/17	500.98	16.33	484.65	ND	100		NS.	NS.	NS	NS.	NS	NS	NS	NS NS	NS.	NS	NS	NS
	12/22/17	500.98	16.39	484.59	ND	20		NS.	NS	NS NS	NS.	NS.	NS.	NS.	NS.	NS.	NS	NS.	NS
	3/6/18	500.98	14.81	486.17	ND.	200		NS.	NS	NS NS	NS NS	NS.	NS.	NS NS	NS.	NS NS	NS	NS NS	NS
	3/27/18	500.98	15.92	485.06	ND	20		×1.0	11.0	×1.0	41.0	-20	-1.0	11.0	<1.0	<1.0	*1.0	-0.020	5.3
		500.98	15.92		ND ND	733	7			*1.0 NS					*1.0 NS		NS		NS NS
	4/26/18 5/4/18	500.98	15.65	485.64 485.33	ND ND			NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	GW Elevation (ft)	Depth to Product (ft)	Product Thickness (ft)	Groundwater Elevation (ft)	Benzene (pgt.)	Ethyl benzene (pg/L)	Isopropyl benzene (µg/L)	Totuene (ug1.)	Xylenes (µg/L)	MTBE (Vg/L)	Naphthalene (µg/L)	1,2,4-TMB (PQT.)	1,3,5-TMB (Jeu)	EDC (yg/L)	EDB (JQU)	Lead (ugl.)
ASCs for Use	d. Non-Resid	dental Aquife	1		1 100	0.70.00	St. 01/100 St	5	700	3,500	1,000	10,000	20	100	62	1,200	5	0.05	5
MW-7	W26V10	99.14	4.69	94.45	ND	-	-	931	431	24.7	1,250	973	513	120	336	72.5	<5.0	<0.020	<2.0
-1777	6/2/10	99.14	5.99	93.15	ND			712	340	21.8	433	479	477	91.1	202	37.1	<5.0	<0.020	<2.0
- 1	9/1/10	99.14	8.00	91.14	ND			597	257	15.8	133	242	348	39.6	83.0	22.6	<5.0	<0.020	<2.0
	12/2/10	99.14	4.56	94.58	ND			706	406	15.5	233	154	274	41.7	77.5	22.1	<5.0	<0.021	<2.0
	3/4/11	99.14	4.93	94.21	ND	20		720	295	16.7	374	328	350	29.9	71.5	18.5	<5.0	<0.019	<2.0
- 1	5/6/11	99.14	5.06	94.08	4.25	0.81	94.67	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
	9/9/11	99.14	3.26	95.88	ND:	- 2	-	450	370	61	470	1,400	140	200	840	310	<1.0	-0.050	-0.46
	12/9/11	99.14	4.03	95.11	4.02	0.01	95.12	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
	3/27/12	99.14	5.69	93.45	5.59	0.10	93.52	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
10000	6/8/12	496.63	3.78	495.05	sheen	-		SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
	9/6/12	498.83	6.05	492.78	6.04	0.01	492.79	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
- 1	12/4/12	498.83	5.40	493.43	sheen	2000		SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
- 1	3/15/13	498.83	3.86	494.97	sheen			SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
- 1	6/25/13	498.83	4.71	494.12	sheen	- 4		SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
	9/13/13	498.83	6.16	492.67	6.15	0.01	492.68	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
	12/11/13	498.83	6.15	492 68	sheen			SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
	3/20/14	498.83	4.34	494.49	sheen	433		SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SP14	SPH	SPH	SPH
	5/27/14	496.63	3.71	495.12	sheen	407		SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
	9/19/14	490.83	7.15	491.68	6.42	0.73	492.21	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
	12/26/14	490.83	5.71	493.12	sheen	400		SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
	3/13/15	496.63	5.99	492.84	sheen			SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
	6/29/15	498.83	4.73	494.10	4.10	0.63	494.56	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
	9/18/15	498.83	6.55	492.28	5.88	0.67	492.77	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
1000	12/11/15	496.83	5.78	493.05	5.78	-0.01		SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SF91	SPH	SPH	SPH
	4/8/16	498.83	4.32	494.51	sheen			SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
	6/15/16	496.83	5.31	493.52	sheen	200		SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
	9/22/16	496.63	6.72	492.11	sheen	43		590	380	33	140	460	50	120	340	82	<5.0	<0.020	<1.5
	12/14/16	496.83	6.62	492.21	sheen	÷33	-	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
	3/29/17	498.83	4.31	494.52	sheen	400		SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
	6/22/17	498.83	4.62	494.21	sheen	23		160	57	6.0	110	140	22	14	61	15	<1.0	< 0.020	<1.5
	9/20/17	498.83	5.68	493.15	sheen	40		SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
	12/22/17	498.83	6.73	492.10	sheen	400	*	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
	3/6/18	498.83	3.35	495.48	sheen	40		NS.	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3/27/18	498.83	4.43	494.40	sheen			2,500	540	48	940	1,900	390	190	700	190	<10	<0.020	<1.5
	4/26/18	498.83	3.88	494.95	sheen			NS	NS	NS	NS.	NS	NS	NS:	NS	NS	NS.	NS	NS
	5/4/18	496.83	4.04	494.79	sheen	2.5		NS	NS	NS	NS.	NS	NS	NS.	NS	NS	NS	NS	NS

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	GW Elevation (ft)	Depth to Product (ft)	Product Thickness (ft)	Corrected Groundwater Elevation (ft)	Benzene (µg1.)	Ethyl benzene (yg/L)	Isopropyt benzene (µg1.)	Totuene (pg/L)	Xylenes (ag-L)	MTBE (Joh)	Naphthalene (µg/L)	1,2,4-TMS (99%)	1,3,5-TMB 6/91.)	EDC (yg/L)	EDB (JQL)	Lead (ugl.)
MSCs for Use	d, Non-Resid	dental Aquife	1				7.11	5	700	3,500	1,000	10,000	20	100	62	1,200	5	0.05	5
MW-6	3/26/10	99.31	8.31	91.00	ND	* 1		865	510	44.1	758	1,850	96.6	110	843	252	<5.0	<0.020	<2.0
1.000000	6/2/10	99.31	9.41	89.90	ND			820	473	43.9	709	1,810	119	110	701	211	<5.0	<0.020	<2.0
- 1	9/1/10	99.31	10.64	88,67	10.41	0.23	88.84	SPH	SPH	SPH	SPH	SPH	SPH	8844	SPH	SPH	SPH	SPH	SPH
- 1	12/2/10	99.31	8.35	90.96	ND	10.40	* * *	198	147	5.2	623	730	8.0	19.2	180	45.4	<5.0	0.090	<2.0
- 1	3/4/11	99.31	8.99	90.32	ND:	400		781	579	45.6	796	2,380	67.1	80.2	841	236	<5.0	0.10	<2.0
- 1	5/6/11	99.31	8.73	90.58	ND	+17		674	377	37.1	308	1,240	79.5	65.9	539	160	<5.0	0.035	*2.0
- 1	9/9/11	99.31	7.78	91.53	ND	800		210	160	19	42	460	39	39	220	66	<1.0	-0.050	-0.48
- 1	12/8/11	99.31	8.44	90.87	ND:	+0		380	290	33	79	770	26	59	430	120	<1.0	<0.051	<0.48
- 1	3/27/12	99.31	9.64	89.67	9.64	<0.01	89.67	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
- 1	6/8/12	499.26	8.78	490.48	ND .	*/3	-	450	370	46	360	1,200	<40	190	580	160	<20	-0.038	-0.48
- 1	9/6/12	499.26	10.05	489.21	ND	400	* 1	350	450	59	150	1,100	12	130	790	270	<1.0	<0.020	<1.5
- 1	12/4/12	499.26	9.60	489.66	sheen	60		SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
- 1	3/15/13	499.26	8.68	490.58	sheen	477	(4)	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
- 1	6/25/13	499.26	9.18	490.08	sheen		*	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
	9/13/13	499.26	9.80	489.46	9.77	0.03	489.48	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH.	SPH
	12/11/13	499.26	9.74	489.52	sheen			SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
	3/20/14	499.25	8.85	490.41	sheen	+0.2		SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
	5/27/14	499.26	8.51	490.75	sheen	+01		SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
	9/19/14	499.26	10.00	489.26	sheen	**	+	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
	12/26/14	499.26	9.24	490.02	sheen	400	-	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
	3/13/15	499.26	9.58	489.68	sheen	400		SPH	SPH	SPH	SPH-	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
	6/29/15	499.26	8.70	490.56	sheen	400		SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
	9/18/15	499.26	9.66	489.60	sheen	10.00		SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
770	12/11/15	499.26	9.20	490.06	9.20	<0.01		SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
	4/8/16	499.26	8.62	490.64	sheen	-		SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
	6/15/16	499.26	9.36	489.90	sheen	200		SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
	9/22/16	499.26	9.99	489.27	sheen	23		230	380	60	20	670	<5.0	110	840	240	<5.0	<0.020	*1.5
	12/14/16	499.26	9.81	489.45	sheen	400	-	SPH	SPH	SPH	SPH:	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
	3/29/17	499.26	5.56	493.70	sheen	47	2.0	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
	6/22/17	499.26	8.81	490.45	sheen	200	2.	41	58	10	4.8	120	<1.0	17	150	43	<1.0	<0.020	*1.5
	9/20/17	499.26	9.27	489.99	sheen	40		SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
	12/22/17	499.26	9.89	489.37	sheen	- 60	100	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH	SPH
	3/6/18	499.26	7.93	491.33	sheen	40		NS	NS.	NS	NS	NS	NS	NS NS	NS	NS	NS	NS	NS
	3/27/18	499.26	8.68	490.58	sheen			270	360	53	69	790	×5.0	96	620	160	×5.0	<0.020	<1.5
	4/26/18	499.26	8.30	490.96	sheen	20		NS	NS	NS	NS.	NS	NS	NS	NS	NS	NS	NS	NS
	5/4/18	499.26	8.44	490.82	sheen	20		NS.	NS	NS NS	NS.	NS	NS	NS NS	NS	NS	NS	NS	NS

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	GW Elevation (ft)	Depth to Product (ft)	Product Thickness (ft)	Groundwater Elevation (ft)	Benzene (µg1.)	Ethyl benzene (µg/L)	Isopropyt benzene (µg/L)	Totuene (µg1.)	Xylenes (µg1.)	MTBE (vg/L)	Naphthalene (µg/L)	1,2,4-TMB (99%)	1,3,5-TMB (pgl.)	EDC (yg/L)	EDB (JQU)	Lead (ugl.)
ASCs for Use	d, Non-Resi	dental Aquife	r	Carlo Const	96.00.7	0.70,800	0.00	5	700	3,500	1,000	10,000	20	100	62	1,200	5	0.05	5
MW-9	6/8/12	499.82	15.41	484.41	ND			150	44.	19	9.0	62	13	41	37	7,4	<1.0	<0.038	<0.48
7.40,0000	9/6/12	499.82	16.12	483.70	ND	0.0		14	4.1	8.1	<2.0	<6.0	<2.0	<8.0	<2.0	<2.0	<1.0	<0.020	<1.5
	12/4/12	499.82	16.05	483.77	ND	H10		34	9.6	13	<2.0	<6.0	3.2	<8.0	<2.0	<2.0	<1.0	<0.020	<1.5
	3/15/13	499.82	15.22	484.60	ND	80		33	1.1	<1.0	≺1.0	<3.0	8.6	<1.0	-1.0	~1.0	<1.0	< 0.020	<1.5
	6/25/13	499.82	16.08	483.74	ND:	400		170	17	19	1.4	1.9 J	17	0.67 J	0.66 J	<0.15	< 0.19	<0.020	<1.5
	9/13/13	499.82	15.89	483.93	ND:	+17		18	<1.0	8.1	<1.0	<3.0	5.1	1.0	<1.0	<1.0	<1.0	+0.020	<1.5
	12/11/13	499.82	15.42	484.40	ND	80	-	11	<1.0	7.9	<1.0	<3.0	2.5	<1.0	×1.0	<1.0	<1.0	-0.020	<1.5
	3/20/14	499.82	15.69	484.13	ND	* 1		47	2.2	8.5	<1.0	<2.0	7.4	<1.0	<1.0	<1.0	<1.0	<0.020	<1.5
	5/27/14	499.82	15.60	484.22	ND	400		65	5.3	11	<1.0	<2.0	8.6	<1.0	<1.0	<1.0	<1.0	<0.020	<1.5
	9/19/14	499.82	16.14	483.68	ND	200		1.9	<1.0	5.1	<1.0	<2.0	<1.0	<1.0	+1.0	<1.0	<1.0	-0.020	<1.5
	12/26/14	499.82	15.51	484.31	ND	40		5.5	<1.0	5.0	<1.0	<2.0	3.8	<1.0	<1.0	<1.0	<1.0	<0.020	<1.5
	3/13/15	499.82	15.56	484.26	ND:	- 2		15	<1.0	6.4	<1.0	<2.0	3.8	<1.0	<1.0	<1.0	<1.0	<0.020	<1.5
	6/29/15	499.82	15.63	484.19	ND	47	(w)	17	<1.0	8.9	<1.0	<2.0	8.8	<1.0	<1.0	<1.0	<1.0	<0.020	<1.5
	9/18/15	499.82	16.29	483.53	ND	4.1		1.5	<1.0	4.6	<1.0	<2.0	2.5	<1.0	+1.0	<1.0	<1.0	<0.020	<1.5
	12/11/15	499.82	15.99	483.83	ND:	4.1	-	1.5	<1.0	4.0	<1.0	<2.0	2.2	<1.0	<1.0	<1.0	<1.0	<0.020	<1.5
	4/5/16	499.82	15.44	484.38	ND	40		5.0	<1.0	4.3	<1.0	<2.0	4.9	<1.0	<1.0	<1.0	<1.0	<0.020	<1.5
	6/15/16	499.82	16.22	483.60	ND.	400		6.0	<1.0	6.6	<1.0	<2.0	5.1	<1.0	₹1.0	<1.0	<1.0	-0.020	*1.5
	9/22/16	499.82	16.31	483.51	ND	400		2.0	<1.0	2.9	<1.0	<2.0	1.6	<1.0	<1.0	<1.0	<1.0	<0.020	<1.5
	12/14/16	499.82	15.14	483.68	ND	**		1.7	<1.0	2.4	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	-0.020	<1.5
	3/29/17	499.82	15.26	484.56	ND	40	-	8.5	<1.0	6.8	<1.0	-2.0	3.4	₹1.0	<1.0	<1.0	<1.0	-0.020	<1.5
	6/22/17	499.82	15.84	483.98	ND	400	-	11	<1.0	90	<1.0	<2.0	5.9	<1.0	<1.0	<1.0	<1.0	<0.020	<1.5
	9/20/17	499.82	16.23	483.59	ND	400		1.9	<1.0	2.6	<1.0	<2.0	2.0	<1.0	<1.0	<1.0	<1.0	<0.020	<1.5
	12/22/17	499.82	16.24	483.58	ND	41		<1.0	<1.0	1.2	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020	<1.5
	3/6/18	499.82	14.96	484.86	ND	41		NS	NS.	NS	NS	NS	NS	NS.	NS	NS	NS	NS	NS.
	3/27/18	499.82	15.85	483.97	ND	40		18	<1.0	10	<1.0	<2.0	3.1	<1.0	<1.0	<1.0	<1.0	<0.020	<1.5
	4/25/18	499.82	15.22	484.60	ND	800		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	5/4/18	499.82	15.55	484.27	ND:	23		NS	NS	NS	NS.	NS	NS	NS:	NS	NS	NS	NS	NS

Monitoring Well	Date	Top of Casing (R)	Depth to Water (ft)	GW Elevation (ft)	Depth to Product (ft)	Product Thickness (ft)	Groundwater Elevation (ft)	Benzene (µg-L)	Ethyl benzene (µg/L)	Isopropyl benzene (µg/L)	Totuene (µg/L)	Xylenes (µg/L)	MTBE (Vg/L)	Naphthalene (µg/L)	(1991)	1,3,5-TMB (pgl.)	EDC (ygl.)	EDB (ug/L)	Lead (ugl)
	Charles and the Control of the Contr	dental Aquife	-	-				5	700	3,500	1,000	10,000	20	100	62	1,200	5	0.05	5
MW-10	6/8/12	499,64	13.05	486.59	ND	7.1		1,700	840	93	350	2,000	100	270	1,500	350	<5.0	<0.038	0.88
	9/6/12	499.64	14.31	485.33	ND	50		4,800	1,500	140	1,200	4,100	230	300	1,700	430	<20	<0.020	<1.5
	12/4/12	499.64	14.24	485.40	ND	500		2,200	810	89	710	1,900	120	200	490	250	<1.0	<0.020	<1.5
	3/15/13	499.64	13.36	486.28	ND	500		1,500	410	41	100	720	120	130	590	150	<5.0	<0.020	<1.5
	6/25/13	499.64	14.07	485.57	ND:	*1		2,800	840	90	34	630	160	210	990	150	<1.9	<0.020	<1.5
	9/13/13	499.64	14.10	485.54	ND	+17		2,900	770	68	48	750	160	180	780	170	<10	+0.020	*1.5
	12/11/13	499.54	14.09	485.55	ND	#33	- 60	2,900	850	70	24	370	130	210	630	20	<10	-0.020	<1.5
	3/20/14	499.64	13.66	485.98	ND	200	2.5	2,000	610	52	110	490	130	120	440	41	<10	<0.020	<1.5
	5/27/14	499.64	13.20	486.44	ND	500		1,300	400	37	83	550	74	120	390	70	<5.0	<0.020	<1.5
	9/19/14	499.64	14.21	485.43	ND .	#33		2,900	950	98	94	1,000	140	220	640	110	<10	-0.020	<1.5
	12/26/14	499.64	13.53	486.11	ND	*C)		1,700	660	71	9.6	140	89	84	350	11	<5.0	<0.020	<1.5
	3/13/15	499.64	13.52	486.12	ND:	60		630	260	29	25	120	43	56	170	20	<2.0	<0.020	<1.5
	6/29/15	499.64	13.40	486.24	ND	40	(#1)	2,200	670	60	18	340	110	83	450	<10	<10	<0.020	<1.5
	9/18/15	499.64	14.08	485.56	ND	400		2,100	490	64	51	220	100	120	170	45	<10	<0.020	<1.5
	12/11/15	499.64	13.71	485.93	ND	81	16.1	1,000	300	43	<10	37	54	39	69	<10	<10	<0.020	<1.5
	4/5/16	499.64	13.42	486.22	ND	40		1,300	280	30	38	150	77	30	58	13	<10	<0.020	<1.5
	6/15/16	499.64	13.99	485.65	ND.			2,200	530	60	50	260	130	80	170	29	<10	-0.020	-1.5
	9/22/16	499.64	14.23	485.41	ND	400		NS.	NS	NS	NS	NS	NS	NS.	NS	NS	NS	NS	NS
	12/14/16	499.64	14.11	485.53	ND	**	-	3,300	530	55	31	120	95	27	34	<10	<10	< 0.020	<1.5
	3/29/17	499.64	13.26	486.36	ND	400	2.5	810	130	26	6.1	22	60	5.9	13	*5.D	<5.0	-0.020	<1.5
	6/22/17	499.54	13.58	486.06	ND	400	-	330	61	5.7	9.0	42	13	12	29	2.2	<1.0	<0.020	<1.5
	9/20/17	499.64	13.95	485.69	ND	2.1		2,500	550	65	20.0	85	68	46	71	14	50	<0.020	<1.5
	12/22/17	499.64	14.21	485.43	ND	40	2.7	2,000	490	70	13	24	58	27	23	<5.0	×5.0	<0.020	<1.5
	3/6/18	499.64	12.96	486 68	ND			NS	NS	NS	NS:	NS.	NS.	NS	NS	NS	NS.	NS	NS.
	3/27/18	499.64	13.75	485.89	ND	200	127	1,300	130	19	36	240	77	34	76	8.2	<5.0	<0.020	<1.5
	4/26/18	499.64	13.28	486.36	ND	20	200	NS.	NS	NS	NS	NS	NS	NS	NS	NS NS	NS	NS	NS
	5/4/18	499.64	13.51	405.13	ND	- 23		NS	NS	NS	NS.	NS	NS	NS	NS	NS	NS	NS	NS
MW-11	4/6/16	501.37	11,91	489.46	ND	- 1	-	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	-0.020	<1.5
	6/15/16	501.37	12.89	488.48	ND	5.7		<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020	<1.5
	9/22/16	501.37	13.88	487.49	ND	- 60	+	<1.0	<1.0	<1.0	<1.0	<2.0	41.0	<1.0	<1.0	<1.0	<1.0	<0.020	<1.5
	12/14/16	501.37	13.91	487.46	ND	+ 1		≺1.0	<1.0	≺1.0	<1.0	<2.0	<1.0	-1.0	<1.0	<1.0	<1.0	<0.020	<1.5
	3/29/17	501.37	12.23	489.14	ND	80	100	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020	<1.5
	6/22/17	501.37	12.26	489.11	ND	400	14.1	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020	<1.5
	9/20/17	501.37	12.92	400.45	ND.	900	*	~1.0	<1.0	<1.0	<1.0	-2.0	<1.0	<1.0	<1.0	<1.0	<1.0	-0.020	<1.5
	12/22/17	501.37	13.76	487.61	ND	93	*	<1.0	<1.0	<1.0	<1.0	-2.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 0.020	<1.5
	3/6/18	501.37	10.89	490.48	ND	#C7	(4)	NS.	NS	NS	NS.	NS.	NS	NS	NS	NS	NS	NS	NS.
	3/27/16	501.37	12.00	489.37	ND	20		<1.0	<1.0	≺1.0	<1.0	-2.0	<1.0	<1.0	<1.0	<1.0	+1.0	-0.020	<1.5
	4/26/18	501.37	11.60	489.77	ND	231	-	NS	NS	NS	NS.	NS	NS	NS	NS.	NS	NS.	NS	NS.
	5/4/18	501.37	11.77	489.60	ND	8.7		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-12	3/6/18	497.04	5.53	491.51	ND:	+		460	520	78	120	720	25	160	550	180	<2.0	+0.020	<1.5
	3/27/18	497.04	5.89	491.15	ND	83		560	470	79	150	550	29	160	490	150	<2.0	-0.020	<1.5
	4/26/18	497.04	5.76	491.28	ND:	90	*	NS.	NS.	NS	NS	NS	NS	NS	NS	NS	NS.	NS:	NS
	5/4/18	497.04	5.74	491.30	ND	£3		NS.	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-13	3/6/18	497.44	3.17	494.27	ND	*0	-	68	100	8.3	99	210	1.4	12	85	15	<1.0	<0.020	<1.5
	3/27/18	497.44	4.02	493.42	ND	50		110	140	11	44	220	1.8	19	150	25	2.4	<0.020	<1.5
	4/26/18	497.44	3.89	493.55	ND.	60		NS.	NS	NS	NS	NS	NS.	NS	NS	NS	NS	NS	NS
	5/4/18	497.44	3.81	493.63	ND	90		NS	NS	NS	NS.	NS	NS	NS	NS	NS.	NS	NS	NS

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	GW Elevation (ft)	Depth to Product (ft)	Product Thickness (ft)	Groundwater Elevation (ft)	Benzene	Ethyl benzene	Isopropyl benzene	Toluene	Xylenes	MTBE	Naphthalene	1,2,4-TMB	1,3,5-TMB	EDC	EDB (1951)	Lead
ASCs for Use				660	640	(10)	0.0	(ugt.)	(pg/L) 700	(µg/L) 3,500	1,000	10,000	20	(Hg/L)	(pg/L) 62	(µg/L)	(yg/L) 5	0.05	5
Bridge US	6/2/10	103.87	19,17	84.70	NO	-		NS	NS	NS	NS.	NS	NS	NS NS	NS	NS	NS	NS	N
	9/1/10	103.87	19.22	84.65	ND			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	N:
	12/2/10	103.87	16.95	86.92	ND	M1.5	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	N:
	3/4/11	103.87	18.87	85.00	ND	80		NS.	NS	NS	NS	NS.	NS	NS	NS.	NS	NS	NS	N:
	5/6/11	103.87	18.58	85.29	ND	400		NS	NS	NS	NS	NS:	NS	NS	NS	NS	NS	NS	N:
	9/9/11	103.87	16.90	86.97	ND:	+17		NS	NS	NS	NS	NS	NS	NS:	NS	NS:	NS	NS	N.
	12/0/11	103.87	17.84	86.03	ND	833		NS	NS	NS	NS	NS	NS	NS	NS.	NS	NS	NS	N.
	3/27/12	103.87	19,18	84.69	ND	* 1		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	N
- 1	6/8/12	503.76	18.67	485.09	ND	800		NS.	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	N
	9/6/12	503.76	19.19	484.57	ND .	¥03		NS	NS.	NS	NS	NS	NS	NS	NS	NS.	NS	NS	N
	12/4/12	503.76	19.09	484.67	ND	÷0)		NS	NS	NS	NS.	NS	NS	NS.	NS	NS.	NS	NS	N
	3/15/13	503.76	18.55	485.21	ND:	60		NS	NS	NS	NS	NS	NS	NS	NS	NS.	NS	NS	N
	6/25/13	503.76	19.03	484.73	ND	400	*	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	N
	9/13/13	503.76	18.96	484.80	ND	* 1		N3	NS	NS.	NS	NS	NS	NS	NS	NS	NS	NS	N
	12/11/13	503.76	18.90	484.86	ND	60	-	NS	NS	NS	NS	NS	NS	NS	N/S	NS	NS	NS	N
- 1	3/20/14	503.76	18.82	484.94	ND	***		<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	×1.0	<1.0	<1.0	<0.020	*1
	5/27/14	503.76	18.85	484.91	ND	#88		<1.0	<1.0	≺1.0	<1.0	<2.0	<1.0	<1.0	~1.0	<1.0	+1.0	-0.020	*1
	9/19/14	503.76	19.21	484.55	ND	523		<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020	<1
- 1	12/26/14	503.76	18.75	485.01	ND	*	*	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	-0.020	*1
	3/13/15	503.76	18.73	485.03	ND	£3		<1.0	<1.0	≺1.0	-1.0	-2.0	<1.0	≺1,0	+1.0	<1.0	<1.0	-0.020	-1
	6/29/15	503.76	18.80	484.96	ND	50	*	NS	NS	NS	NS.	NS	NS	NS	NS.	NS	NS	NS	N
	9/18/15	503.76	19.40	484.36	ND	500		NS .	NS.	NS	NS	NS	NS	NS	NS.	NS	NS	NS	N
	12/11/15	503.76	19.02	484.74	ND	**		NS	NS	NS	NS	NS	NS	NS	NS	NS NS	NS	NS	N
	4/5/16	503.76	18.66	485.10	ND	200	*	NS	NS	NS	NS	NS	NS	NS	NS.	NS	NS	NS	N
	6/15/16	503.76	19.35	484.41	ND	200		NS NS	NS	NS	NS	NS	NS	NS.	NS.	NS NS	NS.	NS	N
	9/22/16	503.76	19.41	484.35	ND	*55		NS	NS	NS	NS	NS	NS	NS	NS	NS.	NS	NS	N:
- 1	12/14/16	503.76	19.13	484.63	ND	***	15.1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	N:
	3/29/17	503.76	18.80	484.96	ND	- 87	1.5	NS	NS	NS	NS	NS	NS	NS	NS	NS NS	NS	NS	N
	6/22/17	503.76	19.00	484.76	ND	20		NS	NS	NS	NS	NS	NS	NS	NS	NS NS	NS	NS	N:
	9/20/17	503.76	19.31	484.45	ND	20		NS	NS	NS	NS	NS	NS	NS	NS	NS.	NS	NS	N:
	12/22/17 3/6/18	503.76 503.76	19.32	484.44 485.16	ND ND	2.0		NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS
	3/27/18	503.76	18.98	484.78	ND.	20	1	NS.	NS.	NS NS	NS.	NS NS	NS.	NS NS	NS.	NS NS	NS.	NS NS	NS NS
- 1	4/25/18	503.76	18.73	485.03	ND	- 2		NS NS	NS NS	NS	NS.	NS.	NS.	NS.	NS	NS NS	NS.	NS	NS NS
	5/4/18	503.76	18.86	484.90	ND	60		NS	NS.	NS	NS.	NS	NS	NS	NS	NS	NS.	NS	NS
		-	-		-	- 100			22.00			1000			1000		1000		
Bridge DS	3/20/14	NM NM	NM NM	NM NM	NM	50.0		<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0 <1.0	<1.0	<1.0	<0.020	*1.
	5/27/14 9/19/14	NM.	NM	NM NM	NM	500		-1.0 -1.0	<1.0 <1.0	<1.0	+1.0	<2.0	<1.0 <1.0	<1.0	41.0	<1.0	<1.0	=0.020 =0.020	-1
	12/26/14	NM	NM	NM	NM	53	100	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020	<1
	3/13/15	NM	NM	NM	NM	26	1	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020	*1.
Notes; Statewide Hea	eth Standard	values as per	revisions effe	ctive January	8, 2011														
		ary butyl ether																	
	= Trimethybi = 1,2-Dichlor																		
	= 1,2-Dibrom																		
		s/liter (parts pr																	
				and interest i	Indicates our		ceeds PADEP St	stands Head	n Chandrad										
	= Not detecte		Ove the scree	DENOT BUILDINGS V	mocases cor	icermanon ex	Deeds PAUEF OF	meaning trem	in orminals										
		the detection is	-																
		hase Hydroca																	
		nt socks prese																	
		hase Hydroca																	
	= Not measu		-																
	= Not sample																		
			red groundw	ater elevation	-(product this	kness x (dene	ity of gasoline/de	ensity of water	rill										
of gasoline			- Francis			and a finding		d or many											
		s per millitter																	
			er Free Prod	uct at Leaking	Underground	Storage Tan	k Sities: A Guide:	for State Reg	ulators,										
2012/12							Office of Undergr			tember 1996.									
	= Result is g	reader than the	Method Des	ection Limit by	A kess than th	e Reporting L	imit and is an est	mared value											

APPENDIX A

Sample QA/AC and Waste Disposal Plans

Quality Assurance/Quality Control Program for the Performance of Site Characterization Field Activities & for the Accurate Collection, Storage, Retrieval, Reduction, Analysis and Interpretation of Site Characterization Data

The following items are related to sample collection, management, and analysis of data from soil, water, and vapor samples collected as part of the site investigation:

- Groundwater: The monitoring well network is gauged and sampled on a quarterly basis. Prior to collection of groundwater samples, the depth to water or product in each monitoring well is measured. These data along with the total well depths and top of casing elevations are used to calculate the volume of groundwater within each well and the groundwater elevation and hydraulic gradient across the site, respectively. Each monitoring well is then purged of three to five well volumes to ensure a representative sampling matrix. Groundwater samples are then placed into laboratory supplied bottleware, either refrigerated or placed on ice, and submitted under chain of custody documentation for analysis of the PA underground storage tank (UST) short list for leaded and unleaded gasoline constituents via EPA Methods 8260C, 8011, and 200.8.
- Soil: All soils are logged and screened using a photoionization detector (PID) for the
 relative presence of volatile organic compounds which may be indicative of petroleum
 hydrocarbon impact. Soil samples are then collected using disposable sampling
 equipment, placed directly into laboratory supplied bottleware, either refrigerated or placed
 on ice, and submitted under chain of custody documentation for analysis of the PAUST
 short list for leaded and unleaded gasoline constituents via EPA Method 8260B or
 8260C, and 6010C.
- Soil Vapor: Soil gas samples are collected with laboratory supplied summa canisters and flow regulators set to collect a four hour composite sample. Disposable tubing and brass fittings are used to connect the summa canister to each vapor well. Each vapor well is evacuated of stagnant air prior to sample collection using a vacuum pump, peristaltic pump, or similar devise. Canister pressure readings are collected throughout the test to ensure proper sample collection and to determine the end of the test. The canisters are then submitted to the laboratory under chain of custody documentation for analysis of the PAUST short list for leaded and unleaded gasoline constituents via EPA Method TO 15.
- All non-disposable sampling equipment is decontaminated prior to the collection of the
 next sample. All gross contamination is wiped from the equipment, then the equipment is
 washed with a free-rinsing, ammonia free detergent (i.e. liquinox) and a potable water
 rinse prior to re-use. Disposable materials that have come in contact with contaminated
 soil or groundwater are containerized and disposed of properly.

Following laboratory analysis by a Pennsylvania NELAP certified laboratory, the sample
data is received by Center Point Tank Services (CPTS). The data is reviewed by the
project manager to ensure there were no issues with the laboratory analysis. If any
issues arise, CPTS consults with the laboratory directly to address these issues. The
data is then tabulated by the project manager and compared to the appropriate
Pennsylvania Department of Environmental Protection (DEP) remedial standard and
previously collected data to determine the extent of impact, and evaluate remedial
effectiveness.

Identification, Management, and Disposition of Solid, Hazardous, Residual & Other Wastes Generated as Part of the Site Characterization

Wastes generated during site characterization activities will be handled as follows:

- Water generated during sampling is treated with granular activated carbon prior to being discharged to the ground surface. Water generated during monitoring well development is either treated with granular activated carbon prior to being discharged to the ground surface or placed in a 55-gallon drum and stored on site pending proper disposal at an approved facility.
- Soil and or rock cuttings generated during excavations, monitoring/vapor well installation and/or soft dig activities will be placed in steel 55 gallon drums and staged on site pending proper disposal at an approved facility.
- General trash generated during all phases of site work including but not limited to used nitrile gloves, poly tubing, and disposable bailers will be placed in a trash bag and disposed of properly for normal trash collection.
- All wastes described above are considered to be non-hazardous materials.

APPENDIX B UST Closure Report

UNDERGROUND STORAGE TANK SYSTEM CLOSURE REPORT

Prepared For

Mr. Norwood Klotz 600 E. Main Street Schuylkill Haven, Pennsylvania 17972-1430

Site Location

Liberty Oil Station #38
700 N. Railroad Street
Tamaqua, Pennsylvania 18252
Borough of Tamaqua
Schuylkill County Pennsylvania
Facility ID #54-51586
Removal of Four (4) Underground Storage Tanks

Prepared By

CENTER POINT TANK SERVICES

---- INC. ---

536 E. Benjamin Franklin Highway Douglassville, Pennsylvania 19518

October 17, 2008

Tank Handling Activity and Summary Report

Re: Liberty Oil Station # 38
700 N. Railroad Street
Tamaqua, Pennsylvania 18252
Borough of Tamaqua
Schuylkill County
PADEP Facility ID# 54-51586

The following chronology details the events that took place during the removal of four (4) underground storage tanks (USTs) and the related product and non-product piping from the above referenced facility.

During the month of August between August 12th and August 18th, 2008 Center Point Tank Services, Inc. (CPTS) removed the following: UST # 001which was 3,000 gallons and contained diesel fuel, UST # 002 which was 3,000-gallons and contained gasoline, UST # 003 which was 6,000 gallons and contained gasoline and UST # 004 which was 5,000 gallons and also contained gasoline, five (5) suction dispensing pumps and three (3) fuel delivery islands.

The USTs were constructed of single wall bare unprotected steel and the suction product piping was also single wall bare steel. The systems were listed by the Pennsylvania Department of Environmental Protection (PADEP) as tank # 001 through # 004. The USTs were removed using the December 1, 2001 PADEP Technical Guidance Document "Closure Requirements for Underground Storage Tank Systems".

Upon completion of the removal an inspection of the USTs and related underground piping revealed UST # 001 and # 002 had corrosion holes which breached the USTs and UST # 003 and # 004 were found intact with no obvious holes or visible signs of corrosion. The product piping had severe corrosion holes throughout the entire pipe system.

CPTS's visual observation of the subsurface soil was that a release had occurred from both the tanks and the piping system. Additionally detected were high levels of petroleum odors in the excavated material surrounding the UST systems. Based on the odor and the detection of staining of the subsurface soil it was determined that a suspected reportable release had occurred.

Post excavation soil closure samples were collected using a cut plastic syringe, weighed, and placed in vials of Methanol and Sodium Bisulfate. The samples were preserved on ice and transferred under chain-of-custody for analysis to Test America Laboratories of King of Prussia, Pennsylvania.

Soil closure samples obtained from the UST excavations resulted in levels that are within PADEP's current Statewide Standard Action guidelines. However, the product piping and fuel dispensers did contain detectable levels that exceed PADEP's current guidelines for the target compounds: benzene, ethylbenzene, naphthalene, toluene, 1, 2, 4, - trimethylbenzene, 1, 3, 5, - trimethylbenzene and xylene.

Based on the observed soil staining and petroleum odor a verbal Notification of Suspected Contamination was made to PADEP's Northeast Regional Office on August 15, 2008, and on August 20, 2008 a written notice was submitted to PADEP with a copy to the Borough of Tamaqua.

The release was also reported to the Pennsylvania Underground Storage Tank Indemnification Fund.

Prepared by:

Center Point Tank Services, Inc.

Roger J. Tartaglia, Sr.

President

PADEP Certification # 368

CPTS PADEP Certification # 792

UNDERGROUND STORAGE TANK SYSTEM CLOSURE REPORT FORM

54-51586 Facility I.D.

Borough of Tamaqua Municipality Schuylkill County

October 17, 2008 Date Prepared

Roger J. Tartaglia, Sr.
Name of Person Submitting Report
(Please Print)

Center Point Tank Servies, Inc. Company Name (If Applicable)

> Contractor/Consultant Title

Clos	sure Method (Check all that apply):	Site Assessment Results (Check all that apply):						
\boxtimes	Removal		No Obvious Contamination - Sample Results Meet Standards/Levels					
	Closure-In-Place		No Obvious Contamination - Sample Results Do Not Meet Standards/Levels					
	Change-In-Service		Obvious, Localized Contamination - Sample Results Meet Standards/Levels					
			Obvious, Localized Contamination - Sample Results Do Not Meet Standards/Levels					
			Obvious, Extensive Contamination					

DATE RECEIVED:	
----------------	--

UNDERGROUND STORAGE TANK SYSTEM CLOSURE REPORT FORM

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

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

1.	. Facility ID Number <u>54-51586</u> 2.	Facility Name Liberty Oil Station #38
3.	Facility County Schuylkill County 4.	Facility Municipality Borough of Tamaqua
5.	5. Facility Address 700 N. Railroad Street, Tamaqua, PA 182	252
6.	6. Facility Contact Person Mr. Norwood Klotz 7.	Facility Telephone Number (570) 385-5459
8.	Owner Name <u>Mr. Norwood Klotz</u>	
9.	Owner Mailing Address 600 E. Main Street, Schuylkill Hav	ren, PA 17972-1430
10.	. Description of Underground Storage Tanks (Complete for	each tank closed)

DATE OF TANK CLOSU	RE (Month/Day/Year)	08/12-18/2008	08/12-18/08	08/12-18/08	08/12-18/08
Tank Registration Number	r		001	002	003	004
Estimated Total Capacity	(Gal	lons)	3,000	3,000	6,000	5,000
Substance(s) Stored Throughout Operating Life of Tank (Check All That Apply)	a.	Petroleum Unleaded Gasoline Leaded Gasoline Aviation Gasoline Kerosene Jet Fuel Diesel Fuel Fuel Oil No. 1 Fuel Oil No. 2 Fuel Oil No. 4 Fuel Oil No. 5 Fuel Oil No. 6 New Motor Oil Used Motor Oil Other, Please Specify				8000000000000
NOTE: If Hazardous Substance Block is Checked, Attach Material Safety Data Sheets (MSDS)	b. c.	Name of Principal CERCLA Substance AND Chemical Abstract Service (CAS) No.	N/A N/A	N/A N/A	N/A N/A	N/A N/A
Closure Method (Check Only One)	a. b. c.	Removal Closure-in-Place Change-In-Service				
Partial System Closure (Ye	es o	No)	No	No	No	No

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	DATE	OF TA	NK CLOSU	RE (Month/Day/Year)	T			
			ation Number						
					lons)				
	Estimat Substar Through Life of T (Check	ed Tonce(s hout (Fank All Th	otal Capacity) Stored Operating nat Apply)	a.	Petroleum Unleaded Gasoline Leaded Gasoline Aviation Gasoline Kerosene Jet Fuel Diesel Fuel Fuel Oil No. 1 Fuel Oil No. 2 Fuel Oil No. 4 Fuel Oil No. 5 Fuel Oil No. 6 New Motor Oil Used Motor Oil Other, Please Specify Hazardous Substance				
Subs		Block rial S	ous is Checked, afety Data	b.	Name of Principal CERCLA Substance AND Chemical Abstract Service (CAS) No.				
	Closure	Meth	od	a.	Removal	H	H	Н	H
	(Check			b. c.	Closure-in-Place			Ħ	
-	Partial S	syster	n Closure (Ye	es or					
Yes	N/A	11.	facility (bo Prior to its	th hi	e the storage tank facility a storical and present) include sure, the facility was a reta sed to store fuel for retail s	ling use of tanks il motor fuel bus	s: siness. The four	underground st	orage tanks
			islands we	re a	Iso removed.				
			Original, co	lor p	and sampling map of the sit photographs of the closure showing condition).		The second second second second second		
\boxtimes		14.			Registration of Storage T x 8762, Harrisburg, PA 171		s submitted to:	PADEP Divisio	on of Storage
			Date: Septe	embe	er 30, 2008				
\boxtimes		15.	If a reportation or operator.		elease was confirmed, the	appropriate reg	ional office of D	EP was notified	by the owner
			Date: Aug	ust	15, 2008, Verbal Notification	n to PADEP No	rtheast Region,	Mr. Eric Supey.	
			Office: Augu	st 2	0, 2008, Written Notification	n to PADEP Nor	theast Region, f	Mr. Eric Supey.	

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Yes	N/A		
\boxtimes		16.	If tanks were cleaned on-site:
			Briefly describe the disposition of usable product:
			There was no usable product.
			 Briefly describe the disposal of unusable product, sludges, sediments, and wastewater generated during cleaning. Provide the name and permit number of the processing, treatment, storage or disposal facility. (Attach documentation of proper disposal): Prior to CPTS cleaning the
			four (4) USTs, five (5) drums of waste/water/sludge were removed from them The drums remain
			on site as of this writing.
			c. If tank contents were determined/deemed to be hazardous waste, provide:
			(1) Generator ID Number: N/A
			(2) Licensed Hazardous Waste Transporter Name and ID Number: N/A
	\boxtimes	17.	If tanks were removed from the site for cleaning:
			 a. Provide the name and permit number of the processing, treatment, storage or disposal facility
			performing the tank cleaning: The USTs were properly cleaned on-site by Center Point Tank
			Services, Inc. (CPTS).
			b. If tank contents were determined/deemed to be hazardous waste, provide:
			(1) Generator ID Number: N/A
			(2) Licensed Hazardous Waste Transporter Name and ID Number: N/A
		18.	Briefly describe the disposition of tanks/piping (Attach documentation of proper disposal):
			On August 07, 13, 18, and 20, 2008 the USTs, dispensers, piping and bare steel tanks were
			transported by CPTS to: U.W. Zaprazny, Inc. 2401 Summer Valley Road, New Ringgold, PA 17960.
			Receipts #12714, #13087, #13143, #13869 and #13209 are attached
		10	If contaminated soil is excavated:
	Ш	19.	B: 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
			a. Briefly describe the disposition and amount 160-170 (tons) of contaminated soil. Provide the name and permit number of the processing, treatment, storage or disposal facility. (Attach documentation of proper disposal):
			The contaminated soil remains on site set on 6 mil polysheeting and covered with 6 mil
			polysheeting.
			b. If contaminated soil is determined/deemed to be hazardous waste, provide:
			(1) Generator ID Number N/A
			(2) Licensed Hazardous Waste Transporter Name and ID Number: N/A

Yes N/A 20. Briefly describe the disposition of and amount approximately 40-tons of uncontaminated soil (attach analyses): The uncontaminated soil was backfilled. I, Norwood Klotz (Print Name) (relating to unsworn falsification to authorities) that I am the owner of the above referenced storage tank(s) and that the information provided by me in this closure report (Section I) is true, accurate and complete to the best of my knowledge and belief.

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UNDERGROUND STORAGE TANK SYSTEM CLOSURE REPORT FORM

SECTION II. Tank Handling Information Facility ID Number 54-51586

N/A		
	1.	Briefly describe the excavation and initial on-site staging of uncontaminated/contaminated soil: The excavated soils were stock piled and covered with 6 mil poly sheeting. The cover was secured
		with weights.
	2.	Briefly describe the method of piping system closure and the closure of the piping systems including the quantity and condition of the piping:
		The product was blown back into tanks using nitrogen.
	3.	Briefly describe the condition of the tanks and any problems encountered during tank removal:
		The #001 and #002 tanks had holes and corrosion. The #003 and #004 tanks were intact and free of holes and corrosion. There were odors in the soil in the excavation of tank #001 and #003. There were no problems encountered during the removal.
	4.	Briefly describe the method used to purge the tanks of and monitor for explosive vapors:
		The USTs were purged using a Coppus Blower and an LEL meter to measure for explosive vapors.
	5.	If tanks were cleaned on-site:
		a. Briefly describe the tank cleaning process: Upon lowering the explosive vapors, the USTs were
		cut open and entered using supplied air, they were squeegeed and rag wiped clean prior to removal.
		b. If subcontracted, name and address of company that performed the tank cleaning: N/A
\boxtimes	6.	If tanks were closed-in-place, briefly describe the tank fill material: N/A
	7.	If contamination was suspected or observed, the "Notification of Contamination" form was submitted. August 15, 2008, Verbal Notification to PADEP Northeast Region, Mr. Eric Supey.
		August 20, 2008, Written Notification to PADEP Northeast Region, Mr. Eric Supey.
		 1. 2. 3. 4.

SECTION II. (continued)

I, George Wilkins	, hereby certify	, under penalty of law as provided in 18 Pa. C.S. §4904
(Print Name)		
	above referenced storage tar	ertified installer who performed the tank handling activities nk(s) and that the information provided by me in this closure ny knowledge and belief.
Signature of C	Evelpsis ertified Installer	October 17, 2008 Date
	93	792
Installer Certifi	ication Number	Company Certification Number
		Center Point Tank Services, Inc. Company Name
		536 E. Benjamin Franklin Hwy. Street
		Douglassville, Pennsylvania 19518 City/Town, State, Zip
		610 - 385 - 4977 Phone

UNDERGROUND STORAGE TANK CLOSURE REPORT FORM

SECTION III. Site Assessment Information

Tank Registration # 001 (complete one sheet for EACH tank system and attach ALL laboratory sheets pertaining to that system)
Facility ID Number 54-51586

Bed	drock N/A	feet below land surface	Water N/A	feet below land surface
Pro	vide Length of PIPI	NG IF piping was closed-in-place	(write "N/A" if NOT close	ed-in-place).
	igth of piping N/A	feet	(
TA	NK SYSTEM REMO	OVED FROM THE GROUND		
1).	Was obvious cor	ntamination observed while excava	ating?	
		 Conduct confirmatory samp and maintenance of closure record 		end of this section for options or plete item C.2. below.
		Report release to DEP within (s) tank, piping, dispenser, spills, of		scribe contamination observed and
	Product od	or, corrosion and one hole in 3,000	0-gallon Bare Steel Diese	el UST, no staining, no sheen or
	_product in v	vater or soil, no free product in exc	cavation was noted. Sar	nples obtained from under the
	excavated a	area.		
		omplete item C.2. below.		
2).			the tank system in ever	ery direction with no obvious water
		Remove or remediate contamina	ated soil→ Condu	uct confirmatory sampling→
	See end of Indemnificati	this section for options on submon Fund (717-787-0763).	nission and maintenance	e of closure records> Call
		Continue interim remedial act nd maintenance of closure record		end of this section for options on ification Fund (717-787-0763).
TAN	IK SYSTEM CLOS	ED-IN-PLACE OR CHANGED-IN	-SERVICE	
Was	obvious contamina	ation observed during sampling, bo	oring or assessing water	depths?
	NO→ Co and maintenance	onduct confirmatory sampling of closure records.	→ See end of this	section for options on submission
	YES> R	eport release to DEP within 2 ho ping, dispenser, spills, overfills):	urs→ Describe	contamination observed and likely

of closure records ------ Call Indemnification Fund (717-787-0763).

UNDERGROUND STORAGE TANK CLOSURE REPORT FORM

SECTION III. Site Assessment Information

Tank Registration # 002 (complete one sheet for EACH tank system and attach ALL laboratory sheets pertaining to that system)
Facility ID Number 54-51586

Bed	rock	N/A	feet below land surface	Water N/A	Α	_feet below land surface	
Pro	vide l	ength of PIPIN	IG IF piping was closed-in-place	(write "N/A" if NO	T closed-in	n-place).	
Len	gth o	f piping N/A	feet				
TAN	IK S	YSTEM REMO	VED FROM THE GROUND				
1).	Wa	as obvious cont	amination observed while excar	ating?			
	\boxtimes		Conduct confirmatory sam and maintenance of closure reco			of this section for options or te item C.2. below.	1
			Report release to DEP within tank, piping, dispenser, spills,		→ Descri	be contamination observed and	1
		The 3,000-ga	allon Bare Steel Gasoline Tank	had multiple holes	in it. How	ever, there were no product	_
		odors in the	soil, no stain or sheen in the soi	or water, no free	product in	the excavation. Samples were	
		obtained.					
			nplete item C.2. below.				
2).		s contamination ntamination)?	n localized (within three feet of	of the tank system	in every	direction with no obvious water	
		YES→	Remove or remediate contamin	nated soil→	Conduct	confirmatory sampling→	
			nis section for options on sub in Fund (717-787-0763).	mission and maint	tenance of	f closure records→ Call	
			Continue interim remedial a d maintenance of closure recor			of this section for options on ation Fund (717-787-0763).	
TAN	K SY	STEM CLOSE	D-IN-PLACE OR CHANGED-II	N-SERVICE			
Was	obvi	ous contaminat	ion observed during sampling, I	oring or assessing	water de	oths?	
			enduct confirmatory sampling of closure records.	→ See end	of this se	ction for options on submission	
			port release to DEP within 2 hing, dispenser, spills, overfills):	ours→ De	escribe co	ntamination observed and likely	

of closure records ------ Call Indemnification Fund (717-787-0763).

UNDERGROUND STORAGE TANK CLOSURE REPORT FORM

SECTION III. Site Assessment Information

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

Facility ID Number 54-51586

В	edrock	N/A feet below land surface Water N/A feet below land surface
3. Pi	rovide	ength of PIPING IF piping was closed-in-place (write "N/A" if NOT closed-in-place).
		f piping N/A feet
с. т	ANK S	YSTEM REMOVED FROM THE GROUND
1)	. W	as obvious contamination observed while excavating?
		NO
		YES→ Report release to DEP within 2 hours
		The 6,000-gal, Bare Steel Gasoline UST had no holes or corrosion. There were some product odors
		noted in the soil, no sheen or product noted on water or soil. Samples were obtained.
2)		is contamination localized (within three feet of the tank system in every direction with no obvious water intamination)?
		YES→ Remove or remediate contaminated soil> Conduct confirmatory sampling>
		See end of this section for options on submission and maintenance of closure records> Ca Indemnification Fund (717-787-0763).
		NO
). T/	NK S	STEM CLOSED-IN-PLACE OR CHANGED-IN-SERVICE
		ous contamination observed during sampling, boring or assessing water depths?
	N	
		S

UNDERGROUND STORAGE TANK CLOSURE REPORT FORM

SECTION III. Site Assessment Information

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

Facility ID Number 54-51586

A.		vide depth of BE ountered).	EDROCK and WATER IF encount	ered during excavation	n or soil boring (write "N/A: if NOT				
	Bed	Irock N/A	feet below land surface	Water N/A	feet below land surface				
В.		vide Length of <i>PIF</i> gth of piping <u>N/A</u>	PING IF piping was closed-in-place feet	(write "N/A" if NOT clos	ed-in-place).				
C.	TAN	NK SYSTEM REM	OVED FROM THE GROUND						
	1).	Was obvious co	ontamination observed while excava	ating?					
			 Conduct confirmatory samp and maintenance of closure record 		end of this section for options on nplete item C.2. below.				
			 → Report release to DEP within e(s) tank, piping, dispenser, spills, or 		escribe contamination observed and				
		The 5,000	-gallon Bare Steel Gasoline UST ha	ad no holes or corrosion	in it. There were no product odors				
		or sheen o	or product noted in the soil. Sample	s were obtained.					
		→ (Complete item C.2. below.						
	2).	Was contamination)?	tion localized (within three feet of	the tank system in ev	ery direction with no obvious water				
		☐ YES	→ Remove or remediate contamina	ated soil→ Cond	luct confirmatory sampling→				
			this section for options on submition Fund (717-787-0763).	ission and maintenand	ce of closure records> Call				
				redial actions					
D.	TAN	K SYSTEM CLO	SED-IN-PLACE OR CHANGED-IN	-SERVICE					
	Was	obvious contamir	nation observed during sampling, be	oring or assessing wate	r depths?				
			Conduct confirmatory sampling e of closure records.	→ See end of thi	s section for options on submission				
			Report release to DEP within 2 ho piping, dispenser, spills, overfills):	urs→ Describe	e contamination observed and likely				
			orrective action→ See end ds		ons on submission and maintenance				

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

Options for Submission and Maintenance of Closure Site Assessment Records

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

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

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

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

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

boreby certify under penalty of law as provided in 18 Pa. C.S. 84904 (relating

(Print Name)	perially of law as provided in for all olding
to unsworn falsification to authorities) that I am the person who the closure of the above referenced storage tank(s) and the (Section III) is true, accurate and complete to the best of my known	at the information provided by me in this closure report
Signature of Person Performing Site Assessment	October 17, 2008
Signature of Person Performing Site Assessment	Date
Contractor/ Consultant	Center Point Tank Service, Inc.
Title of Person Performing Site Assessment	Name of Company Performing Site Assessment

SAMPLING DATA

UNDERGROUND STORAGE TANK SYSTEM CLOSURE REPORT FORM

Sample/Analysis Information (Attachment for Section III.)

Sample I.D. (See diagram)	Parameter	Analytical Method ¹		Media	Result (units)	Detection Limit (units)	Date Sample Taken	Date Sample Analyzed
#1 Fill End	Ethylbenzene	EPA 8260B	P	Soil	ND ug/kg	200 ug/kg	08/12/2008	08/18/2008
	Isopropylbenzene	EPA 8260B	Р	Soil	ND ug/kg	200 ug/kg	08/12/2008	08/18/2008
•	Benzene	EPA 8260B	Р	Soil	ND ug/kg	200 ug/kg	08/12/2008	08/18/2008
	Methyl tert-butyl ether	EPA 8260B	Р	Soil	ND ug/kg	200 ug/kg	08/12/2008	08/18/2008
	Naphthalene	EPA 8260B	Р	Soil	ND ug/kg	250 ug/kg	08/12/2008	08/18/2008
	Toluene	EPA 8260B	Р	Soil	ND ug/kg	200 ug/kg	08/12/2008	08/18/2008
	1,2,4,- Trimethylbenzene	EPA 8260B	Р	Soil	ND ug/kg	200 ug/kg	08/12/2008	08/18/2008
	1,3,5,- Trimethylbenzene	EPA 8260B	Р	Soil	ND ug/kg	200 ug/kg	08/12/2008	08/18/2008

¹ Where EPA Method 5035 is required, indicate sample collection option in the right hand box of this column using the following codes:

P - Samples placed in a soil sample vial with a preservative present.

E - Samples collected and stored in a soil collection device which is airtight and affords little to no headspace.

N - Samples placed in soil sample vial without a preservative present.

UNDERGROUND STORAGE TANK SYSTEM CLOSURE REPORT FORM

Sample/Analysis Information (Attachment for Section III.)

Sample I.D. (See diagram)	Parameter	Analytical Method ¹		Media	Result (units)	Detection Limit (units)	Sample Taken	Date Sample Analyzed
# 2 Middle	Ethylbenzene	EPA 8260B	P	Soil	ND ug/kg	200 ug/kg	08/12/2008	08/18/2008
	Isopropylbenzene	EPA 8260B	Р	Soil	ND ug/kg	200 ug/kg	08/12/2008	08/18/2008
	Benzene	EPA 8260B	Р	Soil	ND ug/kg	200 ug/kg	08/12/2008	08/18/2008
	Methyl tert-butyl ether	EPA 8260B	P	Soil	ND ug/kg	200 ug/kg	08/12/2008	08/18/2008
	Naphthalene	EPA 8260B	Р	Soil	ND ug/kg	250 ug/kg	08/12/2008	08/18/2008
•	Toluene	EPA 8260B	Р	Soil	ND ug/kg	200 ug/kg	08/12/2008	08/18/2008
	1,2,4,- Trimethylbenzene	EPA 8260B	Р	Soil	ND ug/kg	200 ug/kg	08/12/2008	08/18/2008
	1,3,5,- Trimethylbenzene	EPA 8260B	Р	Soil	ND ug/kg	200 ug/kg	08/12/2008	08/18/2008

¹ Where EPA Method 5035 is required, indicate sample collection option in the right hand box of this column using the following codes:

P - Samples placed in a soil sample vial with a preservative present.

E - Samples collected and stored in a soil collection device which is airtight and affords little to no headspace.

N - Samples placed in soil sample vial without a preservative present.

UNDERGROUND STORAGE TANK SYSTEM CLOSURE REPORT FORM

Sample/Analysis Information (Attachment for Section III.)

Sample I.D. (See diagram)	Parameter	Analytica Method ¹	1	Media	Result (units)	Detection Limit (units)	Date Sample Taken	Date Sample Analyzed
# 3 End	Ethylbenzene	EPA 8260B	P	Soil	ND ug/kg	200 ug/kg	08/12/2008	08/18/2008
	Isopropylbenzene	EPA 8260B	Р	Soil	ND ug/kg	200 ug/kg	08/12/2008	08/18/2008
	Benzene	EPA 8260B	Р	Soil	ND ug/kg	200 ug/kg	08/12/2008	08/18/2008
	Methyl tert-butyl ether	EPA 8260B	Р	Soil	ND ug/kg	200 ug/kg	08/12/2008	08/18/2008
	Naphthalene	EPA 8260B	Р	Soil	ND ug/kg	250 ug/kg	08/12/2008	08/18/2008
	Toluene	EPA 8260B	Р	Soil	ND ug/kg	200 ug/kg	08/12/2008	08/18/2008
	1,2,4,- Trimethylbenzene	EPA 8260B	Р	Soil	ND ug/kg	200 ug/kg	08/12/2008	08/18/2008
	1,3,5,- Trimethylbenzene	EPA 8260B	Р	Soil	ND ug/kg	200 ug/kg	08/12/2008	08/18/2008

¹ Where EPA Method 5035 is required, indicate sample collection option in the right hand box of this column using the following codes:

P - Samples placed in a soil sample vial with a preservative present.

E - Samples collected and stored in a soil collection device which is airtight and affords little to no headspace.

N - Samples placed in soil sample vial without a preservative present.

UNDERGROUND STORAGE TANK SYSTEM CLOSURE REPORT FORM

Sample/Analysis Information (Attachment for Section III.)

Sample I.D. (See diagram)	Parameter	Analytical Method ¹		Media	Result (units)	Detection Limit (units)	Sample Taken	Date Sample Analyzed
#4 Fill End	Lead	EPA 6010B	P	Soil	13 mg/kg	1.0 mg/kg	08/13/2008	08/20/2008
	Benzene	EPA 8260B	Р	Soil	4.6 ug/kg	4.0 ug/kg	08/13/2008	08/19/2008
	1,2-Dibromoethane	EPA 8260B	P	Soil	ND ug/kg	4.0 ug/kg	08/13/2008	08/19/2008
	1,2-Dichloroethane	EPA 8260B	P	Soil	ND ug/kg	4.0 ug/kg	08/13/2008	08/19/2008
я	Ethylbenzene	EPA 8260B	P	Soil	36 ug/kg	4.0 ug/kg	08/13/2008	08/19/2008
	Isopropylbenzene	EPA 8260B	Р	Soil	26 ug/kg	4.0 ug/kg	08/13/2008	08/19/2008
	Naphthalene	EPA 8260B	P	Soil	87 ug/kg	5.0 ug/kg	08/13/2008	08/19/2008
	Toluene	EPA 8260B	Р	Soil	25 ug/kg	4.0 ug/kg	08/13/2008	08/19/2008
	1,2,4,- Trimethylbenzene	EPA 8260B	Р	Soil	3200 ug/kg	200 ug/kg	08/13/2008	08/20/2008
•	1,3,5,- Trimethylbenzene	EPA 8260B	Р	Soil	300 ug/kg	4.0 ug/kg	08/13/2008	08/19/2008
	Xylenes (total)	EPA 8260B	Р	Soil	240 ug/kg	12 ug/kg	08/13/2008	08/19/2008
	Methyl tert-butyl ether	EPA 8260B	P	Soil	ND ug/kg	4.0 ug/kg	08/13/2008	08/19/2008

¹ Where EPA Method 5035 is required, indicate sample collection option in the right hand box of this column using the following codes:

P - Samples placed in a soil sample vial with a preservative present.

E - Samples collected and stored in a soil collection device which is airtight and affords little to no headspace.

N - Samples placed in soil sample vial without a preservative present.

UNDERGROUND STORAGE TANK SYSTEM CLOSURE REPORT FORM

Sample/Analysis Information (Attachment for Section III.)

Sample I.D. (See diagram)	Parameter	Analytica Method ¹	1	Media	Result (units)	Detection Limit (units)	Date Sample Taken	Date Sample Analyzed
#5 Middle	Lead	EPA 6010B	P	Soil	13 mg/kg	1.0 mg/kg	08/13/2008	08/20/2008
	Benzene	EPA 8260B	Р	Soil	ND ug/kg	4.0 ug/kg	08/13/2008	08/19/2008
	1,2-Dibromoethane	EPA 8260B	Р	Soil	ND ug/kg	4.0 ug/kg	08/13/2008	08/19/2008
ж	1,2-Dichloroethane	EPA 8260B	Р	Soil	ND ug/kg	4.0 ug/kg	08/13/2008	08/19/2008
	Ethylbenzene	EPA 8260B	P	Soil	ND ug/kg	4.0 ug/kg	08/13/2008	08/19/2008
и	Isopropylbenzene	EPA 8260B	P	Soil	ND ug/kg	4.0 ug/kg	08/13/2008	08/19/2008
	Naphthalene	EPA 8260B	Р	Soil	ND ug/kg	5.0 ug/kg	08/13/2008	08/19/2008
	Toluene	EPA 8260B	Р	Soil	ND ug/kg	4.0 ug/kg	08/13/2008	08/19/2008
	1,2,4,- Trimethylbenzene	EPA 8260B	Р	Soil	ND ug/kg	4.0 ug/kg	08/13/2008	08/22/2008
	1,3,5,- Trimethylbenzene	EPA 8260B	Р	Soil	ND ug/kg	4.0 ug/kg	08/13/2008	08/19/2008
	Xylenes (total)	EPA 8260B	P	Soil	ND ug/kg	12 ug/kg	08/13/2008	08/19/2008
	Methyl tert-butyl ether	EPA 8260B	Р	Soil	ND ug/kg	4.0 ug/kg	08/13/2008	08/19/2008

¹ Where EPA Method 5035 is required, indicate sample collection option in the right hand box of this column using the following codes:

P - Samples placed in a soil sample vial with a preservative present.

E - Samples collected and stored in a soil collection device which is airtight and affords little to no headspace.

N - Samples placed in soil sample vial without a preservative present.

UNDERGROUND STORAGE TANK SYSTEM CLOSURE REPORT FORM

Sample/Analysis Information (Attachment for Section III.)

Sample I.D. (See diagram)	Parameter	Analytica Method ¹		Media	Result (units)	Detection Limit (units)	Date Sample Taken	Date Sample Analyzed
#6 End	Lead	EPA 6010B	P	Soil	19 mg/kg	1.0 mg/kg	08/13/2008	08/20/2008
	Benzene	EPA 8260B	Р	Soil	ND ug/kg	4.0 ug/kg	08/13/2008	08/19/2008
	1,2-Dibromoethane	EPA 8260B	Р	Soil	ND ug/kg	4.0 ug/kg	08/13/2008	08/19/2008
	1,2-Dichloroethane	EPA 8260B	Р	Soil	ND ug/kg	4.0 ug/kg	08/13/2008	08/19/2008
	Ethylbenzene	EPA 8260B	Р	Soil	ND ug/kg	4.0 ug/kg	08/13/2008	08/19/2008
	Isopropylbenzene	EPA 8260B	Р	Soil	ND ug/kg	4.0 ug/kg	08/13/2008	08/19/2008
	Naphthalene	EPA 8260B	Р	Soil	ND ug/kg	5.0 ug/kg	08/13/2008	08/19/2008
	Toluene	EPA 8260B	Р	Soil	ND ug/kg	4.0 ug/kg	08/13/2008	08/19/2008
	1,2,4,- Trimethylbenzene	EPA 8260B	Р	Soil	ND ug/kg	4.0 ug/kg	08/13/2008	08/22/2008
	1,3,5,- Trimethylbenzene	EPA 8260B	Р	Soil	5.5 ug/kg	4.0 ug/kg	08/13/2008	08/19/2008
	Xylenes (total)	EPA 8260B	Р	Soil	ND ug/kg	12 ug/kg	08/13/2008	08/19/2008
	Methyl tert-butyl ether	EPA 8260B	Р	Soil	ND ug/kg	4.0 ug/kg	08/13/2008	08/19/2008

¹ Where EPA Method 5035 is required, indicate sample collection option in the right hand box of this column using the following codes:

P - Samples placed in a soil sample vial with a preservative present.

E - Samples collected and stored in a soil collection device which is airtight and affords little to no headspace.

N - Samples placed in soil sample vial without a preservative present.

UNDERGROUND STORAGE TANK SYSTEM CLOSURE REPORT FORM

Sample/Analysis Information (Attachment for Section III.)

Sample I.D. (See diagram)	Parameter	Analytica Method ¹		Media	Result (units)	Detection Limit (units)	Date Sample Taken	Date Sample Analyzed
#7 Diesel Island	Ethylbenzene	EPA 8260B	Р	Soil	ND ug/kg	250 ug/kg	08/15/2008	08/22/2008
	Isopropylbenzene	EPA 8260B	Р	Soil	ND ug/kg	250 ug/kg	08/15/2008	08/22/2008
	Benzene	EPA 8260B	P	Soil	ND ug/kg	250 ug/kg	08/15/2008	08/22/2008
	Methyl tert-butyl ether	EPA 8260B	Р	Soil	ND ug/kg	250 ug/kg	08/15/2008	08/22/2008
	Naphthalene	EPA 8260B	Р	Soil	ND ug/kg	320 ug/kg	08/15/2008	08/22/2008
	Toluene	EPA 8260B	Р	Soil	ND ug/kg	250 ug/kg	08/15/2008	08/22/2008
	1,2,4,- Trimethylbenzene	EPA 8260B	Р	Soil	ND ug/kg	250 ug/kg	08/15/2008	08/22/2008
•	1,3,5,- Trimethylbenzene	EPA 8260B	Р	Soil	ND ug/kg	250 ug/kg	08/15/2008	08/22/2008

¹ Where EPA Method 5035 is required, indicate sample collection option in the right hand box of this column using the following codes:

P - Samples placed in a soil sample vial with a preservative present.

E - Samples collected and stored in a soil collection device which is airtight and affords little to no headspace.

N - Samples placed in soil sample vial without a preservative present.

UNDERGROUND STORAGE TANK SYSTEM CLOSURE REPORT FORM

Sample/Analysis Information (Attachment for Section III.)

Sample I.D. (See diagram) #8 Suction End	Parameter Lead	Analytical Method ¹		Media	Result (units)	Detection Limit (units)	Date Sample Taken	Date Sample Analyzed
		EPA 6010B	P	Soil	6.7 mg/kg	1.0 mg/kg	08/18/2008	08/20/2008
	Benzene	EPA 8260B	Р	Soil	ND ug/kg	4.0 ug/kg	08/18/2008	08/22/2008
	1,2-Dibromoethane	EPA 8260B	Р	Soil	ND ug/kg	4.0 ug/kg	08/18/2008	08/22/2008
	1,2-Dichloroethane	EPA 8260B	P	Soil	ND ug/kg	4.0 ug/kg	08/18/2008	08/22/2008
-	Ethylbenzene	EPA 8260B	Р	Soil	ND ug/kg	200 ug/kg	08/18/2008	08/22/2008
-	Isopropylbenzene	EPA 8260B	P	Soil	ND ug/kg	200 ug/kg	08/18/2008	08/22/2008
	Naphthalene	EPA 8260B	Р	Soil	ND ug/kg	250 ug/kg	08/18/2008	08/22/2008
	Toluene	EPA 8260B	Р	Soil	ND ug/kg	4.0 ug/kg	08/18/2008	08/22/2008
	1,2,4,- Trimethylbenzene	EPA 8260B	Р	Soil	ND ug/kg	200 ug/kg	08/18/2008	08/22/2008
	1,3,5,- Trimethylbenzene	EPA 8260B	Р	Soil	ND ug/kg	200 ug/kg	08/18/2008	08/22/2008
	Xylenes (total)	EPA 8260B	Р	Soil	ND ug/kg	600 ug/kg	08/18/2008	08/22/2008
*	Methyl tert-butyl ether	EPA 8260B	Р	Soil	ND ug/kg	4.0 ug/kg	08/18/2008	08/22/2008

¹ Where EPA Method 5035 is required, indicate sample collection option in the right hand box of this column using the following codes:

P - Samples placed in a soil sample vial with a preservative present.

E - Samples collected and stored in a soil collection device which is airtight and affords little to no headspace.

N - Samples placed in soil sample vial without a preservative present.

UNDERGROUND STORAGE TANK SYSTEM CLOSURE REPORT FORM

Sample/Analysis Information (Attachment for Section III.)

Sample I.D. (See diagram)	Parameter	Analytical Method ¹		Media	Result (units)	Detection Limit (units)	Date Sample Taken	Date Sample Analyzed
#9 Fill Middle	Lead	EPA 6010B	Р	Soil	27 mg/kg	1.0 mg/kg	08/18/2008	08/20/2008
	Benzene	EPA 8260B	Р	Soil	42 ug/kg	4.0 ug/kg	08/18/2008	08/22/2008
	1,2-Dibromoethane	EPA 8260B	Р	Soil	ND ug/kg	4.0 ug/kg	08/18/2008	08/22/2008
	1,2-Dichloroethane	EPA 8260B	Р	Soil	ND ug/kg	4.0 ug/kg	08/18/2008	08/22/2008
	Ethylbenzene	EPA 8260B	Р	Soil	20 ug/kg	4.0 ug/kg	08/18/2008	08/22/2008
	Isopropylbenzene	EPA 8260B	Р	Soil	5.6 ug/kg	4.0 ug/kg	08/18/2008	08/22/2008
	Naphthalene	EPA 8260B	P	Soil	8.9 ug/kg	5.0 ug/kg	08/18/2008	08/22/2008
	Toluene	EPA 8260B	Р	Soil	16 ug/kg	4.0 ug/kg	08/18/2008	08/22/2008
	1,2,4,- Trimethylbenzene	EPA 8260B	Р	Soil	33 ug/kg	4.0 ug/kg	08/18/2008	08/22/2008
	1,3,5,- Trimethylbenzene	EPA 8260B	Р	Soil	17 ug/kg	4.0 ug/kg	08/18/2008	08/22/2008
	Xylenes (total)	EPA 8260B	Р	Soil	39 ug/kg	12 ug/kg	08/18/2008	08/22/2008
	Methyl tert-butyl ether	EPA 8260B	Р	Soil	ND ug/kg	4.0 ug/kg	08/18/2008	08/22/2008

¹ Where EPA Method 5035 is required, indicate sample collection option in the right hand box of this column using the following codes:

P - Samples placed in a soil sample vial with a preservative present.

E - Samples collected and stored in a soil collection device which is airtight and affords little to no headspace.

N - Samples placed in soil sample vial without a preservative present.

UNDERGROUND STORAGE TANK SYSTEM CLOSURE REPORT FORM

Sample/Analysis Information (Attachment for Section III.)

Sample I.D. (See diagram)	Parameter	Analytical Method ¹		Media	Result (units)	Detection Limit (units)	Date Sample Taken	Date Sample Analyzed
#10 Vent End	Lead	EPA 6010B	P	Soil	30 mg/kg	1.0 mg/kg	08/18/2008	08/20/2008
	Benzene	EPA 8260B	Р	Soil	9.3 ug/kg	4.0 ug/kg	08/18/2008	08/22/2008
	1,2-Dibromoethane	EPA 8260B	Р	Soil	ND ug/kg	4.0 ug/kg	08/18/2008	08/22/2008
	1,2-Dichloroethane	EPA 8260B	Р	Soil	ND ug/kg	4.0 ug/kg	08/18/2008	08/22/2008
	Ethylbenzene	EPA 8260B	P	Soil	6.7 ug/kg	4.0 ug/kg	08/18/2008	08/22/2008
*	Isopropylbenzene	EPA 8260B	Р	Soil	ND ug/kg	4.0 ug/kg	08/18/2008	08/22/2008
	Naphthalene	EPA 8260B	Р	Soil	ND ug/kg	5.0 ug/kg	08/18/2008	08/22/2008
	Toluene	EPA 8260B	Р	Soil	8.3 ug/kg	4.0 ug/kg	08/18/2008	08/22/2008
	1,2,4,- Trimethylbenzene	EPA 8260B	Р	Soil	6.8 ug/kg	4.0 ug/kg	08/18/2008	08/22/2008
	1,3,5,- Trimethylbenzene	EPA 8260B	Р	Soil	4.5 ug/kg	4.0 ug/kg	08/18/2008	08/22/2008
	Xylenes (total)	EPA 8260B	Р	Soil	16 ug/kg	12 ug/kg	08/18/2008	08/22/2008
	Methyl tert-butyl ether	EPA 8260B	Р	Soil	ND ug/kg	4.0 ug/kg	08/18/2008	08/22/2008

¹ Where EPA Method 5035 is required, indicate sample collection option in the right hand box of this column using the following codes:

P - Samples placed in a soil sample vial with a preservative present.

E - Samples collected and stored in a soil collection device which is airtight and affords little to no headspace.

N - Samples placed in soil sample vial without a preservative present.

UNDERGROUND STORAGE TANK SYSTEM CLOSURE REPORT FORM

Sample/Analysis Information (Attachment for Section III.)

Sample I.D. (See diagram)	Parameter	Analytical Method ¹		Media	Result (units)	Detection Limit (units)	Date Sample Taken	Date Sample Analyzed
#11 Vent End	Lead	EPA 6010B	P	Soil	45 mg/kg	1.0 mg/kg	08/19/2008	08/22/2008
	Benzene	EPA 8260B	Р	Soil	130 ug/kg	4.0 ug/kg	08/19/2008	08/26/2008
	1,2-Dibromoethane	EPA 8260B	P	Soil	ND ug/kg	4.0 ug/kg	08/19/2008	08/26/2008
	1,2-Dichloroethane	EPA 8260B	Р	Soil	ND ug/kg	4.0 ug/kg	08/19/2008	08/26/2008
	Ethylbenzene	EPA 8260B	P	Soil	210 ug/kg	4.0 ug/kg	08/19/2008	08/26/2008
•	Isopropylbenzene	EPA 8260B	Р	Soil	38 ug/kg	4.0 ug/kg	08/19/2008	08/26/2008
	Naphthalene	EPA 8260B	Р	Soil	26 ug/kg	5.0 ug/kg	08/19/2008	08/26/2008
	Toluene	EPA 8260B	Р	Soil	88 ug/kg	4.0 ug/kg	08/19/2008	08/26/2008
	1,2,4,- Trimethylbenzene	EPA 8260B	Р	Soil	230 ug/kg	4.0 ug/kg	08/19/2008	08/26/2008
	1,3,5,- Trimethylbenzene	EPA 8260B	Р	Soil	160 ug/kg	4.0 ug/kg	08/19/2008	08/26/2008
	Xylenes (total)	EPA 8260B	Р	Soil	400 ug/kg	12 ug/kg	08/19/2008	08/26/2008
	Methyl tert-butyl ether	EPA 8260B	Р	Soil	ND ug/kg	4.0 ug/kg	08/19/2008	08/26/2008

¹ Where EPA Method 5035 is required, indicate sample collection option in the right hand box of this column using the following codes:

- P Samples placed in a soil sample vial with a preservative present.
- E Samples collected and stored in a soil collection device which is airtight and affords little to no headspace.
- N Samples placed in soil sample vial without a preservative present.

UNDERGROUND STORAGE TANK SYSTEM CLOSURE REPORT FORM

Sample/Analysis Information (Attachment for Section III.)

Sample I.D. (See diagram)	Parameter	Analytica Method¹	ı	Media	Result (units)	Detection Limit (units)	Date Sample Taken	Date Sample Analyzed
#12 Fill Middle	Lead	EPA 6010B	Р	Soil	31 mg/kg	1.0 mg/kg	08/19/2008	08/22/2008
	Benzene	EPA 8260B	P	Soil	260 ug/kg	4.0 ug/kg	08/19/2008	08/26/2008
	1,2-Dibromoethane	EPA 8260B	Р	Soil	ND ug/kg	4.0 ug/kg	08/19/2008	08/26/2008
	1,2-Dichloroethane	EPA 8260B	Р	Soil	ND ug/kg	4.0 ug/kg	08/19/2008	08/26/2008
"	Ethylbenzene	EPA 8260B	Р	Soil	350 ug/kg	4.0 ug/kg	08/19/2008	08/26/2008
	Isopropylbenzene	EPA 8260B	P	Soil	60 ug/kg	4.0 ug/kg	08/19/2008	08/26/2008
	Naphthalene	EPA 8260B	Р	Soil	40 ug/kg	5.0 ug/kg	08/19/2008	08/26/2008
4	Toluene	EPA 8260B	P	Soil	3100 ug/kg	200 ug/kg	08/19/2008	08/27/2008
	1,2,4,- Trimethylbenzene	EPA 8260B	Р	Soil	440 ug/kg	4.0 ug/kg	08/19/2008	08/26/2008
	1,3,5,- Trimethylbenzene	EPA 8260B	Р	Soil	190 ug/kg	4.0 ug/kg	08/19/2008	08/26/2008
	Xylenes (total)	EPA 8260B	Р	Soil	1500 ug/kg	12 ug/kg	08/19/2008	08/26/2008
	Methyl tert-butyl ether	EPA 8260B	Р	Soil	ND ug/kg	4.0 ug/kg	08/19/2008	08/26/2008

¹ Where EPA Method 5035 is required, indicate sample collection option in the right hand box of this column using the following codes:

P - Samples placed in a soil sample vial with a preservative present.

E - Samples collected and stored in a soil collection device which is airtight and affords little to no headspace.

N - Samples placed in soil sample vial without a preservative present.

UNDERGROUND STORAGE TANK SYSTEM CLOSURE REPORT FORM

Sample/Analysis Information (Attachment for Section III.)

Sample I.D. (See diagram)	Parameter	Analytica Method ¹		Media	Result (units)	Detection Limit (units)	Date Sample Taken	Date Sample Analyzed
#13 Suction End	Lead	EPA 6010B	P	Soil	28 mg/kg	1.0 mg/kg	08/19/2008	08/26/2008
	Benzene	EPA 8260B	P	Soil	61 ug/kg	4.0 ug/kg	08/19/2008	08/26/2008
	1,2-Dibromoethane	EPA 8260B	Р	Soil	ND ug/kg	4.0 ug/kg	08/19/2008	08/26/2008
	1,2-Dichloroethane	EPA 8260B	P	Soil	ND ug/kg	4.0 ug/kg	08/19/2008	08/26/2008
	Ethylbenzene	EPA 8260B	P	Soil	59 ug/kg	4.0 ug/kg	08/19/2008	08/26/2008
q	Isopropylbenzene	EPA 8260B	Р	Soil	26 ug/kg	4.0 ug/kg	08/19/2008	08/26/2008
	Naphthalene	EPA 8260B	Р	Soil	8.9 ug/kg	5.0 ug/kg	08/19/2008	08/26/2008
	Toluene	EPA 8260B	Р	Soil	13 ug/kg	4.0 ug/kg	08/19/2008	08/28/2008
•	1,2,4,- Trimethylbenzene	EPA 82608	Р	Soil	230 ug/kg	4.0 ug/kg	08/19/2008	08/28/2008
	1,3,5,- Trimethylbenzene	EPA 8260B	Р	Soil	140 ug/kg	4.0 ug/kg	08/19/2008	08/26/2008
п	Xylenes (total)	EPA 8260B	Р	Soil	250 ug/kg	12 ug/kg	08/19/2008	08/28/2008
	Methyl tert-butyl ether	EPA 8260B	Р	Soil	ND ug/kg	4.0 ug/kg	08/19/2008	08/26/2008

¹ Where EPA Method 5035 is required, indicate sample collection option in the right hand box of this column using the following codes:

P - Samples placed in a soil sample vial with a preservative present.

E - Samples collected and stored in a soil collection device which is airtight and affords little to no headspace.

N - Samples placed in soil sample vial without a preservative present.

UNDERGROUND STORAGE TANK SYSTEM CLOSURE REPORT FORM

Sample/Analysis Information (Attachment for Section III.)

Sample I.D. (See diagram)	Parameter	Analytical Method ¹		Media	Result (units)	Detection Limit (units)	Date Sample Taken	Date Sample Analyzed
#14 Gas Pump	Lead	EPA 6010B	P	Soil	110 mg/kg	1.0 mg/kg	08/19/2008	08/26/2008
"	Benzene	EPA 8260B	P	Soil	2100 ug/kg	2000 ug/kg	08/19/2008	08/26/2008
	1,2-Dibromoethane	EPA 8260B	Р	Soil	ND ug/kg	2000 ug/kg	08/19/2008	08/26/2008
	1,2-Dichloroethane	EPA 8260B	P	Soil	ND ug/kg	2000 ug/kg	08/19/2008	08/26/2008
	Ethylbenzene	EPA 8260B	Р	Soil	48000 ug/kg	2000 ug/kg	08/19/2008	08/26/2008
	Isopropylbenzene	EPA 8260B	Р	Soil	15000 ug/kg	2000 ug/kg	08/19/2008	08/26/2008
"	Naphthalene	EPA 8260B	Р	Soil	80000 ug/kg	2500 ug/kg	08/19/2008	08/26/2008
	Toluene	EPA 8260B	Р	Soil	39000 ug/kg	2000 ug/kg	08/19/2008	08/26/2008
"	1,2,4,- Trimethylbenzene	EPA 8260B	Р	Soil	890000 ug/kg	20000 ug/kg	08/19/2008	08/26/2008
"	1,3,5,- Trimethylbenzene	EPA 8260B	Р	Soil	400000 ug/kg	20000 ug/kg	08/19/2008	08/26/2008
	Xylenes (total)	EPA 8260B	Р	Soil	840000 ug/kg	6000 ug/kg	08/19/2008	08/26/2008
	Methyl tert-butyl ether	EPA 8260B	Р	Soil	ND ug/kg	2000 ug/kg	08/19/2008	08/26/2008

¹ Where EPA Method 5035 is required, indicate sample collection option in the right hand box of this column using the following codes:

P - Samples placed in a soil sample vial with a preservative present.

E - Samples collected and stored in a soil collection device which is airtight and affords little to no headspace.

N - Samples placed in soil sample vial without a preservative present.

UNDERGROUND STORAGE TANK SYSTEM CLOSURE REPORT FORM

Sample/Analysis Information (Attachment for Section III.)

Sample I.D. (See diagram)	Parameter	Analytica Method ¹	ı	Media	Result (units)	Detection Limit (units)	Date Sample Taken	Date Sample Analyzed
#15 Gas Pump	Lead	EPA 6010B	P	Soil	61 mg/kg	1.0 mg/kg	08/19/2008	08/26/2008
"	Benzene	EPA 8260B	Р	Soil	1300 ug/kg	200 ug/kg	08/19/2008	08/26/2008
	1,2-Dibromoethane	EPA 8260B	Р	Soil	ND ug/kg	200 ug/kg	08/19/2008	08/26/2008
	1,2-Dichloroethane	EPA 8260B	Р	Soil	ND ug/kg	200 ug/kg	08/19/2008	08/26/2008
	Ethylbenzene	EPA 8260B	Р	Soil	3200 ug/kg	200 ug/kg	08/19/2008	08/26/2008
	Isopropylbenzene	EPA 8260B	P	Soil	ND ug/kg	20000 ug/kg	08/19/2008	08/26/2008
"	Naphthalene	EPA 8260B	Р	Soil	53000 ug/kg	25000 ug/kg	08/19/2008	08/26/2008
	Toluene	EPA 8260B	Р	Soil	8200 ug/kg	200 ug/kg	08/19/2008	08/26/2008
"	1,2,4,- Trimethylbenzene	EPA 8260B	Р	Soil	880000 ug/kg	20000 ug/kg	08/19/2008	08/26/2008
"	1,3,5,- Trimethylbenzene	EPA 8260B	P	Soil	520000 ug/kg	20000 ug/kg	08/19/2008	08/26/2008
	Xylenes (total)	EPA 8260B	Р	Soil	440000 ug/kg	60000 ug/kg	08/19/2008	08/26/2008
	Methyl tert-butyl ether	EPA 8260B	Р	Soil	ND ug/kg	200 ug/kg	08/19/2008	08/26/2008

¹ Where EPA Method 5035 is required, indicate sample collection option in the right hand box of this column using the following codes:

P - Samples placed in a soil sample vial with a preservative present.

E - Samples collected and stored in a soil collection device which is airtight and affords little to no headspace.

N - Samples placed in soil sample vial without a preservative present.

UNDERGROUND STORAGE TANK SYSTEM CLOSURE REPORT FORM

Sample/Analysis Information (Attachment for Section III.)

Sample I.D. (See diagram)	Parameter	Analytica Method ¹		Media	Result (units)	Detection Limit (units)	Date Sample Taken	Date Sample Analyzed
#16 Gas Piping	Lead	EPA 6010B	Р	Soil	160 mg/kg	1.4 mg/kg	08/19/2008	08/26/2008
**	Benzene	EPA 8260B	Р	Soil	2200 ug/kg	550 ug/kg	08/19/2008	08/28/2008
	1,2-Dibromoethane	EPA 8260B	Р	Soil	ND ug/kg	550 ug/kg	08/19/2008	08/28/2008
	1,2-Dichloroethane	EPA 8260B	Р	Soil	ND ug/kg	550 ug/kg	08/19/2008	08/28/2008
	Ethylbenzene	EPA 8260B	Р	Soil	21000 ug/kg	2800 ug/kg	08/19/2008	08/26/2008
	Isopropylbenzene	EPA 8260B	Р	Soil	9300 ug/kg	2800 ug/kg	08/19/2008	08/26/2008
"	Naphthalene	EPA 8260B	Р	Soil	110000 ug/kg	3500 ug/kg	08/19/2008	08/26/2008
. *	Toluene	EPA 8260B	Р	Soil	6400 ug/kg	2800 ug/kg	08/19/2008	08/26/2008
"	1,2,4,- Trimethylbenzene	EPA 8260B	Р	Soil	430000 ug/kg	28000 ug/kg	08/19/2008	08/27/2008
**	1,3,5,- Trimethylbenzene	EPA 8260B	Р	Soil	170000 ug/kg	2800 ug/kg	08/19/2008	08/26/2008
44	Xylenes (total)	EPA 8260B	Р	Soil	190000 ug/kg	8300 ug/kg	08/19/2008	08/26/2008
	Methyl tert-butyl ether	EPA 8260B	Р	Soil	ND ug/kg	550 ug/kg	08/19/2008	08/26/2008

¹ Where EPA Method 5035 is required, indicate sample collection option in the right hand box of this column using the following codes:

P - Samples placed in a soil sample vial with a preservative present.

E - Samples collected and stored in a soil collection device which is airtight and affords little to no headspace.

N - Samples placed in soil sample vial without a preservative present.

UNDERGROUND STORAGE TANK SYSTEM CLOSURE REPORT FORM

Sample/Analysis Information (Attachment for Section III.)

Sample I.D. (See diagram)	Parameter	Analytica Method ¹		Media	Result (units)	Detection Limit (units)	Date Sample Taken	Date Sample Analyzed
#17 Piping Gas	Lead	EPA 6010B	Р	Soil	55 mg/kg	1.0 mg/kg	08/20/2008	08/26/2008
	Benzene	EPA 8260B	P	Soil	25 ug/kg	4.0 ug/kg	08/20/2008	08/22/2008
	1,2-Dibromoethane	EPA 8260B	P	Soil	ND ug/kg	4.0 ug/kg	08/20/2008	08/22/2008
	1,2-Dichloroethane	EPA 8260B	P	Soil	ND ug/kg	4.0 ug/kg	08/20/2008	08/22/2008
	Ethylbenzene	EPA 8260B	Р	Soil	ND ug/kg	4.0 ug/kg	08/20/2008	08/22/2008
и	Isopropylbenzene	EPA 8260B	Р	Soil	ND ug/kg	4.0 ug/kg	08/20/2008	08/22/2008
	Naphthalene	EPA 8260B	Р	Soil	46 ug/kg	5.0 ug/kg	08/20/2008	08/22/2008
	Toluene	EPA 8260B	Р	Soil	44 ug/kg	4.0 ug/kg	08/20/2008	08/22/2008
"	1,2,4,- Trimethylbenzene	EPA 8260B	Р	Soil	27000 ug/kg	2000 ug/kg	08/19/2008	08/26/2008
"	1,3,5,- Trimethylbenzene	EPA 8260B	Р	Soil	24000 ug/kg	2000 ug/kg	08/19/2008	08/26/2008
-	Xylenes (total)	EPA 8260B	Р	Soil	1100 ug/kg	12 ug/kg	08/19/2008	08/22/2008
	Methyl tert-butyl ether	EPA 8260B	Р	Soil	ND ug/kg	4.0 ug/kg	08/19/2008	08/22/2008

¹ Where EPA Method 5035 is required, indicate sample collection option in the right hand box of this column using the following codes:

P - Samples placed in a soil sample vial with a preservative present.

E - Samples collected and stored in a soil collection device which is airtight and affords little to no headspace.

N - Samples placed in soil sample vial without a preservative present.

UNDERGROUND STORAGE TANK SYSTEM CLOSURE REPORT FORM

Sample/Analysis Information (Attachment for Section III.)

Sample I.D. (See diagram)	Parameter	Analytica Method ¹	ı	Media	Result (units)	Detection Limit (units)	Date Sample Taken	Date Sample Analyzed
#18 Gas Island	Lead	EPA 6010B	Р	Soil	88 mg/kg	1.0 mg/kg	08/20/2008	08/26/2008
"	Benzene	EPA 8260B	Р	Soil	32000 ug/kg	20000 ug/kg	08/20/2008	08/26/2008
	1,2-Dibromoethane	EPA 8260B	Р	Soil	ND ug/kg	20000 ug/kg	08/20/2008	08/26/2008
	1,2-Dichloroethane	EPA 8260B	Р	Soil	ND ug/kg	20000 ug/kg	08/20/2008	08/26/2008
	Ethylbenzene	EPA 8260B	Р	Soil	110000 ug/kg	20000 ug/kg	08/20/2008	08/26/2008
	Isopropylbenzene	EPA 8260B	P	Soil	36000 ug/kg	20000 ug/kg	08/20/2008	08/26/2008
"	Naphthalene	EPA 8260B	P	Soil	110000 ug/kg	25000 ug/kg	08/20/2008	08/26/2008
"	Toluene	EPA 8260B	Р	Soil	450000 ug/kg	20000 ug/kg	08/20/2008	08/26/2008
"	1,2,4,- Trimethylbenzene	EPA 8260B	P	Soil	890000 ug/kg	20000 ug/kg	08/19/2008	08/26/2008
"	1,3,5,- Trimethylbenzene	EPA 8260B	Р	Soil	300000 ug/kg	20000 ug/kg	08/19/2008	08/26/2008
"	Xylenes (total)	EPA 8260B	Р	Soil	1500000 ug/kg	60000 ug/kg	08/19/2008	08/26/2008
*	Methyl tert-butyl ether	EPA 8260B	Р	Soil	ND ug/kg	20000 ug/kg	08/19/2008	08/26/2008

¹ Where EPA Method 5035 is required, indicate sample collection option in the right hand box of this column using the following codes:

P - Samples placed in a soil sample vial with a preservative present.

E - Samples collected and stored in a soil collection device which is airtight and affords little to no headspace.

N - Samples placed in soil sample vial without a preservative present.

UNDERGROUND STORAGE TANK SYSTEM CLOSURE REPORT FORM

Sample/Analysis Information (Attachment for Section III.)

Sample I.D. (See diagram)	Parameter	Analytica Method ¹		Media	Result (units)	Detection Limit (units)	Date Sample Taken	Date Sample Analyzed
#19 Gas Piping	Lead	EPA 6010B	P	Soil	88 mg/kg	1.3 mg/kg	08/20/2008	08/26/2008
"	Benzene	EPA 8260B	P	Soil	28000 ug/kg	2600 ug/kg	08/20/2008	08/26/2008
	1,2-Dibromoethane	EPA 8260B	Р	Soil	ND ug/kg	2600 ug/kg	08/20/2008	08/26/2008
	1,2-Dichloroethane	EPA 8260B	Р	Soil	ND ug/kg	2600 ug/kg	08/20/2008	08/26/2008
"	Ethylbenzene	EPA 8260B	Р	Soil	160000 ug/kg	2600 ug/kg	08/20/2008	08/26/2008
	Isopropylbenzene	EPA 8260B	Р	Soil	47000 ug/kg	26000 ug/kg	08/20/2008	08/26/2008
"	Naphthalene	EPA 8260B	Р	Soil	94000 ug/kg	3300 ug/kg	08/20/2008	08/26/2008
"	Toluene	EPA 8260B	Р	Soil	740000 ug/kg	26000 ug/kg	08/20/2008	08/26/2008
"	1,2,4,- Trimethylbenzene	EPA 8260B	Р	Soil	860000 ug/kg	26000 ug/kg	08/19/2008	08/26/2008
"	1,3,5,- Trimethylbenzene	EPA 8260B	Р	Soil	220000 ug/kg	2600 ug/kg	08/19/2008	08/26/2008
"	Xylenes (total)	EPA 8260B	Р	Soil	1800000 ug/kg	79000 ug/kg	08/19/2008	08/26/2008
	Methyl tert-butyl ether	EPA 8260B	Р	Soil	ND ug/kg	2600 ug/kg	08/19/2008	08/26/2008

¹ Where EPA Method 5035 is required, indicate sample collection option in the right hand box of this column using the following codes:

P - Samples placed in a soil sample vial with a preservative present.

E - Samples collected and stored in a soil collection device which is airtight and affords little to no headspace.

N - Samples placed in soil sample vial without a preservative present.

UNDERGROUND STORAGE TANK SYSTEM CLOSURE REPORT FORM

Sample/Analysis Information (Attachment for Section III.)

Sample I.D. (See diagram)	Parameter	Analytica Method ¹	1	Media	Result (units)	Detection Limit (units)	Date Sample Taken	Date Sample Analyzed
#20 Contami- nated	Lead	EPA 6010B	Р	Soil	82 mg/kg	1.0 mg/kg	08/20/2008	08/26/2008
Soil Pile								
	Benzene	EPA 8260B	Р	Soil	88 ug/kg	4.0 ug/kg	08/20/2008	08/22/2008
	1,2-Dibromoethane	EPA 8260B	Р	Soil	ND ug/kg	4.0 ug/kg	08/20/2008	08/22/2008
*	1,2-Dichloroethane	EPA 8260B	Р	Soil	ND ug/kg	4.0 ug/kg	08/20/2008	08/22/2008
	Ethylbenzene	EPA 8260B	Р	Soil	3200 ug/kg	2000 ug/kg	08/20/2008	08/26/2008
-	Isopropylbenzene	EPA 8260B	Р	Soil	ND ug/kg	2000 ug/kg	08/20/2008	08/26/2008
	Naphthalene	EPA 8260B	Р	Soil	17000 ug/kg	2500 ug/kg	08/20/2008	08/26/2008
	Toluene	EPA 8260B	Р	Soil	5700 ug/kg	2000 ug/kg	08/20/2008	08/26/2008
"	1,2,4,- Trimethylbenzene	EPA 8260B	Р	Soil	160000 ug/kg	2000 ug/kg	08/19/2008	08/26/2008
"	1,3,5,- Trimethylbenzene	EPA 8260B	Р	Soil	74000 ug/kg	2000 ug/kg	08/19/2008	08/26/2008
	Xylenes (total)	EPA 8260B	Р	Soil	110000 ug/kg	6000 ug/kg	08/19/2008	08/26/2008
	Methyl tert-butyl ether	EPA 8260B	Р	Soil	ND ug/kg	4.0 ug/kg	08/19/2008	08/22/2008

¹ Where EPA Method 5035 is required, indicate sample collection option in the right hand box of this column using the following codes:

P - Samples placed in a soil sample vial with a preservative present.

E - Samples collected and stored in a soil collection device which is airtight and affords little to no headspace.

N - Samples placed in soil sample vial without a preservative present.

DISPOSAL SAMPLE OBTAINED NOVEMBER 03, 2008

UNDERGROUND STORAGE TANK SYSTEM CLOSURE REPORT FORM

Sample/Analysis Information (Attachment for Section III.)

Facility ID Number 54-51586

TCLP METALS EXTRACTION BY EPA 1311

Sample I.D. (See diagram)	Parameter	Analytica Method ¹		Media	Result (units)	Detection Limit (units)	Date Sample Taken	Date Sample Analyzed
#1 Disposal Sample	Mercury	EPA7470A	N	Soil	ND mg/L	0.00100 mg/L	11/03/2008	11/13/2008
"	Arsenic	EPA 200.7	N	Soil	ND mg/L	0.10 mg/L	11/03/2008	11/13/2008
	Barium	EPA 200.7	N	Soil	0.76 mg/L	0.010 mg/L	11/03/2008	11/13/2008
	Cadmium	EPA 200.7	N	Soil	ND mg/L	0.0080 mg/L	11/03/2008	11/13/2008
*	Chromium	EPA 200.7	N	Soil	ND mg/L	0.10 mg/L	11/03/2008	11/13/2008
	Copper	EPA 200.7	N	Soil	ND mg/L	0.10 mg/L	11/03/2008	11/13/2008
	Lead	EPA 200.7	N	Soil	ND mg/L	0.20 mg/L	11/03/2008	11/13/2008
	Nickel	EPA 200.7	N	Soil	ND mg/L	0.10 mg/L	11/03/2008	11/13/2008
	Selenium	EPA 200.7	N	Soil	ND mg/L	0.20 mg/L	11/03/2008	11/13/2008
	Silver	EPA 200.7	N	Soil	ND mg/L	0.040 mg/L	11/03/2008	11/13/2008
	Zinc	EPA 200.7	N	Soil	0.37 mg/L	0.10 mg/L	11/03/2008	11/13/2008

¹ Where EPA Method 5035 is required, indicate sample collection option in the right hand box of this column using the following codes:

- P Samples placed in a soil sample vial with a preservative present.
- E Samples collected and stored in a soil collection device which is airtight and affords little to no headspace.
- N Samples placed in soil sample vial without a preservative present.

UNDERGROUND STORAGE TANK SYSTEM CLOSURE REPORT FORM

Sample/Analysis Information (Attachment for Section III.)

Facility ID Number 54-51586

QAM-025-TPH

Sample I.D. (See diagram)	Parameter	Analytic Method		Media	Result (units)	Detection Limit (units)	Date Sample Taken	Date Sample Analyzed
#1 Disposal Sample	TPH-QAM	8015 QAM025	N	Soil	25 mg/kg	5.0 mg/kg	11/03/2008	11/12/2008

¹ Where EPA Method 5035 is required, indicate sample collection option in the right hand box of this column using the following codes:

- P Samples placed in a soil sample vial with a preservative present.
- E Samples collected and stored in a soil collection device which is airtight and affords little to no headspace.
- N Samples placed in soil sample vial without a preservative present.

UNDERGROUND STORAGE TANK SYSTEM CLOSURE REPORT FORM

Sample/Analysis Information (Attachment for Section III.)

Facility ID Number 54-51586

TOTAL METALS BY EPA 6000/7000 SERIES METHODS

Sample I.D. (See diagram)	Parameter	Analytical Method ¹		Media	Result (units)	Detection Limit (units)	Date Sample Taken	Date Sample Analyzed
#1 Disposal Sample	Arsenic	EPA6010B	N	Soil	2.8 mg/kg	1.0 mg/kg	11/03/2008	11/11/2008
	Mercury	EPA7471A	N	Soil	ND mg/kg	0.100 mg/kg	11/03/2008	11/11/2008
	Barium	EPA6010B	N	Soil	62 mg/kg	0.50 mg/kg	11/03/2008	11/11/2008
	Cadmium	EPA6010B	N	Soil	ND mg/kg	1.0 mg/kg	11/03/2008	11/11/2008
	Chromium	EPA6010B	N	Soil	8.2 mg/kg	2.5 mg/kg	11/03/2008	11/11/2008
	Copper	EPA6010B	N	Soil	14 mg/kg	2.5 mg/kg	11/03/2008	11/11/2008
	Lead	EPA6010B	N	Soil	33 mg/kg	1.0 mg/kg	11/03/2008	11/11/2008
•	Nickel	EPA6010B	N	Soil	6.6 mg/kg	2.5 mg/kg	11/03/2008	11/11/2008
	Selenium	EPA6010B	N	Soil	ND mg/kg	4.0 mg/kg	11/03/2008	11/11/2008
	Silver	EPA6010B	N	Soil	ND mg/kg	1.0 mg/kg	11/03/2008	11/11/2008
	Zinc	EPA6010B	N	Soil	70 mg/kg	2.5 mg/kg	11/03/2008	11/11/2008

¹ Where EPA Method 5035 is required, indicate sample collection option in the right hand box of this column using the following codes:

- P Samples placed in a soil sample vial with a preservative present.
- E Samples collected and stored in a soil collection device which is airtight and affords little to no headspace.
- N Samples placed in soil sample vial without a preservative present.

UNDERGROUND STORAGE TANK SYSTEM CLOSURE REPORT FORM

Sample/Analysis Information (Attachment for Section III.)

Facility ID Number 54-51586

VOLATILE ORGANIC COMPOUNDS BY EPA METHOD 8260B

Sample I.D. (See diagram)	Parameter	Analytica Method ¹		Media	Result (units)	Detection Limit (units)	Date Sample Taken	Date Sample Analyzed
#1 Disposal Sample	Benzene	EPA8260B	N	Soil	ND ug/kg	200 ug/kg	11/03/2008	11/11/2008
	Toluene	EPA8260B	N	Soil	ND ug/kg	200 ug/kg	11/03/2008	11/11/2008
	Ethylbenzene	EPA8260B	N	Soil	ND ug/kg	200 ug/kg	11/03/2008	11/11/2008
	Xylenes (total)	EPA8260B	N	Soil	ND ug/kg	600 ug/kg	11/03/2008	11/11/2008

¹ Where EPA Method 5035 is required, indicate sample collection option in the right hand box of this column using the following codes:

- P Samples placed in a soil sample vial with a preservative present.
- E Samples collected and stored in a soil collection device which is airtight and affords little to no headspace.
- N Samples placed in soil sample vial without a preservative present.

UNDERGROUND STORAGE TANK SYSTEM CLOSURE REPORT FORM

Sample/Analysis Information (Attachment for Section III.)

Facility ID Number 54-51586

GENERAL CHEMISTRY

Sample I.D. (See diagram)	Parameter	Analytica Method ¹	ı	Media	Result (units)	Detection Limit (units)	Date Sample Taken	Date Sample Analyzed
#1 Disposal Sample	Flashpoint	ASTM D92- 85	N	Soil	No Flash>200	1.00 F	11/03/2008	11/12/2008
	pН	EPA9045B	N	Soil	6.85 pH Units	pH Units	11/03/2008	11/11/2008
	Reactive Cyanide	EPA 7.3.3	N	Soil	ND mg/kg	2.5 mg/kg	11/03/2008	11/12/2008
	Reactive Sulfide	EPA 7.3.4	N	Soil	ND mg/kg	5.0 mg/kg	11/03/2008	11/17/2008
-	% Solids	EPA 160.3	N	Soil	91.4% by Weight	0.01% by Wt.	11/03/2008	11/11/2008

¹ Where EPA Method 5035 is required, indicate sample collection option in the right hand box of this column using the following codes:

- P Samples placed in a soil sample vial with a preservative present.
- E Samples collected and stored in a soil collection device which is airtight and affords little to no headspace.
- N Samples placed in soil sample vial without a preservative present.



21 August 2008

CENTERPOINT TANK SERVICES, INC

9 Bure

Roger Tartaglia 536 Benjamin Franklin Highway Douglassville, PA 19518

RE: Liberty #38

Laboratory ID #: KRH0264

Enclosed are the results of analyses for samples received by the laboratory on 08/14/08 09:23. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Oswaldo Burgos

Project Manager



THE LEADER IN ENVIRONMENTAL TESTING

1008 W. 9th Ave. - King of Prussia, PA 19606

(610) 337-9992 - FAX (610) 337-9939

CENTERPOINT TANK SERVICES, INC

536 Benjamin Franklin Highway

Douglassville PA, 19518

Project: Liberty #38

Project Number: NA

Project Manager: Roger Tartaglia

Reported:

08/21/08 09:59

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
#1 Fill End	KRH0264-01	Soil	08/12/08 13:30	08/14/08 09:23
#2 Middle	KRH0264-02	Soil	08/12/08 13:40	08/14/08 09:23
#3 End	KRH0264-03	Soil	08/12/08 13:50	08/14/08 09:23

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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.



(610) 337-9992 - FAX (610) 337-9939

CENTERPOINT TANK SERVICES, INC

536 Benjamin Franklin Highway

Douglassville PA, 19518

Project: Liberty #38

Project Number: NA

Project Manager: Roger Tartaglia

Reported: 08/21/08 09:59

Volatile Organic Compounds by EPA Method 5035/8260B

TestAmerica King Of Prussia

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
#1 Fill End (KRH0264-01) Soil	Sampled: 08/12/08 13:30	Received: 08/14	08 09:23						
Ethylbenzene	ND	200	ug/kg dry	50	8081412	08/14/08	08/18/08	EPA 8260B	
Isopropylbenzene	ND	200	*					*	
Benzene	ND	200	*					*	
Methyl tert-butyl ether	ND	200	*				*	.40	
Naphthalene	ND	250	*:					**	
Toluene	ND	200	×.					*	
1.2.4-Trimethylbenzene	ND	200	*					*	
1.3.5-Trimethylbenzene	ND	200	*			*			
Surrogate: Dibromofluoromethar	ne	92.7 %	42.6-	163					
Surrogate: 1,2-Dichloroethane-d	4	92.0 %	48.2-	167	**				
Surrogate: Toluene-d8		93.1 %	41.6-	167				-	
Surroguie, Tomene-uo									
Surrogate: 4-Bromofluorobenzen	e	92.0 %	33.4-	187	*		*	**	
		92.0 %	33.4-	187	*	*	*	*	
Surrogate: 4-Bromofluorobenzen		92.0 %	33.4-	50	8081412	08/14/08	08/18/08	" EPA 8260B	
Surrogate: 4-Bromofluorobenzen #2 Middle (KRH0264-02) Soil	Sampled: 08/12/08 13:40	92.0 % Received: 08/14/0	33.4- 8 09:23						
Surrogate: 4-Bromofluorobenzen #2 Middle (KRH0264-02) Soil Ethylbenzene	Sampled: 08/12/08 13:40 ND	92.0 % Received: 08/14/0 200	33.4- 8 09:23	50	8081412		08/18/08	EPA 8260B	
Surrogate: 4-Bromofluorobenzen #2 Middle (KRH0264-02) Soil Ethylbenzene Isopropylbenzene	Sampled: 08/12/08 13:40 ND ND	92.0 % Received: 08/14/0 200 200	33.4- 8 09:23 ug/kg dry	50	8081412	08/14/08	08/18/08	EPA 8260B	
Surrogate: 4-Bromofluorobenzen #2 Middle (KRH0264-02) Suil Ethylbenzene Isopropylbenzene Benzene	Sampled: 08/12/08 13:40 ND ND ND ND	92.0 % Received: 08/14/6 200 200 200	33.4- 8 09:23 ug/kg dry	50	8081412	08/14/08	08/18/08	EPA 8260B	
Surrogate: 4-Bromofluorobenzen #2 Middle (KRH0264-02) Soil Ethylbenzene Isopropylbenzene Benzene Methyl tert-butyl ether	ND N	92.0 % Received: 08/14/0 200 200 200 200	33.4- 8 09:23 ug/kg dry	50	8081412	08/14/08	08/18/08	EPA 8260B	
Surrogate: 4-Bromofluorobenzen #2 Middle (KRH0264-02) Soil Ethylbenzene Isopropylbenzene Benzene Methyl tert-butyl ether Naphthalene	ND N	92.0 % Received: 08/14/0 200 200 200 200 200 250	33.4- 8 09:23 ug/kg dry	50	8081412	08/14/08	08/18/08	EPA 8260B	
Surrogate: 4-Bromofluorobenzen #2 Middle (KRH0264-02) Soil Ethylbenzene Isopropylbenzene Benzene Methyl tert-butyl ether Naphthalene Toluene	ND N	92.0 % Received: 08/14/0 200 200 200 200 250 200	33.4- 8 09:23 ug/kg dry	50	8081412	08/14/08	08/18/08	EPA 8260B	
Surrogate: 4-Bromofluorobenzen #2 Middle (KRH0264-02) Soil Ethylbenzene Isopropylbenzene Benzene Methyl tert-butyl ether Naphthalene Toluene 1.2.4-Trimethylbenzene	Sampled: 08/12/08 13:40 ND ND ND ND ND ND ND ND ND N	92.0 % Received: 08/14/0 200 200 200 200 250 200 200	33.4- 8 09:23 ug/kg dry	50	8081412	08/14/08	08/18/08	EPA 8260B	
Surrogate: 4-Bromofluorobenzen #2 Middle (KRH0264-02) Soil Ethylbenzene Isopropylbenzene Benzene Methyl tert-butyl ether Naphthalene Toluene 1.2.4-Trimethylbenzene 1,3,5-Trimethylbenzene	Sampled: 08/12/08 13:40 ND ND ND ND ND ND ND ND ND N	92.0 % Received: 08/14/6 200 200 200 200 250 200 200 200	33.4- 8 09:23 ug/kg dry	50	8081412	08/14/08	08/18/08	EPA 8260B	
Surrogate: 4-Bromofluorobenzen #2 Middle (KRH0264-02) Soil Ethylbenzene Isopropylbenzene Benzene Methyl tert-butyl ether Naphthalene Toluene 1.2.4-Trimethylbenzene 1,3.5-Trimethylbenzene Surrogate: Dibromofluoromethan	Sampled: 08/12/08 13:40 ND ND ND ND ND ND ND ND ND N	92.0 % Received: 08/14/0 200 200 200 200 250 200 200 200 91.6 %	33.4- 8 09:23 ug/kg dry	50	8081412	08/14/08	08/18/08	EPA 8260B	

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(610) 337-9992 - FAX (610) 337-9939

CENTERPOINT TANK SERVICES, INC.

536 Benjamin Franklin Highway

Douglassville PA, 19518

Project: Liberty #38

Project Number: NA

Project Manager: Roger Tartaglia

Reported: 08/21/08 09:59

Volatile Organic Compounds by EPA Method 5035/8260B

TestAmerica King Of Prussia

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
#3 End (KRH0264-03) Soil Sampled: 08/	12/08 13:50 Receive	d: 08/14/08 0	9:23	500	er og en				100000
Ethylbenzene	ND	200	ug/kg dry	50	8081412	08/14/08	08/18/08	EPA 8260B	
Isopropylbenzene	ND	200			-	*			
Benzene	ND	200		•	-	-		-	
Methyl tert-butyl ether	ND	200	*						
Naphthalene	ND	250	*	-				-	
Toluene	ND	200				*			
1,2,4-Trimethylbenzene	ND	200		7	*				
1.3,5-Trimethylbenzene	ND	200	-						
Surrogate: Dibromofluoromethane		93.5 %	42.6-	163	*			*	
Surrogate: 1,2-Dichloroethane-d4		93.2 %	48.2-	167		~		*	
Surrogate: Toluene-d8		92.5 %	41.6-	167	*				
Surrogate: 4-Bromofluorobenzene		91.7%	33.4-	187			•	*	

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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.



(610) 337-9992 - FAX (610) 337-9939

CENTERPOINT TANK SERVICES, INC

536 Benjamin Franklin Highway Douglassville PA, 19518 Project: Liberty #38

Project Number: NA

Project Manager: Roger Tartaglia

Reported: 08/21/08 09:59

General Chemistry

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Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
#1 Fill End (KRH0264-01) Soil	Sampled: 08/12/08 13:30	Received: 08/14	/08 09:23						
% Solids	92.5	0.01	% by Weight	1	8081416	08/14/08	08/14/08	EPA 160.3	
/2 Middle (KR110264-02) Soil	Sampled: 98/12/08 13:40	Received: 08/14/	08 09:23						
% Solids	92.2	0.01	% by Weight	- 1	8081416	08/14/08	08/14/08	EPA 160.3	
#3 End (KRH0264-03) Soil San	npled: 08/12/08 13:50 Rec	cived: 08/14/08	09:23						
% Solids	92.8	0.01	% by Weight	1	8081416	08/14/08	08/14/08	EPA 160.3	

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(610) 337-9992 - FAX (610) 337-9939

CENTERPOINT TANK SERVICES, INC 536 Benjamin Franklin Highway Project: Liberty #38 Project Number: NA

Reported:

Douglassville PA. 19518

Project Manager: Roger Tartaglia

08/21/08 09:59

Notes and Definitions

DET

Analyte DETECTED

ND

Analyte NOT DETECTED at or above the reporting limit

NR

ot Reported

dry

Sample results reported on a dry weight basis

RPD

Relative Percent Difference

TestAmerica King Of Prussia

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.

Oswaldo Burgos, Project Manager

CHAIN OF CUSTODY REPORT

1008 W. Ninth Avenue King of Prussia, PA 19406 (610) 337-9992 FAX (610) 337-9939

1090 King Georges Post Rd Suite 803

Edison, NJ 08837 (732) 661-0777 FAX (732) 661-0305

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22 August 2008

CENTERPOINT TANK SERVICES, INC.

O Bure

Roger Tartaglia 536 Benjamin Franklin Highway Douglassville, PA 19518

RE: Liberty #38

Laboratory ID #: KRH0285

Enclosed are the results of analyses for samples received by the laboratory on 08/14/08 17:05. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Oswaldo Burgos

Project Manager



(610) 337-9992 - FAX (610) 337-9939

CENTERPOINT TANK SERVICES, INC.

Project: Liberty #38

536 Benjamin Franklin Highway Douglassville PA, 19518 Project Number: NA

Project Manager: Roger Tartaglia

Reported:

08/22/08 14:10

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
#4 Fill End	KRH0285-01	Soil	08/13/08 13:00	08/14/08 17:05
#5 Middle	KRH0285-02	Soil	08/13/08 13:15	08/14/08 17:05
#6 End	KRH0285-03	Soil	08/13/08 13:30	08/14/08 17:05

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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.



(610) 337-9992 - FAX (610) 337-9939

CENTERPOINT TANK SERVICES, INC

536 Benjamin Franklin Highway

Douglassville PA, 19518

Project: Liberty #38

Project Number: NA

Project Manager: Roger Tartaglia

Reported:

08/22/08 14:10

Total Metals by EPA 6000/7000 Series Methods

TestAmerica King Of Prussia

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
#4 Fill End (KRH0285-01) Soil Sample	d: 08/13/08 13:00 Reco	eived: 08/14/	08 17:05		200				1001500
Lead	13	1.0	mg/kg dry	1	8082001	08/20/08	08/20/08	EPA 6010B	
#5 Middle (KRH0285-02) Soil Sampled	: 08/13/08 13:15 Recei	ived: 08/14/0	8 17:05						
Lead	13	1.0	mg/kg dry	1	8082001	08/20/08	08/20/08	EPA 6010B	
#6 End (KRH0285-03) Soil Sampled: 0	8/13/08 13:30 Received	d: 08/14/08 1	7:05						
Lead	19	1,0	mg/kg dry	1	8082001	08/20/08	08/20/08	EPA 6010B	

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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.

Cl Durge



(610) 337-9992 - FAX (610) 337-9939

CENTERPOINT TANK SERVICES, INC.

536 Benjamin Franklin Highway

Douglassville PA, 19518

Project: Liberty #38

Project Number: NA Project Manager: Roger Tartaglia

Reported: 08/22/08 14:10

Volatile Organic Compounds by EPA Method 5035/8260B

TestAmerica King Of Prussia

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
#4 Fill End (KRH0285-01) Soil				Dimion	Dilleri	2 (4)-1112	7,44		
					0001511	00/14/08	08/19/08	EPA 8260B	
Benzeue	4.6		ug/kg dry	1	8081511	08/14/08	08/19/08	EPA 8200B	
1,2-Dibromocthane	ND	4.0			-	2			
1,2-Dichloroethane	ND	4.0						-	
Ethylbenzene	36	4.0							
Isopropylbenzene	26	4.0				į.			
Naphthalene	87	5.0		0	- 5				
Toluene	25	4.0				į.	2000		200
1.2,4-Trimethylbenzene	3200	200		50			08/20/08		RL
1,3,5-Trimethylbenzene	300	4.0	-	1		*	08/19/08		
Xylenes (total)	240	12				*			
Surrogate: Dibromofluoromethane		102 %	42.6-1	63		-	-	*	
Surrogate: 1,2-Dichloroethane-d4		103 %	48.2-1	67	"	-	•	~	
Surrogate: Toluene-d8		101 %	41.6-1	67		~	~	-	
Surrogate: 4-Bromofluorobenzene		94.9 %	33.4-1	87		*			
1,2-Dibromoethane	ND	4.0		*	*			8260B	
#5 Middle (KRH0285-02) Soil S	iampled: 08/13/08 13:15	Received: 08/14/0	8 17:05						
Control of the Contro									
Benzene	ND	4.0	ug/kg dry	1	8081511	08/14/08	08/19/08	EPA 8260B	
Benzene 1,2-Dibromoethane	ND ND	4.0 4.0	ug/kg dry	1	8081511	08/14/08	08/19/08	EPA 8260B	
			ug/kg dry - -	(2)			08/19/08	EPA 8260B	
1,2-Dibromoethane	ND	4.0	-				08/19/08	EPA 8260B	
1,2-Dibromoethane 1,2-Dichloroethane	ND ND	4.0 4.0	-				08/19/08	EPA 8260B	
1,2-Dibromoethane 1,2-Dichloroethane Ethylbenzene	ND ND ND	4.0 4.0 4.0	:				08/19/08	EPA 8260B	
1,2-Dibromoethane 1,2-Dichloroethane Ethylbenzene Isopropylbenzene	ND ND ND ND	4.0 4.0 4.0	:	:	:		08/19/08	EPA 8260B	
1,2-Dibromoethane 1,2-Dichloroethane Ethylbenzene Isopropylbenzene Naphthalene	ND ND ND ND	4.0 4.0 4.0 5.0	:	:	:		08/19/08	EPA 8260B	
1,2-Dibromoethane 1,2-Dichloroethane Ethylbenzene Isopropylbenzene Naphthalene Toluene	ND ND ND ND ND	4.0 4.0 4.0 5.0 4.0	:				:	EPA 8260B	
1,2-Dibromoethane 1,2-Dichloroethane Ethylbenzene Isopropylbenzene Naphthalene Toluene 1,2,4-Trimethylbenzene	ND ND ND ND ND ND	4.0 4.0 4.0 5.0 4.0 4.0					08/22/08	EPA 8260B	
1,2-Dibromoethane 1,2-Dichloroethane Ethylbenzene Isopropylbenzene Naphthalene Toluene 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene Xylenes (total)	ND ND ND ND ND ND ND	4.0 4.0 4.0 5.0 4.0 4.0 4.0					08/22/08	EPA 8260B	
1,2-Dibromoethane 1,2-Dichloroethane Ethylbenzene Isopropylbenzene Naphthalene Toluene 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene Xylenes (total) Surrogate: Dibromofluoromethane	ND ND ND ND ND ND ND	4.0 4.0 4.0 5.0 4.0 4.0 4.0 12	42.6-10	63			08/22/08	EPA 8260B	
1,2-Dibromoethane 1,2-Dichloroethane Ethylbenzene Isopropylbenzene Naphthalene Toluene 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene Xylenes (total) Surrogate: Dibromofluoromethane Surrogate: 1,2-Dichloroethane-d4	ND ND ND ND ND ND ND	4.0 4.0 4.0 5.0 4.0 4.0 4.0		63			08/22/08	EPA 8260B	***************************************
1,2-Dibromoethane 1,2-Dichloroethane Ethylbenzene Isopropylbenzene Naphthalene Toluene 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene Xylenes (total)	ND ND ND ND ND ND ND	4.0 4.0 4.0 5.0 4.0 4.0 4.0 12	42.6-10	63			08/22/08	EPA 8260B	

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Oswaldo Burgos. Project Manager



(610) 337-9992 - FAX (610) 337-9939

CENTERPOINT TANK SERVICES, INC

536 Benjamin Franklin Highway

Douglassville PA, 19518

Project: Liberty #38

Project Number: NA

Project Manager: Roger Tartaglia

Reported: 08/22/08 14:10

Volatile Organic Compounds by EPA Method 5035/8260B

TestAmerica King Of Prussia

Analyte	Re	esult	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
#6 End (KRH0285-03) Soil	Sampled: 08/13/08 13:30	Received:	08/14/08 1	7:05						
Benzene		ND	4.0	ug/kg dry	1	8081511	08/14/08	08/19/08	EPA 8260B	
1,2-Dibromoethane		ND	4.0	"				*		
1,2-Dichloroethane		ND	4.0							
Ethylbenzene		ND	4.0			*	*			
Isopropylbenzene		ND	4.0					-		
Naphthalene		ND	5.0			*	*		*	
l'oluene		ND	4.0			-			-	
1,2,4-Trimethylbenzene		ND	4.0	w				08/22/08		
1,3,5-Trimethylbenzene		5.5	4.0					08/19/08		
Xylenes (total)		ND	12							
Surrogate: Dibromofluoromei	hane		103 %	42.6-	163		*			
Surrogate: 1,2-Dichloroethan			111%	48.2-	167			•	•	
Surrogate: Toluene-d8	35,400		95.2 %	41.6-	167				-	
Surrogate: 4-Bromofluoroben	zene		90.5 %	33.4-	187	*	-	*	-	
1,2-Dibromoethane		ND	4.0				*		826013	

TestAmerica King Of Prussia

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(610) 337-9992 - FAX (610) 337-9939

CENTERPOINT TANK SERVICES, INC

536 Benjamin Franklin Highway

Douglassville PA. 19518

Project: Liberty #38

Project Number: NA

Project Manager: Roger Tartaglia

Reported:

08/22/08 14:10

Volatile Organic Compounds by EPA Method 8260B

TestAmerica King Of Prussia

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
#4 Fill End (KRH0285-01) Soil Sampled:	08/13/08 13:00 Rec	eived: 08/14/	08 17:05						
Methyl tert-butyl ether	ND	4.0	ug/kg dry	1	8081511	08/14/08	08/19/08	EPA 8260B	
#5 Middle (KRH0285-02) Soil Sampled: 0	8/13/08 13:15 Rece	ived: 08/14/0	08 17:05						
Methyl tert-butyl ether	ND	4.0	ug/kg dry	1	8081511	08/14/08	08/19/08	EPA 8260B	
#6 End (KRH0285-03) Soil Sampled: 08/1.	3/08 13:30 Receive	d: 08/14/08 1	7:05						_
Methyl tert-butyl other	ND	4.0	ug/kg dry	1	8081511	08/14/08	08/19/08	EPA 8260B	

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(610) 337-9992 - FAX (610) 337-9939

CENTERPOINT TANK SERVICES. INC

536 Benjamin Franklin Highway

Douglassville PA, 19518

Project: Liberty #38

Project Number: NA

Project Manager: Roger Tartaglia

Reported:

08/22/08 14:10

General Chemistry

TestAmerica King Of Prussia

Analyte	Result	Reporting Limit		Dilution	Batch	Prepared	Analyzed	Method	Notes
#4 Fill End (KRH0285-01) Soil	Sampled: 08/13/08 13:00	Received: 08/14	/08 17:05		200				
% Solids	91.0	0.01	% by Weight	1	8081810	08/18/08	08/18/08	EPA 160.3	
#5 Middle (KRH0285-02) Soil	Sampled: 08/13/08 13:15	Received: 08/14/	08 17:05						
% Solids	86.4	10.0	% by Weight	1	8081810	08/18/08	08/18/08	EPA 160.3	
#6 End (KRH0285-03) Soil Sar	npled: 08/13/08 13:30 Rec	cived: 08/14/08	17:05						
% Solids	85.3	0.01	% by Weight	1	8081810	08/18/08	08/18/08	EPA 160.3	

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CENTERPOINT TANK SERVICES, INC.

536 Benjamin Franklin Highway

Douglassville PA, 19518

Project: Liberty #38

Project Number: NA

Project Manager: Roger Tartaglia

Reported:

08/22/08 14:10

Notes and Definitions

RL7 Sample required dilution due to high concentrations of target analyte.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

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Oswaldo Burgos, Project Manager

Test/merica

CHAIN OF CUSTODY REPORT

1008 W. Ninth Avenue King of Prussia, PA 19406 (610) 337-9992 FAX (610) 337-9939

1090 King Georges Post Rd Suite 803 Edison, NJ 08837 (732) 661-0777 FAX (732) 661-0305

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29 August 2008

CENTERPOINT TANK SERVICES, INC

O Buze

Roger Tartaglia 536 Benjamin Franklin Highway Douglassville, PA 19518

RE: Liberty #38

Laboratory ID #: KRH0406

Enclosed are the results of analyses for samples received by the laboratory on 08/20/08 12:30. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Oswaldo Burgos

Project Manager



(610) 337-9992 - FAX (610) 337-9939

CENTERPOINT TANK SERVICES, INC

Project: Liberty #38

536 Benjamin Franklin Highway Douglassville PA, 19518 Project Number: NA

Project Manager: Roger Tartaglia

Reported: 08/29/08 14:44

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
#11 Vent End	KRH0406-01	Soil	08/19/08 08:20	08/20/08 12:30
#12 Fill Middle	KRH0406-02	Soil	08/19/08 08:30	08/20/08 12:30
f13 Suction End	KRH0406-03	Soil	08/19/08 08:40	08/20/08 12:30
114 Gas Pump	KRH0406-04	Soil	08/19/08 13:20	08/20/08 12:30
115 Gas Pump	KRH0406-05	Soil	08/19/08 13:30	08/20/08 12:30
16 Gas Piping	KRH0406-06	Soil	08/19/08 14:00	08/20/08 12:30

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Oswaldo Burgos, Project Manager



(610) 337-9992 - FAX (610) 337-9939

CENTERPOINT TANK SERVICES, INC

536 Benjamin Franklin Highway Douglassville PA, 19518 Project: Liberty #38

Project Number: NA

Project Manager: Roger Tartaglia

Reported: 08/29/08 14:44

Total Metals by EPA 6000/7000 Series Methods

TestAmerica King Of Prussia

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analy zed	Method	Notes
#11 Vent End (KRH0406-01) Soil	Sampled: 08/19/08 08:20	Received: 08/	/20/08 12:30			100			
Lead	45	1.0	mg/kg dry	1	8082202	08/22/08	08/22/08	EPA 6010B	
#12 Fill Middle (KRH0406-02) Soil	Sampled: 08/19/08 08:30	Received: 0	8/20/08 12:3	0					
Lead	31	1.0	mg/kg dry	1	8082202	08/22/08	08/22/08	EPA 6010B	
#13 Suction End (KRH0406-03) So	il Sampled: 08/19/08 08:4	0 Received:	08/20/08 12:	30					
Lead	28	1.0	mg/kg dry	1	8082506	08/25/08	08.26/08	EPA 6010B	
#14 Gas Pump (KRH0406-04) Soil	Sampled: 08/19/08 13:20	Received: 08	8/20/08 12:30	6	1=10-1		0		
Lead	110	1.0	mg/kg dry	1	8082506	08/25/08	08/26/08	EPA 6010B	
#15 Gas Pump (KRH0406-05) Soil	Sampled: 08/19/08 13:30	Received: 08	8/20/08 12:30						
Lead	61	1.0	mg/kg dry	1	8082506	08/25/08	08/26:08	EPA 6010B	
#16 Gas Piping (KRH0406-06) Soil	Sampled: 08/19/08 14:00	Received: 0	8/20/08 12:30)	10000				2
I.ead	160	1.4	mg/kg dry	1	8082506	08/25/08	08/26/08	EPA 6010B	

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(610) 337-9992 - FAX (610) 337-9939

CENTERPOINT TANK SERVICES, INC

536 Benjamin Franklin Highway Douglassville PA, 19518

Project: Liberty #38

Project Number: NA

Project Manager: Roger Tartaglia

Reported: 08/29/08 14:44

Volatile Organic Compounds by EPA Method 5035/8260B

TestAmerica King Of Prussia

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
#11 Vent End (KRH0406-01) Soil	Sampled: 08/19/08 08:20	Received: 08/	20/08 12:30						
Benzene	130	4.0	ug kg dry	1	8082214	08/22/08	08 26 08	EPA 8260B	
1,2-Dibromoethane	ND	4.0							
1,2-Dichloroethane	ND	4.0	*				*		
Ethylbenzene	210	4.0		-			-		
Isopropylbenzene	38	4.0			-		-		
Naphthalene	26	5.0					-		
Toluene	88	4.0			**		-		
1,2,4-Trimethylbenzene	230	4.0			*			-	
1,3,5-Trimethylbenzene	160	4.0		-	*				
Xylenes (total)	400	12			-				
Surrogate: Dibromofluoromethane		106 %	42.6-	163	-			-	
Surrogate: 1,2-Dichloroethane-d4		106 %	48.2-	167			-	-	
Surrogate: Toluene-d8		96.8 %	41.6-	167	*	*			
Surrogate: 4-Bromofluorobenzene		101 %	33.4-	187	*		-	×	
1,2-Dibromoethane	ND	4.0	-		*			8260B	
#12 Fill Middle (KRH0406-02) Soil	Sampled: 08/19/08 08:30	Received: 08	/20/08 12:30)					
Benzene	260	4.0	ug/kg dry	1	8082214	08/22/08	08/26/08	EPA 8260B	
,2-Dibromoethane	ND	4.0							
,2-Dichloroethane	ND	4.0	*		*				
Ethylbenzene	350	4.0		*	83		-		
sopropylbenzene	60	4.0			80				
Naphthalene	40	5.0							
Toluene	3100	200		50	+		08/27/08		RL7
,2,4-Trimethylbenzene	440	4.0		1		-	08/26 08		res.
3.5-Trimethylbenzene	190	4.0	*						
(ylenes (total)	1500	12							
Surrogate: Dibromofluoromethane		103 %	42.6-1	63				-	
urrogate: 1,2-Dichloroethane-d4		102 %	48.2-1	67					
urrogate: Toluene-d8		103 %	41.6-1			-	-		
urrogate: 4-Bromofluorobenzene		107 %	33.4-1	87		*			

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CENTERPOINT TANK SERVICES, INC

536 Benjamin Franklin Highway Douglassville PA, 19518 Project: Liberty #38

Project Number: NA

Project Manager: Roger Tartaglia

Reported: 08/29/08 14.44

Volatile Organic Compounds by EPA Method 5035/8260B

TestAmerica King Of Prussia

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
#13 Suction End (KRH0406-03) Soil	Sampled: 08/19/08 08:40	Received:	08/20/08 12:	30					
Benzene	61	4.0	ug/kg dry	1	8082214	08/22/08	08/26/08	EPA 8260B	
1,2-Dibromoethane	ND	4.0							
1,2-Dichloroethane	ND	4.0		*					
Ethylbenzene	59	4.0		*			-		
Isopropylbenzene	26	4.0		-			-		
Naphthalene	8.9	5.0				*			
Toluene	13	4.0					08/28/08		A-0
1,2,4-Trimethylbenzene	230	4.0	- 1	**					A-01
1,3,5-Trimethylbenzene	140	4.0					08/26/08		
Xylenes (total)	250	12		-		*	08/28/08		A-01
Surrogate: Dibromofluoromethane		104 %	42.6-	163			08 26 08		
Surrogate: 1,2-Dichloroethane-d4		98.0 %	48.2-	167	*	-			
Surrogate: Toluene-d8		106 %	41.6-	167			-		
Surrogate: 4-Bromofluorobenzene		104 %	33.4-	187		*			
1,2-Dibromoethane	ND	4.0	•	-	*	-		8260B	
#14 Gas Pump (KRH0406-04) Soil S	ampled: 08/19/08 13:20 F	Received: 08/	20/08 12:30						
Benzene	2100	2000	ug kg dry	500	8082214	08/22/08	08/26-08	EPA 8260B	
1,2-Dibromoethane								PILL OFFICE	RL7
in continuentalie	ND	2000						# #	RL7
1,2-Dichloroethane	ND ND	2000 2000				:	:	*	
			:				:	*	RL1
1,2-Dichloroethane	ND	2000		*	*		:	*	RL1
1,2-Dichloroethane Ethylbenzene	ND 48000	2000 2000		:		:	:	*	RL1 RL1 RL7
1,2-Dichloroethane Ethylbenzene Isopropylbenzene	ND 48000 15000	2000 2000 2000	:	-			:		RL1 RL1 RL7
1,2-Dichloroethane Ethylbenzene Isopropylbenzene Naphthalene	ND 48000 15000 80000	2000 2000 2000 2500	:	-					RL1 RL7 RL7 RL7 RL7
1,2-Dichloroethane Ethylbenzene Isopropylbenzene Naphthalene Foluene	ND 48000 15000 80000 39000	2000 2000 2000 2500 2000	:	-		:	:		RL1 RL7 RL7 RL7 RL7 RL7
1,2-Dichloroethane Ethylbenzene Isopropylbenzene Naphthalene Foluene 1,2,4-Trimethylbenzene	ND 48000 15000 80000 39000 890000	2000 2000 2000 2500 2000 2000	:	5000					RL1 RL7 RL7 RL7 RL7
1,2-Dichloroethane Ethylbenzene Isopropylbenzene Naphthalene Toluene 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene	ND 48000 15000 80000 39000 890000 400000	2000 2000 2000 2500 2000 20000 20000	:	5000			08 26/08		RL1 RL7 RL7 RL7 RL7 RL7 RL7
1,2-Dichloroethane Ethylbenzene Isopropylbenzene Naphthalene Foluene 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene (ylenes (total)	ND 48000 15000 80000 39000 890000 400000	2000 2000 2000 2500 2000 20000 20000 6000	:	5000 5000			08 26/08 08 26/08		RL1 RL7 RL7 RL7 RL7 RL7 RL7
1,2-Dichloroethane Ethylbenzene Isopropylbenzene Naphthalene Toluene 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene Kylenes (total) Surrogate: Dibromofluoromethane	ND 48000 15000 80000 39000 890000 400000	2000 2000 2000 2500 2000 20000 20000 6000	42.6-1	5000 5000 63		:	08 26/08 08 26/08		RL1 RL7 RL7 RL7 RL7 RL7 RL7
1,2-Dichloroethane Ethylbenzene Isopropylbenzene Naphthalene Foluene 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene Kylenes (total) Surrogate: Dibromofluoromethane Surrogate: 1,2-Dichloroethane-d4	ND 48000 15000 80000 39000 890000 400000	2000 2000 2000 2500 2000 20000 20000 6000 103 % 102 %	42.6-1	5000 5000 63			08 26/08 08 26/08		RL1 RL7 RL7 RL7 RL7 RL7 RL7

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CENTERPOINT TANK SERVICES, INC

536 Benjamin Franklin Highway

Douglassville PA, 19518

Project: Liberty #38

Project Number: NA

Project Manager: Roger Tartaglia

Reported: 08/29/08 14:44

Volatile Organic Compounds by EPA Method 5035/8260B

TestAmerica King Of Prussia

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
#15 Gas Pump (KRH0406-05) Soil	Sampled: 08/19/08 13:30	Received: 08	3/20/08 12:3	0		-Ve=1000007			
Benzene	1300	200	ug/kg dry	50	8082214	08/22/08	08/26/08	EPA 8260B	RL
1,2-Dibromoethane	ND	200							RL
1,2-Dichloroethane	ND	200	*		25				RL
Ethylbenzene	3200	200	*						RL7
Isopropylbenzene	ND	20000		5000	*		08/26/08		RL7
Naphthalene	53000	25000				*			RL7
Toluene	8200	200		50			08 26 08		RL7
1.2,4-Trimethylbenzene	880000	20000		5000			08/26/08		RL7
1,3,5-Trimethylbenzene	520000	20000							RL7
Xylenes (total)	440000	60000						2	RL7
Surrogate: Dibromofluoromethane		104 %	42.6-	163	*				
Surrogate: 1,2-Dichloroethane-d4		95.0 %	48.2-	167	-		-		
Surrogate: Toluene-d8		94.0 %	41.6-	167	*		-	-	
Surrogate: 4-Bromofluorobenzene		102 %	33.4-	187	*	*	*	*	
1,2-Dibromoethane	ND	200		50		*	08/26/08	8260B	RLI
#16 Gas Piping (KRH0406-06) Soil	Sampled: 08/19/08 14:00	Received: 08	/20/08 12:3	0					
Benzene	2200	550	ug/kg dry	100	8082214	08/22/08	08/28/08	EPA 8260B	RL7
1,2-Dibromoethane	ND	550							RLI
,2-Dichloroethane	ND	550				*			RL1
Ethylbenzene	21000	2800		500			08/26/08	*	RL7
sopropylbenzene	9300	2800	*						RL7
Naphthalene	110000	3500		-					RL7
Toluene	6400	2800				*			RL7
,2,4-Trimethylbenzene	430000	28000		5000		*	08/27/08		RL7
,3,5-Trimethylbenzene	170000	2800		500		-	08/26/08	-	RL7
(ylenes (total)	190000	8300						-	RL7
urrogate: Dibromofluoromethane		103 %	42.6-1	163					
urrogate: 1,2-Dichloroethane-d4		98.5 %	48.2-1	67	-	-		-	
urrogate: Toluene-d8		94.7 %	41.6-1	67		-			
urrogate: 4-Bromofluorobenzene		102 %	33.4-1	87					
.2-Dibromoethane	ND	550	*	100	~		08/26/08	8260B	RL1
	1000000								20,157,856.0

TestAmerica King Of Prussia

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CENTERPOINT TANK SERVICES, INC

536 Benjamin Franklin Highway Douglassville PA, 19518 Project: Liberty #38

Project Number NA

Project Manager: Roger Tartaglia

Reported: 08/29/08 14:44

Volatile Organic Compounds by EPA Method 8260B TestAmerica King Of Prussia

Analyse	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
#11 Vent End (KRH0406-01) Soil	Sampled: 08/19/08 08:20	Received: 08/	20/08 12:30		- 1000				
Methyl tert-butyl ether	ND	4.0	ug/kg dry	1	8082214	08/22/08	08/26/08	EPA 8260B	
Surrogate: Dibromofluoromethane		106 %	42.6-	163	×.		*	*	
#12 Fill Middle (KRH0406-02) Soil	Sampled: 08/19/08 08:30	Received: 0	8/20/08 12:3	0					
Methyl tert-butyl ether	ND	4.0	ug/kg dry	1	8082214	08/22/08	08/26/08	EPA 8260B	
Surrogate: Dibromofluoromethane		103 %	42.6-	163	-		-	-	
#13 Suction End (KRH0406-03) Soi	il Sampled: 08/19/08 08:4	0 Received:	08/20/08 12:	30					
Methyl tert-butyl ether	ND	4.0	ug/kg dry	1	8082214	08/22/08	08/26/08	EPA 8260B	
Surrogate: Dibromofluoromethane		104 %	42.6-	163	-				
#14 Gas Pump (KRH0406-04) Soil	Sampled: 08/19/08 13:20	Received: 08	/20/08 12:30)					
Methyl tert-butyl ether	ND	2000	ug kg dry	500	8082214	08/22/08	08/26/08	EPA 8260B	RL7
Surrogate: Dibromofluoromethane		103 %	42.6-	163	*	*	*	*	
#15 Gas Pump (KRH0406-05) Soil	Sampled: 08/19/08 13:30	Received: 08	/20/08 12:30)					
Methyl tert-butyl ether	ND	200	ug kg dry	50	8082214	08-22-08	08/26-08	EPA 8260B	RL7
Surrogate: Dibromofluoromethane		102 %	42.6-	163	*			*	
#16 Gas Piping (KRH0406-06) Soil	Sampled: 08/19/08 14:00	Received: 08	8/20/08 12:3	0					
Methyl tert-butyl ether	ND	550	ug kg dry	100	8082214	08/22/08	08 26 08	EPA 8260B	RL7
Surrogate: Dibromofluoromethane		97.6 %	42.6-	163	-	*	-		- 11

TestAmerica King Of Prussia



(610) 337-9992 - FAX (610) 337-9939

CENTERPOINT TANK SERVICES, INC

536 Benjamin Franklin Highway Douglassville PA, 19518 Project: Liberty #38

Project Number: NA

Project Manager: Roger Tartaglia

Reported: 08/29/08 14:44

General Chemistry

TestAmerica King Of Prussia

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
#11 Vent End (KRH0406-01) Soil	Sampled: 08/19/08 08:20	Received: 08	/20/08 12:30						
% Solids	85.1	0.01	% by Weight	1	8082209	08/22/08	08/22/08	EPA 160.3	
#12 Fill Middle (KRH0406-02) Soil	Sampled: 08/19/08 08:30	Received: 0	8/20/08 12:30						
% Solids	85.0	0.01	% by Weight	1	8082209	08/22/08	08/22/08	EPA 160.3	
#13 Suction End (KRH0406-03) Soi	Sampled: 08/19/08 08:4	0 Received:	08/20/08 12:3	0					
% Solids	85.7	0.01	% by Weight	1	8082209	08/22/08	08-22-08	EPA 160.3	
#14 Gas Pump (KRH0406-04) Soil	Sampled: 08/19/08 13:20	Received: 08	3/20/08 12:30						
% Solids	81.7	0.01	% by Weight	1	8082209	08/22/08	08/22/08	EPA 160,3	
#15 Gas Pump (KRH0406-05) Soil	Sampled: 08/19/08 13:30	Received: 08	8/20/08 12:30						
% Solids	83.5	0.01	% by Weight	1	8082209	08/22/08	08/22/08	EPA 160.3	
#16 Gas Piping (KRH0406-06) Soil	Sampled: 08/19/08 14:00	Received: 0	8/20/08 12:30			10/11/2009-0		DOMEST	
% Solids	72.4	0.01	% by Weight	1	8082209	08/22/08	08/22/08	EPA 160.3	

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CENTERPOINT TANK SERVICES, INC Project; Liberty #38
536 Benjamin Franklin Highway Project Number: NA
Douglassville PA, 19518 Project Manager: Roger Tartaglia

Reported: 08/29/08 14:44

Notes and Definitions

RL7 Sample required dilution due to high concentrations of target analyte.

RL1 Reporting limit raised due to sample matrix effects.

MHA Due to high levels of analyte in the sample, the MS/MSD calculation does not provide useful spike recovery information. See

Blank Spike (LCS).

M2 The MS and/or MSD were below the acceptance limits due to sample matrix interference. See Blank Spike (LCS).

A-01 These analytes are reported from a sample that was prepared using drinking water. The provided NaHSO4 preserved samples were

used and another re-run was required.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

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Test/merica

CHAIN OF CUSTODY REPORT

1008 W. Ninth Avenue King of Prussia, PA 19406 (610) 337-9992 FAX (610) 337-9939

1090 King Georges Post Rd Suite 803 Edison, NJ 08837 (732) 661-0777 FAX (732) 661-0305

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#15 Grs Powl 33	#14 GARS PUMP 3'	9/4/08 1:20	5	4	7 -	>			节
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28 August 2008

CENTERPOINT TANK SERVICES, INC

O Buy

Roger Tartaglia 536 Benjamin Franklin Highway Douglassville, PA 19518

RE: Liberty #38

Laboratory ID #: KRH0413

Enclosed are the results of analyses for samples received by the laboratory on 08/21/08 08:20. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Oswaldo Burgos

Project Manager



(610) 337-9992 - FAX (610) 337-9939

CENTERPOINT TANK SERVICES, INC 536 Benjamin Franklin Highway Douglassville PA, 19518 Project Liberty #38

Project Number: NA

Project Manager: Roger Tartaglia

Reported: 08/28/08 15:38

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
#17 Piping Gas	KRH0413-01	Soil	08/20/08 08:20	08/21/08 08:20
#18 Gas Island	KRH0413-02	Soil	08/20/08 09:10	08/21/08 08:20
#19 Gas Piping	KRH0413-03	Soil	08/20/08 09:30	08/21/08 08:20
#20 Contaminated Soil Pile	KRH0413-04	Soil	08/20/08 09:50	08/21/08 08:20

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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.

Oswaldo Burgos, Project Manager



(610) 337-9992 - FAX (610) 337-9939

CENTERPOINT TANK SERVICES, INC.

536 Benjamin Franklin Highway Douglassville PA, 19518

Project: Liberty #38 Project Number: NA

Project Manager: Roger Tartaglia

Reported:

08/28/08 15.38

Total Metals by EPA 6000/7000 Series Methods

TestAmerica King Of Prussia

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared ·	Analyzed	Method	Notes
#17 Piping Gas (KRH0413-01) Soil	Sampled: 08/20/08 08:20	Received: 08	8/21/08 08:20)					
Lead	55	1.0	mg/kg dry	1	8082506	08 25 08	08-26-08	EPA 6010B	
#18 Gas Island (KRH0413-02) Soil	Sampled: 08/20/08 09:10	Received: 08	8/21/08 08:20						
Lead	88	1.0	mg kg dry	1	8082506	08.25.08	08/26/08	EPA 6010B	
#19 Gas Piping (KRH0413-03) Soil	Sampled: 08/20/08 09:30	Received: 08	8/21/08 08:20	1					
Lead	88	1.3	mg/kg dry	1	8082506	08/25/08	08-26/08	EPA 6010B	
#20 Contaminated Soil Pile (KRH0-	13-04) Soil Sampled: 08/	20/08 09:50	Received: 08	/21/08 08:	20				
Lead	82	1.0	mg kg dry	1	8082506	08-25/08	08:26:08	EPA 6010B	

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CENTERPOINT TANK SERVICES, INC

536 Benjamin Franklin Highway

Douglassville PA, 19518

Project: Liberty #38

Project Number: NA

Project Manager: Roger Tartaglia

Reported: 08/28/08 15:38

Volatile Organic Compounds by EPA Method 5035/8260B TestAmerica King Of Prussia

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
#17 Piping Gas (KRH0413-01) Soil	Sampled: 08/20/08 08:20	Received: 0	8/21/08 08:2	20					
Benzene	25	4.0	ug kg dry	1	8082116	08 21:08	08/22/08	EPA 8260B	
1.2-Dibromoethane	ND	4.0	-			-			
1,2-Dichloroethane	ND	4.0		-		*			
Ethylbenzene	ND	4.0	*	*		-	~		
Isopropylbenzene	ND	4.0	*	*		*	-		
Naphthalene	46	5.0		*		*			
Toluene	44	4.0		75		*	*		
1.2.4-Trimethylbenzene	27000	2000		500			08/26/08		RL7
1,3,5-Trimethylbenzene	24000	2000				-	*	-	RL7
Xylenes (total)	1100	12		1	*	-	08 22 08	-	
Surrogate: Dibromofluoromethane		105 %	42.6-	-163					
Surrogate: 1,2-Dichloroethane-d4		108 %	48.2	167			75		
Surrogate: Toluene-d8		98.9 %	41.6-	167		*	~	*	
Surrogate: 4-Bromofluorobenzene		118 %	33.4-	187		*		146	
1,2-Dibromoethane	ND	4.0		•		*	*	8260B	
#18 Gas Island (KRH0413-02) Soil	Sampled: 08/20/08 09:10	Received: 08	/21/08 08:2	0					
Benzene	32000	20000	ug kg dry	5000	8082116	08-21-08	08 26 08	EPA 8260B	RL7
1,2-Dibromoethane	ND	20000		*		-			RL1
1.2-Dichloroethane	ND	20000		-		-	-	**	RLI
Ethylbenzene	110000	20000			*		+		RL7
Isopropylbenzene	36000	20000			-		-		RL7
Naphthalene	110000	25000			*	*	-		RL7
Toluene	450000	20000					-		RL7
1.2,4-Trimethylbenzene	890000	20000				*			RL7
1,3,5-Trimethylbenzene	300000	20000		*					RL7
Nylenes (total)	1500000	60000			*				RL7
Surrogate: Dibromofluoromethane		104 %	42.6-	163	*	*			
Surrogate: 1,2-Dichloroethane-d4		102 %	48.2-	167	*				
Surrogate: Toluene-d8		100 %	41.6-	167	*	*	*	-	
Surrogate: 4-Bromosluorobenzene		98.3 %	33.4-	187	•	*			
1.2-Dibromoethane	ND	20000	*	5000		-		8260B	RLI

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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.

Oswaldo Burgos, Project Manager





CENTERPOINT TANK SERVICES, INC

536 Benjamin Franklin Highway Douglassville PA, 19518 Project: Liberty #38

Project Number: NA

Project Manager Roger Tartaglia

Reported: 08/28/08 15:38

Volatile Organic Compounds by EPA Method 5035/8260B

TestAmerica King Of Prussia

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
#19 Gas Piping (KRH0413-03) Soil	Sampled: 08/20/08 09:30	Received: 0	8/21/08 08:2	10					
Benzene	28000	2600	ug kg dry	500	8082116	08 21 08	08 26 08	EPA 8260B	RL
1,2-Dibromoethane	ND	2600							RL
1,2-Dichloroethane	ND	2600		*				14.	RL
Ethylbenzene	160000	2600		*		*			RL
Isopropylbenzene	47000	26000	*	5000			08 26 08		RL
Naphthalene	94000	3300		500	-		08 26 08		RL
Toluene	740000	26000	-	5000			08 26 08		RL
1,2,4-Trimethylbenzene	860000	26000	*						RL7
1,3.5-Trimethylbenzene	220000	2600		500			08 26 08		RLT
Xylenes (total)	1800000	79000		5000			08/26/08	-	RL7
Surrogate: Dibromofluoromethane		98.8 %	42.6-	163			08 26 08		
Surrogate: 1,2-Dichloroethane-d4		95.9 %	48.2-	167		*	-		
Surrogate: Toluene-d8		108 %	41.6-	167	*			*	
Surrogate: 4-Bromofluorobenzene		105 %	33.4-	187		-			
,2-Dibromoethane	ND	2600		500		*		8260B	RLI
20 Contaminated Soil Pile (KRH04	13-04) Soil Sampled: 08/2	20/08 09:50	Received: 0	8/21/08 08:2	20				
Benzene	88	4.0	ug/kg dry	1	8082116	08.21/08	08-22-08	EPA 8260B	
,2-Dibromoethane	ND	4.0			-				72
.2-Dichloroethane	ND	4.0						2	
Ethylbenzene	3200	2000		500			08 26 08	14	RL7
sopropylbenzene	ND	2000	*				08.26.08		RLI
Saphthalene	17000	2500	*				08 26 08		RL7
Toluene	5700	2000	*	*					RL7
,2,4-Trimethylbenzene	160000	2000				24.0			RL7
.3,5-Trimethylbenzene	74000	2000					~	×	RL7
(ylenes (total)	110000	6000	-					-	RL7
urrogate: Dibromofluoromethane		103 %	42.6-1	163				-	
urrogate: 1,2-Dichloroethane-d4		103 %	48.2-1	167			-		
urrogate: Toluene-d8		101 %	41.6-1	67					
urrogate: 4-Bromofluorobenzene		101 %	33.4-1	87		-		-	

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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.

Oswaldo Burgos, Project Manager

Page 4 of 7



(610) 337-9992 - FAX (610) 337-9939

CENTERPOINT TANK SERVICES, INC

536 Benjamin Franklin Highway Douglassville PA, 19518 Project. Liberty #38

Project Number: NA

Project Manager: Roger Tartaglia

Reported: 08/28/08 15:38

Volatile Organic Compounds by EPA Method 8260B

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Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
#17 Piping Gas (KRH0413-01) Soil	Sampled: 08/20/08 08:20	Received: 08	8/21/08 08:2	0					
Methyl tert-butyl ether	ND	4.0	ug kg dry	1	8082116	08 21 08	08/22/08	EPA 8260B	-
Surrogate: Dibromofluoromethane		105 %	42.6-	163					
#18 Gas Island (KRH0413-02) Soil	Sampled: 08/20/08 09:10	Received: 08	2/21/08 08:2	0					
Methyl tert-butyl ether	ND	20000	ug kg dry	5000	8082116	08 21/08	08 26-08	EPA 8260B	RL7
Surrogate: Dibromofluoromethane		104 %	42.6-	163	-				
#19 Gas Piping (KRH0413-03) Soil	Sampled: 08/20/08 09:30	Received: 08	3/21/08 08:2	0					
Methyl tert-butyl ether	ND	2600	ug'kg dry	500	8082116	08/21/08	08 26 08	EPA 8260B	RL7
Surrogate: Dibromosluoromethane		98.8 %	42.6-	163	~	*			
#20 Contaminated Soil Pile (KRH04	13-04) Soil Sampled: 08/	20/08 09:50	Received: 0	8/21/08 08:	20				
Methyl tert-butyl ether	ND	4.0	ug kg dry	- 1	8082116	08 21 08	08 22/08	EPA 8260B	-
Surrogate: Dibromofluoromethane		108 %	42.6-	163		*.		•	

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(610) 337-9992 - FAX (610) 337-9939

CENTERPOINT TANK SERVICES, INC

536 Benjamin Franklin Highway Douglassville PA. 19518 Project: Liberty #38

Project Number: NA

Project Manager: Roger Tartaglia

Reported:

08/28/08 15:38

General Chemistry

TestAmerica King Of Prussia

Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
Sampled: 08/20/08 08:20	Received: 0	8/21/08 08:20)					
92,0	0.01	% by Weight	1	8082209	08-22 08	08 22:08	EPA 160.3	
Sampled: 08/20/08 09:10	Received: 0	8/21/08 08:20						
83.6	0.01	% by Weight	1	8082209	08 22 08	08-22-08	EPA 160.3	
Sampled: 08/20/08 09:30	Received: 0	8/21/08 08:20	ı					
75.9	0.01	% by Weight	1	8082209	08:22:08	08.22.08	EPA 160 3	* 24 11 12 2
113-04) Soil Sampled: 08/	20/08 09:50	Received: 08	/21/08 08:	20				
90.4	0.01	% by Weight	1	8082209	08/22/08	08-22/08	EPA 160.3	
	Sampled: 08/20/08 08:20 92,0 Sampled: 08/20/08 09:10 83.6 Sampled: 08/20/08 09:30 75.9	Result Limit Sampled: 08/20/08 08:20 Received: 0 92.0 0 01 Sampled: 08/20/08 09:10 Received: 0 83.6 0.01 Sampled: 08/20/08 09:30 Received: 0 75.9 0.01 113-04) Soil Sampled: 08/20/08 09:50	Result Limit Units Sampled: 08/20/08 08:20 Received: 08/21/08 08:20 92.0 0 01 % by Weight Sampled: 08/20/08 09:10 Received: 08/21/08 08:20 83.6 0.01 % by Weight Sampled: 08/20/08 09:30 Received: 08/21/08 08:20 75.9 0.01 % by Weight 113-04) Soil Sampled: 08/20/08 09:50 Received: 08/21/08	Result Limit Units Dilution Sampled: 08/20/08 08:20 Received: 08/21/08 08:20 92.0 0 01 % by Weight 1 Sampled: 08/20/08 09:10 Received: 08/21/08 08:20 83.6 0.01 % by Weight 1 Sampled: 08/20/08 09:30 Received: 08/21/08 08:20 75.9 0.01 % by Weight 1 13-04) Soil Sampled: 08/20/08 09:50 Received: 08/21/08 08: 08/21/08 08:	Result Limit Units Dilution Batch Sampled: 08/20/08 08:20 Received: 08/21/08 08:20 83.209 Sampled: 08/20/08 09:10 Received: 08/21/08 08:20 83.6 0.01 % by Weight 1 8082209 Sampled: 08/20/08 09:30 Received: 08/21/08 08:20 8082209 8082209 Sampled: 08/20/08 09:30 Received: 08/21/08 08:20 8082209 75.9 0.01 % by Weight 1 8082209 113-04) Soil Sampled: 08/20/08 09:50 Received: 08/21/08 08:20	Result Limit Units Dilution Batch Prepared Sampled: 08/20/08 08:20 Received: 08/21/08 08:20 92.0 0.01 % by Weight 1 8082209 08.22 08 Sampled: 08/20/08 09:10 Received: 08/21/08 08:20 83.6 0.01 % by Weight 1 8082209 08.22 08 Sampled: 08/20/08 09:30 Received: 08/21/08 08:20 83.6 83.2 83.6 83.2	Result Limit Units Dilution Batch Prepared Analyzed Sampled: 08/20/08 08:20 Received: 08/21/08 08:20 82.08 0.01 % by Weight 1 8082209 08.22 08 08.22 08 Sampled: 08/20/08 09:10 Received: 08/21/08 08:20 83.6 0.01 % by Weight 1 8082209 08.22 08 08.22 08 Sampled: 08/20/08 09:30 Received: 08/21/08 08:20 82.208 08.22 08 08.22 08 13-04) Soil Sampled: 08/20/08 09:50 Received: 08/21/08 08:20 08.22 08 08.22 08	Result Limit Units Dilution Batch Prepared Analyzed Method Sampled: 08/20/08 08:20 Received: 08/21/08 08:20 82.08 8

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(610) 337-9992 - FAX (610) 337-9939

CENTERPOINT TANK SERVICES, INC	Project	Liberty #38	
536 Benjamin Franklin Highway	Project Number	NA	Reported:
Douglassville PA. 19518	Project Manager:	Roger Tartaglia	08/28/08 15:38

Notes and Definitions

Z2	Surrogate recovery was above the acceptance limits. Data not impacted.
RL7	Sample required dilution due to high concentrations of target analyte.
RLI	Reporting limit raised due to sample matrix effects.
M2	The MS and/or MSD were below the acceptance limits due to sample matrix interference. See Blank Spike (LCS).
DET	Analyse DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

TestAmerica King Of Prussia

Test/merical Residence

CHAIN OF CUSTODY REPORT

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17 November 2008

CENTERPOINT TANK SERVICES, INC

Roger Tartaglia 536 Benjamin Franklin Highway Douglassville, PA 19518

RE: Liberty #38

Laboratory ID #: KRK0175

Enclosed are the results of analyses for samples received by the laboratory on 11/10/08 09:51. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Oswaldo Burgos

Project Manager



(610) 337-9992 - FAX (610) 337-9939

CENTERPOINT TANK SERVICES, INC

536 Benjamin Franklin Highway Douglassville PA, 19518 Project: Liberty #38

Project Number: NA

Project Manager: Roger Tartaglia

Reported:

11/17/08 15:03

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
#1 Disposal Sample	KRK0175-01	Soil	11/03/08 10:00	11/10/08 09:51

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(610) 337-9992 - FAX (610) 337-9939

CENTERPOINT TANK SERVICES, INC

536 Benjamin Franklin Highway Douglassville PA, 19518 Project: Liberty #38

Project Number: NA Project Manager: Roger Tartaglia

Reported: 11/17/08 15:03

TCLP Metals Extraction by EPA 1311 TestAmerica King Of Prussia

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
#1 Disposal Sample (KRK0175-01) Soil	Sampled: 11/	03/08 10:00	Received	1: 11/10/08	09:51				
Mercury	ND	0.00100	mg/L	1	8111203	11/12/08	11/13/08	EPA 7470A	
Arsenic	ND	0.10			8111214	11/12/08	11/13/08	EPA 200.7	
Barium	0.76	0.010			**	Pr.			
Cadmium	ND	0.0080					**		
Chromium	ND	0.10		**					
Copper	ND	0.10					-		
Lead	ND	0.20						*	
Nickel	ND	0.10			**				
Selenium	ND	0.20							,
Silver	ND	0.040							L
Zinc	0.37	0.10			**		_		

TestAmerica King Of Prussia



(610) 337-9992 - FAX (610) 337-9939

CENTERPOINT TANK SERVICES, INC

536 Benjamin Franklin Highway Douglassville PA, 19518 Project: Liberty #38

Project Number: NA

Project Manager: Roger Tartaglia

Reported:

11/17/08 15:03

QAM-025-TPH

TestAmerica King Of Prussia

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
#1 Disposal Sample (KRK0175-01) Soil	Sampled: 11/0	3/08 10:00	Received:	11/10/08	8 09:51				
TPH- QAM	25	5.0	mg/kg dry	1	8111025	11/11/08	11/12/08	8015 QAM025	
Surrogate: o-Terphenyl		87.5 %	70-1.	30	"			**	
Surrogate: Chlorobenzene		52.9 %	70-1.	30	**	**	*		Z

TestAmerica King Of Prussia



(610) 337-9992 - FAX (610) 337-9939

CENTERPOINT TANK SERVICES, INC

536 Benjamin Franklin Highway Douglassville PA. 19518 Project: Liberty #38

Project Number: NA

Project Manager: Roger Tartaglia

Reported: 11/17/08 15:03

Total Metals by EPA 6000/7000 Series Methods

TestAmerica King Of Prussia

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
#1 Disposal Sample (KRK0175-01) Soil	Sampled: 11/	03/08 10:00	Received	: 11/10/08	09:51				
Arsenic	2.8	1.0	mg/kg dry	1	8111104	11/11/08	11/11/08	EPA 6010B	
Mercury	ND	0.100	*		8111105	11/11/08	11/11/08	EPA 7471A	
Barium	62	0.50		**	8111104	11/11/08	11/11/08	60103	
Cadmium	ND	1.0	*	**					
Chromium	8.2	2.5			**	*			
Copper	14	2.5			**	40	-		
Lead	33	1.0		*	**		-		
Nickel	6.6	2.5		-					
Selenium	ND	4.0				*	**		
Silver	ND	1.0	*		**				
Zinc	70	2.5			-				

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(610) 337-9992 - FAX (610) 337-9939

CENTERPOINT TANK SERVICES, INC

536 Benjamin Franklin Highway Douglassville PA, 19518 Project: Liberty #38

Project Number: NA Project Manager: Roger Tartaglia Reported:

11/17/08 15:03

Volatile Organic Compounds by EPA Method 8260B TestAmerica King Of Prussia

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
#1 Disposal Sample (KRK0175-01) Soil	Sampled: 11/	/03/08 10:00	Received	: 11/10/08	09:51				P2
Benzene	ND	200	ug/kg dry	50	8111122	11/11/08	11/11/08	EPA 8260B	
Toluene	ND	200							
Ethylbenzene	ND	200				"			
Xylenes (total)	ND	600					-		
Surrogate: 1,2-Dichloroethane-d4		99.2 %	48.2-	167	**	"			
Surrogate: Toluene-d8		91.3 %	41.6-	167	**				

TestAmerica King Of Prussia



(610) 337-9992 - FAX (610) 337-9939

CENTERPOINT TANK SERVICES, INC

536 Benjamin Franklin Highway Douglassville PA, 19518 Project: Liberty #38

Project Number: NA

Project Manager: Roger Tartaglia

Reported: 11/17/08 15:03

General Chemistry TestAmerica King Of Prussia

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
#1 Disposal Sample (KRK0175-01) Soil	Sampled: 11/	03/08 10:00	Received:	11/10/08	09:51				
Flashpoint	NO Flash>200	1.00	°F	1	8111205	11/12/08	11/12/08	ASTM D92-85	
pH	6.85		pH Units	**	8111109	11/11/08	11/11/08	EPA 9045B	HFT
Reactive Cyanide	ND	2.5	mg/kg dry		8111218	11/12/08	11/12/08	EPA 7.3.3	
Reactive Sulfide	ND	5.0	"		8111219	11/12/08	11/17/08	EPA 7.3.4	1.2
% Solids	91.4	0.019	6 by Weight		8111124	11/11/08	11/11/08	EPA 160.3	

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(610) 337-9992 - FAX (610) 337-9939

CENTERPOINT TANK SERVICES, INC 536 Benjamin Franklin Highway Douglassville PA, 19518

Project: Liberty #38
Project Number: NA
Project Manager: Roger Tartaglia

Reported: 11/17/08 15:03

Notes and Definitions

Z6	Surrogate recovery was below acceptance limits.
R2	The RPD exceeded the acceptance limit.
P2	Sample received without chemical preservation, but preserved by the laboratory.
МНА	Due to high levels of analyte in the sample, the MS/MSD calculation does not provide useful spike recovery information. See Blank Spike (LCS).
M8	The MS and/or MSD were below the acceptance limits. See Blank Spike (LCS).
M2	The MS and/or MSD were below the acceptance limits due to sample matrix interference. See Blank Spike (LCS).
MI	The MS and/or MSD were above the acceptance limits due to sample matrix interference. See Blank Spike (LCS).
L2	Laboratory Control Sample and/or Laboratory Control Sample Duplicate recovery was below acceptance limits
L	Laboratory Control Sample and/or Laboratory Control Sample Duplicate recovery was above the acceptance limits Analyte not detected, data not impacted.
HFT	The holding time for this test is immediate. It was analyzed in the laboratory as soon as possible after receipt
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

TestAmerica King Of Prussia



CHAIN OF CUSTODY REPORT

1090 King Georges Post Rd Suite 803 FAX (732) 661-0305 Edison, NJ 08837 (732) 661-0777

King of Prussia, PA 19406 (610) 337-9992 1008 W. Ninth Avenue FAX (610) 337-9939

1-1-11-11 3 DAY 2 DAY 1 DAY <24 HRS. LABORATORY ID NUMBER DATE DATE TMM TIME Temp. Upon Receipt: --PP 1 CONTROL PAGE ☐ ice STD. (5 DAY 4 DAY Deliverable Package: O YES RECEIVED RECEIVED Received: ON D f Yes, please VALYSIB DATE DATE TIME TIME TAT Terms: Net 30 days STULOR SO & MOL Phone #: (RELINQUISHED RELINQUISHED Preservative Used J. SNON 7-# of Bottles 4081/2084 DATE DATE TIME TIME DSHEN State & Program: SIGNAS Address: Bill To: COLLECTED X September 1 0.40 5 COLLECTED RECEIVED RECEIVED BEAL FRENCESKILL 154 31 Tracery Phone #: DATE TIME? 1 DATE Fax #: TIME Strugge 62 FIELD ID, LOCATION 30 PID: PID: PID: PID: PID: PID: PID: PID: PID PID: Production of the Party of the Ligares 17 Client: 3 11 15 DISCORDE Project Name: Project #/PO#: RELINQUISHED RELINQUISHED Sampler: 15 COMMENTS: Address: Report to: E-mail:

3

4

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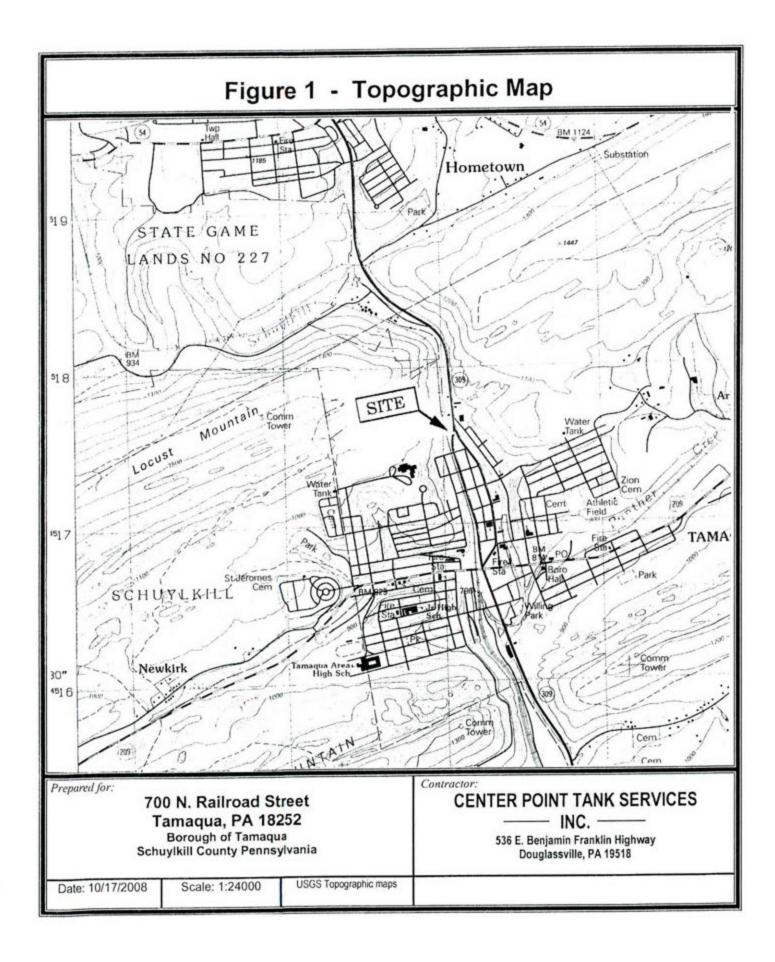
8

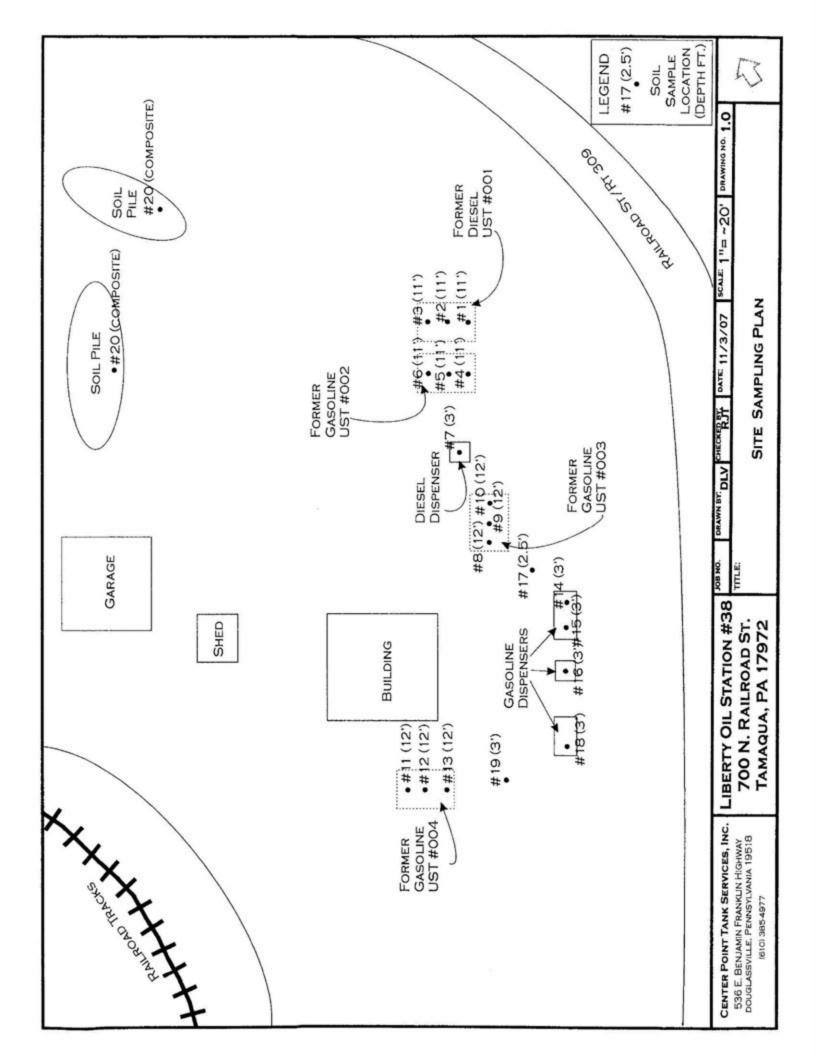
6

2

APPENDIX A

- 1. TOPOGRAPHIC MAP
 - 2. PLOT MAP





APPENDIX B

COLOR SITE PHOTOGRAPHS



Photo # 001 - UST # 001 (3,000 gallon diesel) & UST # 002 (3,000 gallon gas) prior to removal.



Photo # 002 - Diesel dispenser prior to removal.



Photo # 003 - UST # 003 (6,000 gallon gas) prior to removal.



Photo # 004 - UST # 004 - (5,000 gallon gas) prior to removal.



Photo # 005 - Front dispenser island prior to removal.



Photo # 006 - Excavation to tank top UST # 001(right tank) & 002 (left tank).



Photo # 007 - Opening cut for interior cleaning of UST # 001.



Photo # 008 - Removal of UST # 001 & tank hole sub-surface soil.



Photo # 009 - Endwall of UST # 001.



Photo # 010 - Sidewall of UST # 001 with corrosion holes.



Photo # 011- Endwall of UST # 001.



Photo # 012 - Sidewall of UST # 001 with corrosion.



Photo # 013 - Prepare for the removal of UST # 002 post interior cleaning.



Photo # 014 - Endwall view of UST # 002.

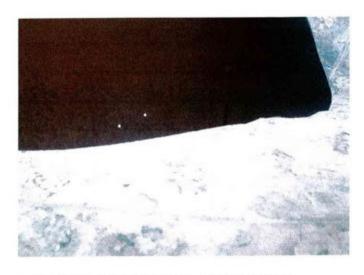


Photo # 015 - Interior view of corrosion holes in UST # 002.



Photo # 016 - Sidewall of UST # 002 with severe corrosion.



Photo #017 - Sidewall view of UST #002.



Photo # 018 - Sidewall of UST # 002 with corrosion holes.



Photo # 019 - Backfilling and compaction of tank hole excavation.



Photo # 020 - Excavate for the removal of UST # 003 (6,000 gallon gas).



Photo # 021 - Opening cut into tank shell for interior cleaning of UST # 003.



Photo # 022 - UST # 003 Endcap with no corrosion holes.



photo # 023 - UST # 003 Sidewall with no corrosion holes.



Photo # 024 - UST # 003 Endcap with no corrosion holes.



Photo # 025 - UST # 003 Sidewall with no corrosion holes.



Photo # 026 - Tank hole of UST # 003 with no signs of soil impact.



Photo # 027 - Interior cleaning of UST # 004.



Photo # 028 Removal of UST # 004 with view of endcap with no holes.



Photo # 029 - Sidewall of UST # 004 with no corrosion holes.



Photo # 030 View of UST # 004 sidewall with area of corrosion.



Photo # 031 - Post removal view of UST # 004 tank hole with no signs of impact.



Photo # 032 - Removal of front fuel islands.



Photo # 033 - Piping removed from under fuel islands.



Photo # 034 - Piping removed from under the front fuel islands.



Photo # 035 - Piping trench excavated to remove product piping.



Photo # 036 - Backfill completion of UST # 004 tank hole.



Photo # 037 - Completion of backfilling of front island area.



Photo # 038 - Completion of backfilling of piping trenchs.



Photo # 039 - Stockpiling of impacted soil.



Photo # 040 - Stockpiling of impacted soil.

APPENDIX C

DISPENSERS, PIPING AND TANKS DISPOSAL RECEIPTS

AE 334A5 385 Bu France J. W. Zaprazny, Inc. 2401 Summer Valley Road, New Ringgold, PA 17960 - (570) 943-2860 OPEN DAILY 8:00 - 5:00 Nº 12714 SATURDAY 8:00 - 11:30 CLOSED SUNDAYS AND HOLIDAYS / PURCHASED DATE MAN MAN FROM ON OFF [] CARS GROSS CUSTOMER PAID BY WEIGHTED BY

4£ 33435 J. W. Zaprazny, Inc. Dump Ph Druglastell. Py 2401 Summer Valley Road, New Ringgold, PA 17960 - (570) 943-2860 OPEN DAILY 8:00 - 5:00 Nº 13087 SATURDAY 8:00 - 11:30 CLOSED SUNDAYS AND HOLIDAYS PURCHASED MAN MAN FROM ON [OFF W CARS GROSS TARE lank 220 NET 10 CUSTOMER PAID BY WEIGHTED BY

536 Ban 7 1 work My 3343 J. W. Zaprazny, Inc. in Current 4 Cf 2401 Summer Valley Road, New Ringgold, PA 17960 - (570) 943-2860 Nº 13143 OPEN DAILY 8:00 - 5:00 SATURDAY 8:00 - 11:30 CLOSED SUNDAYS AND HOLIDAYS MAN OFF MAN **PURCHASED** FROM CARS AZCOZ. CUSTOMER PAID BY WEIGHTED BY

Jan Jump

J. W. Zaprazny, Inc.

£1638

2401 Summer Valley Road, New Ringgold, PA 17960 - (570) 943-2860

OPEN DAILY 8:00 - 5:00 SATURDAY 8:00 - 11:30 CLOSED SUNDAYS AND HOLIDAYS Nº 13869

PURCHASED FROM	(Bat	to it sent ?	and See	MAN MAN DATE	P/18/08
CARS			Q		2/10/00
GROSS	34540	angres	1	73	svelle (1
T ARE	28900			J V	HE2043
N E T	5640				
A MOUNT	10.00	-			
		CUSTOMER			
	564.00		CASH	CK 12030	
WEIGHTED BY		PAID BY		7	

PURCHASED WEIGHTED BY CARS οκουο 4700 16 331/35 2401 Summer Valley Road, New Ringgold, PA 17960 - (570) 943-2860 CUSTOMER OPEN DAILY 8:00 - 5:00 SATURDAY 8:00 - 11:30 CLOSED SUNDAYS AND HOLIDAYS PAID BY J. W. Zaprazny, Inc. CASH MAN D MAN DATE 8- 10 7 Nº 13209

APPENDIX D

PADEP CORRESPONDENCE

- Underground Storage Tank System Closure Notification Form
 - 2. Notification of Contamination
- 3. Registration/Permitting Application Form

CENTER POINT TANK SERVICES

INC. —

Storage Tank Management Services

July 25, 2008

PA Department of Environmental Protection Storage Tank Division 2 Public Square Wilkes Barre, PA 18711-0790

Re:

Liberty Oil Co. Station # 38 700 N. Railroad Street Tamaqua, PA 18252 Borough of Tamaqua Schuylkill County

PADEP Facility ID # 54-51586

Gentlemen:

Please find enclosed a copy of the Underground Storage Tank System Closure Notification Form for the above referenced facility.

If you have any questions please do not hesitate to contact me.

Sincerely,

Center Point Tank Services, Inc.

Roger J. Tartaglia, Sr.

President

cc:

Norwood Klotz, Jr.

PA Department of Labor & Industry

2570-FM-PWM0127 12/2007



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WASTE MANAGEMENT

DATE	RECEIVED:	

UNDERGROUND STORAGE TANK SYSTEM INSTALLATION / CLOSURE NOTIFICATION FORM

NOTE: The appropriate regional office of the Department must receive notification of installation, change-inservice or permanent closure at least 30 days prior to beginning on-site activities. Report subsequent delays as soon as known.

I.	Owner of Tank System						
	Owner Name Liberty Oil Company						
	Street Address 600 E. Main Street					Phone No (570) 3	umber 85 - 5459
	City Schuylkill Haven			State	PA		Zip Code 17972 - 1430
11.	Location of Tank System						
	Facility Name Liberty Oil Co. Sta # 38					entification - 51586	Number
	Street Address 700 N. Railroad Street		City			State	Zip Code
	Municipality Tamaqua		Cou	naqua unty uuylkill		PA	18252 -
	Contact Person Norwood Klotz				1000	hone Numb 570) 385 -	
III.	This notification is for:			acker eye			
	☐ New installation	☐ Complete system i	replace	ment		Partial sy	stem replacement
	☐ Change-in-service	○ Complete system com	closure				stem closure
IV.	Month/Day/Year of Propose	d Installation / Closure	08/2	25/2008			
V.	Certified Installer/Company	Performing Tank Handlir	ng Acti	vities			
	Certified Installer Name Roger J. Tartaglia, Sr.				Installer C 368	ertification	Number
	Street Address 536 E. Bemjamin Franklin Hig	hway			Phone Nu (610) 38		
	City Douglassville Certified Company Name			State	PA		Zip Code 19518 -
	Center Point Tank Services, In	ic.			Company	Certification 7	n Number 92
VI.	(For Closure) Contractor/Ind	ividual Performing Site A	Assess	ment A	ctivities		
	Name of Contractor or Individu Center Point Tank Services, In	al c.					
	Street Address 536 E. Benjamin Franklin High	way				Phone Nur (610) 3	mber 85 - 4977
	City Douglassville			State	PA		Zip Code 19518 -
/II.	(For Installation) Briefly Designation Tank Size Substance	cribe Underground Stora se to be Store		k Syste Size	em(s) to be		to be Stored
/111.	Signature of Tank System Ov	wner/			Title SkyTi		ate 7 124 1 CS

2570-FM-E'.VM0127 12/2007

IX.	(For Closure) Descrip Complete for each tank	tion	of Underground Storage Tank ergoing closure. Include additio	System(s) to	be Closed		
	Tank Registration Num			001	002	003	004
	Estimated Total Capaci		Sallons)	3000	3000	6000	5000
	Substance(s) Stored Throughout Operating Life of Tank (Check All That Apply)	a.	Petroleum & Other Oils Unleaded Gasoline Leaded Gasoline Aviation Gasoline Pure ethanol Ethanol/Gas blend				
			Service (CAS) No.				
	Proposed		Unknown Removal				
	Closure Method	a. b.		×		×	×
	(Check Only One)	C.		l H	l H		
	Tank Registration Numb		Gridinge-III-del Vice				
100	Estimated Total Capaci		allons)				
	Substance(s) Stored Throughout Operating Life of Tank (Check All That Apply)	а. b.	Petroleum & Other Oils Unleaded Gasoline Leaded Gasoline Aviation Gasoline Pure ethanol Ethanol/Gas blend% Kerosene or Fuel Oil No. 1 Jet Fuel Diesel Fuel or Fuel Oil No. 2 Biodiesel% Fuel Oil No. 4, 5 or 6 New Motor Oil Nonpetroleum oil, Specify Used Motor Oil Other, Please Specify Hazardous Substance Name of Principal CERCLA Substance AND Chemical Abstract Service (CAS) No. Unknown				
	Proposed Closure Method (Check Only One)	a. b. c.					

CENTER POINT TANK SERVICES

INC. ———

Storage Tank Management Services

August 20, 2008

PADEP Northeast Region Mr. Eric Supey Division of Storage Tanks 2 Public Square Wilkes-Barre, PA 18711-0790

Re: Liberty 38

Facility ID# 54-51586

Dear Mr. Supey:

As per our conversation please find enclosed a Notification of Contamination form for the above listed site.

Phone: 610-385-4977

Fax: 610-385-4978

If you have any questions, please do not hesitate to contact our office.

Sincerely,

Christine M. Mastrangelo

cc: Norwood Klotz - Liberty Oil Company

NOTIFICATION OF REPORTABLE RELEASE (Owners and Operators)

☑ Initial ☐ Follow-Up

NOTIFICATION OF CONTAMINATION (Certified Installers and Inspectors)

NOTIFICATION OF REPORTABLE RELEASE (Owners and Operators)

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

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

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

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

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

OWNERS AND OPERATORS (O/O)

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

NOTIFICATION OF CONTAMINATION (Certified Installers and Inspectors)

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

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

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

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

INSTRUCTIONS

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

PLEASE SEND COMPLETED ORIGINAL FORM TO:

PA Department of Environmental Protection

Environmental Cleanup Program

Storage Tank Section

(and the appropriate address below,

depending on where the FACILITY is located)

Southeast Region 2 East Main Street Nornstown, PA 19401 PHONE: 484-250-5940 FAX: 484-250-5943

Counties Bucks, Chester, Delaware, Montgomery, Philadelphia Northeast Region 2 Public Square Wikes-Barre, PA 18711-0790 PHONE: 570-826-2511 FAX: 570-820-4907

Counties Carbon, Lackawanna, Lehigh, Luzeme, Monroe, Northampton Pike, Schuylkill, Susquehanna, Wayne, Wyoming Southcentral Region 909 Elmerton Avenue Harrisburg, PA 17110 PHONE: 877-333-1904 FAX: 717-705-4830

Counties

Adams, Bedford, Berks, Blair, Cumberland, Dauphin, Franklin, Fulton, Huntingdon, Juniata, Lancaster, Lebanon, MfMn, Perry, York

Northcentral Region 208 W. Third Street, Suite 101 Williamsport, PA 17701 PHONE: 570-321-6525/327-3696 FAX: 570-327-3420

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

Southwest Region 400 Waterfront Drive Pittsburgh, PA 15222 PHONE: 412-442-4091/4000 FAX: 412-442-4328

Counties Allegheny, Armstrong, Beaver, Cambria, Fayette, Greene, Indiana, Somerset, Washington, Westmoreland Northwest Region 230 Chestnut Street Meadwille, PA 16335-3481 PHONE: 814-332-6945 800-373-3398 FAX: 814-332-6121

Counties Butler, Clanon, Crawford, Eik, Ene, Forest, Jefferson, Lawrence, McKean, Mercer, Venango, Warren

I. FACILITY INFORMATION (Both O/	O and I/I)	II. OWNER/OPERA	TOR INFORMATION (Both (O/O and I/I)
Contact Person Phone	maqua e Number	Owner Name Liberty Oil Co. Inc. Address 600 E. Main Street City Schuylkill Haven Phone Number (570) 385- 5459 Operator Name	State PA Phone Nu	
	385 -5459	Mr. Norwood Klotz	(570) 385	- 5459
ll ll	I. REGULATED SUB	STANCE INFORMAT	TION	
A. Type of Product(s) Involved (Mark All That Apply 図): Both O/O and I/I	B. Quantity (Gallons) of O/O Only	Product(s) Released:	C. Contamination Suspect Confirmed [C] (Mark All I/I Only	
Leaded Gasoline			[S]	[c]
Unleaded Gasoline	u n	k_n o w , n		[C]
Aviation Gasoline			П (6)	(c)
Kerosene				(C)
Jet Fuel			[s]	(c)
Diesel Fuel	<u>u_</u> , n_	known.		[c]
New Motor Oil			[S]	[c]
Used Motor Oil				(c)
Fuel Oil No. 1			[S]	[C]
Fuel Oil No. 2				[c]
Fuel Oil No. 4				[c]
Fuel Oil No. 5				[c]
Fuel Oil No. 6				
Other (Specify)				
Unknown			[S]	
	PORTARI E REI FA	CE INCORMATION ((
		SE INFORMATION (C		
Date of verbal notification:	8 / 15 / 2008 m d y	Municipality(ies) an	or Sent Copy of this Written Notific nd Name of Municipality(les) Notifie	cation to Local ed:
Date Owner/Operator Verbally Notified Approp	riate Regional Office:	Date: _8_ / _15		3300
The state of the s	heast Region - Eric Supey		y municipality ramaqua	<u> </u>
m d y		Date: /	/ Municipality	
Agg property			Environmental Media Affecto	and and Impacts
Source/Cause (Mark All That Apply 🖾):	How Discovered ((Mark All That Apply 🖾):	(Mark All That App	ly 🖾):
Tank (DEP Assigned Nos)	During Closure	Σ	⊠ Soil	⊠
Piping System (Aboveground Regulated)	7			-
Piping System (Underground Regulated)				
Piping System (Non-Regulated)	7	on	Surface Water	
Dispenser/Dispensing Equipment	Third Party Inspection		Ground Water	
Spill Catchment Basin	-	ivities		
Accident/Act of God	7	or Reports	- Dodrock	
Submersible Turbine Pump Head/Fittings			Water Supplies	
Containment/Sump Failure	Water in Tank		☐ Vapors/Product in Buildings	
Faulty Installation				
Corrosion				
Physical/Mechanical Failure	- opg.aaaopa	Results	Ecological Receptors	
Spill During Delivery	Supply Well Sample K			1
Overfill at Delivery	Manitorian Mall Comel	le Results	ן ב	ı
Vehicle Gas Tank Overfill			ן כ	
Product Delivery Hose Rupture			٦١	
Other (Specify)	1		<u> </u>	-
	Unknown		-	

V. INTERIM REMED	IAL ACTIO	NS (0/0 Only)		
(Mark All That Apply 図):				
C1-1-1 C-1-1-1-1	Planned	Initiated	Completed	
Regulated Substance Removed from Storage Tanks				
Fire, Explosion and Safety Hazards Mitigated				
Contaminated Soil Excavated				
Free Product Recovered	2002			
Water Supplies Identified and Sampled			_	_
Temporary Water Supplies Provided				
Other (Specify)	🗆	🗆		
VI. SUSPECTED / CONFIRMED CO	NTAMINA	TION INFORMAT	ION (I/I Only)	
Date of Observation of Suspected/Confirmed Contamination:	8 / <u>15</u> m d	/ 2008 y		
Indication of Suspected Contamination (Mark All That Apply 🗵	l): Extent	of Confirmed Con	tamination (Mark	All That Apply (X):
Unusual Level of Vapors	Produc	t Stained or Produc	t Saturated Soil or	Backfill
Erratic Behavior of Product Dispensing Equipment	Ponded	d Product		
Release Detection Results Indicate a Release	Free Pr	roduct or Sheen on	Ponded Water	
Discovery of Holes in the Storage Tank	Free Pr	roduct or Sheen on	the Ground Water	Surface
Other (Specify)	Free Pr	roduct or Sheen on	Surface Water	
	Other (Specify)		
VII. ADDITIONAL INFO	PMATION	(Both O/O and I/I	<u>, </u>	
Provide any additional, relevant, available information of contamination. Include specific details or problems about release and the cause was corrosion of a metal connector or Provide DEP assigned and owner/operator assigned tank in paper, if necessary.	the release flexible cor	e. For example, nnector, it is impo	if the piping warrant to include to	as the source of the hat information here.
Strong gasoline odors were encountered during the removal while excavating the #001 Diesel and #003 gasoline tanks. I gallon gasoline tank (#002) had multiple holes but the soil did the tank farm was stockpiled on plastic and covered with the be submitted to Test America Laboratories for analysis.	The 3000-ga d not appea	allon diesel tank (r to be stained wit	#001) had one h th product. The s	ole and the 3000- soil removed from

255C-FM-BWM0082 Rev. 8/2007	FACILITY I.D. NUMBER 54-51586
VIII. CERTIFICATION (Both O	O and I/I)
I, Narwood Kiotz (Print Name)	hereby certify, under penalty of law as provided in 18 Pa.
C.S.A. §4904 (relating to unsworm falsification to authorities) that I am the owner and that the information provided by me in this notification is true, accurate and con	or operator of the above referenced storage tank facility inplete to the best of my knowledge and belief.
Mounte ETATO SECITARIS	8/15/08
Signature of Owner of Operator	Date
C.S.A. §4904 (relating to unsworm falsification to authorities) that I am the certification referenced storage tank facility and that the information provided by me in the first my knowledge and belief.	hereby certify, under penalty of law as provided in 18 Pa. ed installer who performed tank handling activities at the this notification is true, accurate and complete to the best 8 / 15 / 2008
Signature of Certifed Installer	Date
0.7	
Installer Certification Number	Company Certification Number
(Driet Name)	hereby certify, under penalty of law as provided in 18 Pa.
C.S.A. §4904 (relating to unsworm falsification to authorities) that I am the cert above referenced storage tank facility and that the information provided by me in of my knowledge and belief.	this notification is true, accurate and complete to the best
Levery William & Installer	
Signature of Certified incoords Installer	Date
Inspector Certification Number	Company Certification Number

CENTER POINT TANK SERVICES

Storage Tank Management Services

September 30, 2008

PADEP Division of Storage Tanks P. O. Box 8762. Harrisburg, PA 17105-8762

RE: Facility ID #54-51586 Liberty Oil #38

To Whom It May Concern:

Please find enclosed a Registration Form for the removal of tank #001, 002, 003, and 004. The removals took place from 8/12/08 thru 8/18/08 at the above listed facility.

Phone: 610-385-4977

Fax: 610-385-4978

If you have any questions, please do not hesitate to contact our office.

Thank you,

Christine M. Mastrangelo



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WASTE MANAGEMENT

STORAGE TANKS REGISTRATION / PERMITTING APPLICATION FORM

Befo	ore completing this fo	rm, read t	the step-by-st	ep instructions	provided in this app	lication pac	kage.	
						DEP USE	ONLY	
					Client ID#			
	51586			Ī	Site ID#			
Fac	ility ID #				Account #			
					Auth ID#			
200.00	erty Oil #38				APS ID#			
Fac	ility Name				Master Auth ID#			
			I. PI	JRPOSE O	FSUBMITTAL			
_			INITIAL (Ap)	olies to First-Ti	me Facility Registra	ition)		
	Register Tanks(s)				Register Tank(s) to be Tem	porarily	Out of Use
	Register Tank(s) t	o be Rem	noved		Register Tank(s) to be Clos	ed in Pl	ace
10000		AMENDE	D (Applies to	Currently Reg	istered Tank(s) or E	xisting Faci	lity)	
	Changed Owner I				Changed Contac	ct Informatio	on	
	Changed Facility I				Changed Facility	Operation	Informa	tion
	Changed to Curre				Added Tank(s) to			
	Changed to Temp	orarily Ou	ut of Use Tan	k(s)	Changed to Peri	manently Cl	osed Ta	ink(s)/Removed
П	Changed Product				Changed to Exe	mpt Tank(s)	
			-	HANGE OF C	WNERSHIP			
	Tanks Changed O	wnership	and Remain	at Same Facil	ity			
		URRE	NT OR NE	W TANK OV	VNER / CLIENT	INFORM	ATION	
	Client ID#	Client T	ype/Code	Fee Kind (che	ck one if applicable)	63,757		
1203		pacor			r Fire Co/EMS Org	☐ State		☐ Fed Govt
	nization Name or Reporty Oil Co.	gistered F	ictitious Nam	е	Employer ID	# (EIN)	Dun	& Bradstreet ID#
Indiv	idual Last Name		First Name		MI	Suffix	SSN	
Addi	tional Individual Last	Name	First Name		MI	Suffix	SSN	
	ng Address Line 1 E. Main St.		Mailing Ad	dress Line 2				
	ess Last Line - City		State		ZIP+4	Co	untry	
	ıylkill Haven		PA		17972	US	21.0	
	t Contact Last Name		First Name		MI		ffix	
Klotz			Norwood			Ju		
_	t Contact Title				Phone	Ext		
Own	er				570-385-549			
E-ma	il Address					FA	X	

	III.	SITE IN	FORM	ATION				
DEP Site ID#	Site Name							
588909	Liberty Oil S	Station #38						
EPA ID#	Estimated N	Number of Er	mployee	s to be Present at	Site			
Description of Site								
County Name	Municipality	у			City	Boro	Twp	State
Schuylkill	Borough of	Tamaqua				\boxtimes		
County Name	Municipality	У			City	Boro	Twp	State
Site Location Line 1			Site Lo	cation Line 2				
700 N. Railroad Street								
Site Location Last Line - City			State	ZIP+4				
Tamaqua			PA	18252				
Site Contact Last Name		First Name	9	MI		Suffix		
Klotz		Norwood						
Site Contact Title Owner			Site Co	ntact Firm				
Mailing Address Line 1			Mailing	Address Line 2	-			
600 E. Main Street								
Address Last Line - City			State	ZIP+4				
Schuylkill Haven			PA	17972				
Phone Ext	FAX		E-mail A	Address				
570-385-5459								
NAICS Codes (Two- & Three-Digit	Codes - List Al	II That Apply)		6-Dig	it Code (C	Optional)	
Site to Client Relationship								-

	IV. FACIL	III INFOR	MATION			
DEP Storage Tank Facility ID# 54-51586	Facility Name Liberty Oil Statio	n 38			Facility Kind MFULS	
Facility Location Line 1 (if different	than Site Location)		Facility Lo	cation Line 2		
Facility Location Last Line - City			State		ZIP+4	
Latitude/Longitude		Latitude		i -	Longitude	
Point of Origin	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
Horizontal Accuracy Measure	Feet		or	. M	eters	
Horizontal Reference Datum Code	North A	American Datum American Datum Geodetic Syster	of 1927 of 1983	W	eters	
Horizontal Collection Method Cod						
Reference Point Code						
Altitude	Feet			or	Meters	
Altitude Datum Name		ational Geodetic orth American V			/D88)	
Altitude (Vertical) Location Datum						
Geometric Type Code						
Data Collection Date		Pace#1				
Source Map Scale Number		In	ch(es)	=	Feet	
	0/	С	entimeter(s)	=	Meters	
Flammable & Combustible Liqu	uid Permit # /if appli	cable)				
State or Municipality that Issue		cable)				
			001117101			
	FACILITY OF					
Same as Owner Identified in Se		ERATOR INF Different than			ion II: identified	below
	ection II.		Owner Iden		ion II; identified	below.
DEP Client ID#	ection II.	Different than	Owner Iden	ified in Sect	ion II; identified Dun & Brads	
Same as Owner Identified in Set DEP Client ID# Organization Name or Registered Individual Last Name	ection II.	Different than	Owner iden de Employer i	ified in Sect		
DEP Client ID# Organization Name or Registered	ection II. CI Fictitious Name	Different than	Employer I	tified in Sect	Dun & Brads	
DEP Client ID# Organization Name or Registered Individual Last Name Additional Individual Last Name	Fictitious Name	Different than lient Type / Cod	Employer I	D# (EIN)	Dun & Brads	
DEP Client ID# Organization Name or Registered Individual Last Name Additional Individual Last Name Mailing Address Line 1	Fictitious Name First Name First Name	Different than lient Type / Cod	Employer I	D# (EIN) Suffix Suffix	Dun & Brads	
DEP Client ID# Organization Name or Registered Individual Last Name Additional Individual Last Name Mailing Address Line 1 Address Last Line - City	Fictitious Name First Name First Name Mailing Address L	Different than lient Type / Cod	Employer I MI ZIP+4	D# (EIN) Suffix C	Dun & Brads SSN SSN	
DEP Client ID# Organization Name or Registered	Fictitious Name First Name First Name Mailing Address L	Different than lient Type / Cod	Employer I MI ZIP+4	D# (EIN) Suffix C	Dun & Brads SSN SSN ountry	

V. C	HANGE OF OWNERSHIP INF	ORMATION	
All Tanks Changed Owners	hip at the Facility		
	ership at the Facility (List all applic	able tank numbers in Se	ction VI.)
	information is noted in Section II.		☐ Yes ☐ No
OWNERSHIP CHANGE FROM (pre	vious owner information)		
Name			
Employer ID# (EIN) or SSN			
Mailing Address Line 1			
Mailing Address Line 2			
Address Last Line - City	State	ZIP	-4
Previous Facility ID#			
Date of Sale/Transfer			
SIG	NATURE & CERTIFICATION OF PREVIO	OUS OWNER	
Previous owner's signature is not ave has attached a deed of transfer of application.	railable. As required, the "new" owner or other proof of ownership to this	r Yes 🗌	No 🗌 N/A
authority to sign this Section for the t	sion to the Department. I certify under 18 PA. C.S.A. §4904 (relating to unswirransfer of permit or registration for the n V is true, accurate and complete to the	orn falsification to author	rities), that I have the
Type or Print Previous Owner Name		, , , , , , , ,	
Previous Owner Signature	Title	Date	

Facility ID# 54-51586

Facility Name: Liberty Oil Station 38

Reference Reference Exempt Exempt Code Code P-Closed In Place ABOVEGROUND TANKS. List all new tanks. If amending information, list only those tanks being amended. Copy this page if more lines are needed UNDERGROUND TANKS. List all new tanks. If amending information, list only those tanks being amended. Copy this page if more lines are needed (If Hazardous (If Hazardous Substance) Substance) CAS# CAS# (If Hazardous Substance) Substance or Petroleum (If Hazardous Substance) Substance or Petroleum R-Removed (If Other Petroleum (If Other Petroleum Substance Name Substance Name **CERCLA Name CERCLA Name** Based Mixture) Based Mixture) VI. STORAGE DESCRIPTION Currently or (Currently or E-Exempt Last Stored) Last Stored) Substance Substance Code Code dies Gas Gas Gas Type or print legibly each regulated storage tank at this facility under your ownership. Capacity (Gallons) Capacity (Gallons) 3000 3000 6000 5000 I-Temporarily Out of Use F-Field Constructed Status Date Status Date (Mo/Day/Yr) (Mo/Day/Yr) Change of Change of 08/12/2008 08/13/2008 08/18/2008 08/18/2008 Install Date (Mo/Day/Yr) Install Date Mo/Day/Yr) 1/1/1985 1/1/1985 1/1/1973 1/1/1983 C-Currently in Use M-Manufactured Type Σ ΣZ Σ Status Status New New œ 2 2 2 Status Status Prev Prev Status Codes: Type Codes: 4 X 4 X K 4 4 4 X Tank# Tank# 001 002 003 004 ä

Facility ID# 54-51586

Facility Name: Liberty Oil Station 38

and place an X in the appropriate box for each component ti	that was installed	stalled.		hat was installed.					chaguina unin ann ann	
Tank Construction & Corrosion Protection (1)	Tank #	Tank #	Tank #	Tank #	Tank #	Tank #	Tank #	Tank #	Tank #	Tank #
A. Unprotected Steel (Single Wall)										
B. Cathodically Protected Steel (Galvanic)										
C. Cathodically Protected Steel (Impressed Current)										
D. Unprotected Steel (Double Wall)										
E. Fiberglass (Single Wall)										
F. Fiberglass (Double Wall)										
G. Steel W/Plastic or Fiberglass Jacket or Double Wall Act 100										
H. Steel With FRP Coating (Act 100 or Equivalent)										
Steel With Lined Interior										
J. Concrete										
O. Cathodically Protected Double Wall Steel (Galvanic)										
P. Cathodically Protected Steel With Liner										
Q. Double Bottom (AST's Only)										
R. Molded Plastic Form (AST's Only)										
S. Stainless Steel										
T. Aluminum									С	

Facility ID# 54-51586

Facility Name: Liberty Oil Station 38

	Underground Piping Construction & Corrosion Protection (2)	Tank #	Tank #	Tank#	Tank #						
<	Bare Steel										
æ.	Cathodically Protected Metallic										
Ö	Copper										
o.	Single Wall Fiberglass										
ш	Single Wall Flexible (Non-Metallic)										
0	None										
	Double Wall Metallic Primary										
7	Double Wall Rigid (FRP) Primary										
Ϋ́.	Double Wall Flexible Primary										
نـ	Trench Liner										
	Aboveground Piping Construction & Corrosion Protection (3)	Tank #									
ď	Carbon Steel										
8	Cathodically Protected Metallic										
Ö	Copper										
0	Single Wall Fiberglass										
ш	Single Wall Flexible (Non-Metallic)										
П.	PVC										
0	None										
	Double Wall - Metallic Primary										
7	Double Wall - Rigid (FRP) Primary										
¥	Double Wall - Flexible Primary										
۲	Stainless Steel										
	Spill Prevention (6) UST Only	Tank #	Tank #	Tank #	Tank#	Tank #					
>	Installed and Liquid Tight										
ż	None										
шi	Fill In Less Than 25 Gallons (Exempt)										
-											
			-7-								

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	Overfill Prevention (7)	Tank#	Tank #	Tank #	Tank#	Tank #					
ď	Overfill Alarm										
B.	Ball Float Valve and No Air Eliminator										, [
ш	. Fill In Less Than 25 Gallons (Exempt)										
z	None										
S	Drop Tube Shutoff Device										
>	Yes (AST only)										
	Emergency Containment (16) ASTs Only	Tank #									
ш	Exempt										
z	No										
>	Yes										
	Secondary Containment (17) ASTs Only	Tank#	Tank #								
ш	Exempt										
ż	No										
>:	Yes										
	Stage I Vapor Recovery (19) USTs Only	Tank#	Tank #								
4	Coax										
Θ.	2 Point										
z	None or Incomplete										
	Stage II Vapor Recovery (20)	Tank #									
∢	Complete Balance System										
Θ.	Complete Assist System										
O	UG Piping Only										
ż	None										
			-			-				-	

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		Tank #	Tank #	Tank #	Tank #						
					-					+	-
	Tank-top Containment Sumps Present (21) USTs Only										
z	None										
S	At some penetrations										
<	A. At all penetrations										
	Under-dispenser Containment Present (22) USTs Only	Tank #	Tank #	Tank #	Tank #	Tank #	12	Tank #	Tank #	Tank #	Tank #
z	N. None										
S	S. At some dispensers										
K	A. Under all dispensers										
	Line Leak Detector Shuts Off Pump (23) USTs Only	Tank #	Tank #	Tank #	Tank #	Tank #	Tank #	Tank #	Tank #	Tank #	Tank #
z	No										
>	Y. Yes										

Facility ID# 54-51586

Facility Name: Liberty Oil Station 38

Š	Write the Tank Number(s) and place an M in the appropriate box for each tank that was removed or closed in place.	box for e	ach tank	that was	removed	or closed	in place.	OF C	SONE		
	Items 2 & 3 below apply to large ASTs and all LISTs	Tank #	Tank #	Tank #	Tank #	Tank# Tank# Tank# Tank# Tank# Tank# Tank# Tank# Tank#	Tank #	Tank #	Tank #	Tank #	Tank #
1	STOO III DIII STOO AAA AAAA AAAA AAAAA AAAAA AAAAA AAAAA AAAA	#001	#002	#003	#004						
- -	Contamination suspected or observed and notification of contamination form was submitted to the appropriate DEP regional office.	×	⊠								
2.	Closure document submitted to the appropriate DEP regional office.	⊠		⊠	×						
6	3. Closure document kept on file by owner.	×	×	×	×						

570-385-5459 CENTER PUINT TANK p.2 PAGE 12/12

2570-PM-BWM0514 Rev. 1:2008 Form

X OWNER CERTIFICATION

I certify under penalty of law that I have personalty examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the Information, I believe that the submitted information is true, accurate, and complete. This registration is conditioned upon compliance with provisions of the Storage Tank and Spill Prevention Act of 1989, all applicable regulations, and with the requirements for obtaining and maintaining a permit required under this Act. I certify my responsibility for assuring the following permit requirements:

- Storage tank systems are in compliance with applicable administrative, technical and operational requirements as specified in Subchapter E for underground tanks or Subchapter F or G for aboveground tanks.
- Tank handling and inspection activities are performed by an individual possessing DEP certification in the appropriate category as required in Subchapters A and B.
- Underground storage tanks meet the applicable financial responsibility requirements of Subchapter H (relating to financial responsibility requirements).
- A Spill Prevention Response (SPR) Plan must be submitted to the appropriate DEP regional office for facilities that have aboveground storage tanks where the total capacity of all aboveground tanks is greater than 21,000 gallons.
- Other state and local permits required for operation of the tank system have been attained.

My signature represents to the Department that I own the storage tank(s) and am aware of the responsibilities and potential liabilities as an "owner" arising under the Storage Tank and Spill Prevention Act of 1989 and all applicable regulations. I am also advised that statements made on this registration is made subject to the penalties of 18 PA. C.S.A. Section 4904 relating to unsworm falsification to authorities.

Type or Print Owner Name	Mr. Norwood Klotz			
Mose E/4		SERTY OF	L CO, THIC	9/26/08
Owner Signature	SECITAGETICLO		•	Date
				,
Information & Invoices she	ould be sent to:			
□ Tank Owner Contact □ Site Contact				
Facility Operator				
Other Responsible Party I	dentified Bolow			
Organization Name or Registere	d Fictitious Name	Emple	oyer ID# (EIN)	Dun & Bradstreet ID#
Individual Last Name	First Name	Mt	Suffix	SSN
Additional Individual Last Name	First Name	MI	Suffix	SSN
Malling Address Line 1	Mailing Address Line 2			
Address Last Line - City		State	ZIP+4	Country
Client to Site (Facility) Relations	ship			

X. INSTALLER / REMOVER CERTIFICATION

This section must be completed by the certified tank handler(s) who is responsible for the installation or removal from service of the aboveground and underground storage tank systems listed in Section VI. Tank modification activity must be submitted on a "Tank Modification Report" form.

SIGNATURE & CERTIFICATION OF INSTALLER(S) / REMOVER(S)

the design, installation and operation standards of the Storage Tank and Spill Prevention Act of 1989 and all applicable regulations. I also certify, under penalty of law as provided in As the certified tank handler responsible for the tank handling activities in the category or categories listed, I certify that all tank handling activities were conducted in compliance with 18 PA C.S.A. 4904 (relating to unsworn falsification to authorities), that the information provided therein is true, accurate and complete to the best of my knowledge and belief.

Tank# Install	Installer/Remover Name	Standard	Certification#	Category	Certification#	Installer/Remover Signature	Date
George	George T. Wilkins		93	UMR	792	There, (Juliano	09/26/08
George	George T. Wilkins		93	UMR	792	Hunge Willam	09/26/08
George	George T. Wilkins		93	UMR	792	Suren Weekin	09/26/08
George	George T. Wilkins		93	UMR	792	A mes Cultin	09/26/08

This section must be completed by the DEP Certified Tank Inspector(s) who is responsible for verifying the installation standards for field constructed tanks and aboveground tanks greater than 21,000 gallons listed in Section VI. (Type or Print legibly) A DEP Certified Inspector may also be responsible for inspecting existing ASTs which are entering regulated service for the first time with no tank handling activities.

SIGNATURE & CERTIFICATION OF INSPECTOR(S)

As the certified tank inspector responsible for verifying tank handling activities and construction standards, I certify that the tank(s) listed below are constructed to appropriate industry standards and, if applicable, to manufacturer's specifications; that the tank(s) have been tested as required by industry standards; and that the tank(s) meet or exceed applicable design and operating standards; and are in compliance with the requirements of the Storage Tank and Spill Prevention Act of 1989, and all applicable regulations. I also certify under penalty of law as provided in 18 PA C.S.A. 4904 (relating to unsworn falsification to authorities), that the information provided herein is true, accurate and complete to the best of my knowledge and belief.

Tank#	Installer/Remover Name	Construction	Individual Certification#	Certification	Company Certification#	Inspector Signature	Date
-							

If a site-specific permit was required for a new tank installation, write the tank number(s) and permit number(s) in the appropriate box XII. SITE SPECIFIC INSTALLATION PERMIT NUMBER

	1000000					was annual de de de la		Contraction State Contraction		A STATE OF THE STA
Site-Specific Installation Permit	Tank#	Tank#	Tank#	Tank#	Tank#	Tank#	Tank#	Tank#	Tank#	Tank#
										-

APPENDIX E

TERMS AND CONDITIONS

LIMITATIONS/STATEMENT OF TERMS AND CONDITIONS

Center Point Tank Services, Inc. exercised reasonable efforts to accomplish the required tasks of this investigation, employing current professional standards. We make no warranties, expressed or implied, as to the merchantability or fitness of this property for a particular purpose. Center Point Tank Services, Inc. is not responsible for independent conclusions, opinions or recommendations made by others based on the information contained herein.

It should be noted that all subsurface investigations are inherently limited in the sense that conclusions are drawn and recommendations developed from point sources such as boring/sampling points. These point sources depict the subsurface conditions at specific times and locations specified in the report. Subsurface conditions may vary spatially over a short distance. Further, the passage of time can result in a change in subsurface conditions.

It should be noted that conditions are based solely on the scope of services and tasks described therein.

APPENDIX C

Monitoring Well and Soil Boring Logs

Table 1.0 Geoprobe Soil Boring Logs—Liberty Oil Company #38 700 North Railroad Street, Tamaqua, PA 18252 Soil Sampling Program Conducted on 1/13/09 & 1/27/09

Boring ID	Depth (Ft)	Description	PID (ppm)	Analytical Interval (ft)
VW-1	1	LOCATED ~1' west of front of office building.	1.14 - 520.55 - 50	
	0-4	Brown gravel, silt and clay (fill). Moist. No odor or stain.	< 0.5	
		Vapor Well Installed has 4' total depth. 2' screen. 2' riser.	VW-1 & VW-1D	
GP-1		LOCATED ~2' north of north end of dispenser area.	11/2	
	0-4	Dark grey gravel, sand and silt. Moist. Strong odor and stain.	>1999	3-4
	4-8	Brown silt and clay. Moist. Moderate odor and stain.	116	
	8-9	Brown silt and clay. Moist. Moderate odor and stain.	396	
	9 (REF)	Refusal on hard brown clay.		
GP-2		LOCATED ~8' north of geoprobe sample location GP-1.	(4.9)	
	0-4	Dark grey gravel, sand and silt. Moist. Very strong odor and stain.	>1999	
	4-8	Brown sand, silt and clay. Moist. Strong odor and stain.	>1999	
	8-11	Red-brown silt and clay, some gravel. Strong odor and stain.	>1999	
	11-12.5	Red-brown silt and clay. Moist. Moderate odor and stain.	292	
	12.5 (REF)	Refusal on hard red-brown clay. Water in hole.		
GP-3		LOCATED ~15' north of geoprobe sample location GP-2.		
6727.77	0-0.5	Blacktop covering.	2 5	
	0.5-4	Dark grey gravel, sand and silt. Moist. No odor or stain.	3.3	
	4-8	Brown silt and clay. Moist. Slight odor. No stain.	7.0	1
	8-12	Brown silt and clay. Moist. Strong odor. No stain.	>1999	
	12-14.5	Red-brown silt and clay. Moist. Very strong odor. No stain.	>1999	14-14.5
GP-4		LOCATED ~15' north of geoprobe sample location GP-3.		
	0-0.5	Blacktop covering.		
	0.5-4	Brown sand, silt and clay. Moist. No odor or stain.	1.2	
	4-5	Brown sand, silt and clay. Moist. No odor or stain.	38.5	-1
- 1	5 (REF)	Refusal on concrete.		

Table 1.0
Geoprobe Soil Boring Logs—Liberty Oil Company #38
700 North Railroad Street, Tamaqua, PA 18252
Soil Sampling Program Conducted on 1/13/09 & 1/27/09

Boring ID	Depth	(Ft) Description	PID (ppm)	Analytical Interval (ft
GP-5		LOCATED ~3' east of geoprobe sample location GP-2.		
- 1	0-0.5	Blacktop covering.		
	0.5-4	Red-brown silt and clay. Moist. No odor or stain.	1.2	
- 3	4-8	Red-brown silt and clay. Moist. Slight odor, no stain.	26.4	
9	8-12	Red-brown silt and clay. Moist. No odor or stain.	78.2	
	12-14	Red-brown silt and clay. Moist. Strong odor, no stain.	>1999	13-14
	14 (REF)	Refusal on hard red-brown clay.		
GP-6		LOCATED ~8' east of geoprobe sample location GP-1.	710	
	0-0.5	Blacktop covering.		
	0.5-4	Red-brown sand, silt and clay. Moist. Strong odor, no stain.	>1999	
	4-8	Red-brown sand, silt and clay. Moist. Strong odor, no stain.	>1999	
	8-12	Red-brown sand, silt and clay. Moist. Strong odor, no stain.	>1999	
	12-15.5	Red-brown silt and clay. Moist. Slight odor, no stain.	68.4	15-15.5
	15.5 (REF)	Refusal on tan rock.		
GP-7		LOCATED ~10' south of geoprobe sample location GP-6.		
	0-0.5	Blacktop covering.		
	0.5-4	Brown silt and clay. Moist. Strong odor, no stain.	>1999	
	4 (REF)	Refusal on concrete.		
GP-8		LOCATED ~2' west of geoprobe sample location GP-7.	0.9	
	0-0.5	Blacktop covering.	3 3	
	0.5-4	Red-brown silt and clay. Moist. Strong odor and stain.	>1999	
	4-5	Red-brown silt and clay. Moist. Strong odor and stain.	>1999	
	5 (REF)	Refusal on concrete.		
GP-9		LOCATED ~3' west of geoprobe sample location GP-8.	6.0	
	0-0.5	Blacktop covering		
	0.5-4	Dark grey sand and silt. Moist. Strong odor and stain.	>1999	
	4-8	Red-brown sand, silt and clay. Moist. Strong odor and stain.	>1999	
	8-9	Red-brown sand, silt and clay. Moist. Strong odor and stain.	1683	8-9
	9 (REF)	Refusal on red-brown rock.		

Table 1.0 Geoprobe Soil Boring Logs—Liberty Oil Company #38 700 North Railroad Street, Tamaqua, PA 18252 Soil Sampling Program Conducted on 1/13/09 & 1/27/09

GP-10		LOCATED ~10' south of geoprobe sample location GP-9.	0.0	
	0-0.5	Blacktop covering.		
	0.5-4	Dark grey sand and silt. Moist. Strong odor and stain.	>1999	
	4 (REF)	Refusal on concrete.		
GP-11	101 197	LOCATED ~1' west of geoprobe sample location GP-10.		
	0-4	Dark grey gravel and silt. Strong odor and stain.	>1999	
	4-8	Red-brown silt and clay. Moist. Strong odor and stain.	1820	
	8-12	Red-brown gravel, sand and silt. Moist. Slight odor and stain.	122.9	
	12-12.5	Red-brown gravel, sand and silt. Moist. Slight odor and stain.	385.8	12-12.5
	12.5 (REF)	Refusal on red rock.		
GP-12		LOCATED ~10' south of geoprobe sample location GP-11.		
	0-4	Red-brown gravel, sand and silt. Moist.	>1999	
	4 (REF)	Refusal on red rock.	6 P	
GP-13		LOCATED ~2' south of southern end of dispenser area.		
	0-0.5	Blacktop covering.	di di	
3	0.5-4	Dark grey gravel, sand, silt and clay. Moist. Strong odor and stain.	>1999	2
	4-8	Red-brown silt and clay. Moist. Strong odor and stain.	>1999	
	8-12	Red-brown silt and clay. Moist. Slight odor, no stain.	32	11-12
	12 (REF)	Refusal on red rock.		
GP-14	25 20	LOCATED ~10° south of geoprobe sample location GP-13.		
	0-0.5	Blacktop covering.		
	0.5-4	Dark grey sand and silt. Moist. Strong odor and stain.	>1999	
	4-8	Red-brown silt and clay. Moist. No odor or stain.	4.4	
	8-10	Red-brown silt and clay. Moist. No odor or stain.	36.4	9-10
	10 (REF)	Refusal on red rock.		

Table 1.0 Geoprobe Soil Boring Logs—Liberty Oil Company #38 700 North Railroad Street, Tamaqua, PA 18252 Soil Sampling Program Conducted on 1/13/09 & 1/27/09

GP-15		LOCATED ~15' south of geoprobe sample location GP-14.		
	0-0.5	Blacktop covering.		
	0.5-4	Dark grey gravel, sand and silt. Moist. No odor or stain.	5.6	
	4-8	Red-brown silt and clay. Moist. No odor or stain.	0.6	
- 1	8-12	Red-brown silt and clay. Moist. No odor or stain.	< 0.5	11-12
7	12 (REF)	Refusal on red rock.		
GP-16		LOCATED ~5' east of geoprobe sample location GP-14.		
	0-0.5	Blacktop covering.		
	0.5-3	Dark grey gravel, sand and silt. Moist. Strong odor and stain.	>1999	2-3
	3 (REF)	Refusal on concrete.		
GP-17	21 22	LOCATED ~15' west of geoprobe sample location GP-1.		
	0-0.5	Blacktop covering.		
	0.5-4	Dark brown to brown silt and clay. Moist. No odor or stain.	< 0.5	
	4-8	Brown silt and clay with some gravel. Moist. No odor or stain.	< 0.5	
	8-12	Brown silt and clay with some gravel. Moist. No odor or stain.	4.5	1
	12-13.5	Red-brown medium-sized gravel and sand. Moist. No odor or stain.	1.3	12-13.5
	13.5 (REF)	Refusal on large red gravel.		
GP-18	37. 77.	LOCATED ~10' north of geoprobe sample location GP-17.		
	0-0.5	Blacktop covering.		
	0.5-2	Concrete.		
	2-4	Black brown sand and silt. Moist. No odor or stain.	0.7	3-4
	4 (REF)	Refusal on concrete.		
GP-19	0.10000011	LOCATED ~5' east of geoprobe sample location GP-18.		
	0-2	Concrete.	1-05/00	
	2-4	Black-brown gravel and sand. Moist. No odor or stain.	< 0.5	
	4-8	Black-brown gravel and sand, with some brick (fill). Moist. No odor or stain.	1.7	
	8-12	Brown silt and clay. Moist. Slight odor, no stain.	41.3	7
	12-13	Brown silt and clay. Wet. Moderate odor, no stain.	902	12-13
	13 (REF)	Refusal on rock.		

Table 1.0 Geoprobe Soil Boring Logs—Liberty Oil Company #38 700 North Railroad Street, Tamaqua, PA 18252 Soil Sampling Program Conducted on 1/13/09 & 1/27/09

GP-20		LOCATED ~15' north of geoprobe sample location GP-19.		
	0-4	Grey gravel and sand (fill). Moist. No odor or stain.	5.0	
	4-8	Yellow-brown gravel and sand (fill). Moist. No odor or stain.	1.8	
	8-11.5	Brown gravel and sand. Moist. Moderate odor, no stain.	1148	
	11.5 (REF)	Refusal on rock.		
GP-21		LOCATED ~2' south of monitoring well location MW-2.		
	0-4	Grey gravel and sand (fill). Moist. No odor or stain.	1.3	
	4-6	Grey small cobble, large gravel and sand. Moist. No odor or stain.	1.5	5-6
	6 (REF)	Refusal on small cobble.		
GP-22		LOCATEED ~2' north of monitoring well location MW-2.		
	0-3	Grey small cobble, large gravel and sand. Moist. No odor or stain.	< 0.5	
	3 (REF)	Refusal on small cobble.		
GP-23		LOCATED ~10' east of geoprobe sample location GP-20.	98	
	0-4	Black gravel and silt (coal and fill). Moist. No odor or stain.	1.9	
	4-8	Void. Black gravel and silt (coal and fill). Moist. No odor or stain.	1.7	1
	8-9	Dark brown cobble, gravel, sand and silt. Moist. No odor or stain.	0.9	8-9
	9 (REF)	Refusal on cobble.		
GP-24	1.00(0.000)	LOCATED ~10° south of geoprobe sample location GP-17.	93	
	0-0.5	Blacktop covering.		
	0.5-4	Brown silt and clay. Moist. No odor or stain.	1.2	
	4-8	Brown silt and clay with small gravel. Moist. No odor or stain.	5.2	
	8-12	Brown silt and clay with small gravel. Moist. No odor or stain.	6.7	1
	12-15.5	Brown silt and clay with small gravel. Moist. No odor or stain.	3.7	14-15.5
	15.5 (REF)	Refusal on rock. Water in hole.	3 3	
GP-25		LOCATED ~10° south of geoprobe sample location GP-24.		
	0-0.5	Blacktop covering.		
	0.5-4	Brown silt and clay. Moist. No odor or stain.	1.1	1
	4 (REF)	Refusal on concrete.		

Table 1.0 Geoprobe Soil Boring Logs—Liberty Oil Company #38 700 North Railroad Street, Tamaqua, PA 18252 Soil Sampling Program Conducted on 1/13/09 & 1/27/09

GP-26		LOCATED ~2' east of geoprobe sample location GP-25.		
	0-0.5	Blacktop covering.		
- 3	0.5-4	Light brown silt and clay. Moist. No odor or stain.	5.8	
	4 (REF)	Refusal on concrete.		
GP-27	303 308	LOCATED ~5' north of geoprobe sample location GP-25 and ~5' east of vapor well location VW-1.		
	0-0.5	Blacktop covering.	3	
	0.5-4	Brown silt and clay. Moist. No odor or stain.	5.4	
	4-8	Brown silt and clay. Moist. No odor or stain.	1.3	
	8-12	Brown silt and clay with some small gravel. Moist. No odor or stain.	4.6	
	12-14	Brown silt and clay with some large gravel. Moist. No odor or stain.	15.0	13-14
	14 (REF)	Refusal on gravel.	3	-
GP-28	arrent &	LOCATED ~10'east of geoprobe sample location GP-25.	2	
11.00.11.00	0-0.5	Blacktop covering.	1	
	0.5-4	Black gravel, sand, silt and clay. Moist. Strong odor and stain.	>1999	
- 1	4-8	Brown gravel, silt and clay. Moist. Moderate odor, no stain.	462	
	8-12	Brown gravel, silt and clay. Moist. No odor or stain.	22.6	
	12-15.5	Brown gravel, silt and clay. Moist. No odor or stain.	34.7	14-15.5
	15.5	Refusal on large gravel.		
GP-29	1310459	LOCATED ~5' south of geoprobe sample location GP-28.	7-	
	0-0.5	Blacktop covering.		
	0.5-4	Black gravel and sand. Moist. Moderate odor, no stain.	365	
	4-8	Brown silt and clay. Moist. Moderate odor, no stain.	423	
	8-10.5	Brown silt and clay, some gravel. Moist. No odor or stain.	47.6	9-10.5
	10.5 (REF)	Refusal on gravel.	2	
GP-30		LOCATED ~5' west of geoprobe sample location GP-28.		
	0-0.5	Blacktop covering.		
	0.5-4	Black silt and clay. Moist. Strong odor and stain.	>1999	
	4	Move to delineate impacted soil within top 4'.	<u> </u>	

Table 1.0 Geoprobe Soil Boring Logs—Liberty Oil Company #38 700 North Railroad Street, Tamaqua, PA 18252 Soil Sampling Program Conducted on 1/13/09 & 1/27/09

GP-31		LOCATED ~2' west of geoprobe sample location GP-30.		
	0-0.5	Blacktop covering.		
	0.5-4	Grey-brown sand, silt and clay. Moist. No odor or stain.	19.7	3-4
	4 (REF)	Refusal on concrete.		
GP-32	101 192	LOCATED ~10' west of geoprobe sample location GP-29.	2 3	
	0-0.5	Blacktop covering.		
	0.5-4	Dark grey gravel, sand and silt. Moist. No odor or stain.	20.3	3-4
	4 (REF)	Refusal on concrete.		
GP-33	79 79	LOCATED ~2' north of monitoring well location MW-3.	8 8	
	0-0.5	Blacktop covering.		
	0.5-4	Black gravel, sand and silt. Moist. Strong odor and stain.	>1999	
	4-8	Brown silt and clay. Moist. No odor or stain.	14.1	
	8-12	Brown silt and clay. Moist. No odor or stain.	21.9	
	12-13.5	Brown silt and clay, with some gravel. Moist. Slight odor, no stain.	103.5	12-13.5
	13.5 (REF)	Refusal on gravel.	2 (2	
GP-34	1/2/2/10/00/07	LOCATED ~8' west of geoprobe sample location GP-33.	0 3	1
	0-0.5	Blacktop covering.	2 2	
	0.5-4	Black-brown gravel, sand and silt. Moist. Moderate odor, no stain.	408	1
	4-8	Brown silt and clay. Moist. No odor or stain.	4.0	
		Move to delineate impacted soil within the top 4'.	33 (3	4
GP-35		LOCATED ~8' west of geoprobe sample location GP-34.		
	0-0.5	Blacktop covering.		8
	0.5-4	Brown gravel, silt and clay. Moist. No odor or stain.	3.1	
	4-8	Brown gravel, silt and clay. Wet. Water in hole. No odor or stain.	3.6	7-8

TABLE

GEOPROBE SOIL QUALITY BORING LOG

LIBERTY OIL COMPANY #38 700 NORTH RAILROAD STREET TAMAQUA, PA

Boring ID	Date	Depth (ft)	Description	PID Reading (ppm)	Analytical Interval (ft)
LO-1	1/14/2010	0-3	Dark brown.	0	Ī
		3-4	Same as above.	7.9	3-4
		4-5	Same as above.		
		5-6	Dark brown coarse sand.	53.7	1
		7-8	Brown-tan clay.	>1,600	7-8
		8-10	Same as above. Saturated.	700-800	
		10-11.2	Same as above. Saturated.	<60	10.5-11.2
		11.2	Refusal.	13230	(1 m 1 m 2 m 2 m 2 m 2 m 2 m 2 m 2 m 2 m
LO-2	1/14/2010	0-4	Brown-black soil with coal gravel.	<10	î —
30733063		4-7.2	Brown-tan with coarse gravel.	<5	6.5-7
		7.2	Refusal.	1000	1000000
LO-3	1/14/2010	0-0.5	Blacktop.	0	i e
255555		0.5-3.5	Brown-black soil with coarse sand.	1.2	1
		3.5-4	Brown soil, clay. Moist.	0.7	1
		4-6	Tan soil. Moist. Band of coarse gravel at 5.5 ft.	0	1
		6-8	Brown clayey soil. Moist.	4.8-0	1
		8-9	Same as above.		1
		9-12	Tan-brown soil with coarse gravel.	0	11-12
		12	Refusal.		
LO-4	1/14/2010	0-1	Fill, coarse sand to gravel.	0	t
		1-4	Dark brown clayey soil with cobbles.	0	1
		4-6	Same as above.		5-6
		6	Water encountered.		5-6
		6-8	Tan-brown clayey soil with coarse sand. Saturated.	6	1
		8-12	Same as above with quartz layer at 10.5 ft.	0	1
LO-5	1/14/2010	0-3.5	Fill.		+
LO-J	1/14/2010	3.5-4	Grey cobbles with quartz.	0	1
		4-8	Flour (Fill).	0	7-8
		8.4	Refusal.		/-0
LO-6	1/14/2010	0-4	Flour (Fill).	0	+
1.0-6	1/14/2010	4-6	Flour (Fill).	0	5-6
		6.4	Refusal. No water encountered.		3-6
10.7	1/14/2010	_	NAME OF TAXABLE PARTY O		-
LO-7	1/14/2010	0-4	Flour (Fill). Same as above.	0	1
		4-8		0	1
		8-12	Same as above.	0	
		12-15	Same as above.	0	14-15
		15	Refusal. No water encountered.		
LO-8	1/14/2010	0-4	Flour (Fill).	0	12/07/09/
		4-7.7	Same as above.	0	6.5-7.5
		7.7	Refusal.		
LO-9	1/14/2010	0-4	Flour (Fill).	0	
		4-8	Same as above.	0	
		8	Water encountered.	1/1/200	
		8-10	Dark coarse sand and cobbles.	7.9	1000100000
		10-12	Tan-brown clayey soil with coarse sand.	>800	11-12

TABLE

GEOPROBE SOIL QUALITY BORING LOG

LIBERTY OIL COMPANY #38 700 NORTH RAILROAD STREET TAMAQUA, PA

Boring ID	Date	Depth (ft)	Description	PID Reading (ppm)	Analytical Interval (ft)
LO-10	1/14/2010	0-3	Fill.	0	
		3-4	Four (Fill).	0	
		4-6	Same as above with dark brown soil.	0	5-6
		6	Refusal. No water encountered.		86
LO-11	1/14/2010	0-4	Fill, tan and brown soil with coarse sand and cobbles.	0	
		4-4.2	Same as above.	0	l
		4.2	Refusal. No water encountered.		No Sample
LO-12	1/14/2010	0-4	Fill, tan-brown-black soil with coarse sand to cobble.	0	
		4-4.2	Same as above.	0	
		4.2	Refusal. No water encountered.		No Sample
LO-13	1/14/2010	0-2	Fill.		
W.C. 7 (S. 8. 5)		2-4	Dark brown soil with coarse gravel.	>1,700	3-4
		4-6	Same as above.	>1,500	100,000
		6-8	Tan-brown clayey soil.	179	
		8	Water encountered.	288508	
		8-10	Same as above.		
		10-12	Reddish tan clayey soil.	53.2	11-12
		12	Refusal.		
LO-14	1/14/2010	0-4	Fill, cobbles to coal dust.	>1,600	Ť –
		4-5	Same as above.	18	
		5-8	Tan-brown silt with cobbles.	5900	
		5.5-6	Moist.		
		8-12	Same as above.	600	9-10
		12-12.5	Water encountered.		
		12-13	Same as above.	240	12-13
		13	Refusal.		
LO-15	1/14/2010	0-4.75	Fill with coarse gravel to cobbles.	>1,300	3-4
		4.75	Refusal.	1.2	
LO-16	1/14/2010	0-4	Fill with coarse sand and cobbles.	1284	
100.000.000.00		4-5	Same as above.	-V-1886-1-	
		5-8	Tan-brown silt with cobbles.	>350	5-6
		8-12	Same as above with cobbles at 10.5 ft.	24.2	11-12
LO-17	1/14/2010	0-4	Fill with cobbles.	100.6	3-4
200302000		4-8	Same as above.	37.6	5-6
		7	Water encountered.	2000000	373,010
LO-18	1/14/2010	0-4	Fill.	1333	1
		4-5	Same as above.	1200	4-5
		5-7	Tan-brown silt with cobbles.	7700	185070.1
		7	Refusal.	200.000	
LO-19	1/14/2010	0-4	Fill with cobbles.	4.7	3-4
277.372		4	Refusal.	820	5000

ft = feet

ppm = parts per milion

GEOPROBE SOIL BORING LOGS MARCH 22, 2016

LIBERTY OIL COMPANY #38 700 NORTH RAILROAD STREET TAMAQUA, PA

Boring ID	Date	Recovery (ft)	Depth (ft)	Description	PID Reading (ppm)	Analytical Interval (ft
SB-1	3/22/2016	4.5	0-5	Fill material, black sand (coal), redish brown, light brown and gray	0	
STATE OF STATE OF	77777777777	61/0107		sand silt and gravel, moist		
		4.0	5-10	Same as above, more gravel	0	
			10-12	Same as above, less gravel	0	11.5
			12	End of boring - refusal		
SB-2	3/22/2016	4.5	0-1	Asphalt cap, gray fill gravel and sand, moist	0	
			1-2.5	Reddish brown sandy silt with cobbles, moist	0	
			2.5-4.5	Black coal sand and gravel, moist. 2" wet lense at 3'	0	
			4.5-5	Cobble at 4.5	0	
		4.0	5-10	Black coal sand and gravel, few cobbles, moist	0	
		2.0	10-13	Gray fossiliferous shale fragments and gray sand, moist	0	
			13-15	Brown sand and silt, trace gravel, moist	0	15
			15-17	Brown sand, silt, and gravel, moist 15-16, wet 16-17		15
			17	End of boring	0	_
SB-3	3/22/2016	3.0	0-1	Fill gavel and sand, moist	0	
			1-2	Black coal sand, silt, and gravel, moist	0	
			2-3.5	Dark brown silt, trace fine gravel, moist	0	
			3.5-5	Medium brown silty clay, some sand, moist	0	
		3.0	5-10	Reddish orange brown clayey silt, some sand and gravel, moist	<1	
		3.0	10-12	As above, so clay	<1	11
		1000000	12	End of boring		57784
SB-4	3/22/2016	3.5	0-5	Dark brown to black sand silt, and gravel, few cobbles, moist	0	†
		1.5	5-10	As above with more cobbles	0	
		2.5	10-12	Dak brown to reddish brown sand, moist.	0	11
		(4.80)	12-12.5	Wet silt and sand lense	0	0.560
			12.5-13	Cobble	0	
			13	End of boring		
SB-5	3/22/2016	2.5	0-5	Asphalt cap, dark brown to black silty sand, moist	0	
200333		3.0	5-9	Buff sandstone cobbles, dry	0	
			9-10	Medium brown clay, some silt, sand and gravel, moist	0	10
			10	End of boring		
SB-6	3/22/2016	2.5	0-0.5	Asphalt cap	0	
			0.5-5	Black coal sand, silt, and gravel, moist	0	
		3.0	5-7	Orange brown and light gray weak mottling, moist	0.5	7
		137972	7	End of boring, refusal		. 950
SB-7	3/22/2016	3.5	0-0.5	Asphalt cap	0	
		1.0000			50 @ 1'	
			0.5-4.5	Black sand silt and gravel, moist. Wet lense at 4'	350 @ 3"	3
			4.5-7	Light gray sand, silt, and gravel, moist	5 @ 5'	5
			7-8	Medium brown clayey silt, moist	0.3 @ 7	
					0@8	
en e	2/22/2016	2.5	8	End of boring (low water table ~7-7.5')	-	_
SB-8	3/22/2016	2.5	0-0.5	Asphalt cap	0	
			0.5-4.5	Black sand, silt and gravel, moist	<1	
			4.5-5	Light gray sand, silt, and gravel, moist	<1	
		4.0	5-6.5	Black sand, silt, and gravel, moist	<1	6
			6.5-8	Light brown sand, wet	<1	
			- 8	End of Boring		

ft = feet

ppm = parts per milion

GEOPROBE SOIL BORING LOGS JANUARY 25-26, 2018

LIBERTY OIL COMPANY #38 700 NORTH RAILROAD STREET TAMAQUA, PA

Boring ID	Date	Recovery (ft)	Depth (ft)	Description	PID Reading (ppm)	Analytical Interval (ft)
SB-9	1/25/2018	4.0	0-1	Medium brown clayey silt, firm, moist	0	
			1-3	Black coal sand, silt, and gravel, moist	0	
			3-4.5	Grayish brown silt and sand, moist	5	3.5
			4.5-5	Very weathered Sandstone, wet	0	
		3.0	5-6.5	Gray fine sand, wet	0	
			6.5-8	Orange brown silt and sand to buff silt and sand, moist	0	
			8	End of boring		
SB-10	1/25/2018	4.0	0-0.5	Asphalt cap	0	
		5.5.67	0.5-3	Black coal sand, silt, and gravel, moist	0	
			3-5	Gray fine sand and silt, moist; wet 4-5	0	3.5
		3.0	5-8	Gray to brown silty sand; water in sleeve, no petroleum odor	0	
		Collection .	8	End of boring	0	
SB-11	1/25/2018	3.0	0-0.5	Asphalt cap	0	
15975			0.5-3	Brownish gray fill gravel and silt, moist	0	
			3-4	Dark brown sand and gravel, moist	7@3'	4
		2.00	4-5	Black coal sand, silt, and gravel, moist	10 @ 5'	
		2.0	5-8	Clayey silt, moist	10-15	7
			8	End of boring		
SB-12	1/26/2018	4.0	0-0.5	Asphalt cap	0	
			0.5-2	Dark brown silt and sand, coal and weathered coal, no odors, moist	0	2
			2-4	As above, wet, no odors	0	10.000
			4-5	Gray and pale reddish brown mottled silt and sand, moist	0	
		2.0	5-6.5	Black silt and sand, water in sleeve, possibly from upper inerval	0	
			6.5-8 8	Brown silty clay, faint mottling and redox spots, smooth, moist End of boring	0	

ft = feet

ppm = parts per milion

CENTER POINT TANK BORING MW-1 SERVICES, INC. No.: PROJECT NO .: DATE: 1/19/09 DRILLING METHOD: AIR ROTARY PROJECT TITLE: LIBERTY OIL CO. STATION #38-DRILLING COMPANY: C.S. GARBER & SONS, BOYERTOWN, PA TAMAQUA PROJECT LOCATION: 700 N. RAILROAD STREET BOREHOLE DIAMETER (IN.) WATER LEVEL (FT): ~15' TAMAQUA, PENNSYLVANIA 10 INCH BELOW GROUND SURFACE. (~20' SOUTH OF GARAGE BUILDING NEAR RR TRACK; ~80 FEET WEST OF ROUTE 309/RAILROAD STREET.) WEATHER CONDITIONS: 20 DE- LOGGED BY: GREES, SNOW FLURRIES. R.S. TEREFENKO, PG

DEPTH (FT)	LITHOLOGIC DESCRIPTION	PID READING	BLOW COUNTS		AMPLE DATA	A ID#	COMMENTS
0	0-0.5'- GRASS LAWN SURFACING.	READING	COUNTS	INTERVAL	TIFE	10#	COMMENTS
_	0.5–8': CUTTINGS: COAL SILT &	<1.0					-No Odor/No Stain-
3	GRAVEL (FILL).						ING
_							
6							No Odor/No Stain-
-	8'-10' :Cuttings: Brown Silt, Clay, & Gravel, Moist, (Fill).	<1.0					
9							
-	10' - 22' CUTTINGS: COBBLES & GRAVEL-SEMI-ANGULAR, W/ SOME SILT,						
12	SAND & CLAY, (ALLUVIUM).	<1.0					No ODOR/NO STAIN-
7-							
15	15'-STEAM VAPORS IN AIR RETURN INDICATING FIRST WATER.						
_							
18							
-	20.000 A 10.000 A 10.000 A 10.000						RETURNED WATER HAD NO ODOR/
21	20' BOTTOM OF WELL/WET-MAKING WATER.	<1.0					NO STAINING.
_	22' END OF BORING.						MW-1 CONSTRUCTION:
24							- 4" DIA. PVC - 5" RISER 15" 0.02" SLOT SCREEN
-							#2 NJ MORIE SAND TO 1' ABOVE SCREEN.
27							1' BENTONITE ABOVE SAND, GROUT TO
-							GRADE, FLUSH MOUNTED W/LOCKING CAP
30							DEVELOP ± 5 GPM /30 MINUTES (SUB PUMP).
_							

NOTES: LOOSE ALLUVIAL GRAVEL KEPT RUNNING BACK INTO HOLE, PREVENTING SETTING WELL AT DESIRED DEPTH. SET TEMP 8-INCH STEEL CASING TO 22' TO SET WELL.

SHEET 1 OF 1

CENTER POINT TANK BORING MW-2 SERVICES, INC. No.: PROJECT NO.:06-8-3483 DATE: 1/20/09 DRILLING METHOD: AIR ROTARY PROJECT TITLE: LIBERTY OIL COMPANY #38 DRILLING COMPANY: C.S. GARBER & SONS, BOYERTOWN, PA PROJECT LOCATION: 700 NORTH RAILROAD STREET WATER LEVEL (FT): ~15' BOREHOLE DIAMETER (IN.) TAMAQUA, PA 18252 8 INCH BELOW GROUND SURFACE. (~25' NORTH OF FORMER DISPENSER AREA) WEATHER CONDITIONS: 20 DE-LOGGED BY: GREES. SUNNY. R.S. TEREFENKO, PG BLOW DEPTH PID SAMPLE DATA (FT) LITHOLOGIC DESCRIPTION READING COUNTS INTERVAL 10# COMMENTS TYPE 0 0-5'- CUTTINGS: BLACK-BROWN GRAVEL, NO ODOR OR STAIN. SAND AND SILT. MOIST. 2 4 2.3 NO ODOR OR STAIN. 5-7'-CUTTINGS: LIGHT GREY GRAVEL AND SAND, MOIST. 6 7 - 12' - CUTTINGS: GREY MEDIUM SIZE 8 NO ODOR OR STAIN. GRAVEL AND SAND. MOIST. 10 12 12-17- FEW CUTTINGS: DARK BROWN SAND SLIGHT ODOR, NO STAIN. 31.0 AND GRAVEL. HARD. MOIST. (SOIL GAS) 14 16 MW-2 CONSTRUCTION: - 20' TOTAL DEPTH 17' FIRST WATER. - 4" DIA. PVC -2" RISER 18" 0.02" SLOT SCREEN 17-22' FEW CUTTINGS: DARK BROWN CAND #2 #2 MORIE SAND TO 185 18 AND SILT. MOIST. MODERATE ODOR. 6" ABOVE SCREEN. (SOIL GAS) 6" BENTONITE ABOVE SAND, GROUT TO GRADE. FLUSH MOUNTED W/ LOCKING CAP DEVELOP 5 GPM /60 20 22' END OF BORING. MINUTES (SUB PUMP). SHEET 1 OF 1

CENTER POINT TANK BORING **MW-3** SERVICES, INC. No.: PROJECT NO.:06-8-3483 DATE: 1/21/09 DRILLING METHOD: AIR ROTARY PROJECT TITLE: LIBERTY OIL COMPANY #38 C.S. GARBER & SONS, BOYERTOWN, PA DRILLING COMPANY: PROJECT LOCATION: 700 NORTH RAILROAD STREET WATER LEVEL (FT): ~5' BOREHOLE DIAMETER (IN.) TAMAQUA, PA 18252 8 INCH BELOW GROUND SURFACE. (~15' SOUTH OF FORMER DISPENSER AREA) WEATHER CONDITIONS: 20 DE-LOGGED BY: GREES. SUNNY. R.S. TEREFENKO, PG BLOW SAMPLE DATA DEPTH PID (FT) LITHOLOGIC DESCRIPTION READING COUNTS INTERVAL 10# COMMENTS TYPE 0 0-5'- CUTTINGS: BLACK-BROWN GRAVEL, 1947 -STRONG ODOR, NO STAIN. SAND AND SILT. MOIST. 2 4 SLIGHT ODOR, NO STAIN. 5-10'-CUTTINGS: BLACK-BROWN GRAVEL, 417 SAND AND SILT. MOIST. 6 8 10 .10' FIRST WATER. 12 SLIGHT ODOR, NO STAIN. 10-18'-CUTTINGS: BROWN COBBLE. 68.7 LARGE GRAVEL AND SAND. WET. 14 MW-3 CONSTRUCTION: - 20' TOTAL DEPTH 16 - 4" DIA. PVC -2' RISER 18' 0.02" SLOT SCREEN #2 #2 MORIE SAND TO 6" ABOVE SCREEN. 18 6" BENTONITE ABOVE 18-22- CUTTINGS: GREY GRAVEL AND SAND 57.7 SAND, GROUT TO MOIST. GRADE, FLUSH MOUNTED W/ LOCKING CAP DEVELOP 5 GPM /60 22' END OF BORING. MINUTES (SUB PUMP). 20 SHEET 1 OF 1

CENTER POINT TANK BORING MW-4 SERVICES, INC. No.: PROJECT NO.:06-8-3483 DATE: 8/25/09 DRILLING METHOD: AIR ROTARY DRILLING COMPANY: B.L. MYERS BROS., GLENMOORE, PA PROJECT TITLE: LIBERTY OIL COMPANY #38 WATER LEVEL (FT): ~5' PROJECT LOCATION: 700 NORTH RAILROAD STREET BOREHOLE DIAMETER (IN.) TAMAQUA, PA 18252 8 INCH BELOW GROUND SURFACE. (~20' EAST OF STATION BUILDING) WEATHER CONDITIONS: 75 DE-LOGGED BY: GREES. SUNNY. PATRICK S. CRAWFORD, PG DEPTH PID BLOW SAMPLE DATA (FT) LITHOLOGIC DESCRIPTION READING COUNTS INTERVAL 10# COMMENTS TYPE 0 0-4'- FILL 250 STRONG ODOR, NO STAIN. 2 4 4-5.5'-QUARTZ LAYER (CLEAR TO WHITE STRONG ODOR, NO STAIN. GRANITIC) 675 6 5.5' - 10' COAL SPOILS 8 10 12 STRONG ODOR PRODUCT 710 14' FIRST WATER BLOWING FROM CRACKS IN THE GROUND SURFACE 14' - 18' - CUTTINGS: BROWN, SANDSTONE WET 14 16 MW-4 CONSTRUCTION: - 19' TOTAL DEPTH - 4" DIA. PVC -4' RISER 16' 0.02" SLOT SCREEN 18 #2 MORIE SAND TO 6" 19' END OF BORING. 765 ABOVE SCREEN. 6" BENTONITE ABOVE SAND, GROUT TO GRADE, FLUSH MOUNTED W/ LOCKING CAP 20 DEVELOP 5 GPM /60 SHEET 1 OF 1

CENTER POINT TANK BORING MW-5 SERVICES, INC. No.: PROJECT NO.:06-8-3483 DATE: 8/25/09 DRILLING METHOD: AIR ROTARY PROJECT TITLE: LIBERTY OIL COMPANY #38 B.L. MYERS BROS., GLENMOORE, PA DRILLING COMPANY: PROJECT LOCATION: 700 NORTH RAILROAD STREET WATER LEVEL (FT): ~14' BOREHOLE DIAMETER (IN.) TAMAQUA, PA 18252 6 INCH BELOW GROUND SURFACE. WEATHER CONDITIONS: 75 DE-LOGGED BY: GREES. SUNNY. PATRICK S. CRAWFORD, PG BLOW SAMPLE DATA DEPTH PID (FT) LITHOLOGIC DESCRIPTION READING COUNTS INTERVAL 10# COMMENTS TYPE 0 0-5'- CUTTINGS: FILL SAND AND GRAVEL 0 -No ODOR, NO STAIN. 2 4 5-10'-CUTTINGS: COAL SPOILS NO ODOR, NO STAIN. 0 6 8 10 10-18'-CUTTINGS: BROWN SANDSTONE 12 NO ODOR, NO STAIN. 0 14' FIRST WATER. 14 MW-5 CONSTRUCTION: - 18' TOTAL DEPTH 16 - 4" DIA. PVC -3' RISER 15" 0.02" SLOT SCREEN #2 MORIE SAND TO 6" 18' END OF BORING. ABOVE SCREEN. 18 **6" BENTONITE ABOVE** 0 SAND, GROUT TO GRADE, FLUSH MOUNTED W/ LOCKING CAP DEVELOP 5 GPM /60 MINUTES (SUB PUMP). 20 SHEET 1 OF 1

CENTER POINT TANK BORING MW-6 SERVICES, INC. No.: PROJECT NO.:06-8-3483 DATE: 8/25/09 DRILLING METHOD: AIR ROTARY B.L. MYERS BROS., GLENMOORE, PA PROJECT TITLE: LIBERTY OIL COMPANY #38 DRILLING COMPANY: PROJECT LOCATION: 700 NORTH RAILROAD STREET WATER LEVEL (FT): ~12' BOREHOLE DIAMETER (IN.) TAMAQUA, PA 18252 6 INCH BELOW GROUND SURFACE. WEATHER CONDITIONS: 75 DE-LOGGED BY: GREES. SUNNY. PATRICK S. CRAWFORD, PG BLOW SAMPLE DATA DEPTH PID (FT) LITHOLOGIC DESCRIPTION READING COUNTS INTERVAL 10# COMMENTS TYPE 0 0-5'- CUTTINGS: FILL, SAND AND GRAVEL 0 -No ODOR, NO STAIN. 2 4 5-10'-COAL SPOILS No. NO STAIN. 0 6 8 10-15'-BROWN SANDSTONE NO ODOR, NO STAIN 10 12' FIRST WATER 12 NO ODOR, NO STAIN. 0 14 15' END OF BORING MW-6 CONSTRUCTION: - 15' TOTAL DEPTH 16 - 4" DIA. PVC - 2' RISER 13" 0.02" SLOT SCREEN #2 MORIE SAND TO 6" ABOVE SCREEN. 18 6" BENTONITE ABOVE SAND, GROUT TO GRADE, FLUSH MOUNTED W/ LOCKING CAP DEVELOP 5 GPM /60 MINUTES (SUB PUMP). 20 SHEET 1 OF 1

CENTER POINT TANK BORING MW-7 SERVICES, INC. No.: DRILLING METHOD: GEOPROBE 6620 WITH HOLLOW PROJECT NO.:06-8-3483 DATE: 1/14/2010 STEM AUGER/AIR ROTARY PROJECT TITLE: LIBERTY OIL COMPANY #38 DRILLING COMPANY: B.L. MYERS BROS., GLENMOORE, PA PROJECT LOCATION: 700 NORTH RAILROAD STREET WATER LEVEL (FT): ~15' BOREHOLE DIAMETER (IN.) TAMAQUA, PA 18252 6 INCH BELOW GROUND SURFACE. WEATHER CONDITIONS: 30's. LOGGED BY: PATRICK S. CRAWFORD, PG CLEAR BLOW SAMPLE DATA DEPTH PID (FT) LITHOLOGIC DESCRIPTION READING COUNTS INTERVAL 10# COMMENTS TYPE 0 0-5'- GRAVEL-BLACK COAL SPOILS (FILL) 2 4 3284 5 - 9'-LEAN CLAY, BROWN TO ORANGE 6 8 9-10' - RED CLAY (AUGER REFUSAL AT 10') 10-17'-RED CLAY 10 12 14 15' WATER ENCOUNTERED 16 MW-7 CONSTRUCTION: - 20' TOTAL DEPTH - 4" DIA. PVC 17-20' ROUNDED QUARTZ COBBLES. -2' RISER ABUNDANT WATER 18" 0.02" SLOT SCREEN #2 MORIE SAND TO 1' 18 ABOVE SCREEN. 1' BENTONITE ABOVE SAND, GROUT TO GRADE. FLUSH MOUNTED W/ LOCKING CAP 20 DEVELOP 5 GPM /60 20' - END OF BORING MINUTES (SUB PUMP). SHEET 1 OF 1

CENTER POINT TANK BORING **MW-8** SERVICES, INC. No.: DRILLING METHOD: GEOPROBE 6620 WITH HOLLOW PROJECT NO.:06-8-3483 DATE: 1/14/2010 STEM AUGER/AIR ROTARY PROJECT TITLE: LIBERTY OIL COMPANY #38 DRILLING COMPANY: B.L. MYERS BROS., GLENMOORE, PA PROJECT LOCATION: 700 NORTH RAILROAD STREET WATER LEVEL (FT): ~14' BOREHOLE DIAMETER (IN.) TAMAQUA, PA 18252 6 INCH BELOW GROUND SURFACE. WEATHER CONDITIONS: 30's, LOGGED BY: PATRICK S. CRAWFORD, PG CLEAR BLOW SAMPLE DATA DEPTH PID (FT) LITHOLOGIC DESCRIPTION READING COUNTS INTERVAL 10# COMMENTS TYPE 0 0-5'- FILL COAL 2 4 >550 5 - 10'-RED SILTY SAND, STRONG ODOR 6 8 10-18' - RED SILT WITH 1/4" DIAMETER 10 ROCK COBBLES 12 14' - WATER ENCOUNTERED 14 16 MW-7 CONSTRUCTION: - 20' TOTAL DEPTH - 4" DIA. PVC -5' RISER 15' 0.02" SLOT SCREEN 18-20' GRAVEL AND SILT #2 MORIE SAND TO 1' 18 ABOVE SCREEN. 4' BENTONITE ABOVE SAND, GROUT TO GRADE. FLUSH MOUNTED 20' - END OF BORING W/ LOCKING CAP 20 DEVELOP 5 GPM /60 MINUTES (SUB PUMP). SHEET 1 OF 1

____ INC ___

Storage Tank Management Services

Well ID MW-9

Site Name:	Liberty Oil #38	Job # 08-12-4292	Date: April	30, 2012
Site/Boring Lo	cation: 700 N. Railroad St	Subcontractor:	Eichelbergers, Inc.	
on eastern side	e of traffic island, between	Drilling Method: Air rotary		
Weather:	Sunny, 50s		Borehole Dia.:	8"
CPTS oversight	t: Rachel Burkart, P.G.		DTW: NA	DTR: NA

—	41- 11 1	S	- I nin	I 6
$\overline{}$	epth (feet)	Description	PID	Comments/Recovery
0 1 2	0-3	Dark red/brown silt, sand and gravel, moist	0	
3	3-7	As above, dark gray little coal and wood backfill	0	
5		indic cost one wood backing	0	
7 8	7-12	Gray, sand, silt and gravel, moist	0	Harder drilling
9			0	
11 12	12-16	Shale and quartz gravel and sand, moist	0	
13 14	12-10	Shale and quartz graver and sand, moist	"	
15			0	
16 17	16	finer cuttings, increased moisture, hydrocarbon odor	140	
18 19	18-26	Sand and gravel, wet, hyrocarbon odor	450	
20 21			225	
21 22 23				
24		As above, larger gravel	100 45	Well Construction Detail: 18' - 4" PVC well screen
25 26 27		End of Boring 26' collapsed to 20'		2' - 2" solid PVC riser sand pack 1.5' to 20'
28				bentonite seal 0.5'-1.5' complete with concrete
29 30				pad and flushmount

____ INC ____

Storage Tank Management Services

Well ID MW-10

Site Name:	Liberty Oil #38	Job # 08-12-4292	Date: April	30, 2012	
Site/Boring Lo	cation: 700 N. Railroad St	Subcontractor:	Eichelbergers, Inc.		
on western sid	le of traffic island, between	309 N and 309 S	Drilling Method: Air Rotary		
Weather: Sunny, 60s			Borehole Dia.:	8"	
CPTS oversight	t: Rachel Burkart, P.G.		DTW: NA	DTR: NA	

De	epth (feet)	Description	PID	Comments/Recovery
0	0-5	Red/brown silt, sand and gravel, dry	0	
1			200	
2			0	
3				
4				
5	5-11	Gray, sand, silt and gravel, moist	0	
7		brick, glass, and wood fragments - backfill material		
8				
9				
10				
11	11-16	Concrete, dry	0	
12		AN STOCKED FOR THE SECOND SECO	2000	
13				
14				
15	rese seren			
16	16-20	Brownish gray silt, sand, and gravel moist	0	
17 18	18-20	possible boulder	215	
10	18-20	possible boulder	50	
19 20		End of Boring at 20'	30	Well Construction Detail:
21				18' - 4" PVC well screen
22				2' - 2" solid PVC riser
23				sand pack 1.5' to 20'
24				bentonite seal 0.5'-1.5'
25				complete with concrete
21 22 23 24 25 26 27				pad and flushmount
27				
28				
29				
30				

- INC -

Storage Tank Management Services

Well ID MW-11

Liberty Oil #38 08-12-4292 March 22, 2016 Site Name: Date: Site/Boring Location: 700 N. Railroad Street Tamaqua, PA Subcontractor: **Odyssey Environmental** near northwestern property boundary **Drilling Method:** Auger 6" Weather: Sunny, 30s Borehole Dia.: CPTS oversight: Rachel Burkart, P.G. DTW: NA DTR: NA

느				
_	Depth (feet)	Description	PID	Comments/Recovery
0	0-5	Very dark brown silty sand and fine to medium gravel fill material coal fragments, glass, wood, moist	0	
2				
3				
5	5-9	Brown silt, some subround gravel, moist	0	sample coal fill material at 5 feet
6	5-00			
7				
9	9-17	Reddish brown silt with subround gravel, moist	0	
10				
11		cobble at 12'	0	sample at 11.5'
13				
14			16e85	
15 16			0	
17 18		End of boring at 17 feet		Well Construction Detail: 15' - 2" PVC well screen 2' - 2" solid PVC riser
19				sand pack 1.5' to 17' bentonite seal 0.5'-1.5' complete with concrete
20 21				pad and flushmount

- INC -

Storage Tank Management Services

Well ID MW-12

Liberty Oil #38 08-12-4292 January 25, 2018 Site Name: Date: Site/Boring Location: 700 N. Railroad Street Tamaqua, PA **Odyssey Environmental** Subcontractor: Thorne's property, closest to traffic island **Drilling Method:** Auger 6" Weather: Sunny, 20s, breezy Borehole Dia.: CPTS oversight: Rachel Burkart, P.G. DTW: NA DTR: NA

H	South (foot)	Description	L pup	C
0	0-0.5	Description Applied to the Control of the Control o	PID	Comments/Recovery
ľ	0.5-2	Asphalt cap Black silt, moist, sewery odor	0	
1	0.5-2	black sitt, moist, sewery out	"	
2	2-7	Very dark Brown silt, trace sand and fine gravel, moist, no odors	0	
3				
4				
5			0	
6				
7	7-9	Dark brown gravelly silt and fill material (coal, brick, and fragments		
8		of friable asphalt), moist, petroleum odor	35 30	collect sample at 7.5'
9	9-11.5	Dark brown silt, less gravel, soft, wet, stron petroleum odor	200	reading in wet soil
10				
11			55	
12		End of Boring at 11.5		Well Construction Detail: 7.5' - 2" PVC well screen 4' - 2" solid PVC riser
13				sand pack 3 - 11.5' bentonite seal 1'-3'
14				complete with concrete pad and flushmount
15				
16				
17				
18				
19				
20				
21				

— INC -

Storage Tank Management Services

Well ID MW-13

Site Name:	Liberty Oil #38	Job # 08-12-4292	Date: Janu	ary 25, 2018
Site/Boring Lo	cation: 700 N. Railroad Str	eet Tamaqua, PA	Subcontractor:	Odyssey Environmental
Eastern side of	Thorne's property	Drilling Method:	Auger	
Weather:	Sunny, 20s, breezy		Borehole Dia.:	6"
CPTS oversight	t: Rachel Burkart, P.G.	·	DTW: NA	DTR: NA

H	anth (fact)	Description	L pip	Comments/Decourse
0	0-0.5	Description Asphalt cap	PID	Comments/Recovery
ľ	0.5-3.5	Very dark brown to black silt, and sand, trace gravel, moist	0	
1	0.5-5.5	very dark brown to black sitt, and saild, trace graver, moist	"	
l l				
2		as above, wet lense	10	
Ш		10 VENTY 10 No. 202 1 10 10	5054	
3	2020000	as above, petroleum odor and moisture increasing	20	
LI	3.5-4.5	< 6" clayey layer light brown, moist	15	hard drilling
4	4.5-5.5	Brown sand and silt, trace fine gravel, some friable asphalt, moist As above, less gravel,	15	easier drilling
5	4.5-5.5	As above, less graver,		easier urning
ľ	5.5-10	Medium Brown silt and sand, loose, moist		
6		slight petroleum odor to 6 feet	15-20	
		no odors at 6.5 feet or below	10	
7		The second secon		
8				
9				
ľ				
10	10-11	Medium brown silt and subround gravel, slow drilling	0	
		20 dd argani 40 a ni cae fel anis i'i C22 de maraich eaga 45 (27 da anis 27 da anis 27 da cae a fhair shearaigh a 2	10000	
11	11-13.5	As above, less gravel, moist		
12	12.5			
13	12.5	wet	15	reading on wet soil
13		End of Boring at 13.5		Well Construction Detail:
14				11.5' - 2" PVC well screen
П				4' - 2" solid PVC riser
15				sand pack 3 - 13.5'
				bentonite seal 1'-3'
16				complete with concrete
1.7				pad and flushmount
17				
18				
-				
19				
20				
21				

APPENDIX D Soil Analytical Data Reports



26 January 2009

CENTERPOINT TANK SERVICES, INC

9. Buye

Roger Tartaglia 536 Benjamin Franklin Highway Douglassville, PA 19518

RE: Liberty #38

Laboratory ID #: KSA0201

Enclosed are the results of analyses for samples received by the laboratory on 01/14/09 10:17. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Oswaldo Burgos

Project Manager





01/26/09 10:47



CENTERPOINT TANK SERVICES, INC

536 Benjamin Franklin Highway Douglassville PA, 19518 Project: Liberty #38

Project Number: NA

Project Manager: Roger Tartaglia

Reported:

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
GP-1 (3-4)	KSA0201-01	Soil	01/13/09 09:40	01/14/09 10:17
GP-3 (14-14.5)	KSA0201-02	Soil	01/13/09 10:45	01/14/09 10:17
GP-5 (13-14)	KSA0201-03	Soil	01/13/09 11:40	01/14/09 10:17
GP-6 (15-15.5)	KSA0201-04	Soil	01/13/09 12:05	01/14/09 10:17
GP-9 (8-9)	KSA0201-05	Soil	01/13/09 12:45	01/14/09 10:17
GP-11 (12-12.5)	KSA0201-06	Soil	01/13/09 13:20	01/14/09 10:17
GP-13 (11-12)	KSA0201-07	Soil	01/13/09 13:50	01/14/09 10:17
GP-14 (9-10)	KSA0201-08	Soil	01/13/09 14:10	01/14/09 10:17
GP-15 (11-12)	KSA0201-09	Soil	01/13/09 14:30	01/14/09 10:17
GP-16 (2-3)	KSA0201-10	Soil	01/13/09 14:40	01/14/09 10:17

TestAmerica King Of Prussia







536 Benjamin Franklin Highway Douglassville PA, 19518 Project: Liberty #38

Project Number: NA

Project Manager: Roger Tartaglia

Reported: 01/26/09 10:47

Total Metals by EPA 6000/7000 Series Methods

TestAmerica King Of Prussia

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GP-1 (3-4) (KSA0201-01) Soil Samp	led: 01/13/09 09:40 Rece	ived: 01/14/0	9 10:17		20002000		-,0000- * -0000	10000000	9031078
Lead	79	1.3	mg/kg dry	1	9011901	01/19/09	01/21/09	EPA 6010B	
GP-3 (14-14.5) (KSA0201-02) Soil Sci	ampled: 01/13/09 10:45 I	Received: 01	14/09 10:17						
Lead	8.3	1.0	mg/kg dry	1	9011901	01/19/09	01/21/09	EPA 6010B	
GP-5 (13-14) (KSA0201-03) Soil San	npled: 01/13/09 11:40 Re	ceived: 01/1	4/09 10:17						
Lead	13	1.0	mg/kg dry	1	9011901	01/19/09	01/21/09	EPA 6010B	
GP-6 (15-15.5) (KSA0201-04) Soil Sci	ampled: 01/13/09 12:05 I	Received: 01	14/09 10:17						
Lead	6.6	1.0	mg/kg dry	1	9011901	01/19/09	01/21/09	EPA 6010B	
GP-9 (8-9) (KSA0201-05) Soil Samp	led: 01/13/09 12:45 Rece	ived: 01/14/0	9 10:17						
Lead	11	1.0	mg/kg dry	1	9011901	01/19/09	01/21/09	EPA 6010B	
GP-11 (12-12.5) (KSA0201-06) Soil	Sampled: 01/13/09 13:20	Received: 0	1/14/09 10:1	7					
Lead	10	1.0	mg/kg dry	1	9011901	01/19/09	01/21/09	EPA 6010B	
GP-13 (11-12) (KSA0201-07) Soil Sa	mpled: 01/13/09 13:50 R	eceived: 01/	14/09 10:17						
Lead	6.5	1.0	mg/kg dry	1	9011901	01/19/09	01/21/09	EPA 6010B	
GP-14 (9-10) (KSA0201-08) Soil San	npled: 01/13/09 14:10 Re	ceived: 01/1	4/09 10:17						
Lead	8.9	1.0	mg/kg dry	1	9011901	01/19/09	01/21/09	EPA 6010B	
GP-15 (11-12) (KSA0201-09) Soil Sa	mpled: 01/13/09 14:30 R	eceived: 01/	14/09 10:17						
Lead	11	1.0	mg/kg dry	1	9011901	01/19/09	01/21/09	EPA 6010B	

TestAmerica King Of Prussia



1008 W. 9th Ave. - King of Prussia, PA 19406

(610) 337-9992 - FAX (610) 337-9939

CENTERPOINT TANK SERVICES, INC

536 Benjamin Franklin Highway Douglassville PA, 19518 Project: Liberty #38

Project Number: NA

Project Manager: Roger Tartaglia

Reported: 01/26/09 10:47

Total Metals by EPA 6000/7000 Series Methods

TestAmerica King Of Prussia

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GP-16 (2-3) (KSA0201-10) Soil	Sampled: 01/13/09 14:40	Received: 01/14/	09 10:17						
Lead	20	1.0	mg/kg dry	1	9011901	01/19/09	01/21/09	EPA 6010B	

TestAmerica King Of Prussia





536 Benjamin Franklin Highway Douglassville PA, 19518 Project: Liberty #38

Project Number: NA

Project Manager: Roger Tartaglia

Reported: 01/26/09 10:47

Volatile Organic Compounds by EPA Method 5035/8260B

TestAmerica King Of Prussia

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GP-1 (3-4) (KSA0201-01) Soil Sa	mpled: 01/13/09 09:40 Rec	ceived: 01/14/0	9 10:17						RL
1,2-Dibromoethane	ND	260	ug/kg dry	50	9011612	01/16/09	01/19/09	EPA 8260B	
1,2-Dichloroethane	ND	260				*	-	*	
Isopropylbenzene	17000	260					*		
Surrogate: Dibromofluoromethane		97.2 %	42.6	-163	*				
Surrogate: 1,2-Dichloroethane-d4		107 %	48.2	-167	*	*			
Surrogate: Toluene-d8		121 %	41.6	-167	*	*	*		
Surrogate: 4-Bromofluorobenzene		116 %	33.4	-187		*	*	*	
GP-1 (3-4) (KSA0201-01RE1) Soil	Sampled: 01/13/09 09:40	Received: 01	/14/09 10:1	7					RL
Benzene	7700	5100	ug/kg dry	1000	9011612	01/16/09	01/21/09	EPA 8260B	
Ethylbenzene	84000	5100	**	-			-		
Naphthalene	46000	6400	**			*	-		
Toluene	110000	5100	**				-		
1,2,4-Trimethylbenzene	380000	5100					-		
1,3,5-Trimethylbenzene	130000	5100					-	*	
Xylenes (total)	740000	15000					-	-	
Surrogate: Dibromofluoromethane		99.8 %	42.6	-163	*	*	"		
Surrogate: 1,2-Dichloroethane-d4		98.6 %	48.2	-167					
Surrogate: Toluene-d8		102 %	41.6	-167	#				
Surrogate: 4-Bromofluorobenzene		101 %	33.4	-187	*	*	*		
GP-3 (14-14.5) (KSA0201-02) Soil	Sampled: 01/13/09 10:45	Received: 01	/14/09 10:17	,					RL
Ethylbenzene	3300	200	ug/kg dry	50	9011612	01/16/09	01/19/09	EPA 8260B	
1,2,4-Trimethylbenzene	22000	200	*				-		
1,3,5-Trimethylbenzene	7200	200		-		~			
Xylenes (total)	15000	600			*	-			
Surrogate: Dibromofluoromethane		98.8 %	42.6	-163					
Surrogate: 1,2-Dichloroethane-d4		106 %	48.2	-167		-	*		
Surrogate: Toluene-d8		105 %	41.6	-167	*		-		
Surrogate: 4-Bromofluorobenzene		105 %	33.4	-187	*		-		

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536 Benjamin Franklin Highway Douglassville PA, 19518 Project: Liberty #38

Project Number: NA

Project Manager: Roger Tartaglia

Reported:

01/26/09 10:47

Volatile Organic Compounds by EPA Method 5035/8260B

Reporting Limit Units Dilution B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GP-3 (14-14.5) (KSA0201-02RE1) So	il Sampled: 01/13/09 10:45	Received	1: 01/14/09 1	0:17					
Benzene	110	4.0	ug/kg dry	1	9011612	01/16/09	01/21/09	EPA 8260B	
1,2-Dibromoethane	ND	4.0	**			*	-	*	
1,2-Dichloroethane	ND	4.0				20	-		
Isopropylbenzene	190	4.0				*	-		
Naphthalene	400	5.0	*				-	*	
Toluene	66	4.0				*			
Surrogate: Dibromofluoromethane		105 %	42.6-	163	*		*		
Surrogate: 1,2-Dichloroethane-d4		112 %	48.2-	167	#	*	*		
Surrogate: Toluene-d8		102 %	41.6-	167		*	w		
Surrogate: 4-Bromofluorobenzene		109 %	33.4-	187	*		*	*	
GP-5 (13-14) (KSA0201-03) Soil Sai	mpled: 01/13/09 11:40 Rece	ived: 01/1	4/09 10:17						
Benzene	230	4.0	ug/kg dry	1	9011612	01/16/09	01/19/09	EPA 8260B	
1,2-Dibromoethane	ND	4.0				*	-		
1,2-Dichloroethane	ND	4.0	*				-	*	
Ethylbenzene	150	4.0					-		
Isopropylbenzene	28	4.0	*	-	-		-		
Naphthalene	70	5.0	**				-		
Toluene	56	4.0					-		
1,2,4-Trimethylbenzene	520	4.0					-		
1,3,5-Trimethylbenzene	160	4.0		-					
Xylenes (total)	710	12				-		-	
Surrogate: Dibromofluoromethane		101 %	42.6-	163	#	*			
Surrogate: 1,2-Dichloroethane-d4		105 %	48.2-	167		*			
Surrogate: Toluene-d8		103 %	41.6-	167			*		
Surrogate: 4-Bromofluorobenzene		105 %	33.4-	187					

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536 Benjamin Franklin Highway Douglassville PA, 19518 Project: Liberty #38

Project Number: NA

Project Manager: Roger Tartaglia

Reported: 01/26/09 10:47

Volatile Organic Compounds by EPA Method 5035/8260B

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Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
GP-6 (15-15.5) (KSA0201-04) Soil	Sampled: 01/13/09 12:05	Received: 01/	14/09 10:17						
Benzene	100	4.0	ug/kg dry	1	9011612	01/16/09	01/19/09	EPA 8260B	
1,2-Dibromoethane	ND	4.0			-	*	-		
1,2-Dichloroethane	ND	4.0			7	2.			
Ethylbenzene	52	4.0			-	*	-		
Isopropylbenzene	ND	4.0	*	7	*	*	-	*	
Naphthalene	34	5.0				*	-		
Toluene	70	4.0							
1,2,4-Trimethylbenzene	77	4.0			-	*	-	*	
1,3,5-Trimethylbenzene	23	4.0				*			
Xylenes (total)	130	12			-	*			
Surrogate: Dibromofluoromethane		99.2 %	42.6-	163	"	*	"		
Surrogate: 1,2-Dichloroethane-d4		106 %	48.2-	167	*	*	*	*	
Surrogate: Toluene-d8		104 %	41.6-	167	*	*	*		
Surrogate: 4-Bromofluorobenzene		106 %	33.4-	187	*	*	*		
GP-9 (8-9) (KSA0201-05) Soil Sa	mpled: 01/13/09 12:45 Re	ceived: 01/14/0	9 10:17						
1,2-Dibromoethane	ND	4.0	ug/kg dry	1	9011612	01/16/09	01/19/09	EPA 8260B	
1,2-Dichloroethane	ND	4.0					-		
Ethylbenzene	180	4.0		*			-		
Isopropylbenzene	9.4	4.0					-		
Naphthalene	110	5.0					-	*	
1,2,4-Trimethylbenzene	330	4.0					-		
1,3,5-Trimethylbenzene	100	4.0		-			-		
Xylenes (total)	1100	12				-			
Surrogate: Dibromofluoromethane		102 %	42.6-	163	*	*	*		
Surrogate: 1,2-Dichloroethane-d4		111 %	48.2-	167		*	*		
Surrogate: Toluene-d8		105 %	41.6-	167					
Surrogate: 4-Bromofluorobenzene		106 %	33.4-	187	*	*			

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536 Benjamin Franklin Highway Douglassville PA, 19518 Project: Liberty #38

Project Number: NA

Project Manager: Roger Tartaglia

Reported: 01/26/09 10:47

Volatile Organic Compounds by EPA Method 5035/8260B

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Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GP-9 (8-9) (KSA0201-05RE1) Soil	Sampled: 01/13/09 12:45	Received: 01	/14/09 10:1	7					RL
Benzene	940	200	ug/kg dry	50	9011612	01/16/09	01/21/09	EPA 8260B	
Toluene	2700	200		-	-	*			
Surrogate: Dibromofluoromethane		97.8 %	42.6-	163		"	ir		
Surrogate: 1,2-Dichloroethane-d4		99.2 %	48.2	167	*	*			
Surrogate: Toluene-d8		101 %	41.6	167			*		
Surrogate: 4-Bromofluorobenzene		97.8 %	33.4	187	*	*			
GP-11 (12-12.5) (KSA0201-06) Soil	Sampled: 01/13/09 13:20	Received: 0	1/14/09 10:1	17					RLI
Benzene	28000	200	ug/kg dry	50	9011612	01/16/09	01/19/09	EPA 8260B	
1,2-Dibromoethane	ND	200	*	•			-		
1,2-Dichloroethane	ND	200					-		
Isopropylbenzene	14000	200					-		
Naphthalene	26000	250		*	-				
Surrogate: Dibromofluoromethane		98.1 %	42.6-	163		*	*		
Surrogate: 1,2-Dichloroethane-d4		103 %	48.2-	167		*		*	
Surrogate: Toluene-d8		121 %	41.6-	167	*		-		
Surrogate: 4-Bromofluorobenzene		121 %	33.4-	187			*	-	
GP-11 (12-12.5) (KSA0201-06RE1)	Soil Sampled: 01/13/09 1	3:20 Receive	d: 01/14/09	10:17					RL7
Ethylbenzene	66000	10000	ug/kg dry	2500	9011612	01/16/09	01/21/09	EPA 8260B	
Toluene	190000	10000				-	-		
1,2,4-Trimethylbenzene	260000	10000					-	*	
1,3,5-Trimethylbenzene	95000	10000		*			-		
Xylenes (total)	470000	30000	*	-	-				
Surrogate: Dibromofluoromethane		100 %	42.6-	163	,*				
Surrogate: 1,2-Dichloroethane-d4		101 %	48.2-	167	*	*	*		
Surrogate: Toluene-d8		101 %	41.6	167	-		*		
Surrogate: 4-Bromofluorobenzene		98.6 %	33.4	187			*	-	

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536 Benjamin Franklin Highway Douglassville PA, 19518 Project: Liberty #38

Project Number: NA

Project Manager: Roger Tartaglia

Reported: 01/26/09 10:47

Volatile Organic Compounds by EPA Method 5035/8260B

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Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GP-13 (11-12) (KSA0201-07) Soil	Sampled: 01/13/09 13:50	Received: 01/	14/09 10:17	(A					
1,2-Dibromoethane	ND	4.0	ug/kg dry	1	9011612	01/16/09	01/19/09	EPA 8260B	
1,2-Dichloroethane	ND	4.0			-	*	-	*	
Ethylbenzene	71	4.0				*			
Isopropylbenzene	11	4.0				*	-		
Naphthalene	41	5.0	*				-	*	
1,2,4-Trimethylbenzene	380	4.0				*	-		
1,3,5-Trimethylbenzene	160	4.0		100					
Xylenes (total)	730	12			-				
Surrogate: Dibromofluoromethane		104 %	42.6-	163		*	н		
Surrogate: 1,2-Dichloroethane-d4		109 %	48.2-	167	*	*			
Surrogate: Toluene-d8		102 %	41.6-	167		*	*		
Surrogate: 4-Bromofluorobenzene		104 %	33.4-	187	. **	*			
GP-13 (11-12) (KSA0201-07RE1)	Soil Sampled: 01/13/09 13	3:50 Received	01/14/09 1	0:17					
Benzene	ND	200	ug/kg dry	50	9011612	01/16/09	01/21/09	EPA 8260B	A-0
Toluene	ND	200			-	-			A-0
Surrogate: Dibromofluoromethane		97.0 %	42.6-	163	*	*			
Surrogate: 1,2-Dichloroethane-d4		100 %	48.2-	167		*			
Surrogate: Toluene-d8		99.3 %	41.6-	167					
Surrogate: 4-Bromofluorobenzene		100 %	33.4-	187		*			
GP-14 (9-10) (KSA0201-08) Soil	Sampled: 01/13/09 14:10	Received: 01/1	4/09 10:17						
Benzene	ND	4.0	ug/kg dry	1	9011612	01/16/09	01/19/09	EPA 8260B	
1,2-Dibromoethane	ND	4.0	*	-			-		
1,2-Dichloroethane	ND	4.0	*	-		~	-	*	
Ethylbenzene	ND	4.0							
Isopropylbenzene	ND	4.0							
Naphthalene	ND	5.0		*		-		*	
Toluene	8.4	4.0							
1,2,4-Trimethylbenzene	14	4.0	*	-					
1,3,5-Trimethylbenzene	4.4	4.0		-		~		*	
Xylenes (total)	17	12				-			
Surrogate: Dibromofluoromethane	5.3.75	101 %	42.6-	163		,			

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01/26/09 10:47



CENTERPOINT TANK SERVICES, INC

536 Benjamin Franklin Highway Douglassville PA, 19518 Project: Liberty #38

Project Number: NA

Project Manager: Roger Tartaglia

Reported:

Volatile Organic Compounds by EPA Method 5035/8260B TestAmerica King Of Prussia

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GP-14 (9-10) (KSA0201-08) Soil	Sampled: 01/13/09 14:10	Received: 01/1	4/09 10:17						
Surrogate: 1,2-Dichloroethane-d4		106 %	48.2	-167	9011612	01/16/09	01/19/09	EPA 8260B	
Surrogate: Toluene-d8		102 %	41.6	167	"				
Surrogate: 4-Bromofluorobenzene		103 %	33.4-	-187		~	*		
GP-15 (11-12) (KSA0201-09) Soil	Sampled: 01/13/09 14:30	Received: 01/	14/09 10:17						
Benzene	ND	4.0	ug/kg dry	1	9011612	01/16/09	01/19/09	EPA 8260B	
1,2-Dibromoethane	ND	4.0		-		*	-		
1,2-Dichloroethane	ND	4.0				*	-		
Ethylbenzene	ND	4.0	w		*	*	-		
Isopropylbenzene	ND	4.0		*		*	-	*	
Naphthalene	ND	5.0				9			
Toluene	ND	4.0				*			
1,2,4-Trimethylbenzene	ND	4.0				×			
1,3,5-Trimethylbenzene	ND	4.0					-		
Xylenes (total)	ND	12		-	*	*			
Surrogate: Dibromofluoromethane		102 %	42.6-	-163					
Surrogate: 1,2-Dichloroethane-d4		105 %	48.2-	-167	*	*	-	-	
Surrogate: Toluene-d8		102 %	41.6	-167	*	-			
Surrogate: 4-Bromofluorobenzene		101 %	33.4-	-187	*	*	*		
GP-16 (2-3) (KSA0201-10) Soil	Sampled: 01/13/09 14:40 1	Received: 01/14	09 10:17						RLI
1,2-Dibromoethane	ND	200	ug/kg dry	50	9011612	01/16/09	01/19/09	EPA 8260B	
1,2-Dichloroethane	ND	200							
Isopropylbenzene	21000	200				*	*		
Surrogate: Dibromofluoromethane		100 %	42.6-	-163					
Surrogate: 1,2-Dichloroethane-d4		108 %	48.2-	-167		*	**		
Surrogate: Toluene-d8		125 %	41.6	-167	#	*	*		
Surrogate: 4-Bromofluorobenzene		122 %	33.4	-187	*	*			

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536 Benjamin Franklin Highway Douglassville PA, 19518 Project: Liberty #38

Project Number: NA

Project Manager: Roger Tartaglia

Reported: 01/26/09 10:47

Volatile Organic Compounds by EPA Method 5035/8260B

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Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GP-16 (2-3) (KSA0201-10RE1) Soil	Sampled: 01/13/09 14:40	Received: 0	1/14/09 10:1	7					RL7
Benzene	42000	10000	ug/kg dry	2500	9011612	01/16/09	01/21/09	EPA 8260B	
Ethylbenzene	100000	10000				*	-	*	
Naphthalene	46000	12000				*			
Toluene	360000	10000				*	-		
1,2,4-Trimethylbenzene	350000	10000	**			*	-	*	
1,3,5-Trimethylbenzene	110000	10000				*	-		
Xylenes (total)	670000	30000		7					
Surrogate: Dibromofluoromethane		99.5 %	42.6-	163		*	w		
Surrogate: 1,2-Dichloroethane-d4		102 %	48.2-	167	W	*	*		
Surrogate: Toluene-d8		101 %	41.6-	167	*	*			
Surrogate: 4-Bromofluorobenzene		99.7 %	33.4-	187		*	· m		

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536 Benjamin Franklin Highway Douglassville PA, 19518 Project: Liberty #38

Project Number: NA

Project Manager: Roger Tartaglia

Reported: 01/26/09 10:47

Volatile Organic Compounds by EPA Method 8260B

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Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GP-1 (3-4) (KSA0201-01) Soil Sampled: 01	1/13/09 09:40 Receiv	red: 01/14/0	9 10:17						RL
Methyl tert-butyl ether	ND	260	ug/kg dry	50	9011612	01/16/09	01/19/09	EPA 8260B	
Surrogate: Dibromofluoromethane		97.2 %	42.6-	163	*	*	*		
GP-3 (14-14.5) (KSA0201-02RE1) Soil San	npled: 01/13/09 10:4	5 Received	l: 01/14/09 1	0:17					
Methyl tert-butyl ether	ND	4.0	ug/kg dry	1	9011612	01/16/09	01/21/09	EPA 8260B	
Surrogate: Dibromofluoromethane		105 %	42.6-	163	*		"	-	
GP-5 (13-14) (KSA0201-03) Soil Sampled:	01/13/09 11:40 Rec	eived: 01/1	4/09 10:17						
Methyl tert-butyl ether	47	4.0	ug/kg dry	1	9011612	01/16/09	01/19/09	EPA 8260B	
Surrogate: Dibromofluoromethane		101 %	42.6-	163	, ,	-	"		
GP-6 (15-15.5) (KSA0201-04) Soil Sample	d: 01/13/09 12:05 R	eceived: 01/	14/09 10:17						
Methyl tert-butyl ether	59	4.0	ug/kg dry	1	9011612	01/16/09	01/19/09	EPA 8260B	
Surrogate: Dibromofluoromethane		99.2 %	42.6-	163	-		"		
GP-9 (8-9) (KSA0201-05) Soil Sampled: 01	1/13/09 12:45 Receiv	red: 01/14/0	9 10:17						
Methyl tert-butyl ether	200	4.0	ug/kg dry	1	9011612	01/16/09	01/19/09	EPA 8260B	
Surrogate: Dibromofluoromethane		102 %	42.6-	163	*			-	
GP-11 (12-12.5) (KSA0201-06) Soil Sample	ed: 01/13/09 13:20 1	Received: 0	1/14/09 10:1	7					RL
Methyl tert-butyl ether	800	200	ug/kg dry	50	9011612	01/16/09	01/19/09	EPA 8260B	
Surrogate: Dibromofluoromethane		98.1 %	42.6-	163					
GP-13 (11-12) (KSA0201-07) Soil Sampled	1: 01/13/09 13:50 Re	ceived: 01/	14/09 10:17						
Methyl tert-butyl ether	72	4.0	ug/kg dry	1	9011612	01/16/09	01/19/09	EPA 8260B	
Surrogate: Dibromofluoromethane		104 %	42.6-	163	"				

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536 Benjamin Franklin Highway Douglassville PA, 19518 Project: Liberty #38

Project Number: NA

Project Manager: Roger Tartaglia

Reported:

01/26/09 10:47

Volatile Organic Compounds by EPA Method 8260B

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Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GP-14 (9-10) (KSA0201-08) Soil	Sampled: 01/13/09 14:10	Received: 01/1	4/09 10:17						
Methyl tert-butyl ether	11	4.0	ug/kg dry	1	9011612	01/16/09	01/19/09	EPA 8260B	
Surrogate: Dibromofluoromethane		101 %	42.6-	163	*	*	*		
GP-15 (11-12) (KSA0201-09) Soil	Sampled: 01/13/09 14:30	Received: 01/	14/09 10:17						
Methyl tert-butyl ether	ND	4.0	ug/kg dry	1	9011612	01/16/09	01/19/09	EPA 8260B	
Surrogate: Dibromofluoromethane		102 %	42.6-	163	m		*		
GP-16 (2-3) (KSA0201-10) Soil S	Sampled: 01/13/09 14:40 I	Received: 01/14/	09 10:17						RL1
Methyl tert-butyl ether	320	200	ug/kg dry	50	9011612	01/16/09	01/19/09	EPA 8260B	
Surrogate: Dibromofluoromethane		100 %	42.6-	163	#	-	*		

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536 Benjamin Franklin Highway Douglassville PA, 19518 Project: Liberty #38

Project Number: NA

Project Manager: Roger Tartaglia

Reported: 01/26/09 10:47

General Chemistry

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Analyte Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
GP-1 (3-4) (KSA0201-01) Soil Sampled: 01/13/09 09:40	Received: 01/14/0	9 10:17						
% Solids 78.0	0.01	% by Weight	1	9011508	01/15/09	01/15/09	EPA 160.3	
GP-3 (14-14.5) (KSA0201-02) Soil Sampled: 01/13/09 10:4	45 Received: 01/	/14/09 10:17						
% Solids 90.4	0.01	% by Weight	1	9011508	01/15/09	01/15/09	EPA 160.3	
GP-5 (13-14) (KSA0201-03) Soil Sampled: 01/13/09 11:40	Received: 01/1	4/09 10:17						
% Solids 91.2	0.01	% by Weight	1	9011508	01/15/09	01/15/09	EPA 160.3	
GP-6 (15-15.5) (KSA0201-04) Soil Sampled: 01/13/09 12:0	05 Received: 01/	14/09 10:17						
% Solids 90.7	0.01	% by Weight	1	9011508	01/15/09	01/15/09	EPA 160.3	
GP-9 (8-9) (KSA0201-05) Soil Sampled: 01/13/09 12:45	Received: 01/14/0	9 10:17						
% Solids 88.2	0.01	% by Weight	1	9011508	01/15/09	01/15/09	EPA 160.3	
GP-11 (12-12.5) (KSA0201-06) Soil Sampled: 01/13/09 13	:20 Received: 0	1/14/09 10:13	7					
% Solids 88.3	0.01	% by Weight	1	9011508	01/15/09	01/15/09	EPA 160.3	
GP-13 (11-12) (KSA0201-07) Soil Sampled: 01/13/09 13:5	0 Received: 01/	14/09 10:17						
% Solids 89.4	0.01	% by Weight	1	9011508	01/15/09	01/15/09	EPA 160.3	
GP-14 (9-10) (KSA0201-08) Soil Sampled: 01/13/09 14:10	Received: 01/1	4/09 10:17						
% Solids 90.1	0.01	% by Weight	1	9011508	01/15/09	01/15/09	EPA 160.3	
GP-15 (11-12) (KSA0201-09) Soil Sampled: 01/13/09 14:3	0 Received: 01/	14/09 10:17						
6 Solids 85.9	0.01	% by Weight	1	9011508	01/15/09	01/15/09	EPA 160.3	

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CENTERPOINT TANK SERVICES, INC

536 Benjamin Franklin Highway Douglassville PA, 19518 Project: Liberty #38

Project Number: NA

Project Manager: Roger Tartaglia

Reported:

01/26/09 10:47

General Chemistry

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Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GP-16 (2-3) (KSA0201-10) Soil	Sampled: 01/13/09 14:40	Received: 01/14/	09 10:17						
% Solids	90.3	0.01	% by Weight	1	9011508	01/15/09	01/15/09	EPA 160.3	

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536 Benjamin Franklin Highway Douglassville PA, 19518 Project: Liberty #38

Project Number: NA

Project Manager: Roger Tartaglia

Reported:

01/26/09 10:47

Notes and Definitions

RL7	Sample required	dilution due to high concer	ntrations of target analyte.
-----	-----------------	-----------------------------	------------------------------

RL1 Reporting limit raised due to sample matrix effects.

R2 The RPD exceeded the acceptance limit.

C Calibration Verification recovery was above the method control limit for this analyte. Analyte not detected, data not impacted.

A-01 The sample was non-homogenous. Data will be reported from the methanol run, which requires a dilution.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

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Test/merica

CHAIN OF CUSTODY REPORT

1008 W. Ninth Avenue King of Prussia, PA 19406 (610) 337-9992 FAX (610) 337-9939

1090 King Georges Post Rd Suite 803 Edison, NJ 08837 (732) 661-0777 FAX (732) 661-0305

THE COLOR OF	Client Collect Cent will Second		E	Bill To.	211/11	,				2	TAT STO	DAY 4 DAY	3 DAY 2 DAY	DATE RESULTS NEEDED:
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December	Address: 336 K Professional								181	Nat W	_	ble Package:	remp. Opor	Lecept
113-41 114-15 1	Phone #:	3.3	_	state &	SOF.	アンス		200		Justs (If Yes, pleas	explain		
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04 February 2009

CENTERPOINT TANK SERVICES, INC

9. Buye

Danielle Varnes 536 Benjamin Franklin Highway Douglassville, PA 19518

RE: Liberty Oil #38 - Tamaqua Laboratory ID #: KSA0442

Enclosed are the results of analyses for samples received by the laboratory on 01/28/09 14:15. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Oswaldo Burgos

Project Manager







Project: Liberty Oil #38 - Tamaqua

536 Benjamin Franklin Highway Douglassville PA, 19518 Project Number: NA Project Manager: Danielle Varnes Reported:

02/04/09 16:23

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
GP-17 (12-13.5)	KSA0442-01	Soil	01/27/09 09:00	01/28/09 14:15
GP-18 (3-4)	KSA0442-02	Soil	01/27/09 09:20	01/28/09 14:15
GP-19 (12-13)	KSA0442-03	Soil	01/27/09 10:00	01/28/09 14:15
GP-21 (5-6)	KSA0442-04	Soil	01/27/09 10:30	01/28/09 14:15
GP-23 (8-9)	KSA0442-05	Soil	01/27/09 11:00	01/28/09 14:15
GP-24 (14-15.5)	KSA0442-06	Soil	01/27/09 11:25	01/28/09 14:15
GP-27 (13-14)	KSA0442-07	Soil	01/27/09 12:20	01/28/09 14:15
GP-28 (14-15.5)	KSA0442-08	Soil	01/27/09 12:45	01/28/09 14:15
GP-29 (9-10.5)	KSA0442-09	Soil	01/27/09 13:05	01/28/09 14:15
GP-31 (3-4)	KSA0442-10	Soil	01/27/09 13:25	01/28/09 14:15
GP-32 (3-4)	KSA0442-11	Soil	01/27/09 13:40	01/28/09 14:15
GP-33 (12-13.5)	KSA0442-12	Soil	01/27/09 14:00	01/28/09 14:15
GP-35 (7-8)	KSA0442-13	Soil	01/27/09 14:20	01/28/09 14:15

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Project: Liberty Oil #38 - Tamaqua

536 Benjamin Franklin Highway Douglassville PA, 19518 Project Number: NA Project Manager: Danielle Varnes Reported: 02/04/09 16:23

Total Metals by EPA 6000/7000 Series Methods

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Analyte Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GP-17 (12-13.5) (KSA0442-01) Soil Sampled: 01/27/09 09	:00 Received: 0	1/28/09 14:1	5					
Lead 11	1.0	mg/kg dry	1	9013002	01/30/09	01/30/09	EPA 6010B	
GP-18 (3-4) (KSA0442-02) Soil Sampled: 01/27/09 09:20	Received: 01/28	/09 14:15						
Lead 98	1.4	mg/kg dry	1	9013002	01/30/09	01/30/09	EPA 6010B	
GP-19 (12-13) (KSA0442-03) Soil Sampled: 01/27/09 10:0	0 Received: 01/	28/09 14:15						
Lead 7.7	1.0	mg/kg dry	1	9013002	01/30/09	01/30/09	EPA 6010B	
GP-21 (5-6) (KSA0442-04) Soil Sampled: 01/27/09 10:30	Received: 01/28	/09 14:15						
Lead 13	1.0	mg/kg dry	1	9013002	01/30/09	01/30/09	EPA 6010B	
GP-23 (8-9) (KSA0442-05) Soil Sampled: 01/27/09 11:00	Received: 01/28	/09 14:15						
Lead 79	1.0	mg/kg dry	1	9013002	01/30/09	01/30/09	EPA 6010B	
GP-24 (14-15.5) (KSA0442-06) Soil Sampled: 01/27/09 11	:25 Received: 0	1/28/09 14:1	5					
Lead 6.6	1.0	mg/kg dry	1	9013002	01/30/09	01/30/09	EPA 6010B	
GP-27 (13-14) (KSA0442-07) Soil Sampled: 01/27/09 12:2	0 Received: 01/	28/09 14:15						
Lead 9.0	1.0	mg/kg dry	1	9013002	01/30/09	01/30/09	EPA 6010B	
GP-28 (14-15.5) (KSA0442-08) Soil Sampled: 01/27/09 12	:45 Received: 0	1/28/09 14:1	5					
Lead 7.9	1.0	mg/kg dry	1	9013002	01/30/09	01/30/09	EPA 6010B	
GP-29 (9-10.5) (KSA0442-09) Soil Sampled: 01/27/09 13:	05 Received: 01	/28/09 14:15						
Lead 7.5	1.0	mg/kg dry	1	9013002	01/30/09	01/30/09	EPA 6010B	

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536 Benjamin Franklin Highway

Douglassville PA, 19518

Project: Liberty Oil #38 - Tamaqua

Project Number: NA

Project Manager: Danielle Varnes

Reported: 02/04/09 16:23

Total Metals by EPA 6000/7000 Series Methods

TestAmerica King Of Prussia

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GP-31 (3-4) (KSA0442-10) Soil	Sampled: 01/27/09 13:25	Received: 01/28/	09 14:15						
Lead	7.4	1.0	mg/kg dry	1	9013002	01/30/09	01/30/09	EPA 6010B	
GP-32 (3-4) (KSA0442-11) Soil	Sampled: 01/27/09 13:40	Received: 01/28/	09 14:15						
Lead	6.3	1.3	mg/kg dry	1	9013002	01/30/09	01/30/09	EPA 6010B	
GP-33 (12-13.5) (KSA0442-12) S	Soil Sampled: 01/27/09 14:	00 Received: 0	1/28/09 14:1	5					
Lead	8.3	1.0	mg/kg dry	1	9013002	01/30/09	01/30/09	EPA 6010B	
GP-35 (7-8) (KSA0442-13) Soil	Sampled: 01/27/09 14:20	Received: 01/28	09 14:15						
Lead	25	1.0	mg/kg dry	1	9013002	01/30/09	01/30/09	EPA 6010B	

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Project: Liberty Oil #38 - Tamaqua

536 Benjamin Franklin Highway Douglassville PA, 19518 Project Number: NA

Project Manager: Danielle Varnes

Reported: 02/04/09 16:23

Volatile Organic Compounds by EPA Method 5035/8260B

TestAmerica King Of Prussia

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
GP-17 (12-13.5) (KSA0442-01) Soil	Sampled: 01/27/09 09:00	Received: 0	1/28/09 14:1	5					
Benzene	ND	4.0	ug/kg dry	1	9012915	01/29/09	01/30/09	EPA 8260B	
1,2-Dibromoethane	ND	4.0			-	*	-	*	
1,2-Dichloroethane	ND	4.0			7	200	-		
Ethylbenzene	ND	4.0			-	*	-		
Isopropylbenzene	ND	4.0	*	7.7		*	-	*	
Naphthalene	ND	5.0				*	-		
Toluene	ND	4.0							
1,2,4-Trimethylbenzene	ND	4.0				*		*	
1,3,5-Trimethylbenzene	ND	4.0				20	-		
Xylenes (total)	ND	12				*			
Surrogate: Dibromofluoromethane		102 %	42.6-	163		*	*		
Surrogate: 1,2-Dichloroethane-d4		107 %	48.2-	167		*	~	*	
Surrogate: Toluene-d8		100 %	41.6-	167	*	-	*		
Surrogate: 4-Bromofluorobenzene		104 %	33.4-	187	*	*			
GP-18 (3-4) (KSA0442-02) Soil San	mpled: 01/27/09 09:20 Re	ceived: 01/28/	09 14:15						
Benzene	ND	5.4	ug/kg dry		9012915	***	5070000000		
	1417	3.4	ug kg my	1	9012915	01/29/09	02/02/09	EPA 8260B	
1,2-Dibromoethane	ND	5.4	" "		9012913	01/29/09	02/02/09	EPA 8260B	
		75.53		196				707	
1,2-Dichloroethane	ND	5.4	*					707	
1,2-Dichloroethane Ethylbenzene	ND ND	5.4 5.4			:			707	
1,2-Dichloroethane Ethylbenzene Isopropylbenzene	ND ND ND	5.4 5.4 5.4			:			707	
1,2-Dichloroethane Ethylbenzene Isopropylbenzene Naphthalene	ND ND ND ND	5.4 5.4 5.4 5.4			:			707	
1,2-Dichloroethane Ethylbenzene Isopropylbenzene Naphthalene Toluene	ND ND ND ND ND	5.4 5.4 5.4 5.4 6.8	:		:			707	
1,2-Dichloroethane Ethylbenzene Isopropylbenzene Naphthalene Toluene 1,2,4-Trimethylbenzene	ND ND ND ND ND ND	5.4 5.4 5.4 5.4 6.8 5.4			:			707	
1,2-Dichloroethane Ethylbenzene Isopropylbenzene Naphthalene Toluene 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene	ND ND ND ND ND ND	5.4 5.4 5.4 5.4 6.8 5.4 5.4	:					707	
1,2-Dibromoethane 1,2-Dichloroethane Ethylbenzene Isopropylbenzene Naphthalene Toluene 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene Xylenes (total) Surrogate: Dibromofluoromethane	ND ND ND ND ND ND ND	5.4 5.4 5.4 5.4 6.8 5.4 5.4 5.4							
1,2-Dichloroethane Ethylbenzene Isopropylbenzene Naphthalene Toluene 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene Xylenes (total)	ND ND ND ND ND ND ND	5.4 5.4 5.4 5.4 6.8 5.4 5.4 5.4	:	163					
1,2-Dichloroethane Ethylbenzene Isopropylbenzene Naphthalene Toluene 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene Xylenes (total) Suarogate: Dibromofluoromethane	ND ND ND ND ND ND ND	5.4 5.4 5.4 6.8 5.4 5.4 5.4 16	42.6-	163					

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Project: Liberty Oil #38 - Tamaqua

536 Benjamin Franklin Highway Douglassville PA, 19518 Project Number: NA

Project Manager: Danielle Varnes

Reported: 02/04/09 16:23

Volatile Organic Compounds by EPA Method 5035/8260B

TestAmerica King Of Prussia

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GP-19 (12-13) (KSA0442-03) Soil	0.0000000	Received: 01/	The section of	Dunnou	Dancis	Treplaca	rumyees	274400	RL
Benzene	ND	200	ug/kg dry	50	9012915	01/29/09	01/31/09	EPA 8260B	50.40
1.2-Dibromoethane	ND	200	"			*		и	
1.2-Dichloroethane	ND	200							
Ethylbenzene	3000	200					-		
Isopropylbenzene	4200	200		-			-		
Naphthalene	1900	250				*	-		
Toluene	ND	200		100					
1,3,5-Trimethylbenzene	23000	200							
Xylenes (total)	11000	600		100					
Surrogate: Dibromofluoromethane		98.0 %	42.6-	163		*	"		
Surrogate: 1,2-Dichloroethane-d4		104 %	48.2-	167	*	*	*		
Surrogate: Toluene-d8		107 %	41.6-	167		*	*		
Surrogate: 4-Bromofluorobenzene		107 %	33.4-	187		*	*	*	
surroguie. 4-bromojimorovenzene									
GP-19 (12-13) (KSA0442-03RE1)	Soil Sampled: 01/27/09 10	:00 Received	: 01/28/09 1	4:15					RL7
	Soil Sampled: 01/27/09 10 58000	2000 Received	ug/kg dry	4:15 500	9012915	01/29/09	01/31/09	EPA 8260B	RL7
GP-19 (12-13) (KSA0442-03RE1)			- 10 10	500	9012915	01/29/09	01/31/09	EPA 8260B	RL7
GP-19 (12-13) (KSA0442-03RE1) 1,2,4-Trimethylbenzene		2000	ug/kg dry	500 163		0.00			RL7
GP-19 (12-13) (KSA0442-03RE1) 1,2,4-Trimethylbenzene Surrogate: Dibromofluoromethane		2000 98.8 %	ug/kg dry 42.6-	500 163 167	*				RL7
GP-19 (12-13) (KSA0442-03RE1) 1,2,4-Trimethylbenzene Surrogate: Dibromofluoromethane Surrogate: 1,2-Dichloroethane-d4		2000 98.8 % 105 %	ug/kg dry 42.6- 48.2-	500 163 167 167				,,	RL7
GP-19 (12-13) (KSA0442-03RE1) 1,2,4-Trimethylbenzene Surrogate: Dibromofluoromethane Surrogate: 1,2-Dichloroethane-d4 Surrogate: Toluene-d8	58000	2000 98.8 % 105 % 100 % 105 %	ug/kg dry 42.6- 48.2- 41.6- 33.4-	500 163 167 167	*	:			RL7
GP-19 (12-13) (KSA0442-03RE1) 1,2,4-Trimethylbenzene Surrogate: Dibromofluoromethane Surrogate: 1,2-Dichloroethane-d4 Surrogate: Toluene-d8 Surrogate: 4-Bromofluorobenzene	58000	2000 98.8 % 105 % 100 % 105 %	ug/kg dry 42.6- 48.2- 41.6- 33.4-	500 163 167 167	*	:			RL7
GP-19 (12-13) (KSA0442-03RE1) 1,2,4-Trimethylbenzene Surrogate: Dibromofluoromethane Surrogate: 1,2-Dichloroethane-d4 Surrogate: Toluene-d8 Surrogate: 4-Bromofluorobenzene GP-21 (5-6) (KSA0442-04) Soil	58000 Sampled: 01/27/09 10:30 R	2000 98.8 % 105 % 100 % 105 % seceived: 01/28	ug/kg dry 42.6- 48.2- 41.6- 33.4-	500 163 167 167 187	* * * * * * * * * * * * * * * * * * * *	:	# # #	**	RL7
GP-19 (12-13) (KSA0442-03RE1) 1,2,4-Trimethylbenzene Surrogate: Dibromofluoromethane Surrogate: 1,2-Dichloroethane-d4 Surrogate: Toluene-d8 Surrogate: 4-Bromofluorobenzene GP-21 (5-6) (KSA0442-04) Soil Benzene	58000 Sampled: 01/27/09 10:30 R	2000 98.8 % 105 % 100 % 105 % deceived: 01/28	ug/kg dry 42.6- 48.2- 41.6- 33.4- (09 14:15 ug/kg dry	500 163 167 167 187	9012915	:	01/30/09	" " " EPA 8260B	RL7
GP-19 (12-13) (KSA0442-03RE1) 1,2,4-Trimethylbenzene Surrogate: Dibromofluoromethane Surrogate: 1,2-Dichloroethane-d4 Surrogate: 4-Bromofluorobenzene GP-21 (5-6) (KSA0442-04) Soil Benzene 1,2-Dibromoethane	58000 Sampled: 01/27/09 10:30 R ND ND	2000 98.8 % 105 % 100 % 105 % deceived: 01/28 4.0 4.0	ug/kg dry 42.6- 48.2- 41.6- 33.4- //09 14:15 ug/kg dry "	500 163 167 167 187	9012915	01/29/09	01/30/09	# # # # # # # # # # # # # # # # # # #	RL7
GP-19 (12-13) (KSA0442-03RE1) 1,2,4-Trimethylbenzene Surrogate: Dibromofluoromethane Surrogate: 1,2-Dichloroethane-d4 Surrogate: 4-Bromofluorobenzene GP-21 (5-6) (KSA0442-04) Soil Benzene 1,2-Dibromoethane 1,2-Dichloroethane	58000 Sampled: 01/27/09 10:30 R ND ND ND	2000 98.8 % 105 % 100 % 105 % deceived: 01/28 4.0 4.0 4.0	ug/kg dry 42.6- 48.2- 41.6- 33.4- //09 14:15 ug/kg dry "	500 163 167 167 187	9012915	01/29/09	01/30/09	# # # # # # # # # # # # # # # # # # #	RL7
GP-19 (12-13) (KSA0442-03RE1) 1,2,4-Trimethylbenzene Surrogate: Dibromofluoromethane Surrogate: 1,2-Dichloroethane-d4 Surrogate: 4-Bromofluorobenzene GP-21 (5-6) (KSA0442-04) Soil Benzene 1,2-Dibromoethane 1,2-Dichloroethane Ethylbenzene	58000 Sampled: 01/27/09 10:30 R ND ND ND ND ND	2000 98.8 % 105 % 100 % 105 % eccived: 01/28 4.0 4.0 4.0	ug/kg dry 42.6- 48.2- 41.6- 33.4- /09 14:15 ug/kg dry "	500 163 167 167 187	9012915	01/29/09	01/30/09	EPA 8260B	RL7
GP-19 (12-13) (KSA0442-03RE1) 1,2,4-Trimethylbenzene Surrogate: Dibromofluoromethane Surrogate: 1,2-Dichloroethane-d4 Surrogate: 4-Bromofluorobenzene GP-21 (5-6) (KSA0442-04) Soil Benzene 1,2-Dichloroethane 1,2-Dichloroethane Ethylbenzene Isopropylbenzene	58000 Sampled: 01/27/09 10:30 R ND ND ND ND ND ND ND	2000 98.8 % 105 % 100 % 105 % ecceived: 01/28 4.0 4.0 4.0 4.0	ug/kg dry 42.6- 48.2- 41.6- 33.4- /09 14:15 ug/kg dry "	500 163 167 167 187	9012915	01/29/09	01/30/09	######################################	RL7
GP-19 (12-13) (KSA0442-03RE1) 1,2,4-Trimethylbenzene Surrogate: Dibromofluoromethane Surrogate: 1,2-Dichloroethane-d4 Surrogate: 4-Bromofluorobenzene GP-21 (5-6) (KSA0442-04) Soil Senzene 1,2-Dichloroethane 1,2-Dichloroethane Ethylbenzene Isopropylbenzene Toluene	58000 Sampled: 01/27/09 10:30 R ND ND ND ND ND ND ND ND ND	2000 98.8 % 105 % 100 % 105 % eccived: 01/28 4.0 4.0 4.0 4.0 4.0	ug/kg dry 42.6- 48.2- 41.6- 33.4- /09 14:15 ug/kg dry "	500 163 167 167 187	9012915	01/29/09	01/30/09	EPA 8260B	RL7
GP-19 (12-13) (KSA0442-03RE1) 1,2,4-Trimethylbenzene Surrogate: Dibromofluoromethane Surrogate: 1,2-Dichloroethane-d4 Surrogate: 4-Bromofluorobenzene GP-21 (5-6) (KSA0442-04) Soil Benzene 1,2-Dibromoethane 1,2-Dichloroethane Ethylbenzene Isopropylbenzene Toluene Toluene Xylenes (total)	58000 Sampled: 01/27/09 10:30 R ND ND ND ND ND ND ND ND ND	2000 98.8 % 105 % 100 % 105 % seceived: 01/28 4.0 4.0 4.0 4.0 4.0 4.0	ug/kg dry 42.6- 48.2- 41.6- 33.4- //09 14:15 ug/kg dry "	500 163 167 167 187	9012915	01/29/09	01/30/09	EPA 8260B	RL7

TestAmerica King Of Prussia





Project: Liberty Oil #38 - Tamaqua

536 Benjamin Franklin Highway Douglassville PA, 19518 Project Number: NA

Project Manager: Danielle Varnes

Reported: 02/04/09 16:23

Volatile Organic Compounds by EPA Method 5035/8260B

TestAmerica King Of Prussia

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
GP-21 (5-6) (KSA0442-04RE1) Soil	Sampled: 01/27/09 10:30	Received: 0	1/28/09 14:	15					A-0
Naphthalene	ND	250	ug/kg dry	50	9012915	01/29/09	02/03/09	EPA 8260B	
1,2,4-Trimethylbenzene	ND	200				*	-	*	
1,3,5-Trimethylbenzene	ND	200				20			
Surrogate: Dibromofluoromethane		101 %	42.6-	163	**	*	*		
Surrogate: 1,2-Dichloroethane-d4		107 %	48.2-	167	*	*	*		
Surrogate: Toluene-d8		101 %	41.6-	167	*	*	*		
Surrogate: 4-Bromofluorobenzene		104 %	33.4	187		*	"		
GP-23 (8-9) (KSA0442-05) Soil Sai	mpled: 01/27/09 11:00 Rec	ceived: 01/28	09 14:15						
Benzene	ND	4.0	ug/kg dry	1	9012915	01/29/09	01/30/09	EPA 8260B	
1,2-Dibromoethane	ND	4.0		-			-		
1,2-Dichloroethane	ND	4.0					-		
Ethylbenzene	ND	4.0					-		
Isopropylbenzene	ND	4.0		-			-		
Naphthalene	ND	5.0					-		
Toluene	ND	4.0		-			-		
1,2,4-Trimethylbenzene	ND	4.0		-	-		-		
1,3,5-Trimethylbenzene	ND	4.0					-		
Xylenes (total)	ND	12		*	-				
Surrogate: Dibromofluoromethane		105 %	42.6-	163	*	*	*		
Surrogate: 1,2-Dichloroethane-d4		110 %	48.2-	167		*		*	
Surrogate: Toluene-d8		102 %	41.6-	167	*				
Surrogate: 4-Bromofluorobenzene		109 %	33.4-	187					
GP-24 (14-15.5) (KSA0442-06) Soil	Sampled: 01/27/09 11:25	Received: 0	1/28/09 14:1	5					
Benzene	ND	4.0	ug/kg dry	1	9012915	01/29/09	01/30/09	EPA 8260B	
1,2-Dibromoethane	ND	4.0							
1,2-Dichloroethane	ND	4.0				-		*	
Ethylbenzene	6.4	4.0							
Isopropylbenzene	ND	4.0	*	-					
Naphthalene	ND	5.0		-		~			
Toluene	ND	4.0				-			
1,2,4-Trimethylbenzene	ND	4.0							

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Project: Liberty Oil #38 - Tamaqua

536 Benjamin Franklin Highway Douglassville PA, 19518 Project Number: NA

Project Manager: Danielle Varnes

Reported: 02/04/09 16:23

Volatile Organic Compounds by EPA Method 5035/8260B

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Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GP-24 (14-15.5) (KSA0442-06) Soil	Sampled: 01/27/09 11:25	Received: 0	1/28/09 14:1	5					
1,3,5-Trimethylbenzene	ND	4.0	ug/kg dry	1	9012915	01/29/09	01/30/09	EPA 8260B	
Xylenes (total)	ND	12			-	*		w	
Surrogate: Dibromofluoromethane		102 %	42.6-	163		"	W		
Surrogate: 1,2-Dichloroethane-d4		107 %	48.2	167	*	*	-		
Surrogate: Toluene-d8		99.4 %	41.6	167		*	*		
Surrogate: 4-Bromofluorobenzene		103 %	33.4-	187	*	*	. W.		
GP-27 (13-14) (KSA0442-07) Soil	Sampled: 01/27/09 12:20	Received: 01/2	28/09 14:15						
Benzene	4.1	4.0	ug/kg dry	1	9012915	01/29/09	01/30/09	EPA 8260B	
1,2-Dibromoethane	ND	4.0			•		-		
1,2-Dichloroethane	ND	4.0		-	-	-	-		
Ethylbenzene	7.8	4.0	**				-		
Isopropylbenzene	ND	4.0			-		-		
Naphthalene	6.0	5.0			-		-		
Toluene	ND	4.0					-	*	
1,2,4-Trimethylbenzene	5.0	4.0	**				-		
1,3,5-Trimethylbenzene	ND	4.0	*	-	-		-		
Xylenes (total)	ND	12		-		-			
Surrogate: Dibromofluoromethane		99.9 %	42.6-	163	w	*	*		
Surrogate: 1,2-Dichloroethane-d4		104 %	48.2	167		*		*	
Surrogate: Toluene-d8		101 %	41.6	167					
Surrogate: 4-Bromofluorobenzene		103 %	33.4-	187	-	*			
GP-28 (14-15.5) (KSA0442-08) Soil	Sampled: 01/27/09 12:45	Received: 0	1/28/09 14:1	5					
Benzene	88	4.0	ug/kg dry	1	9012915	01/29/09	01/30/09	EPA 8260B	
1,2-Dibromoethane	ND	4.0							
1,2-Dichloroethane	ND	4.0							
Ethylbenzene	270	4.0		*		-		*	
Isopropylbenzene	12	4.0		*				*	
Naphthalene	20	5.0	*	-	-			*	
Toluene	34	4.0		-		~			
1,2,4-Trimethylbenzene	190	4.0							
1,3,5-Trimethylbenzene	60	4.0							

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Project Number: NA

Project: Liberty Oil #38 - Tamaqua

536 Benjamin Franklin Highway Douglassville PA, 19518

Project Manager: Danielle Varnes

Reported: 02/04/09 16:23

Volatile Organic Compounds by EPA Method 5035/8260B

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Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GP-28 (14-15.5) (KSA0442-08) Soil	Sampled: 01/27/09 12:45	Received: 0	1/28/09 14:1	5					
Xylenes (total)	610	12	ug/kg dry	1	9012915	01/29/09	01/30/09	EPA 8260B	
Surrogate: Dibromofluoromethane		99.8 %	42.6-	163	*	*	*		
Surrogate: 1,2-Dichloroethane-d4		106 %	48.2-	167		*	er.		
Surrogate: Toluene-d8		105 %	41.6-	167	-	"	*		
Surrogate: 4-Bromofluorobenzene		122 %	33.4-	187		*			
GP-29 (9-10.5) (KSA0442-09) Soil	Sampled: 01/27/09 13:05	Received: 01	/28/09 14:15	i					
Benzene	140	4.0	ug/kg dry	1	9012915	01/29/09	01/30/09	EPA 8260B	
1,2-Dibromoethane	ND	4.0					-	*	
1,2-Dichloroethane	ND	4.0	*	-			-		
Ethylbenzene	48	4.0	*	-	-		-		
Isopropylbenzene	ND	4.0	*	-			-		
Naphthalene	30	5.0		*			-		
Toluene	ND	4.0		*			-		
1,2,4-Trimethylbenzene	20	4.0					-	*	
1,3,5-Trimethylbenzene	12	4.0					-		
Xylenes (total)	95	12		-	-	-			
Surrogate: Dibromofluoromethane		104 %	42.6-	163					
Surrogate: 1,2-Dichloroethane-d4		112 %	48.2-	167		*	*	*	
Surrogate: Toluene-d8		101 %	41.6-	167					
Surrogate: 4-Bromofluorobenzene		102 %	33.4-	187	*				
GP-31 (3-4) (KSA0442-10) Soil Sa	mpled: 01/27/09 13:25 Re	ceived: 01/28	/09 14:15						
Benzene	100	4.0	ug/kg dry	1	9012915	01/29/09	02/02/09	EPA 8260B	
1,2-Dibromoethane	ND	4.0		-		*	-	*	
1,2-Dichloroethane	ND	4.0							
Ethylbenzene	94	4.0					*		
Isopropylbenzene	91	4.0		-				*	
Naphthalene	ND	5.0		*		*		*	
Toluene	12	4.0	*	-	-				
1,3,5-Trimethylbenzene	330	4.0		-		~		*	
Surrogate: Dibromofluoromethane		102 %	42.6-	163			-		
Surrogate: 1,2-Dichloroethane-d4		106 %	48.2-	167	*	-			

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Project Number: NA

Project: Liberty Oil #38 - Tamaqua

536 Benjamin Franklin Highway Douglassville PA, 19518

Project Manager: Danielle Varnes

Reported: 02/04/09 16:23

Volatile Organic Compounds by EPA Method 5035/8260B

TestAmerica King Of Prussia

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GP-31 (3-4) (KSA0442-10) Soil Sampled: 0	1/27/09 13:25 Re	ceived: 01/28	09 14:15						
Surrogate: Toluene-d8		109 %	41.6	167	9012915	01/29/09	02/02/09	EPA 8260B	
Surrogate: 4-Bromofluorobenzene		134 %	33.4	187			~		
GP-31 (3-4) (KSA0442-10RE1) Soil Sample	d: 01/27/09 13:25	Received: 0	1/28/09 14:	15					RL
1,2,4-Trimethylbenzene	1600	200	ug∕kg dry	50	9012915	01/29/09	02/02/09	EPA 8260B	
Xylenes (total)	2100	600		-	-	*			
Surrogate: Dibromofluoromethane		100 %	42.6	163	π.		.#.		
Surrogate: 1,2-Dichloroethane-d4		102 %	48.2	167					
Surrogate: Toluene-d8		100 %	41.6	167		-	~		
Surrogate: 4-Bromofluorobenzene		105 %	33.4	187	*	-	*	*	
GP-32 (3-4) (KSA0442-11) Soil Sampled: 0	1/27/09 13:40 Re	ceived: 01/28	09 14:15						
Benzene	150	5.0	ug/kg dry	1	9012915	01/29/09	01/30/09	EPA 8260B	
1,2-Dibromoethane	ND	5.0		*			-		
1,2-Dichloroethane	ND	5.0				*			
Ethylbenzene	63	5.0				*			
Isopropylbenzene	26	5.0							
Toluene	14	5.0				*	*		
Xylenes (total)	790	15				*			
Surrogate: Dibromofluoromethane		102 %	42.6	163	-		"		
Surrogate: 1,2-Dichloroethane-d4		104 %	48.2	167					
Surrogate: Toluene-d8		120 %	41.6	167		*	*		
GP-32 (3-4) (KSA0442-11RE1) Soil Sample	d: 01/27/09 13:40	Received: 0	1/28/09 14:	15					RLI
			ug/kg dry	50	9012915	01/29/09	02/02/09	EPA 8260B	
Naphthalene	ND	310	ug kg my						
Naphthalene 1,2,4-Trimethylbenzene	ND 280	310 250	ug/kg tay			*		*	
			ug kg tay		:		:		
1,2,4-Trimethylbenzene	280	250	**	•					
1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene	280	250 250		163					
1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene Surrogate: Dibromofluoromethane	280	250 250 98.5 %	42.6	-163 -167			-		

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Project. Live

Project: Liberty Oil #38 - Tamaqua

536 Benjamin Franklin Highway Douglassville PA, 19518 Project Number: NA Project Manager: Danielle Varnes Reported: 02/04/09 16:23

Volatile Organic Compounds by EPA Method 5035/8260B

TestAmerica King Of Prussia

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
GP-33 (12-13.5) (KSA0442-12) Soil	Sampled: 01/27/09 14:00	Received: 01	/28/09 14:1	5					
Benzene	35	4.0	ug/kg dry	1	9012915	01/29/09	01/31/09	EPA 8260B	
1,2-Dibromoethane	ND	4.0		-	-	*		*	
1,2-Dichloroethane	ND	4.0			7	2.	-		
Ethylbenzene	78	4.0				*	-		
Isopropylbenzene	21	4.0	*	7.7		*	-	*	
Naphthalene	81	5.0				*	-		
Toluene	210	4.0							
1,2,4-Trimethylbenzene	530	4.0			-	*			
1,3,5-Trimethylbenzene	160	4.0					-		
Xylenes (total)	560	12				*			
Surrogate: Dibromofluoromethane		101 %	42.6-	163		*	*		
Surrogate: 1,2-Dichloroethane-d4		109 %	48.2-	167		*	~	*	
Surrogate: Toluene-d8		101 %	41.6-	167	*		*		
Surrogate: 4-Bromofluorobenzene		105 %	33.4-	187	*	*	w	*	
GP-35 (7-8) (KSA0442-13) Soil San	mpled: 01/27/09 14:20 Re-	ceived: 01/28/	09 14:15						
Benzene	ND	4.0	ug/kg dry	1	9012915	01/29/09	01/30/09	EPA 8260B	
1.2 Diberousethers									
1,2-Dibromoethane	ND	4.0	**	-	*	-	-		
	ND ND	4.0			:		:		
1,2-Dichloroethane						:	:	:	
1,2-Dichloroethane Ethylbenzene	ND	4.0		-		:	:	:	
1,2-Dichloroethane Ethylbenzene Isopropylbenzene	ND ND	4.0 4.0		:	:	:	:	:	
1,2-Dichloroethane Ethylbenzene Isopropylbenzene Naphthalene	ND ND ND	4.0 4.0 4.0		:	:	:		:	
1,2-Dichloroethane Ethylbenzene Isopropylbenzene Naphthalene Toluene	ND ND ND ND	4.0 4.0 4.0 5.0		:	:	:			
1,2-Ditromoethane 1,2-Dichloroethane Ethylbenzene Isopropylbenzene Naphthalene Toluene 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene	ND ND ND ND ND	4.0 4.0 4.0 5.0 4.0		:	:	:			
1,2-Dichloroethane Ethylbenzene Isopropylbenzene Naphthalene Toluene 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene	ND ND ND ND ND ND	4.0 4.0 4.0 5.0 4.0 4.0		:	:	:			
1,2-Dichloroethane Ethylbenzene Isopropylbenzene Naphthalene Toluene 1,2,4-Trimethylbenzene	ND ND ND ND ND ND	4.0 4.0 4.0 5.0 4.0 4.0	:		:	:			
1,2-Dichloroethane Ethylbenzene Isopropylbenzene Naphthalene Toluene 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene Xylenes (total) Starrogate: Dibromofluoromethane	ND ND ND ND ND ND	4.0 4.0 5.0 4.0 4.0 4.0	:		:	:			
1,2-Dichloroethane Ethylbenzene Isopropylbenzene Naphthalene Toluene 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene Xylenes (total)	ND ND ND ND ND ND	4.0 4.0 5.0 4.0 4.0 4.0 12	42.6-	163	:		:		

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Project Number: NA

Project: Liberty Oil #38 - Tamaqua

536 Benjamin Franklin Highway Douglassville PA, 19518

Project Manager: Danielle Varnes

Reported: 02/04/09 16:23

Volatile Organic Compounds by EPA Method 8260B

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Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GP-17 (12-13.5) (KSA0442-01) Soil Sampled: 01/27	7/09 09:00	Received: 0	1/28/09 14:1	5					
Methyl tert-butyl ether	ND	4.0	ug/kg dry	1	9012915	01/29/09	01/30/09	EPA 8260B	
Surrogate: Dibromofluoromethane		102 %	42.6-	163	*		w		
GP-18 (3-4) (KSA0442-02) Soil Sampled: 01/27/09	09:20 Re	ceived: 01/28/	09 14:15						
Methyl tert-butyl ether	ND	5.4	ug/kg dry	1	9012915	01/29/09	02/02/09	EPA 8260B	
Surrogate: Dibromofluoromethane		105 %	42.6-	163	*		"		
GP-19 (12-13) (KSA0442-03) Soil Sampled: 01/27/0	09 10:00 I	Received: 01/2	28/09 14:15						RLI
Methyl tert-butyl ether	ND	200	ug/kg dry	50	9012915	01/29/09	01/31/09	EPA 8260B	
Surrogate: Dibromofluoromethane		98.0 %	42.6-	163	"		*		
GP-21 (5-6) (KSA0442-04) Soil Sampled: 01/27/09	10:30 Re	ceived: 01/28/	09 14:15						
Methyl tert-butyl ether	ND	4.0	ug/kg dry	1	9012915	01/29/09	01/30/09	EPA 8260B	
Surrogate: Dibromofluoromethane		118 %	42.6-	163	-		"		
GP-23 (8-9) (KSA0442-05) Soil Sampled: 01/27/09	11:00 Red	reived: 01/28/	09 14:15						
Methyl tert-butyl ether	ND	4.0	ug/kg dry	1	9012915	01/29/09	01/30/09	EPA 8260B	
Surrogate: Dibromofluoromethane		105 %	42.6-	163	*				
GP-24 (14-15.5) (KSA0442-06) Soil Sampled: 01/27	7/09 11:25	Received: 01	1/28/09 14:1	5					
Methyl tert-butyl ether	4.3	4.0	ug/kg dry	1	9012915	01/29/09	01/30/09	EPA 8260B	
Surrogate: Dibromofluoromethane		102 %	42.6-	163			"		
GP-27 (13-14) (KSA0442-07) Soil Sampled: 01/27/0	09 12:20 I	Received: 01/2	28/09 14:15						
Methyl tert-butyl ether	ND	4.0	ug/kg dry	1	9012915	01/29/09	01/30/09	EPA 8260B	
Surrogate: Dibromofluoromethane		99.9 %	42.6-	163	м				

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Project: Liberty Oil #38 - Tamaqua

536 Benjamin Franklin Highway Douglassville PA, 19518 Project Number: NA

Project Manager: Danielle Varnes

Reported: 02/04/09 16:23

Volatile Organic Compounds by EPA Method 8260B

TestAmerica King Of Prussia

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GP-28 (14-15.5) (KSA0442-08RE1) Soil Sai	mpled: 01/27/09 12:45	Receive	d: 01/28/09	14:15					RL
Methyl tert-butyl ether	2400	200	ug/kg dry	50	9012915	01/29/09	02/02/09	EPA 8260B	
Surrogate: Dibromofluoromethane		100 %	42.6-	163		*	*		
GP-29 (9-10.5) (KSA0442-09) Soil Sampled	: 01/27/09 13:05 Rece	ived: 01	28/09 14:15						
Methyl tert-butyl ether	510	4.0	ug/kg dry	1	9012915	01/29/09	01/30/09	EPA 8260B	
Surrogate: Dibromofluoromethane		104 %	42.6-	163	*		"		
GP-31 (3-4) (KSA0442-10) Soil Sampled: 0	1/27/09 13:25 Receive	d: 01/28	09 14:15						
Methyl tert-butyl ether	89	4.0	ug/kg dry	1	9012915	01/29/09	02/02/09	EPA 8260B	
Surrogate: Dibromofluoromethane		102 %	42.6-	163	#	-	*		
GP-32 (3-4) (KSA0442-11) Soil Sampled: 0	1/27/09 13:40 Receive	d: 01/28	09 14:15						
Methyl tert-butyl ether	610	5.0	ug/kg dry	1	9012915	01/29/09	01/30/09	EPA 8260B	
Surrogate: Dibromofluoromethane		102 %	42.6-	163	-		**	-	
GP-33 (12-13.5) (KSA0442-12) Soil Sample	d: 01/27/09 14:00 Rec	eived: 0	1/28/09 14:1	5					
Methyl tert-butyl ether	ND	4.0	ug/kg dry	1	9012915	01/29/09	01/31/09	EPA 8260B	
Surrogate: Dibromofluoromethane		101 %	42.6-	163	"				
GP-35 (7-8) (KSA0442-13) Soil Sampled: 0	1/27/09 14:20 Receive	d: 01/28	09 14:15						
Methyl tert-butyl ether	21	4.0	ug/kg dry	1	9012915	01/29/09	01/30/09	EPA 8260B	
Surrogate: Dibromofluoromethane		103 %	42.6-	163			"		

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(610) 337-9992 - FAX (610) 337-9939

CENTERPOINT TANK SERVICES, INC

536 Benjamin Franklin Highway

Douglassville PA, 19518

Project: Liberty Oil #38 - Tamaqua Project Number: NA

Project Manager: Danielle Varnes

Reported:

02/04/09 16:23

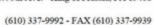
General Chemistry

TestAmerica King Of Prussia

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GP-17 (12-13.5) (KSA0442-01) Soil Sampled: 0	1/27/09 09:00	Received: 0	1/28/09 14:15	5					
% Solids	89.6	0.01	% by Weight	1	9012908	01/29/09	01/29/09	EPA 160.3	
GP-18 (3-4) (KSA0442-02) Soil Sampled: 01/27	7/09 09:20 Rec	eived: 01/28	/09 14:15						
% Solids	73.5	0.01	% by Weight	1	9012908	01/29/09	01/29/09	EPA 160.3	
GP-19 (12-13) (KSA0442-03) Soil Sampled: 01	27/09 10:00 R	eceived: 01/	28/09 14:15						
% Solids	89.6	0.01	% by Weight	1	9012908	01/29/09	01/29/09	EPA 160.3	
GP-21 (5-6) (KSA0442-04) Soil Sampled: 01/27	7/09 10:30 Rec	eived: 01/28	/09 14:15						
% Solids	89.8	0.01	% by Weight	1	9012908	01/29/09	01/29/09	EPA 160.3	
GP-23 (8-9) (KSA0442-05) Soil Sampled: 01/27	7/09 11:00 Rec	eived: 01/28	/09 14:15						
% Solids	80.2	0.01	% by Weight	1	9012908	01/29/09	01/29/09	EPA 160.3	
GP-24 (14-15.5) (KSA0442-06) Soil Sampled: 0	1/27/09 11:25	Received: 0	1/28/09 14:15	5					
% Solids	86.9	0.01	% by Weight	1	9012908	01/29/09	01/29/09	EPA 160.3	
GP-27 (13-14) (KSA0442-07) Soil Sampled: 01	27/09 12:20 R	eceived: 01/	28/09 14:15						
% Solids	90.6	0.01	% by Weight	1	9012908	01/29/09	01/29/09	EPA 160.3	
GP-28 (14-15.5) (KSA0442-08) Soil Sampled: 0	1/27/09 12:45	Received: 0	1/28/09 14:15	5					
% Solids	88.1	0.01	% by Weight	1	9012908	01/29/09	01/29/09	EPA 160.3	
GP-29 (9-10.5) (KSA0442-09) Soil Sampled: 01	/27/09 13:05 I	Received: 01	/28/09 14:15						
% Solids	90.9	0.01	% by Weight	1	9012908	01/29/09	01/29/09	EPA 160.3	

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536 Benjamin Franklin Highway Douglassville PA, 19518 Project: Liberty Oil #38 - Tamaqua

Project Number: NA

Project Manager: Danielle Varnes

Reported:

02/04/09 16:23

General Chemistry

TestAmerica King Of Prussia

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GP-31 (3-4) (KSA0442-10) Soil S	ampled: 01/27/09 13:25 R	Received: 01/28	/09 14:15						
% Solids	85.0	0.01	% by Weight	1	9012908	01/29/09	01/29/09	EPA 160.3	
GP-32 (3-4) (KSA0442-11) Soil S	ampled: 01/27/09 13:40 R	Received: 01/28	/09 14:15						
% Solids	79.8	0.01	% by Weight	1	9012908	01/29/09	01/29/09	EPA 160.3	
GP-33 (12-13.5) (KSA0442-12) Soil	Sampled: 01/27/09 14:0	0 Received: 0	1/28/09 14:15	5					
% Solids	91.0	0.01	% by Weight	1	9012908	01/29/09	01/29/09	EPA 160.3	
GP-35 (7-8) (KSA0442-13) Soil S	ampled: 01/27/09 14:20 R	Received: 01/28	7/09 14:15						
% Solids	85.1	0.01	% by Weight	1	9012908	01/29/09	01/29/09	EPA 160.3	

TestAmerica King Of Prussia







Project: Liberty Oil #38 - Tamaqua Project Number: NA

Reported:

536 Benjamin Franklin Highway Douglassville PA, 19518

Project Manager: Danielle Varnes

02/04/09 16:23

Notes and Definitions

RL7	Sample required	dilution due to high	concentrations of	target analyte.
-----	-----------------	----------------------	-------------------	-----------------

RL1 Reporting limit raised due to sample matrix effects.

A-01 Both DI vials were previously analyzed with an Internal Standard recovery below the limit. The sample was prepared from the

methanol vial, which requires a dilution.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

TestAmerica King Of Prussia

Test/merica

CHAIN OF CUSTODY REPORT

1090 King Georges Post Rd Suite 803 Edison, NJ 08837 (732) 661-0777 FAX (732) 661-0305

1008 W. Ninth Avenue King of Prussia, PA 19406 (610) 337-9992 FAX (610) 337-9939

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Pest/merica

CHAIN OF CUSTODY REPORT

1008 W. Ninth Avenue King of Prussia, PA 19406 (610) 337-9992 FAX (610) 337-9939

A 19406 Suite 803 Edison, NJ 08837 (732) 661-0777 FAX (732) 661-0305

RECEIVED
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34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

Certificate of Analysis

Project Name: TAMAQUA - PA SITE Workorder: 9827287

Purchase Order: Workorder ID: Liberty Oil #38

Mr. Pat Crawford Center Point Tank Services 536 E. Benjamin Franklin Hwy Douglassville, PA 19518

January 29, 2010

Dear Mr. Crawford,

Enclosed are the analytical results for samples received by the laboratory on Monday, January 18, 2010

ALSI is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Tonya Hironimus (Project Coordinator) or Anna G Milliken (Laboratory Manager) at (717) 944-5541.

Please visit us at www.analyticallab.com for a listing of ALSI's NELAP accreditations and Scope of Work, as well as other links to Water Quality documentation on the internet.

This laboratory report may not be reproduced, except in full, without the written approval of ALSI.

NOTE: ALSI has changed the report generation tool and while we have tried to retain the existing format, you will notice some changes in the laboratory report. Please feel free to contact ALSI in case you have any questions.

Analytical Laboratory Services, Inc.

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Report ID: 9827287

Anna G Milliken Laboratory Manager

Page 1 of 33



34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

SAMPLE SUMMARY

Workorder: 9827287 Liberty Oil #38 Discard Date: 02/12/2010

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
9827287001	LO-1[3-4]	Solid	1/14/10 09:13	1/18/10 18:44	Pat Crawford
9827287002	LO-1[7-8]	Solid	1/14/10 09:27	1/18/10 18:44	Pat Crawford
9827287003	LO-1[10.5-11.2]	Solid	1/14/10 09:35	1/18/10 18:44	Pat Crawford
9827287004	LO-2[6.5-7]	Solid	1/14/10 09:43	1/18/10 18:44	Pat Crawford
9827287005	LO-3[11-12]	Solid	1/14/10 10:14	1/18/10 18:44	Pat Crawford
9827287006	LO-4[5-6]	Solid	1/14/10 10:31	1/18/10 18:44	Pat Crawford
9827287007	LO-5[7-8]	Solid	1/14/10 11:02	1/18/10 18:44	Pat Crawford
9827287008	LO-6[5-6]	Solid	1/14/10 11:34	1/18/10 18:44	Pat Crawford
9827287009	LO-7[14-15]	Solid	1/14/10 12:03	1/18/10 18:44	Pat Crawford
9827287010	LO-8[6.5-7.5]	Solid	1/14/10 12:27	1/18/10 18:44	Pat Crawford
9827287011	LO-9[11-12]	Solid	1/14/10 12:41	1/18/10 18:44	Pat Crawford
827287012	LO-10[5-6]	Solid	1/14/10 13:08	1/18/10 18:44	Pat Crawford
9827287013	LO-13[3-4]	Solid	1/14/10 13:52	1/18/10 18:44	Pat Crawford
827287014	LO-13[11-12]	Solid	1/14/10 14:09	1/18/10 18:44	Pat Crawford
9827287015	LO-14[9-10]	Solid	1/14/10 14:41	1/18/10 18:44	Pat Crawford
9827287016	LO-14[12-13]	Solid	1/14/10 14:50	1/18/10 18:44	Pat Crawford
827287017	LO-15[3-4]	Solid	1/14/10 15:10	1/18/10 18:44	Pat Crawford
827287018	LO-16[5-6]	Solid	1/14/10 15:25	1/18/10 18:44	Pat Crawford
9827287019	LO-16[11-12]	Solid	1/14/10 15:37	1/18/10 18:44	Pat Crawford
9827287020	LO-17[3-4]	Solid	1/14/10 15:53	1/18/10 18:44	Pat Crawford
827287021	LO-17[5-6]	Solid	1/14/10 16:01	1/18/10 18:44	Pat Crawford
827287022	LO-18[4-5]	Solid	1/14/10 16:08	1/18/10 18:44	Pat Crawford
9827287023	LO-19[3-4]	Solid	1/14/10 16:23	1/18/10 18:44	Pat Crawford

Workorder Comments:

Report ID: 9827287 Page 2 of 33



34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

SAMPLE SUMMARY

Workorder: 9827287 Liberty Oil #38 Discard Date: 02/12/2010

ı	Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
_						

Notes

- -- Samples collected by ALSI personnel are done so in accordance with the procedures set forth in the ALSI Field Sampling Plan (20 Field Services Sampling Plan).
- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
- -- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
- -- The Chain of Custody document is included as part of this report.

Standard Acronyms/Flags

J, B Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte

U Indicates that the analyte was Not Detected (ND)

MDL Method Detection Limit
PQL Practical Quantitation Limit
RDL Reporting Detection Limit

ND Not Detected - indicates that the analyte was Not Detected at the RDL

Cntr Analysis was performed using this container

RegLmt Regulatory Limit

LCS Laboratory Control Sample

MS Matrix Spike

MSD Matrix Spike Duplicate DUP Sample Duplicate %Rec Percent Recovery

RPD Relative Percent Difference

Report ID: 9827287 Page 3 of 33



Matrix:

Solid

34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

ANALYTICAL RESULTS

Workorder: 9827287 Liberty Oil #38

LO-1[3-4]

Lab ID: 9827287001

Sample ID:

Date Collected: 1/14/2010 09:13

Date Received: 1/18/2010 18:44

Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
OLATILE ORGANICS										
Benzene	63.0		ug/kg	1.3	8260/5035	1/14/10	TMP	1/20/10 06:32	DD	C
1,2-Dibromoethane	ND		ug/kg	1.3	8260/5035	1/14/10	TMP	1/20/10 06:32	DD	C
1,2-Dichloroethane	ND		ug/kg	1.3	8260/5035	1/14/10	TMP	1/20/10 06:32	DD	C
Ethylbenzene	84.3		ug/kg	1.3	8260/5035	1/14/10	TMP	1/20/10 06:32	DD	C
Isopropylbenzene	35.4		ug/kg	1.3	8260/5035	1/14/10	TMP	1/20/10 06:32	DD	C
Methyl t-Butyl Ether	7.1		ug/kg	1.3	8260/5035	1/14/10	TMP	1/20/10 06:32	DD	C
Naphthalene	101		ug/kg	1.3	8260/5035	1/14/10	TMP	1/20/10 06:32	DD	C
Toluene	107		ug/kg	1.3	8260/5035	1/14/10	TMP	1/20/10 06:32	DD	C
Total Xylenes	204		ug/kg	3.9	8260/5035	1/14/10	TMP	1/20/10 06:32	DD	C
1,2,4-Trimethylbenzene	3750		ug/kg	23.2	8260/5035	1/14/10	TMP	1/27/10 14:24	TMP	A
1,3,5-Trimethylbenzene	1710		ug/kg	23.2	8260/5035	1/14/10	TMP	1/27/10 14:24	TMP	A
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	Ву	Cntr
1,2-Dichloroethane-d4 (S)	56.3	1	%	71-146	8260/5035	1/14/10	TMP	1/27/10 14:24	TMP	Α
4-Bromofluorobenzene (S)	87.1		%	46-138	8260/5035	1/14/10	TMP	1/27/10 14:24	TMP	A
Toluene-d8 (S)	70.9		%	54-141	8260/5035	1/14/10	TMP	1/27/10 14:24	TMP	A
Dibromofluoromethane (S)	65.2		96	42-143	8260/5035	1/14/10	TMP	1/27/10 14:24	TMP	A
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	Ву	Cntr
1,2-Dichloroethane-d4 (S)	97		%	56-124	8260/5035	1/14/10	TMP	1/20/10 06:32	DD	C
Toluene-d8 (S)	101		%	59-131	8260/5035	1/14/10	TMP	1/20/10 06:32	DD	C
Dibromofluoromethane (S)	89.5		%	62-123	8260/5035	1/14/10	TMP	1/20/10 06:32	DD	C
4-Bromofluorobenzene (S)	103		96	51-128	8260/5035	1/14/10	TMP	1/20/10 06:32	DD	C
WET CHEMISTRY										
Moisture	7.0		%	0.1	SM20-2540 G			1/19/10 03:30	LJF	D
Total Solids	93.0		%	0.1	SM20-2540 G			1/19/10 03:30	LJF	D
METALS										

Sample Comments:

One or more of the method 8260 internal standards were recovered outside of the control limits. The sample was re-analyzed with similar results, indicating a significant matrix interference.

One or more of the method 8260 surrogates were recovered outside of the control limits. The sample was re-analyzed with similar results, indicating a significant matrix interference.

Report ID: 9827287 Page 4 of 33



34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

ANALYTICAL RESULTS

Workorder: 9827287 Liberty Oil #38

Lab ID: 9827287001 Date Collected: 1/14/2010 09:13 Matrix: Solid

Sample ID: LO-1[3-4] Date Received: 1/18/2010 18:44

Parameters Results Flag Units RDL Method Prepared By Analyzed By Cntr

Anna G Milliken

Laboratory Manager

Report ID: 9827287 Page 5 of 33



Matrix:

Solid

34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

ANALYTICAL RESULTS

Workorder: 9827287 Liberty Oil #38

LO-1[7-8]

Lab ID: 9827287002

Sample ID:

Date Collected: 1/14/2010 09:27

Date Received: 1/18/2010 18:44

Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/kg	1.7	8260/5035	1/14/10	TMP	1/19/10 10:13	MES	В
1,2-Dibromoethane	ND		ug/kg	1.7	8260/5035	1/14/10	TMP	1/19/10 10:13	MES	В
1,2-Dichloroethane	ND		ug/kg	1.7	8260/5035	1/14/10	TMP	1/19/10 10:13	MES	В
Ethylbenzene	ND		ug/kg	1.7	8260/5035	1/14/10	TMP	1/19/10 10:13	MES	В
Isopropylbenzene	ND		ug/kg	1.7	8260/5035	1/14/10	TMP	1/19/10 10:13	MES	В
Methyl t-Butyl Ether	ND		ug/kg	1.7	8260/5035	1/14/10	TMP	1/19/10 10:13	MES	В
Naphthalene	ND		ug/kg	1.7	8260/5035	1/14/10	TMP	1/19/10 10:13	MES	В
Toluene	ND		ug/kg	1.7	8260/5035	1/14/10	TMP	1/19/10 10:13	MES	В
Total Xylenes	ND		ug/kg	5.0	8260/5035	1/14/10	TMP	1/19/10 10:13	MES	В
1,2,4-Trimethylbenzene	ND		ug/kg	1.7	8260/5035	1/14/10	TMP	1/19/10 10:13	MES	В
1,3,5-Trimethylbenzene	ND		ug/kg	1.7	8260/5035	1/14/10	TMP	1/19/10 10:13	MES	В
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	Ву	Cntr
1,2-Dichloroethane-d4 (S)	86.8		%	56-124	8260/5035	1/14/10	TMP	1/19/10 10:13	MES	В
4-Bromofluorobenzene (S)	79.8		%	51-128	8260/5035	1/14/10	TMP	1/19/10 10:13	MES	В
Dibromofluoromethane (S)	84.3		%	62-123	8260/5035	1/14/10	TMP	1/19/10 10:13	MES	В
Toluene-d8 (S)	79.3		%	59-131	8260/5035	1/14/10	TMP	1/19/10 10:13	MES	В
WET CHEMISTRY										
Moisture	14.0		%	0.1	SM20-2540 G			1/19/10 03:30	LJF	D
Total Solids	86.0		%	0.1	SM20-2540 G			1/19/10 03:30	LJF	D
METALS										
Lead, Total	9.8		mg/kg	2.3	SW846 6010C	1/19/10	MNP	1/20/10 03:54	SRT	D1

Sample Comments:

Anna G Milliken

amm mille

Laboratory Manager

Report ID: 9827287 Page 6 of 33



Solid

Matrix:

34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

ANALYTICAL RESULTS

Workorder: 9827287 Liberty Oil #38

LO-1[10.5-11.2]

Lab ID: 9827287003

Sample ID:

Date Collected: 1/14/2010 09:35

Date Received: 1/18/2010 18:44

Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
VOLATILE ORGANICS										
Benzene	4.1		ug/kg	1.4	8260/5035	1/14/10	TMP	1/19/10 16:33	MES	В
1,2-Dibromoethane	ND		ug/kg	1.4	8260/5035	1/14/10	TMP	1/19/10 16:33	MES	В
1,2-Dichloroethane	ND		ug/kg	1.4	8260/5035	1/14/10	TMP	1/19/10 16:33	MES	В
Ethylbenzene	120		ug/kg	1.4	8260/5035	1/14/10	TMP	1/19/10 16:33	MES	В
Isopropylbenzene	7.0		ug/kg	1.4	8260/5035	1/14/10	TMP	1/19/10 16:33	MES	В
Methyl t-Butyl Ether	ND		ug/kg	1.4	8260/5035	1/14/10	TMP	1/19/10 16:33	MES	В
Naphthalene	114		ug/kg	1.4	8260/5035	1/14/10	TMP	1/19/10 16:33	MES	В
Toluene	22.5		ug/kg	1.4	8260/5035	1/14/10	TMP	1/19/10 16:33	MES	В
Total Xylenes	2190		ug/kg	98.2	8260/5035	1/14/10	TMP	1/22/10 18:02	TMP	A
1,2,4-Trimethylbenzene	906		ug/kg	32.7	8260/5035	1/14/10	TMP	1/22/10 18:02	TMP	A
1,3,5-Trimethylbenzene	58.6		ug/kg	1.4	8260/5035	1/14/10	TMP	1/19/10 16:33	MES	В
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	Ву	Cntr
1,2-Dichloroethane-d4 (S)	86		%	71-146	8260/5035	1/14/10	TMP	1/22/10 18:02	TMP	Α
Dibromofluoromethane (S)	98		%	42-143	8260/5035	1/14/10	TMP	1/22/10 18:02	TMP	A
Toluene-d8 (S)	108		96	54-141	8260/5035	1/14/10	TMP	1/22/10 18:02	TMP	A
4-Bromofluorobenzene (S)	138		96	46-138	8260/5035	1/14/10	TMP	1/22/10 18:02	TMP	A
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	Ву	Cntr
1,2-Dichloroethane-d4 (S)	96.1		%	56-124	8260/5035	1/14/10	TMP	1/19/10 16:33	MES	В
Toluene-d8 (S)	105		%	59-131	8260/5035	1/14/10	TMP	1/19/10 16:33	MES	В
4-Bromofluorobenzene (S)	87.6		%	51-128	8260/5035	1/14/10	TMP	1/19/10 16:33	MES	В
Dibromofluoromethane (S)	80.8		%	62-123	8260/5035	1/14/10	TMP	1/19/10 16:33	MES	В
WET CHEMISTRY										
Moisture	13.1		96	0.1	SM20-2540 G			1/19/10 03:30	LJF	D
Total Solids	86.9		%	0.1	SM20-2540 G			1/19/10 03:30	LJF	D
METALS										
Lead, Total	8.2		mg/kg	1.9	SW846 6010C	1/19/10	MNP	1/20/10 03:57	SRT	D1

Sample Comments:

One or more of the method 8260 internal standards were recovered outside of the control limits, indicating a significant matrix interference.

Anna G Milliken
Laboratory Manager

Report ID: 9827287 Page 7 of 33



34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

ANALYTICAL RESULTS

Workorder: 9827287 Liberty Oil #38

Lab ID: 9827287004

Date Collected: 1/14/2010 09:43

Solid

Matrix:

Sample ID: LO-2[6.5-7]

Date Received: 1/18/2010 18:44

Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/kg	1.6	8260/5035	1/14/10	TMP	1/19/10 10:42	MES	В
1,2-Dibromoethane	ND		ug/kg	1.6	8260/5035	1/14/10	TMP	1/19/10 10:42	MES	В
1,2-Dichloroethane	ND		ug/kg	1.6	8260/5035	1/14/10	TMP	1/19/10 10:42	MES	В
Ethylbenzene	ND		ug/kg	1.6	8260/5035	1/14/10	TMP	1/19/10 10:42	MES	В
Isopropylbenzene	ND		ug/kg	1.6	8260/5035	1/14/10	TMP	1/19/10 10:42	MES	В
Methyl t-Butyl Ether	ND		ug/kg	1.6	8260/5035	1/14/10	TMP	1/19/10 10:42	MES	В
Naphthalene	ND		ug/kg	1.6	8260/5035	1/14/10	TMP	1/19/10 10:42	MES	В
Toluene	ND		ug/kg	1.6	8260/5035	1/14/10	TMP	1/19/10 10:42	MES	В
Total Xylenes	ND		ug/kg	4.7	8260/5035	1/14/10	TMP	1/19/10 10:42	MES	В
1,2,4-Trimethylbenzene	ND		ug/kg	1.6	8260/5035	1/14/10	TMP	1/19/10 10:42	MES	В
1,3,5-Trimethylbenzene	ND		ug/kg	1.6	8260/5035	1/14/10	TMP	1/19/10 10:42	MES	В
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	Ву	Cntr
1,2-Dichloroethane-d4 (S)	74.9		%	56-124	8260/5035	1/14/10	TMP	1/19/10 10:42	MES	В
4-Bromofluorobenzene (S)	81.6		%	51-128	8260/5035	1/14/10	TMP	1/19/10 10:42	MES	В
Dibromofluoromethane (S)	84.1		96	62-123	8260/5035	1/14/10	TMP	1/19/10 10:42	MES	В
Toluene-d8 (S)	97.8		%	59-131	8260/5035	1/14/10	TMP	1/19/10 10:42	MES	В
WET CHEMISTRY										
Moisture	9.7		%	0.1	SM20-2540 G			1/19/10 03:30	LJF	D
Total Solids	90.3		%	0.1	SM20-2540 G			1/19/10 03:30	LJF	D
METALS										
Lead, Total	7.6		mg/kg	2.1	SW846 6010C	1/19/10	MNP	1/20/10 04:01	SRT	D1

Sample Comments:

Anna G Milliken

ann mille

Laboratory Manager

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34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

ANALYTICAL RESULTS

Workorder: 9827287 Liberty Oil #38

Lab ID: 9827287005

Date Collected: 1/14/2010 10:14 Date Received: 1/18/2010 18:44 Matrix: Solid

Sample ID: LO-3[11-12]

Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/kg	1.5	8260/5035	1/14/10	TMP	1/20/10 03:25	DD	C
1,2-Dibromoethane	ND		ug/kg	1.5	8260/5035	1/14/10	TMP	1/20/10 03:25	DD	C
1,2-Dichloroethane	ND		ug/kg	1.5	8260/5035	1/14/10	TMP	1/20/10 03:25	DD	C
Ethylbenzene	ND		ug/kg	1.5	8260/5035	1/14/10	TMP	1/20/10 03:25	DD	C
Isopropylbenzene	ND		ug/kg	1.5	8260/5035	1/14/10	TMP	1/20/10 03:25	DD	C
Methyl t-Butyl Ether	ND		ug/kg	1.5	8260/5035	1/14/10	TMP	1/20/10 03:25	DD	C
Naphthalene	ND		ug/kg	1.5	8260/5035	1/14/10	TMP	1/20/10 03:25	DD	C
Toluene	1.6		ug/kg	1.5	8260/5035	1/14/10	TMP	1/20/10 03:25	DD	C
Total Xylenes	ND		ug/kg	4.6	8260/5035	1/14/10	TMP	1/20/10 03:25	DD	C
1,2,4-Trimethylbenzene	ND		ug/kg	1.5	8260/5035	1/14/10	TMP	1/20/10 03:25	DD	C
1,3,5-Trimethylbenzene	ND		ug/kg	1.5	8260/5035	1/14/10	TMP	1/20/10 03:25	DD	C
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	Ву	Cntr
1,2-Dichloroethane-d4 (S)	80.3		%	56-124	8260/5035	1/14/10	TMP	1/20/10 03:25	DD	С
4-Bromofluorobenzene (S)	84.3		%	51-128	8260/5035	1/14/10	TMP	1/20/10 03:25	DD	C
Dibromofluoromethane (S)	80.5		96	62-123	8260/5035	1/14/10	TMP	1/20/10 03:25	DD	C
Toluene-d8 (S)	97.1		%	59-131	8260/5035	1/14/10	TMP	1/20/10 03:25	DD	C
WET CHEMISTRY										
Moisture	11.5		96	0.1	SM20-2540 G			1/20/10 03:05	LJF	D
Total Solids	88.5		%	0.1	SM20-2540 G			1/20/10 03:05	LJF	D
METALS										
					SW846 6010C		MNP		SRT	D1

Sample Comments:

Anna G Milliken

ann mille

Laboratory Manager

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Matrix:

Solid

34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

ANALYTICAL RESULTS

Workorder: 9827287 Liberty Oil #38

LO-4[5-6]

Lab ID: 9827287006

Sample ID:

Date Collected: 1/14/2010 10:31

Date Received: 1/18/2010 18:44

Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/kg	2.2	8260/5035	1/14/10	TMP	1/19/10 11:41	MES	В
1,2-Dibromoethane	ND		ug/kg	2.2	8260/5035	1/14/10	TMP	1/19/10 11:41	MES	В
1,2-Dichloroethane	ND		ug/kg	2.2	8260/5035	1/14/10	TMP	1/19/10 11:41	MES	В
Ethylbenzene	ND		ug/kg	2.2	8260/5035	1/14/10	TMP	1/19/10 11:41	MES	В
Isopropylbenzene	ND		ug/kg	2.2	8260/5035	1/14/10	TMP	1/19/10 11:41	MES	В
Methyl t-Butyl Ether	ND		ug/kg	2.2	8260/5035	1/14/10	TMP	1/19/10 11:41	MES	В
Naphthalene	ND		ug/kg	2.2	8260/5035	1/14/10	TMP	1/19/10 11:41	MES	В
Toluene	11.2		ug/kg	2.2	8260/5035	1/14/10	TMP	1/19/10 11:41	MES	В
Total Xylenes	ND		ug/kg	6.7	8260/5035	1/14/10	TMP	1/19/10 11:41	MES	В
1,2,4-Trimethylbenzene	ND		ug/kg	2.2	8260/5035	1/14/10	TMP	1/19/10 11:41	MES	В
1,3,5-Trimethylbenzene	ND		ug/kg	2.2	8260/5035	1/14/10	TMP	1/19/10 11:41	MES	В
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	Ву	Cntr
1,2-Dichloroethane-d4 (S)	89.7		%	56-124	8260/5035	1/14/10	TMP	1/19/10 11:41	MES	В
4-Bromofluorobenzene (S)	122		%	51-128	8260/5035	1/14/10	TMP	1/19/10 11:41	MES	В
Dibromofluoromethane (S)	104		96	62-123	8260/5035	1/14/10	TMP	1/19/10 11:41	MES	В
Toluene-d8 (S)	150	2	%	59-131	8260/5035	1/14/10	TMP	1/19/10 11:41	MES	В
WET CHEMISTRY										
Moisture	20.0		96	0.1	SM20-2540 G			1/20/10 03:05	LJF	D
Total Solids	80.0		%	0.1	SM20-2540 G			1/20/10 03:05	LJF	D
METALS										
Lead, Total	359		mg/kg	2.5	SW846 6010C	1/20/10	MNP	1/21/10 03:08	SRT	D1

Sample Comments:

One or more of the method 8260 internal standards were recovered outside of the control limits. The sample was re-analyzed with similar results, indicating a significant matrix interference.

One or more of the method 8260 surrogates were recovered outside of the control limits. The sample was re-analyzed with similar results, indicating a significant matrix interference.

Anna G Milliken Laboratory Manager

ann mille

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Matrix:

Solid

34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

ANALYTICAL RESULTS

Workorder: 9827287 Liberty Oil #38

LO-5[7-8]

Lab ID: 9827287007

Sample ID:

Date Collected: 1/14/2010 11:02

Date Received: 1/18/2010 18:44

Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
VOLATILE ORGANICS										
Benzene	5.7		ug/kg	2.8	8260/5035	1/14/10	TMP	1/19/10 12:10	MES	В
1,2-Dibromoethane	ND		ug/kg	2.8	8260/5035	1/14/10	TMP	1/19/10 12:10	MES	В
1,2-Dichloroethane	ND		ug/kg	2.8	8260/5035	1/14/10	TMP	1/19/10 12:10	MES	В
Ethylbenzene	ND		ug/kg	2.8	8260/5035	1/14/10	TMP	1/19/10 12:10	MES	В
Isopropylbenzene	ND		ug/kg	2.8	8260/5035	1/14/10	TMP	1/19/10 12:10	MES	В
Methyl t-Butyl Ether	ND		ug/kg	2.8	8260/5035	1/14/10	TMP	1/19/10 12:10	MES	В
Naphthalene	ND		ug/kg	2.8	8260/5035	1/14/10	TMP	1/19/10 12:10	MES	В
Toluene	3.5		ug/kg	2.8	8260/5035	1/14/10	TMP	1/19/10 12:10	MES	В
Total Xylenes	ND		ug/kg	8.5	8260/5035	1/14/10	TMP	1/19/10 12:10	MES	В
1,2,4-Trimethylbenzene	ND		ug/kg	2.8	8260/5035	1/14/10	TMP	1/19/10 12:10	MES	В
1,3,5-Trimethylbenzene	ND		ug/kg	2.8	8260/5035	1/14/10	TMP	1/19/10 12:10	MES	В
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	Ву	Cntr
1,2-Dichloroethane-d4 (S)	82.4		%	56-124	8260/5035	1/14/10	TMP	1/19/10 12:10	MES	В
4-Bromofluorobenzene (S)	130	4	%	51-128	8260/5035	1/14/10	TMP	1/19/10 12:10	MES	В
Dibromofluoromethane (S)	96.5		96	62-123	8260/5035	1/14/10	TMP	1/19/10 12:10	MES	В
Toluene-d8 (S)	171	3	96	59-131	8260/5035	1/14/10	TMP	1/19/10 12:10	MES	В
WET CHEMISTRY										
Moisture	6.1		96	0.1	SM20-2540 G			1/20/10 03:05	LJF	D
Total Solids	93.9		%	0.1	SM20-2540 G			1/20/10 03:05	LJF	D
METALS										

Sample Comments:

One or more of the method 8260 internal standards were recovered outside of the control limits. The sample was re-analyzed with similar results, indicating a significant matrix interference.

One or more of the method 8260 surrogates were recovered outside of the control limits. The sample was re-analyzed with similar results, indicating a significant matrix interference.

Anna G Milliken Laboratory Manager

ann mille

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34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541

ANALYTICAL RESULTS

Workorder: 9827287 Liberty Oil #38

Lab ID: 9827287008 Date Collected: 1/14/2010 11:34 Date Received: 1/18/2010 18:44 Matrix: Solid

Sample ID: LO-6[5-6]

Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/kg	2.3	8260/5035	1/14/10	TMP	1/19/10 12:39	MES	В
1,2-Dibromoethane	ND		ug/kg	2.3	8260/5035	1/14/10	TMP	1/19/10 12:39	MES	В
1,2-Dichloroethane	ND		ug/kg	2.3	8260/5035	1/14/10	TMP	1/19/10 12:39	MES	В
Ethylbenzene	ND		ug/kg	2.3	8260/5035	1/14/10	TMP	1/19/10 12:39	MES	В
Isopropylbenzene	ND		ug/kg	2.3	8260/5035	1/14/10	TMP	1/19/10 12:39	MES	В
Methyl t-Butyl Ether	ND		ug/kg	2.3	8260/5035	1/14/10	TMP	1/19/10 12:39	MES	В
Naphthalene	ND		ug/kg	2.3	8260/5035	1/14/10	TMP	1/19/10 12:39	MES	В
Toluene	3.2		ug/kg	2.3	8260/5035	1/14/10	TMP	1/19/10 12:39	MES	В
Total Xylenes	ND		ug/kg	6.9	8260/5035	1/14/10	TMP	1/19/10 12:39	MES	В
1,2,4-Trimethylbenzene	ND		ug/kg	2.3	8260/5035	1/14/10	TMP	1/19/10 12:39	MES	В
1,3,5-Trimethylbenzene	ND		ug/kg	2.3	8260/5035	1/14/10	TMP	1/19/10 12:39	MES	В
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	Ву	Cntr
1,2-Dichloroethane-d4 (S)	91.4		%	56-124	8260/5035	1/14/10	TMP	1/19/10 12:39	MES	В
4-Bromofluorobenzene (S)	151	6	%	51-128	8260/5035	1/14/10	TMP	1/19/10 12:39	MES	В
Dibromofluoromethane (S)	108		96	62-123	8260/5035	1/14/10	TMP	1/19/10 12:39	MES	В
Toluene-d8 (S)	147	5	96	59-131	8260/5035	1/14/10	TMP	1/19/10 12:39	MES	В
WET CHEMISTRY										
Moisture	4.7		%	0.1	SM20-2540 G			1/20/10 03:05	LJF	D
Total Solids	95.3		%	0.1	SM20-2540 G			1/20/10 03:05	LJF	D
METALS										
Lead, Total	11.2		mg/kg	2.0	SW846 6010C	1/20/10	MNP	1/21/10 03:29	SRT	D1

Sample Comments:

One or more of the method 8260 internal standards were recovered outside of the control limits. The sample was re-analyzed with similar results, indicating a significant matrix interference.

One or more of the method 8260 surrogates were recovered outside of the control limits. The sample was re-analyzed with similar results, indicating a significant matrix interference.

Anna G Milliken

ann mille

Laboratory Manager

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34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

ANALYTICAL RESULTS

Workorder: 9827287 Liberty Oil #38

Lab ID: 9827287009

Date Collected: 1/14/2010 12:03

Matrix: Solid

Sample ID: LO-7[14-15]

Date Received: 1/18/2010 18:44

Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
VOLATILE ORGANICS										
Benzene	42.0		ug/kg	2.2	8260/5035	1/14/10	TMP	1/20/10 05:34	DD	C
1,2-Dibromoethane	ND		ug/kg	2.2	8260/5035	1/14/10	TMP	1/20/10 05:34	DD	C
1,2-Dichloroethane	ND		ug/kg	2.2	8260/5035	1/14/10	TMP	1/20/10 05:34	DD	C
Ethylbenzene	ND		ug/kg	2.2	8260/5035	1/14/10	TMP	1/20/10 05:34	DD	C
Isopropylbenzene	ND		ug/kg	2.2	8260/5035	1/14/10	TMP	1/20/10 05:34	DD	C
Methyl t-Butyl Ether	ND		ug/kg	2.2	8260/5035	1/14/10	TMP	1/20/10 05:34	DD	C
Naphthalene	ND		ug/kg	2.2	8260/5035	1/14/10	TMP	1/20/10 05:34	DD	C
Toluene	16.0		ug/kg	2.2	8260/5035	1/14/10	TMP	1/20/10 05:34	DD	C
Total Xylenes	9.4		ug/kg	6.5	8260/5035	1/14/10	TMP	1/20/10 05:34	DD	C
1,2,4-Trimethylbenzene	3.3		ug/kg	2.2	8260/5035	1/14/10	TMP	1/20/10 05:34	DD	C
1,3,5-Trimethylbenzene	2.2		ug/kg	2.2	8260/5035	1/14/10	TMP	1/20/10 05:34	DD	C
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	Ву	Cntr
1,2-Dichloroethane-d4 (S)	117		%	56-124	8260/5035	1/14/10	TMP	1/20/10 05:34	DD	C
4-Bromofluorobenzene (S)	130	4	%	51-128	8260/5035	1/14/10	TMP	1/20/10 05:34	DD	C
Dibromofluoromethane (S)	106		96	62-123	8260/5035	1/14/10	TMP	1/20/10 05:34	DD	C
Toluene-d8 (S)	144	7	%	59-131	8260/5035	1/14/10	TMP	1/20/10 05:34	DD	C
WET CHEMISTRY										
Moisture	14.5		%	0.1	SM20-2540 G			1/20/10 03:05	LJF	D
Total Solids	85.5		%	0.1	SM20-2540 G			1/20/10 03:05	LJF	D
METALS										
Lead, Total	51.9		mg/kg	2.1	SW846 6010C	1/20/10	MNP	1/21/10 03:33	SRT	D1

Sample Comments:

One or more of the method 8260 internal standards were recovered outside of the control limits. The sample was re-analyzed with similar results, indicating a significant matrix interference.

One or more of the method 8260 surrogates were recovered outside of the control limits. The sample was re-analyzed with similar results, indicating a significant matrix interference.

Anna G Milliken Laboratory Manager

ann mille

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Matrix:

Solid

34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

ANALYTICAL RESULTS

Workorder: 9827287 Liberty Oil #38

LO-8[6.5-7.5]

Lab ID: 9827287010

Sample ID:

Date Collected: 1/14/2010 12:27

Date Received: 1/18/2010 18:44

Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
VOLATILE ORGANICS										
Benzene	4.5		ug/kg	2.0	8260/5035	1/14/10	TMP	1/19/10 13:38	MES	В
1,2-Dibromoethane	ND		ug/kg	2.0	8260/5035	1/14/10	TMP	1/19/10 13:38	MES	В
1,2-Dichloroethane	ND		ug/kg	2.0	8260/5035	1/14/10	TMP	1/19/10 13:38	MES	В
Ethylbenzene	ND		ug/kg	2.0	8260/5035	1/14/10	TMP	1/19/10 13:38	MES	В
Isopropylbenzene	ND		ug/kg	2.0	8260/5035	1/14/10	TMP	1/19/10 13:38	MES	В
Methyl t-Butyl Ether	ND		ug/kg	2.0	8260/5035	1/14/10	TMP	1/19/10 13:38	MES	В
Naphthalene	ND		ug/kg	2.0	8260/5035	1/14/10	TMP	1/19/10 13:38	MES	В
Toluene	30.8		ug/kg	2.0	8260/5035	1/14/10	TMP	1/19/10 13:38	MES	В
Total Xylenes	12.5		ug/kg	5.9	8260/5035	1/14/10	TMP	1/19/10 13:38	MES	В
1,2,4-Trimethylbenzene	2.5		ug/kg	2.0	8260/5035	1/14/10	TMP	1/19/10 13:38	MES	В
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	8260/5035	1/14/10	TMP	1/19/10 13:38	MES	В
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	Ву	Cntr
1,2-Dichloroethane-d4 (S)	78.3		%	56-124	8260/5035	1/14/10	TMP	1/19/10 13:38	MES	В
4-Bromofluorobenzene (S)	108		%	51-128	8260/5035	1/14/10	TMP	1/19/10 13:38	MES	В
Dibromofluoromethane (S)	86.6		96	62-123	8260/5035	1/14/10	TMP	1/19/10 13:38	MES	В
Toluene-d8 (S)	103		%	59-131	8260/5035	1/14/10	TMP	1/19/10 13:38	MES	В
WET CHEMISTRY										
Moisture	6.9		96	0.1	SM20-2540 G			1/20/10 03:05	LJF	D
Total Solids	93.1		%	0.1	SM20-2540 G			1/20/10 03:05	LJF	D
METALS										
Lead, Total	110		mg/kg	2.0	SW846 6010C	1/20/10	MNP	1/21/10 03:37	SRT	D1

Sample Comments:

Anna G Milliken

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Laboratory Manager

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34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

ANALYTICAL RESULTS

Workorder: 9827287 Liberty Oil #38

Lab ID: 9827287011 Date Collected: 1/14/2010 12:41 Matrix: Solid

Sample ID: LO-9[11-12] Date Received: 1/18/2010 18:44

Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/kg	38.7	8260/5035	1/14/10	TMP	1/22/10 14:26	TMP	A
1,2-Dibromoethane	50.4		ug/kg	38.7	8260/5035	1/14/10	TMP	1/22/10 14:26	TMP	A
1,2-Dichloroethane	ND		ug/kg	38.7	8260/5035	1/14/10	TMP	1/22/10 14:26	TMP	A
Ethylbenzene	105		ug/kg	38.7	8260/5035	1/14/10	TMP	1/22/10 14:26	TMP	A
Isopropylbenzene	519		ug/kg	38.7	8260/5035	1/14/10	TMP	1/22/10 14:26	TMP	A
Methyl t-Butyl Ether	ND		ug/kg	38.7	8260/5035	1/14/10	TMP	1/22/10 14:26	TMP	A
Naphthalene	ND		ug/kg	77.3	8260/5035	1/14/10	TMP	1/22/10 14:26	TMP	A
Toluene	ND		ug/kg	38.7	8260/5035	1/14/10	TMP	1/22/10 14:26	TMP	A
Total Xylenes	ND		ug/kg	116	8260/5035	1/14/10	TMP	1/22/10 14:26	TMP	A
1,2,4-Trimethylbenzene	6360		ug/kg	38.7	8260/5035	1/14/10	TMP	1/22/10 14:26	TMP	A
1,3,5-Trimethylbenzene	4630		ug/kg	38.7	8260/5035	1/14/10	TMP	1/22/10 14:26	TMP	A
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	Ву	Cntr
1,2-Dichloroethane-d4 (S)	87.6		%	71-146	8260/5035	1/14/10	TMP	1/22/10 14:26	TMP	A
4-Bromofluorobenzene (S)	95.9		%	46-138	8260/5035	1/14/10	TMP	1/22/10 14:26	TMP	A
Dibromofluoromethane (S)	78.5		96	42-143	8260/5035	1/14/10	TMP	1/22/10 14:26	TMP	A
Toluene-d8 (S)	100		%	54-141	8260/5035	1/14/10	TMP	1/22/10 14:26	TMP	A
WET CHEMISTRY										
Moisture	10.0		%	0.1	SM20-2540 G			1/20/10 03:05	LJF	D
Total Solids	90.0		%	0.1	SM20-2540 G			1/20/10 03:05	LJF	D
METALS										
Lead, Total	11.6		mg/kg	1.9	SW846 6010C	1/20/10	MNP	1/21/10 03:40	SRT	D1

Sample Comments:

Anna G Milliken Laboratory Manager

ann mille

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34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

ANALYTICAL RESULTS

Workorder: 9827287 Liberty Oil #38

Lab ID: 9827287012

Date Collected: 1/14/2010 13:08

Matrix: Solid

Sample ID: LO-10[5-6]

Date Received: 1/18/2010 18:44

Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
VOLATILE ORGANICS										
Benzene	ND		ug/kg	3.1	8260/5035	1/14/10	TMP	1/19/10 14:07	MES	В
1,2-Dibromoethane	ND		ug/kg	3.1	8260/5035	1/14/10	TMP	1/19/10 14:07	MES	В
1,2-Dichloroethane	ND		ug/kg	3.1	8260/5035	1/14/10	TMP	1/19/10 14:07	MES	В
Ethylbenzene	ND		ug/kg	3.1	8260/5035	1/14/10	TMP	1/19/10 14:07	MES	В
Isopropylbenzene	ND		ug/kg	3.1	8260/5035	1/14/10	TMP	1/19/10 14:07	MES	В
Methyl t-Butyl Ether	ND		ug/kg	3.1	8260/5035	1/14/10	TMP	1/19/10 14:07	MES	В
Naphthalene	ND		ug/kg	3.1	8260/5035	1/14/10	TMP	1/19/10 14:07	MES	В
Toluene	5.6		ug/kg	3.1	8260/5035	1/14/10	TMP	1/19/10 14:07	MES	В
Total Xylenes	ND		ug/kg	9.3	8260/5035	1/14/10	TMP	1/19/10 14:07	MES	В
1,2,4-Trimethylbenzene	ND		ug/kg	3.1	8260/5035	1/14/10	TMP	1/19/10 14:07	MES	В
1,3,5-Trimethylbenzene	ND		ug/kg	3.1	8260/5035	1/14/10	TMP	1/19/10 14:07	MES	В
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	Ву	Cntr
1,2-Dichloroethane-d4 (S)	123		%	56-124	8260/5035	1/14/10	TMP	1/19/10 14:07	MES	В
4-Bromofluorobenzene (S)	129	10	%	51-128	8260/5035	1/14/10	TMP	1/19/10 14:07	MES	В
Dibromofluoromethane (S)	136	8	96	62-123	8260/5035	1/14/10	TMP	1/19/10 14:07	MES	В
Toluene-d8 (S)	167	9	96	59-131	8260/5035	1/14/10	TMP	1/19/10 14:07	MES	В
WET CHEMISTRY										
Moisture	15.2		96	0.1	SM20-2540 G			1/20/10 03:05	LJF	D
Total Solids	84.8		%	0.1	SM20-2540 G			1/20/10 03:05	LJF	D
METALS										
Lead, Total	9.3		mg/kg	2.3	SW846 6010C	1/20/10	MNP	1/21/10 03:44	SRT	D1

Sample Comments:

One or more of the method 8260 internal standards were recovered outside of the control limits. The sample was re-analyzed with similar results, indicating a significant matrix interference.

One or more of the method 8260 surrogates were recovered outside of the control limits. The sample was re-analyzed with similar results, indicating a significant matrix interference.

Anna G Milliken

Laboratory Manager

ann mille

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34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

ANALYTICAL RESULTS

Workorder: 9827287 Liberty Oil #38

Lab ID: 9827287013

Date Collected: 1/14/2010 13:52

Matrix: Solid

Sample ID: LO-13[3-4]

Date Received: 1/18/2010 18:44

Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
VOLATILE ORGANICS										
Benzene	23100		ug/kg	2240	8260/5035	1/14/10	TMP	1/22/10 14:53	TMP	A
1,2-Dibromoethane	ND		ug/kg	2240	8260/5035	1/14/10	TMP	1/22/10 14:53	TMP	A
1,2-Dichloroethane	ND		ug/kg	2240	8260/5035	1/14/10	TMP	1/22/10 14:53	TMP	A
Ethylbenzene	49300		ug/kg	2240	8260/5035	1/14/10	TMP	1/22/10 14:53	TMP	A
Isopropylbenzene	11900		ug/kg	2240	8260/5035	1/14/10	TMP	1/22/10 14:53	TMP	A
Methyl t-Butyl Ether	ND		ug/kg	2240	8260/5035	1/14/10	TMP	1/22/10 14:53	TMP	A
Naphthalene	17400		ug/kg	4480	8260/5035	1/14/10	TMP	1/22/10 14:53	TMP	A
Toluene	183000		ug/kg	2240	8260/5035	1/14/10	TMP	1/22/10 14:53	TMP	A
Total Xylenes	324000		ug/kg	6720	8260/5035	1/14/10	TMP	1/22/10 14:53	TMP	A
1,2,4-Trimethylbenzene	158000		ug/kg	2240	8260/5035	1/14/10	TMP	1/22/10 14:53	TMP	A
1,3,5-Trimethylbenzene	52800		ug/kg	2240	8260/5035	1/14/10	TMP	1/22/10 14:53	TMP	A
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	Ву	Cntr
1,2-Dichloroethane-d4 (S)	75		%	71-146	8260/5035	1/14/10	TMP	1/22/10 14:53	TMP	A
4-Bromofluorobenzene (S)	92.6		%	46-138	8260/5035	1/14/10	TMP	1/22/10 14:53	TMP	A
Dibromofluoromethane (S)	80.4		96	42-143	8260/5035	1/14/10	TMP	1/22/10 14:53	TMP	A
Toluene-d8 (S)	89.2		96	54-141	8260/5035	1/14/10	TMP	1/22/10 14:53	TMP	A
WET CHEMISTRY										
Moisture	11.4		96	0.1	SM20-2540 G			1/20/10 03:05	LJF	D
Total Solids	88.6		%	0.1	SM20-2540 G			1/20/10 03:05	LJF	D
METALS										
Lead, Total	62.2		mg/kg	2.3	SW846 6010C	1/20/10	MNP	1/21/10 03:48	SRT	D1

Sample Comments:

Anna G Milliken

Laboratory Manager

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34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

ANALYTICAL RESULTS

Workorder: 9827287 Liberty Oil #38

Lab ID: 9827287014

Date Collected: 1/14/2010 14:09

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Solid

Matrix:

Sample ID: LO-13[11-12]

Date Received: 1/18/2010 18:44

Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
VOLATILE ORGANICS										
Benzene	1.7		ug/kg	1.5	8260/5035	1/14/10	TMP	1/19/10 14:36	MES	В
1,2-Dibromoethane	ND		ug/kg	1.5	8260/5035	1/14/10	TMP	1/19/10 14:36	MES	В
1,2-Dichloroethane	ND		ug/kg	1.5	8260/5035	1/14/10	TMP	1/19/10 14:36	MES	В
Ethylbenzene	ND		ug/kg	1.5	8260/5035	1/14/10	TMP	1/19/10 14:36	MES	В
Isopropylbenzene	ND		ug/kg	1.5	8260/5035	1/14/10	TMP	1/19/10 14:36	MES	В
Methyl t-Butyl Ether	36.8		ug/kg	1.5	8260/5035	1/14/10	TMP	1/19/10 14:36	MES	В
Naphthalene	ND		ug/kg	1.5	8260/5035	1/14/10	TMP	1/19/10 14:36	MES	В
Toluene	3.7		ug/kg	1.5	8260/5035	1/14/10	TMP	1/19/10 14:36	MES	В
Total Xylenes	4.5		ug/kg	4.4	8260/5035	1/14/10	TMP	1/19/10 14:36	MES	В
1,2,4-Trimethylbenzene	ND		ug/kg	1.5	8260/5035	1/14/10	TMP	1/19/10 14:36	MES	В
1,3,5-Trimethylbenzene	ND		ug/kg	1.5	8260/5035	1/14/10	TMP	1/19/10 14:36	MES	В
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	Ву	Cntr
1,2-Dichloroethane-d4 (S)	76.6		%	56-124	8260/5035	1/14/10	TMP	1/19/10 14:36	MES	В
4-Bromofluorobenzene (S)	87.1		%	51-128	8260/5035	1/14/10	TMP	1/19/10 14:36	MES	В
Dibromofluoromethane (S)	83.6		96	62-123	8260/5035	1/14/10	TMP	1/19/10 14:36	MES	В
Toluene-d8 (S)	84.6		%	59-131	8260/5035	1/14/10	TMP	1/19/10 14:36	MES	В
WET CHEMISTRY										
Moisture	6.9		96	0.1	SM20-2540 G			1/20/10 03:05	LJF	D
Total Solids	93.1		%	0.1	SM20-2540 G			1/20/10 03:05	LJF	D
METALS										
Lead, Total	7.7		mg/kg	2.1	SW846 6010C	1/20/10	MNP	1/21/10 03:51	SRT	D1

Sample Comments:

Anna G Milliken

Laboratory Manager

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34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

ANALYTICAL RESULTS

Workorder: 9827287 Liberty Oil #38

Lab ID: 9827287015

Sample ID:

LO-14[9-10]

Date Collected: 1/14/2010 14:41

Matrix: Solid

Date Received: 1/18/2010 18:44

Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
VOLATILE ORGANICS										
Benzene	85900		ug/kg	829	8260/5035	1/14/10	TMP	1/22/10 15:20	TMP	A
1,2-Dibromoethane	ND		ug/kg	829	8260/5035	1/14/10	TMP	1/22/10 15:20	TMP	A
1,2-Dichloroethane	ND		ug/kg	829	8260/5035	1/14/10	TMP	1/22/10 15:20	TMP	A
Ethylbenzene	146000		ug/kg	8290	8260/5035	1/14/10	JAH	1/26/10 11:55	MES	A
Isopropylbenzene	29900		ug/kg	829	8260/5035	1/14/10	TMP	1/22/10 15:20	TMP	A
Methyl t-Butyl Ether	ND		ug/kg	829	8260/5035	1/14/10	TMP	1/22/10 15:20	TMP	A
Naphthalene	44800		ug/kg	1660	8260/5035	1/14/10	TMP	1/22/10 15:20	TMP	A
Toluene	603000		ug/kg	8290	8260/5035	1/14/10	JAH	1/26/10 11:55	MES	A
Total Xylenes	884000		ug/kg	24900	8260/5035	1/14/10	JAH	1/26/10 11:55	MES	A
1,2,4-Trimethylbenzene	434000		ug/kg	8290	8260/5035	1/14/10	JAH	1/26/10 11:55	MES	A
1,3,5-Trimethylbenzene	150000		ug/kg	829	8260/5035	1/14/10	TMP	1/22/10 15:20	TMP	A
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	Ву	Cntr
1,2-Dichloroethane-d4 (S)	82.6		%	71-146	8260/5035	1/14/10	TMP	1/22/10 15:20	TMP	Α
Dibromofluoromethane (S)	74.5		%	42-143	8260/5035	1/14/10	TMP	1/22/10 15:20	TMP	A
Toluene-d8 (S)	93.8		96	54-141	8260/5035	1/14/10	TMP	1/22/10 15:20	TMP	A
4-Bromofluorobenzene (S)	94.4		96	46-138	8260/5035	1/14/10	TMP	1/22/10 15:20	TMP	A
1,2-Dichloroethane-d4 (S)	54.6	12	%	71-146	8260/5035	1/14/10	JAH	1/26/10 11:55	MES	A
Toluene-d8 (S)	88.7		%	54-141	8260/5035	1/14/10	JAH	1/26/10 11:55	MES	A
4-Bromofluorobenzene (S)	103		%	46-138	8260/5035	1/14/10	JAH	1/26/10 11:55	MES	A
Dibromofluoromethane (S)	74.3		%	42-143	8260/5035	1/14/10	JAH	1/26/10 11:55	MES	A
WET CHEMISTRY										
Moisture	15.4		96	0.1	SM20-2540 G			1/20/10 03:05	LJF	D
Total Solids	84.6		%	0.1	SM20-2540 G			1/20/10 03:05	LJF	D
METALS										
Lead, Total	35.1		mg/kg	2.2	SW846 6010C	1/20/10	MNP	1/21/10 03:55	SRT	D1

Sample Comments:

Anna G Milliken

Laboratory Manager

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34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

ANALYTICAL RESULTS

Workorder: 9827287 Liberty Oil #38

Lab ID: 9827287016

Date Collected: 1/14/2010 14:50

Matrix: Solid

Sample ID: LO-14[12-13]

Date Received: 1/18/2010 18:44

Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
VOLATILE ORGANICS										
Benzene	29.4		ug/kg	1.8	8260/5035	1/14/10	TMP	1/19/10 15:05	MES	C
1,2-Dibromoethane	ND		ug/kg	1.8	8260/5035	1/14/10	TMP	1/19/10 15:05	MES	C
1,2-Dichloroethane	ND		ug/kg	1.8	8260/5035	1/14/10	TMP	1/19/10 15:05	MES	C
Ethylbenzene	108		ug/kg	1.8	8260/5035	1/14/10	TMP	1/19/10 15:05	MES	C
Isopropylbenzene	25.8		ug/kg	1.8	8260/5035	1/14/10	TMP	1/19/10 15:05	MES	C
Methyl t-Butyl Ether	78.9		ug/kg	1.8	8260/5035	1/14/10	TMP	1/19/10 15:05	MES	C
Naphthalene	71.1		ug/kg	1.8	8260/5035	1/14/10	TMP	1/19/10 15:05	MES	C
Toluene	146		ug/kg	1.8	8260/5035	1/14/10	TMP	1/19/10 15:05	MES	C
Total Xylenes	565	13	ug/kg	5.4	8260/5035	1/14/10	TMP	1/19/10 15:05	MES	C
1,2,4-Trimethylbenzene	359	13	ug/kg	1.8	8260/5035	1/14/10	TMP	1/19/10 15:05	MES	C
1,3,5-Trimethylbenzene	155		ug/kg	1.8	8260/5035	1/14/10	TMP	1/19/10 15:05	MES	C
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	Ву	Cntr
1,2-Dichloroethane-d4 (S)	78.5		%	56-124	8260/5035	1/14/10	TMP	1/19/10 15:05	MES	C
4-Bromofluorobenzene (S)	94		%	51-128	8260/5035	1/14/10	TMP	1/19/10 15:05	MES	C
Dibromofluoromethane (S)	93.1		96	62-123	8260/5035	1/14/10	TMP	1/19/10 15:05	MES	C
Toluene-d8 (S)	94.8		%	59-131	8260/5035	1/14/10	TMP	1/19/10 15:05	MES	C
WET CHEMISTRY										
Moisture	7.2		%	0.1	SM20-2540 G			1/20/10 03:05	LJF	D
Total Solids	92.8		%	0.1	SM20-2540 G			1/20/10 03:05	LJF	D
METALS										
Lead, Total	7.1		mg/kg	1.8	SW846 6010C	1/20/10	MNP	1/21/10 04:06	SRT	D1

Sample Comments:

Anna G Milliken
Laboratory Manager

Report ID: 9827287 Page 20 of 33



34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

ANALYTICAL RESULTS

Workorder: 9827287 Liberty Oil #38

Lab ID: 9827287017

Date Collected: 1/14/2010 15:10

Matrix: Solid

Sample ID: LO-15[3-4]

Date Received: 1/18/2010 18:44

Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
VOLATILE ORGANICS										
Benzene	34100		ug/kg	1200	8260/5035	1/14/10	TMP	1/22/10 15:47	TMP	A
1,2-Dibromoethane	ND		ug/kg	1200	8260/5035	1/14/10	TMP	1/22/10 15:47	TMP	A
1,2-Dichloroethane	ND		ug/kg	1200	8260/5035	1/14/10	TMP	1/22/10 15:47	TMP	A
Ethylbenzene	108000		ug/kg	1200	8260/5035	1/14/10	TMP	1/22/10 15:47	TMP	A
Isopropylbenzene	21700		ug/kg	1200	8260/5035	1/14/10	TMP	1/22/10 15:47	TMP	A
Methyl t-Butyl Ether	ND		ug/kg	1200	8260/5035	1/14/10	TMP	1/22/10 15:47	TMP	A
Naphthalene	41600		ug/kg	2410	8260/5035	1/14/10	TMP	1/22/10 15:47	TMP	A
Toluene	296000		ug/kg	6020	8260/5035	1/14/10	JAH	1/26/10 12:22	MES	A
Total Xylenes	686000		ug/kg	18100	8260/5035	1/14/10	JAH	1/26/10 12:22	MES	A
1,2,4-Trimethylbenzene	518000		ug/kg	6020	8260/5035	1/14/10	JAH	1/26/10 12:22	MES	A
1,3,5-Trimethylbenzene	176000		ug/kg	1200	8260/5035	1/14/10	TMP	1/22/10 15:47	TMP	A
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	Ву	Cntr
1,2-Dichloroethane-d4 (S)	75.4		%	71-146	8260/5035	1/14/10	TMP	1/22/10 15:47	TMP	Α
Dibromofluoromethane (S)	77.3		%	42-143	8260/5035	1/14/10	TMP	1/22/10 15:47	TMP	A
Toluene-d8 (S)	88.2		96	54-141	8260/5035	1/14/10	TMP	1/22/10 15:47	TMP	A
4-Bromofluorobenzene (S)	92.6		96	46-138	8260/5035	1/14/10	TMP	1/22/10 15:47	TMP	A
1,2-Dichloroethane-d4 (S)	56.1	14	%	71-146	8260/5035	1/14/10	JAH	1/26/10 12:22	MES	A
4-Bromofluorobenzene (S)	106		96	46-138	8260/5035	1/14/10	JAH	1/26/10 12:22	MES	A
Toluene-d8 (S)	89.3		96	54-141	8260/5035	1/14/10	JAH	1/26/10 12:22	MES	A
Dibromofluoromethane (S)	74.2		96	42-143	8260/5035	1/14/10	JAH	1/26/10 12:22	MES	A
WET CHEMISTRY										
Moisture	19.7		96	0.1	SM20-2540 G			1/20/10 03:05	LJF	D
Total Solids	80.3		%	0.1	SM20-2540 G			1/20/10 03:05	LJF	D
METALS										
Lead, Total	62.9		mg/kg	2.5	SW846 6010C	1/20/10	MNP	1/21/10 04:09	SRT	D1

Sample Comments:

Anna G Milliken

Laboratory Manager

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34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

ANALYTICAL RESULTS

Workorder: 9827287 Liberty Oil #38

Lab ID: 9827287018

Date Collected: 1/14/2010 15:25

Matrix: Solid

Sample ID: LO-16[5-6]

Date Received: 1/18/2010 18:44

Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
VOLATILE ORGANICS										
Benzene	6070		ug/kg	376	8260/5035	1/14/10	TMP	1/22/10 16:14	TMP	A
1,2-Dibromoethane	ND		ug/kg	376	8260/5035	1/14/10	TMP	1/22/10 16:14	TMP	A
1,2-Dichloroethane	ND		ug/kg	376	8260/5035	1/14/10	TMP	1/22/10 16:14	TMP	A
Ethylbenzene	49600		ug/kg	376	8260/5035	1/14/10	TMP	1/22/10 16:14	TMP	A
Isopropylbenzene	4960		ug/kg	376	8260/5035	1/14/10	TMP	1/22/10 16:14	TMP	A
Methyl t-Butyl Ether	ND		ug/kg	376	8260/5035	1/14/10	TMP	1/22/10 16:14	TMP	A
Naphthalene	13000		ug/kg	751	8260/5035	1/14/10	TMP	1/22/10 16:14	TMP	A
Toluene	141000		ug/kg	1880	8260/5035	1/14/10	JAH	1/26/10 12:49	MES	A
Total Xylenes	271000		ug/kg	5640	8260/5035	1/14/10	JAH	1/26/10 12:49	MES	A
1,2,4-Trimethylbenzene	123000		ug/kg	1880	8260/5035	1/14/10	JAH	1/26/10 12:49	MES	A
1,3,5-Trimethylbenzene	38000		ug/kg	376	8260/5035	1/14/10	TMP	1/22/10 16:14	TMP	A
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	Ву	Cntr
1,2-Dichloroethane-d4 (S)	76.1		%	71-146	8260/5035	1/14/10	TMP	1/22/10 16:14	TMP	Α
Dibromofluoromethane (S)	76.9		%	42-143	8260/5035	1/14/10	TMP	1/22/10 16:14	TMP	A
Toluene-d8 (S)	90.3		96	54-141	8260/5035	1/14/10	TMP	1/22/10 16:14	TMP	A
4-Bromofluorobenzene (S)	92.1		96	46-138	8260/5035	1/14/10	TMP	1/22/10 16:14	TMP	A
1,2-Dichloroethane-d4 (S)	56.1	15	%	71-146	8260/5035	1/14/10	JAH	1/26/10 12:49	MES	A
4-Bromofluorobenzene (S)	104		%	46-138	8260/5035	1/14/10	JAH	1/26/10 12:49	MES	A
Toluene-d8 (S)	89.1		%	54-141	8260/5035	1/14/10	JAH	1/26/10 12:49	MES	A
Dibromofluoromethane (S)	76.3		%	42-143	8260/5035	1/14/10	JAH	1/26/10 12:49	MES	A
WET CHEMISTRY										
Moisture	13.3		96	0.1	SM20-2540 G			1/20/10 03:05	LJF	D
Total Solids	86.7		%	0.1	SM20-2540 G			1/20/10 03:05	LJF	D
METALS										
Lead, Total	13.6		mg/kg	2.2	SW846 6010C	1/20/10	MNP	1/21/10 04:13	SRT	D1

Sample Comments:

Anna G Milliken

Laboratory Manager

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Matrix:

Solid

34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

ANALYTICAL RESULTS

Workorder: 9827287 Liberty Oil #38

LO-16[11-12]

Lab ID: 9827287019

Sample ID:

Date Collected: 1/14/2010 15:37

Date Received: 1/18/2010 18:44

Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
VOLATILE ORGANICS										
Benzene	19900		ug/kg	422	8260/5035	1/14/10	TMP	1/22/10 16:41	TMP	A
1,2-Dibromoethane	ND		ug/kg	422	8260/5035	1/14/10	TMP	1/22/10 16:41	TMP	A
1,2-Dichloroethane	ND		ug/kg	422	8260/5035	1/14/10	TMP	1/22/10 16:41	TMP	A
Ethylbenzene	58600		ug/kg	422	8260/5035	1/14/10	TMP	1/22/10 16:41	TMP	A
Isopropylbenzene	5730		ug/kg	422	8260/5035	1/14/10	TMP	1/22/10 16:41	TMP	A
Methyl t-Butyl Ether	ND		ug/kg	422	8260/5035	1/14/10	TMP	1/22/10 16:41	TMP	A
Naphthalene	13600		ug/kg	844	8260/5035	1/14/10	TMP	1/22/10 16:41	TMP	A
Toluene	156000		ug/kg	2110	8260/5035	1/14/10	JAH	1/26/10 13:16	MES	A
Total Xylenes	290000		ug/kg	6330	8260/5035	1/14/10	JAH	1/26/10 13:16	MES	A
1,2,4-Trimethylbenzene	130000		ug/kg	2110	8260/5035	1/14/10	JAH	1/26/10 13:16	MES	A
1,3,5-Trimethylbenzene	39000		ug/kg	422	8260/5035	1/14/10	TMP	1/22/10 16:41	TMP	A
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	Ву	Cntr
1,2-Dichloroethane-d4 (S)	73.7		%	71-146	8260/5035	1/14/10	TMP	1/22/10 16:41	TMP	A
Dibromofluoromethane (S)	79.3		%	42-143	8260/5035	1/14/10	TMP	1/22/10 16:41	TMP	A
4-Bromofluorobenzene (S)	94.1		%	46-138	8260/5035	1/14/10	TMP	1/22/10 16:41	TMP	A
Toluene-d8 (S)	90		96	54-141	8260/5035	1/14/10	TMP	1/22/10 16:41	TMP	A
1,2-Dichloroethane-d4 (S)	53	16	%	71-146	8260/5035	1/14/10	JAH	1/26/10 13:16	MES	A
4-Bromofluorobenzene (S)	106		%	46-138	8260/5035	1/14/10	JAH	1/26/10 13:16	MES	A
Toluene-d8 (S)	91.1		%	54-141	8260/5035	1/14/10	JAH	1/26/10 13:16	MES	A
Dibromofluoromethane (S)	75.7		%	42-143	8260/5035	1/14/10	JAH	1/26/10 13:16	MES	A
WET CHEMISTRY										
Moisture	6.2		96	0.1	SM20-2540 G			1/20/10 03:05	LJF	D
Total Solids	93.8		%	0.1	SM20-2540 G			1/20/10 03:05	LJF	D
METALS										

Sample Comments:

Anna G Milliken Laboratory Manager

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34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

ANALYTICAL RESULTS

Workorder: 9827287 Liberty Oil #38

Lab ID: 9827287020

Date Collected: 1/14/2010 15:53

Matrix: Solid

Sample ID: LO-17[3-4]

Date Received: 1/18/2010 18:44

Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
VOLATILE ORGANICS										
Benzene	6880		ug/kg	401	8260/5035	1/14/10	TMP	1/22/10 18:57	TMP	A
1,2-Dibromoethane	ND		ug/kg	401	8260/5035	1/14/10	TMP	1/22/10 18:57	TMP	A
1,2-Dichloroethane	ND		ug/kg	401	8260/5035	1/14/10	TMP	1/22/10 18:57	TMP	A
Ethylbenzene	70400		ug/kg	401	8260/5035	1/14/10	TMP	1/22/10 18:57	TMP	A
Isopropylbenzene	22500		ug/kg	401	8260/5035	1/14/10	TMP	1/22/10 18:57	TMP	A
Methyl t-Butyl Ether	ND		ug/kg	401	8260/5035	1/14/10	TMP	1/22/10 18:57	TMP	A
Naphthalene	33000		ug/kg	801	8260/5035	1/14/10	TMP	1/22/10 18:57	TMP	A
Toluene	39500		ug/kg	401	8260/5035	1/14/10	TMP	1/22/10 18:57	TMP	A
Total Xylenes	603000		ug/kg	12000	8260/5035	1/14/10	JAH	1/26/10 10:07	MES	A
1,2,4-Trimethylbenzene	399000		ug/kg	4010	8260/5035	1/14/10	JAH	1/26/10 10:07	MES	A
1,3,5-Trimethylbenzene	136000		ug/kg	4010	8260/5035	1/14/10	JAH	1/26/10 10:07	MES	A
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	Ву	Cntr
1,2-Dichloroethane-d4 (S)	219	17	%	71-146	8260/5035	1/14/10	TMP	1/22/10 18:57	TMP	Α
Dibromofluoromethane (S)	95.9		%	42-143	8260/5035	1/14/10	TMP	1/22/10 18:57	TMP	A
Toluene-d8 (S)	152	19	96	54-141	8260/5035	1/14/10	TMP	1/22/10 18:57	TMP	A
4-Bromofluorobenzene (S)	156	20	96	46-138	8260/5035	1/14/10	TMP	1/22/10 18:57	TMP	A
1,2-Dichloroethane-d4 (S)	204	18	%	71-146	8260/5035	1/14/10	JAH	1/26/10 10:07	MES	A
Toluene-d8 (S)	126		%	54-141	8260/5035	1/14/10	JAH	1/26/10 10:07	MES	A
4-Bromofluorobenzene (S)	307	21	%	46-138	8260/5035	1/14/10	JAH	1/26/10 10:07	MES	A
Dibromofluoromethane (S)	68.5		%	42-143	8260/5035	1/14/10	JAH	1/26/10 10:07	MES	A
WET CHEMISTRY										
Moisture	7.9		96	0.1	SM20-2540 G			1/20/10 03:05	LJF	D
Total Solids	92.1		%	0.1	SM20-2540 G			1/20/10 03:05	LJF	D
METALS										

Sample Comments:

Anna G Milliken

Laboratory Manager

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Matrix:

Solid

34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

ANALYTICAL RESULTS

Workorder: 9827287 Liberty Oil #38

LO-17[5-6]

Lab ID: 9827287021

Sample ID:

Date Collected: 1/14/2010 16:01

Date Received: 1/18/2010 18:44

Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
VOLATILE ORGANICS										
Benzene	42.7		ug/kg	0.78	8260/5035	1/14/10	DD	1/20/10 00:30	DD	В
1,2-Dibromoethane	ND		ug/kg	0.78	8260/5035	1/14/10	DD	1/20/10 00:30	DD	В
1,2-Dichloroethane	ND		ug/kg	0.78	8260/5035	1/14/10	DD	1/20/10 00:30	DD	В
Ethylbenzene	24.4		ug/kg	0.78	8260/5035	1/14/10	DD	1/20/10 00:30	DD	В
Isopropylbenzene	12.5		ug/kg	0.78	8260/5035	1/14/10	DD	1/20/10 00:30	DD	В
Methyl t-Butyl Ether	149		ug/kg	54.9	8260/5035	1/22/10	TMP	1/22/10 19:24	TMP	D2
Naphthalene	6.9		ug/kg	0.78	8260/5035	1/14/10	DD	1/20/10 00:30	DD	В
Toluene	3.3		ug/kg	0.78	8260/5035	1/14/10	DD	1/20/10 00:30	DD	В
Total Xylenes	102		ug/kg	2.3	8260/5035	1/14/10	DD	1/20/10 00:30	DD	В
1,2,4-Trimethylbenzene	1060		ug/kg	54.9	8260/5035	1/22/10	TMP	1/22/10 19:24	TMP	D2
1,3,5-Trimethylbenzene	62.4		ug/kg	0.78	8260/5035	1/14/10	DD	1/20/10 00:30	DD	В
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	Ву	Cntr
1,2-Dichloroethane-d4 (S)	87.5		%	71-146	8260/5035	1/22/10	TMP	1/22/10 19:24	TMP	D2
Dibromofluoromethane (S)	101		%	42-143	8260/5035	1/22/10	TMP	1/22/10 19:24	TMP	D2
Toluene-d8 (S)	103		96	54-141	8260/5035	1/22/10	TMP	1/22/10 19:24	TMP	D2
4-Bromofluorobenzene (S)	107		96	46-138	8260/5035	1/22/10	TMP	1/22/10 19:24	TMP	D2
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	Ву	Cntr
1,2-Dichloroethane-d4 (S)	96.4		%	56-124	8260/5035	1/14/10	DD	1/20/10 00:30	DD	В
Dibromofluoromethane (S)	83.9		%	62-123	8260/5035	1/14/10	DD	1/20/10 00:30	DD	В
Toluene-d8 (S)	92.4		%	59-131	8260/5035	1/14/10	DD	1/20/10 00:30	DD	В
4-Bromofluorobenzene (S)	93.6		%	51-128	8260/5035	1/14/10	DD	1/20/10 00:30	DD	В
WET CHEMISTRY										
Moisture	12.9		96	0.1	SM20-2540 G			1/20/10 03:05	LJF	D
Total Solids	87.1		%	0.1	SM20-2540 G			1/20/10 03:05	LJF	D
METALS										
Lead, Total	18.6		mg/kg	2.0	SW846 6010C	1/20/10	MNP	1/21/10 04:31	SRT	D1

Sample Comments:

This soil sample was collected in preweighed volatile vials but no sample was present in the extract. The soil was prepared from the jar, but the sample was received and prepared by Method 5035 after the 48-hour holding time.

Anna G Milliken Laboratory Manager

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Matrix:

Solid

34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

ANALYTICAL RESULTS

Workorder: 9827287 Liberty Oil #38

LO-18[4-5]

Lab ID: 9827287022

Sample ID:

Date Collected: 1/14/2010 16:08

Date Received: 1/18/2010 18:44

Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
VOLATILE ORGANICS										
Benzene	3100		ug/kg	394	8260/5035	1/14/10	JAH	1/22/10 17:08	TMP	A
1,2-Dibromoethane	ND		ug/kg	394	8260/5035	1/14/10	JAH	1/22/10 17:08	TMP	A
1,2-Dichloroethane	ND		ug/kg	394	8260/5035	1/14/10	JAH	1/22/10 17:08	TMP	A
Ethylbenzene	9980		ug/kg	394	8260/5035	1/14/10	JAH	1/22/10 17:08	TMP	A
Isopropylbenzene	3600		ug/kg	394	8260/5035	1/14/10	JAH	1/22/10 17:08	TMP	A
Methyl t-Butyl Ether	ND		ug/kg	394	8260/5035	1/14/10	JAH	1/22/10 17:08	TMP	A
Naphthalene	2880		ug/kg	787	8260/5035	1/14/10	JAH	1/22/10 17:08	TMP	A
Toluene	2450		ug/kg	394	8260/5035	1/14/10	JAH	1/22/10 17:08	TMP	A
Total Xylenes	43600		ug/kg	1180	8260/5035	1/14/10	JAH	1/22/10 17:08	TMP	A
1,2,4-Trimethylbenzene	59800		ug/kg	394	8260/5035	1/14/10	JAH	1/22/10 17:08	TMP	A
1,3,5-Trimethylbenzene	25100		ug/kg	394	8260/5035	1/14/10	JAH	1/22/10 17:08	TMP	A
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	Ву	Cntr
1,2-Dichloroethane-d4 (S)	90.5		%	71-146	8260/5035	1/14/10	JAH	1/22/10 17:08	TMP	Α
4-Bromofluorobenzene (S)	105		%	46-138	8260/5035	1/14/10	JAH	1/22/10 17:08	TMP	A
Dibromofluoromethane (S)	80.9		96	42-143	8260/5035	1/14/10	JAH	1/22/10 17:08	TMP	A
Toluene-d8 (S)	89.4		%	54-141	8260/5035	1/14/10	JAH	1/22/10 17:08	TMP	A
WET CHEMISTRY										
Moisture	14.3		96	0.1	SM20-2540 G			1/20/10 03:05	LJF	D
Total Solids	85.7		%	0.1	SM20-2540 G			1/20/10 03:05	LJF	D
METALS										
Lead, Total	16.1		mg/kg	2.3	SW846 6010C	1/20/10	MNP	1/21/10 04:35	SRT	D1

Sample Comments:

Anna G Milliken

Laboratory Manager

Report ID: 9827287 Page 26 of 33



Matrix:

Solid

34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

ANALYTICAL RESULTS

Workorder: 9827287 Liberty Oil #38

LO-19[3-4]

Lab ID: 9827287023

Sample ID:

Date Collected: 1/14/2010 16:23

Date Received: 1/18/2010 18:44

Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
VOLATILE ORGANICS										
Benzene	8390		ug/kg	75.4	8260/5035	1/14/10	TMP	1/27/10 14:51	TMP	A
1,2-Dibromoethane	ND		ug/kg	2.7	8260/5035	1/14/10	DD	1/20/10 01:28	DD	В
1,2-Dichloroethane	ND		ug/kg	2.7	8260/5035	1/14/10	DD	1/20/10 01:28	DD	В
Ethylbenzene	7650		ug/kg	75.4	8260/5035	1/14/10	TMP	1/27/10 14:51	TMP	A
Isopropylbenzene	224		ug/kg	2.7	8260/5035	1/14/10	DD	1/20/10 01:28	DD	В
Methyl t-Butyl Ether	242		ug/kg	2.7	8260/5035	1/14/10	DD	1/20/10 01:28	DD	В
Naphthalene	7.2		ug/kg	2.7	8260/5035	1/14/10	DD	1/20/10 01:28	DD	В
Toluene	107		ug/kg	2.7	8260/5035	1/14/10	DD	1/20/10 01:28	DD	В
Total Xylenes	17600		ug/kg	226	8260/5035	1/14/10	TMP	1/27/10 14:51	TMP	A
1,2,4-Trimethylbenzene	201		ug/kg	2.7	8260/5035	1/14/10	DD	1/20/10 01:28	DD	В
1,3,5-Trimethylbenzene	2370		ug/kg	75.4	8260/5035	1/14/10	TMP	1/27/10 14:51	TMP	A
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	Ву	Cntr
1,2-Dichloroethane-d4 (S)	68	22	%	71-146	8260/5035	1/14/10	TMP	1/27/10 14:51	TMP	A
Dibromofluoromethane (S)	63.1		%	42-143	8260/5035	1/14/10	TMP	1/27/10 14:51	TMP	A
Toluene-d8 (S)	71.1		%	54-141	8260/5035	1/14/10	TMP	1/27/10 14:51	TMP	A
4-Bromofluorobenzene (S)	74.3		96	46-138	8260/5035	1/14/10	TMP	1/27/10 14:51	TMP	A
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	Ву	Cntr
1,2-Dichloroethane-d4 (S)	86.9		%	56-124	8260/5035	1/14/10	DD	1/20/10 01:28	DD	В
Toluene-d8 (S)	131		%	59-131	8260/5035	1/14/10	DD	1/20/10 01:28	DD	В
4-Bromofluorobenzene (S)	136	23	%	51-128	8260/5035	1/14/10	DD	1/20/10 01:28	DD	В
Dibromofluoromethane (S)	84.8		%	62-123	8260/5035	1/14/10	DD	1/20/10 01:28	DD	В
WET CHEMISTRY										
Moisture	22.3		%	0.1	SM20-2540 G			1/20/10 03:05	LJF	D
Total Solids	77.7		%	0.1	SM20-2540 G			1/20/10 03:05	LJF	D
METALS										
Lead, Total	144		mg/kg	2.6	SW846 6010C	1/20/10	MNP	1/21/10 04:38	SRT	D1

Sample Comments:

One or more of the method 8260 internal standards were recovered outside of the control limits, indicating a significant matrix interference.

One or more of the method 8260 surrogates were recovered outside of the control limits, indicating a significant matrix interference.

Anna G Milliken

Laboratory Manager

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34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

ANALYTICAL RESULTS QUALIFIERS\FLAGS

Workorder: 9827287 Liberty Oil #38

PARAMETER QUALIFIERS\FLAGS

The surrogate 1,2-Dichloroethane-d4 for method 8260/5035 was outside of control limits. The % Recovery was reported [1] as 56.3 and the control limits were 71 to 146. This result was reported at a dilution of 50. The surrogate Toluene-d8 for method 8260/5035 was outside of control limits. The % Recovery was reported as 150 and [2] the control limits were 59 to 131. This result was reported at a dilution of 1. The surrogate Toluene-d8 for method 8260/5035 was outside of control limits. The % Recovery was reported as 171 and [3] the control limits were 59 to 131. This result was reported at a dilution of 1. The surrogate 4-Bromofluorobenzene for method 8260/5035 was outside of control limits. The % Recovery was reported [4] as 130 and the control limits were 51 to 128. This result was reported at a dilution of 1. The surrogate Toluene-d8 for method 8260/5035 was outside of control limits. The % Recovery was reported as 147 and [5] the control limits were 59 to 131. This result was reported at a dilution of 1. The surrogate 4-Bromofluorobenzene for method 8260/5035 was outside of control limits. The % Recovery was reported [6] as 151 and the control limits were 51 to 128. This result was reported at a dilution of 1. The surrogate Toluene-d8 for method 8260/5035 was outside of control limits. The % Recovery was reported as 144 and [7] the control limits were 59 to 131. This result was reported at a dilution of 1. The surrogate Dibromofluoromethane for method 8260/5035 was outside of control limits. The % Recovery was reported [8] as 136 and the control limits were 62 to 123. This result was reported at a dilution of 1. The surrogate Toluene-d8 for method 8260/5035 was outside of control limits. The % Recovery was reported as 167 and [9] the control limits were 59 to 131. This result was reported at a dilution of 1. The surrogate 4-Bromofluorobenzene for method 8260/5035 was outside of control limits. The % Recovery was reported [10] as 129 and the control limits were 51 to 128. This result was reported at a dilution of 1. The surrogate 1,2-Dichloroethane-d4 for method 8260/5035 was outside of control limits. The % Recovery was reported [12] as 54.6 and the control limits were 71 to 146. This result was reported at a dilution of 10000. This compound was recovered above the calibration range of the instrument. The methanol extract was analyzed, but [13] did not match the low level run. The value given should be considered estimated. The surrogate 1,2-Dichloroethane-d4 for method 8260/5035 was outside of control limits. The % Recovery was reported [14] as 56.1 and the control limits were 71 to 146. This result was reported at a dilution of 5000. The surrogate 1,2-Dichloroethane-d4 for method 8260/5035 was outside of control limits. The % Recovery was reported [15] as 56.1 and the control limits were 71 to 146. This result was reported at a dilution of 2500. The surrogate 1,2-Dichloroethane-d4 for method 8260/5035 was outside of control limits. The % Recovery was reported [16] as 53 and the control limits were 71 to 146. This result was reported at a dilution of 2500. The surrogate 1,2-Dichloroethane-d4 for method 8260/5035 was outside of control limits. The % Recovery was reported [17] as 219 and the control limits were 71 to 146. This result was reported at a dilution of 500. The surrogate 1,2-Dichloroethane-d4 for method 8260/5035 was outside of control limits. The % Recovery was reported [18] as 204 and the control limits were 71 to 146. This result was reported at a dilution of 5000. The surrogate Toluene-d8 for method 8260/5035 was outside of control limits. The % Recovery was reported as 152 and [19] the control limits were 54 to 141. This result was reported at a dilution of 500.

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34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

ANALYTICAL RESULTS QUALIFIERS\FLAGS

Workorder: 9827287 Liberty Oil #38

PARAMETER QUALIFIERS\FLAGS

- [20] The surrogate 4-Bromofluorobenzene for method 8260/5035 was outside of control limits. The % Recovery was reported as 156 and the control limits were 46 to 138. This result was reported at a dilution of 500.
- [21] The surrogate 4-Bromofluorobenzene for method 8260/5035 was outside of control limits. The % Recovery was reported as 307 and the control limits were 46 to 138. This result was reported at a dilution of 5000.
- [22] The surrogate 1,2-Dichloroethane-d4 for method 8260/5035 was outside of control limits. The % Recovery was reported as 68 and the control limits were 71 to 146. This result was reported at a dilution of 50.
- [23] The surrogate 4-Bromofluorobenzene for method 8260/5035 was outside of control limits. The % Recovery was reported as 136 and the control limits were 51 to 128. This result was reported at a dilution of 1.

Report ID: 9827287 Page 29 of 33





34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

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34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

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34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

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34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

Page 1 of 1

Tonya M. Hironimus

From: Tonya M. Hironimus

Sent: Monday, January 25, 2010 10:28 AM

To: 'pat@centerpointtank.com' Subject: Liberty Oil #38 Project

Pat,

I wanted to make you aware that 2 of the methanol vials we received (one for LO-14[12-13] and one for LO-17[5-6]) were received without soil in them, therefore we needed to create the methanol vials from the jars. We received these samples after the 48 hour hold time, therefore the vials were created out of hold and you will see comments on these reports stating this.

Please let me know if you have any questions.

Thanks, Tonya Hironimus Project Coordinator Analytical Laboratory Services, Inc. 34 Dogwood Lane, Middletown, PA 17057 Phone: (717) 944-5541 Ext. 3108 Fax: (717) 944-1430







NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DOD ELAP: A2LA 0818.01 State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

June 7, 2011

JV Center Point Tank Services

Certificate of Analysis

Project Name: Liberty Oil #38 Workorder: 9907781

Purchase Order: Workorder ID: Liberty Oil#38/08-12-4292

Dear ,

Enclosed are the analytical results for samples received by the laboratory on Friday, May 27, 2011.

The ALS Environmental laboratory in Middletown, Pennsylvania (formerly Analytical Laboratory Services, Inc.) is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Tonya Hironimus (Project Coordinator) or Anna G Milliken (Technical Manager) at (717) 944-5541.

Please visit us at www.analyticallab.com for a listing of ALS' NELAP accreditations and Scope of Work, as well as other links to Water Quality documentation on the internet.

This laboratory report may not be reproduced, except in full, without the written approval of ALS Environmental.

CC: Ms. Rachel Burkart, Mr. Pat Crawford

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Anna G Milliken
Technical Manager

ALS Environmental Laboratory Locations Across North America

Report ID: 9907781 Page 1 of 14







NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DOD ELAP: A2LA 0818.01 State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

SAMPLE SUMMARY

Workorder: 9907781 Liberty Oil#38/08-12-4292 Discard Date: 06/21/2011

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
9907781001	EX1@11.5'	Solid	5/25/11 09:35	5/27/11 19:28	Customer
9907781002	EX2@10'	Solid	5/25/11 13:54	5/27/11 19:28	Customer
9907781003	EX3@8'	Solid	5/25/11 14:07	5/27/11 19:28	Customer
9907781004	EX4@8.5'	Solid	5/25/11 14:23	5/27/11 19:28	Customer
9907781005	EX5@9.5'	Solid	5/25/11 14:45	5/27/11 19:28	Customer

Workorder Comments:

Notes

- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 -Field Services Sampling Plan).
- -- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
- -- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
- -- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
- -- The Chain of Custody document is included as part of this report.
- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra.
 Concentrations reported are estimated values.

Standard Acronyms/Flags

- J, B Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
- U Indicates that the analyte was Not Detected (ND)
- N Indicates presumptive evidence of the presence of a compound
- MDL Method Detection Limit
- PQL Practical Quantitation Limit
- RDL Reporting Detection Limit
- ND Not Detected indicates that the analyte was Not Detected at the RDL
- Cntr Analysis was performed using this container

RegLmt Regulatory Limit

LCS Laboratory Control Sample

MS Matrix Spike

MSD Matrix Spike Duplicate
DUP Sample Duplicate
%Rec Percent Recovery

RPD Relative Percent Difference

Canada: Burlington · Calgary · Centre of Excellence · Edmonton · Fort McMurray · Fort St. John · Grande Prairie · London · Mississauga · Richmond Hill · Saskatoon · Thunder Bay Vancouver Waterloo · Winnipeg · Yellowknife United States: Cincinnati · Everett · Fort Collins · Holland · Houston · Middletown · Salt Lake City · Spring City · York Mexico: Monterrey

Report ID: 9907781 Page 2 of 14







NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DOD ELAP: A2LA 0818.01 State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9907781 Liberty Oil#38/08-12-4292

Lab ID: 9907781001 Date Collected: 5/25/2011 09:35 Matrix: Solid

Sample ID: EX1@11.5' Date Received: 5/27/2011 19:28

Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
VOLATILE ORGANICS										
Benzene	3.3		ug/kg	2.2	8260/5035	5/28/11	MES	6/7/11 08:31	MES	D2
1,2-Dibromoethane	ND		ug/kg	2.2	8260/5035	5/28/11	MES	6/7/11 08:31	MES	D2
1,2-Dichloroethane	ND		ug/kg	2.2	8260/5035	5/28/11	MES	6/7/11 08:31	MES	D2
Ethylbenzene	ND		ug/kg	2.2	8260/5035	5/28/11	MES	6/7/11 08:31	MES	D2
Isopropylbenzene	ND		ug/kg	2.2	8260/5035	5/28/11	MES	6/7/11 08:31	MES	D2
Methyl t-Butyl Ether	3.0		ug/kg	2.2	8260/5035	5/28/11	MES	6/7/11 08:31	MES	D2
Naphthalene	ND		ug/kg	2.2	8260/5035	5/28/11	MES	6/7/11 08:31	MES	D2
Toluene	4.3		ug/kg	2.2	8260/5035	5/28/11	MES	6/7/11 08:31	MES	D2
Total Xylenes	ND		ug/kg	6.7	8260/5035	5/28/11	MES	6/7/11 08:31	MES	D2
1,2,4-Trimethylbenzene	ND		ug/kg	2.2	8260/5035	5/28/11	MES	6/7/11 08:31	MES	D2
1,3,5-Trimethylbenzene	ND		ug/kg	2.2	8260/5035	5/28/11	MES	6/7/11 08:31	MES	D2
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	Ву	Cntr
1,2-Dichloroethane-d4 (S)	91		%	56-124	8260/5035	5/28/11	MES	6/7/11 08:31	MES	D2
4-Bromofluorobenzene (S)	85.8		96	51-128	8260/5035	5/28/11	MES	6/7/11 08:31	MES	D2
Dibromofluoromethane (S)	98.8		%	62-123	8260/5035	5/28/11	MES	6/7/11 08:31	MES	D2
Toluene-d8 (S)	85.1		%	59-131	8260/5035	5/28/11	MES	6/7/11 08:31	MES	D2
WET CHEMISTRY										
Moisture	11.5		%	0.1	SM20-2540 G			5/31/11 20:30	EZ	D
Total Solids	88.5		%	0.1	SM20-2540 G			5/31/11 20:30	EZ	D
METALS										
Lead, Total	7.1		mg/kg	0.96	SW846 6020A	6/1/11	KMK	6/1/11 23:34	AJB	D1

Sample Comments:

This sample was collected in a soil jar for the volatile analysis. The sample was received and prepared by Method 5035 after the 48-hour holding time.

Anna G Milliken Technical Manager

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ANALYTICAL RESULTS

Workorder: 9907781 Liberty Oil#38/08-12-4292

Lab ID: 9907781002 Date Collected: 5/25/2011 13:54 Matrix: Solid

Sample ID: EX2@10' Date Received: 5/27/2011 19:28

Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
OLATILE ORGANICS										
Benzene	8330		ug/kg	45.0	8260/5035	5/25/11	CPK	6/2/11 20:56	DJB	A
1,2-Dibromoethane	ND		ug/kg	1.7	8260/5035	5/25/11	DJB	6/1/11 22:25	DJB	В
1,2-Dichloroethane	ND		ug/kg	1.7	8260/5035	5/25/11	DJB	6/1/11 22:25	DJB	В
Ethylbenzene	1100		ug/kg	45.0	8260/5035	5/25/11	CPK	6/2/11 20:56	DJB	A
Isopropylbenzene	7.0		ug/kg	1.7	8260/5035	5/25/11	DJB	6/1/11 22:25	DJB	В
Methyl t-Butyl Ether	4020		ug/kg	45.0	8260/5035	5/25/11	CPK	6/2/11 20:56	DJB	A
Naphthalene	5.8		ug/kg	1.7	8260/5035	5/25/11	DJB	6/1/11 22:25	DJB	В
Toluene	10300		ug/kg	225	8260/5035	5/25/11	ECB	6/3/11 21:15	DJB	A
Total Xylenes	2870		ug/kg	135	8260/5035	5/25/11	CPK	6/2/11 20:56	DJB	Α
1,2,4-Trimethylbenzene	192		ug/kg	45.0	8260/5035	5/25/11	CPK	6/2/11 20:56	DJB	A
1,3,5-Trimethylbenzene	68.2		ug/kg	1.7	8260/5035	5/25/11	DJB	6/1/11 22:25	DJB	В
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	Ву	Cntr
1,2-Dichloroethane-d4 (S)	114		%	71-146	8260/5035	5/25/11	CPK	6/2/11 20:56	DJB	Α
4-Bromofluorobenzene (S)	100		96	46-138	8260/5035	5/25/11	CPK	6/2/11 20:56	DJB	A
Dibromofluoromethane (S)	121		96	42-143	8260/5035	5/25/11	CPK	6/2/11 20:56	DJB	A
Toluene-d8 (S)	89.3		96	54-141	8260/5035	5/25/11	CPK	6/2/11 20:56	DJB	A
1,2-Dichloroethane-d4 (S)	77.2		%	71-146	8260/5035	5/25/11	ECB	6/3/11 21:15	DJB	A
4-Bromofluorobenzene (S)	91.2		%	46-138	8260/5035	5/25/11	ECB	6/3/11 21:15	DJB	A
Dibromofluoromethane (S)	84.4		96	42-143	8260/5035	5/25/11	ECB	6/3/11 21:15	DJB	A
Toluene-d8 (S)	72.9		96	54-141	8260/5035	5/25/11	ECB	6/3/11 21:15	DJB	A
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	By	Cntr
1,2-Dichloroethane-d4 (S)	50.5	2	%	56-124	8260/5035	5/25/11	DJB	6/1/11 22:25	DJB	В
4-Bromofluorobenzene (S)	83.3		%	51-128	8260/5035	5/25/11	DJB	6/1/11 22:25	DJB	В
Dibromofluoromethane (S)	56	1	%	62-123	8260/5035	5/25/11	DJB	6/1/11 22:25	DJB	В
Toluene-d8 (S)	78.6		%	59-131	8260/5035	5/25/11	DJB	6/1/11 22:25	DJB	В
WET CHEMISTRY										
Moisture	23.8		96	0.1	SM20-2540 G			5/31/11 20:30	EZ	D
Total Solids	76.2		%	0.1	SM20-2540 G			5/31/11 20:30	EZ	D
Total Collas	10.2		70	0.1	OHIEU EU 10 O			37711 20.00		
METALS										
Lead, Total	15.4		mg/kg	1.2	SW846 6020A	6/1/11	KMK	6/1/11 23:40	AJB	D1

Sample Comments:

One or more of the method 8260 surrogates were recovered outside of the control limits indicating a significant matrix interference.

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ANALYTICAL RESULTS

Workorder: 9907781 Liberty Oil#38/08-12-4292

Lab ID: 9907781002 Date Collected: 5/25/2011 13:54 Matrix: Solid

Sample ID: EX2@10' Date Received: 5/27/2011 19:28

Parameters Results Flag Units RDL Method Prepared By Analyzed By Cntr

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ANALYTICAL RESULTS

Workorder: 9907781 Liberty Oil#38/08-12-4292

Lab ID: 9907781003 Date Collected: 5/25/2011 14:07 Matrix: Solid

Sample ID: EX3@8' Date Received: 5/27/2011 19:28

Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
OLATILE ORGANICS										
Benzene	1650		ug/kg	48.9	8260/5035	5/25/11	CPK	6/2/11 21:23	DJB	A
1,2-Dibromoethane	ND		ug/kg	1.5	8260/5035	5/25/11	DJB	6/1/11 22:54	DJB	В
1,2-Dichloroethane	ND		ug/kg	1.5	8260/5035	5/25/11	DJB	6/1/11 22:54	DJB	В
Ethylbenzene	14500		ug/kg	489	8260/5035	5/25/11	ECB	6/3/11 20:21	DJB	A
Isopropylbenzene	2190		ug/kg	48.9	8260/5035	5/25/11	CPK	6/2/11 21:23	DJB	A
Methyl t-Butyl Ether	22.4		ug/kg	1.5	8260/5035	5/25/11	DJB	6/1/11 22:54	DJB	В
Naphthalene	4410		ug/kg	97.9	8260/5035	5/25/11	CPK	6/2/11 21:23	DJB	A
Toluene	22100		ug/kg	489	8260/5035	5/25/11	ECB	6/3/11 20:21	DJB	Α
Total Xylenes	86100		ug/kg	1470	8260/5035	5/25/11	ECB	6/3/11 20:21	DJB	A
1,2,4-Trimethylbenzene	54600		ug/kg	489	8260/5035	5/25/11	ECB	6/3/11 20:21	DJB	A
1,3,5-Trimethylbenzene	17700		ug/kg	489	8260/5035	5/25/11	ECB	6/3/11 20:21	DJB	A
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	Ву	Cntr
1,2-Dichloroethane-d4 (S)	107		%	71-146	8260/5035	5/25/11	CPK	6/2/11 21:23	DJB	Α
4-Bromofluorobenzene (S)	97.1		96	46-138	8260/5035	5/25/11	CPK	6/2/11 21:23	DJB	Α
Dibromofluoromethane (S)	99.3		96	42-143	8260/5035	5/25/11	CPK	6/2/11 21:23	DJB	Α
Toluene-d8 (S)	81		96	54-141	8260/5035	5/25/11	CPK	6/2/11 21:23	DJB	A
1,2-Dichloroethane-d4 (S)	94.6		%	71-146	8260/5035	5/25/11	ECB	6/3/11 20:21	DJB	A
4-Bromofluorobenzene (S)	96.9		96	46-138	8260/5035	5/25/11	ECB	6/3/11 20:21	DJB	A
Dibromofluoromethane (S)	94.7		%	42-143	8260/5035	5/25/11	ECB	6/3/11 20:21	DJB	A
Toluene-d8 (S)	82.8		96	54-141	8260/5035	5/25/11	ECB	6/3/11 20:21	DJB	A
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	By	Cntr
1,2-Dichloroethane-d4 (S)	30.1	4	%	56-124	8260/5035	5/25/11	DJB	6/1/11 22:54	DJB	В
4-Bromofluorobenzene (S)	87.9		%	51-128	8260/5035	5/25/11	DJB	6/1/11 22:54	DJB	В
Dibromofluoromethane (S)	49.2	3	%	62-123	8260/5035	5/25/11	DJB	6/1/11 22:54	DJB	В
Toluene-d8 (S)	57	5	%	59-131	8260/5035	5/25/11	DJB	6/1/11 22:54	DJB	В
WET CHEMISTRY										
Moisture	12.7		%	0.1	SM20-2540 G			5/31/11 20:30	EZ	D
Total Solids	87.3		%	0.1	SM20-2540 G			5/31/11 20:30	EZ	D
Total Collas	01.0		70	0.1	OHIEU EU 10 O			5.51711 20.50		
METALS										
Lead, Total	9.7		mg/kg	1.0	SW846 6020A	6/1/11	KMK	6/1/11 23:43	AJB	D1

Sample Comments:

One or more of the method 8260 internal standards were recovered outside of the control limits indicating a significant matrix interference.

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Technical Manager



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ANALYTICAL RESULTS

Workorder: 9907781 Liberty Oil#38/08-12-4292

Lab ID: 9907781003 Date Collected: 5/25/2011 14:07 Matrix: Solid

Sample ID: EX3@8' Date Received: 5/27/2011 19:28

Parameters Results Flag Units RDL Method Prepared By Analyzed By Cntr

One or more of the method 8260 surrogates were recovered outside of the control limits indicating a significant matrix interference.

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ANALYTICAL RESULTS

Workorder: 9907781 Liberty Oil#38/08-12-4292

Lab ID: 9907781004 Date Collected: 5/25/2011 14:23 Matrix: Solid

Sample ID: EX4@8.5' Date Received: 5/27/2011 19:28

Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
OLATILE ORGANICS										
Benzene	114		ug/kg	2.2	8260/5035	5/25/11	DJB	6/1/11 23:24	DJB	В
1,2-Dibromoethane	ND		ug/kg	2.2	8260/5035	5/25/11	DJB	6/1/11 23:24	DJB	В
1,2-Dichloroethane	ND		ug/kg	2.2	8260/5035	5/25/11	DJB	6/1/11 23:24	DJB	В
Ethylbenzene	4870		ug/kg	57.8	8260/5035	5/25/11	CPK	6/2/11 21:50	DJB	A
Isopropylbenzene	185		ug/kg	2.2	8260/5035	5/25/11	DJB	6/1/11 23:24	DJB	В
Methyl t-Butyl Ether	12.7		ug/kg	2.2	8260/5035	5/25/11	DJB	6/1/11 23:24	DJB	В
Naphthalene	3220		ug/kg	116	8260/5035	5/25/11	CPK	6/2/11 21:50	DJB	A
Toluene	4080		ug/kg	57.8	8260/5035	5/25/11	CPK	6/2/11 21:50	DJB	A
Total Xylenes	29500		ug/kg	173	8260/5035	5/25/11	CPK	6/2/11 21:50	DJB	Α
1,2,4-Trimethylbenzene	18900		ug/kg	289	8260/5035	5/25/11	ECB	6/3/11 21:43	DJB	A
1,3,5-Trimethylbenzene	6010	6	ug/kg	57.8	8260/5035	5/25/11	CPK	6/2/11 21:50	DJB	A
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	Ву	Cntr
1,2-Dichloroethane-d4 (S)	102		%	71-146	8260/5035	5/25/11	CPK	6/2/11 21:50	DJB	Α
4-Bromofluorobenzene (S)	96.9		96	46-138	8260/5035	5/25/11	CPK	6/2/11 21:50	DJB	Α
Dibromofluoromethane (S)	100		96	42-143	8260/5035	5/25/11	CPK	6/2/11 21:50	DJB	A
Toluene-d8 (S)	86.4		96	54-141	8260/5035	5/25/11	CPK	6/2/11 21:50	DJB	A
1,2-Dichloroethane-d4 (S)	90.4		%	71-146	8260/5035	5/25/11	ECB	6/3/11 21:43	DJB	A
4-Bromofluorobenzene (S)	103		96	46-138	8260/5035	5/25/11	ECB	6/3/11 21:43	DJB	A
Dibromofluoromethane (S)	98.5		%	42-143	8260/5035	5/25/11	ECB	6/3/11 21:43	DJB	A
Toluene-d8 (S)	84.9		96	54-141	8260/5035	5/25/11	ECB	6/3/11 21:43	DJB	A
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	Ву	Cntr
1,2-Dichloroethane-d4 (S)	52.9	7	%	56-124	8260/5035	5/25/11	DJB	6/1/11 23:24	DJB	В
4-Bromofluorobenzene (S)	85.5		96	51-128	8260/5035	5/25/11	DJB	6/1/11 23:24	DJB	В
Dibromofluoromethane (S)	68		%	62-123	8260/5035	5/25/11	DJB	6/1/11 23:24	DJB	В
Toluene-d8 (S)	87.7		%	59-131	8260/5035	5/25/11	DJB	6/1/11 23:24	DJB	В
WET CHEMISTRY										
Moisture	11.2		%	0.1	SM20-2540 G			5/31/11 20:30	EZ	D
Total Solids	88.8		%	0.1	SM20-2540 G			5/31/11 20:30	EZ	D
Total Collas	00.0		70	0.1	OHIEU EU 10 O			0.01711 20.00		
METALS										
Lead, Total	9.7		mg/kg	1.1	SW846 6020A	6/1/11	KMK	6/1/11 23:46	AJB	D1

Sample Comments:

One or more of the method 8260 internal standards were recovered outside of the control limits indicating a significant matrix interference.

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ANALYTICAL RESULTS

Workorder: 9907781 Liberty Oil#38/08-12-4292

Lab ID: 9907781004 Date Collected: 5/25/2011 14:23 Matrix: Solid

Sample ID: EX4@8.5' Date Received: 5/27/2011 19:28

Parameters Results Flag Units RDL Method Prepared By Analyzed By Cntr

One or more of the method 8260 surrogates were recovered outside of the control limits indicating a significant matrix interference.

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ANALYTICAL RESULTS

Workorder: 9907781 Liberty Oil#38/08-12-4292

Lab ID: 9907781005 Date Collected: 5/25/2011 14:45 Matrix: Solid

Sample ID: EX5@9.5' Date Received: 5/27/2011 19:28

Parameters	Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
OLATILE ORGANICS										
Benzene	1870		ug/kg	48.1	8260/5035	5/25/11	CPK	6/2/11 22:18	DJB	A
1,2-Dibromoethane	ND		ug/kg	2.2	8260/5035	5/25/11	DJB	6/1/11 23:53	DJB	В
1,2-Dichloroethane	ND		ug/kg	2.2	8260/5035	5/25/11	DJB	6/1/11 23:53	DJB	В
Ethylbenzene	9970		ug/kg	481	8260/5035	5/25/11	ECB	6/3/11 20:48	DJB	A
Isopropylbenzene	211		ug/kg	2.2	8260/5035	5/25/11	DJB	6/1/11 23:53	DJB	В
Methyl t-Butyl Ether	20.6		ug/kg	2.2	8260/5035	5/25/11	DJB	6/1/11 23:53	DJB	В
Naphthalene	5360		ug/kg	96.2	8260/5035	5/25/11	CPK	6/2/11 22:18	DJB	A
Toluene	27800		ug/kg	481	8260/5035	5/25/11	ECB	6/3/11 20:48	DJB	A
Total Xylenes	55600		ug/kg	1440	8260/5035	5/25/11	ECB	6/3/11 20:48	DJB	Α
1,2,4-Trimethylbenzene	41600		ug/kg	481	8260/5035	5/25/11	ECB	6/3/11 20:48	DJB	A
1,3,5-Trimethylbenzene	11800		ug/kg	481	8260/5035	5/25/11	ECB	6/3/11 20:48	DJB	A
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	Ву	Cntr
1,2-Dichloroethane-d4 (S)	99.3		%	71-146	8260/5035	5/25/11	CPK	6/2/11 22:18	DJB	Α
4-Bromofluorobenzene (S)	87.3		96	46-138	8260/5035	5/25/11	CPK	6/2/11 22:18	DJB	A
Dibromofluoromethane (S)	88.2		96	42-143	8260/5035	5/25/11	CPK	6/2/11 22:18	DJB	A
Toluene-d8 (S)	82.2		96	54-141	8260/5035	5/25/11	CPK	6/2/11 22:18	DJB	A
1,2-Dichloroethane-d4 (S)	97.8		%	71-146	8260/5035	5/25/11	ECB	6/3/11 20:48	DJB	A
4-Bromofluorobenzene (S)	93.2		96	46-138	8260/5035	5/25/11	ECB	6/3/11 20:48	DJB	A
Dibromofluoromethane (S)	100		%	42-143	8260/5035	5/25/11	ECB	6/3/11 20:48	DJB	A
Toluene-d8 (S)	84.1		96	54-141	8260/5035	5/25/11	ECB	6/3/11 20:48	DJB	A
Surrogate Recoveries	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	By	Cntr
1,2-Dichloroethane-d4 (S)	46.5	9	%	56-124	8260/5035	5/25/11	DJB	6/1/11 23:53	DJB	В
4-Bromofluorobenzene (S)	89.7		%	51-128	8260/5035	5/25/11	DJB	6/1/11 23:53	DJB	В
Dibromofluoromethane (S)	61.2	8	%	62-123	8260/5035	5/25/11	DJB	6/1/11 23:53	DJB	В
Toluene-d8 (S)	66.9		%	59-131	8260/5035	5/25/11	DJB	6/1/11 23:53	DJB	В
WET CHEMISTRY										
Moisture	14.5		96	0.1	SM20-2540 G			5/31/11 20:30	EZ	D
Total Solids	85.5		96	0.1	SM20-2540 G			5/31/11 20:30	EZ	D
METALS										
Lead, Total	11.7		mg/kg	0.99	SW846 6020A	6/1/11	KMK	6/1/11 23:58	AJB	D1

Sample Comments:

One or more of the method 8260 internal standards were recovered outside of the control limits indicating a significant matrix interference.

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Report ID: 9907781 Page 10 of 14





Technical Manager



34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.analyticallab.com ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DOD ELAP: A2LA 0818.01 State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 9907781 Liberty Oil#38/08-12-4292

Lab ID: 9907781005 Date Collected: 5/25/2011 14:45 Matrix: Solid

Sample ID: EX5@9.5' Date Received: 5/27/2011 19:28

Parameters Results Flag Units RDL Method Prepared By Analyzed By Cntr

One or more of the method 8260 surrogates were recovered outside of the control limits indicating a significant matrix interference.

Report ID: 9907781 Page 11 of 14







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ANALYTICAL RESULTS QUALIFIERS\FLAGS

Workorder: 9907781 Liberty Oil#38/08-12-4292

PARAMETER QUALIFIERS\FLAGS

[9]

The surrogate Dibromofluoromethane for method 8260/5035 was outside of control limits. The % Recovery was reported [1] as 56 and the control limits were 62 to 123. This result was reported at a dilution of 1. The surrogate 1,2-Dichloroethane-d4 for method 8260/5035 was outside of control limits. The % Recovery was reported [2] as 50.5 and the control limits were 56 to 124. This result was reported at a dilution of 1. The surrogate Dibromofluoromethane for method 8260/5035 was outside of control limits. The % Recovery was reported [3] as 49.2 and the control limits were 62 to 123. This result was reported at a dilution of 1. The surrogate 1,2-Dichloroethane-d4 for method 8260/5035 was outside of control limits. The % Recovery was reported [4] as 30.1 and the control limits were 56 to 124. This result was reported at a dilution of 1. The surrogate Toluene-d8 for method 8260/5035 was outside of control limits. The % Recovery was reported as 57 and [5] the control limits were 59 to 131. This result was reported at a dilution of 1. The QC sample type LCS for method 8260/5035 was outside the control limits for the analyte 1,3,5-Trimethylbenzene. [6] The % Recovery was reported as 73.6 and the control limits were 74 to 137. The surrogate 1,2-Dichloroethane-d4 for method 8260/5035 was outside of control limits. The % Recovery was reported [7] as 52.9 and the control limits were 56 to 124. This result was reported at a dilution of 1. The surrogate Dibromofluoromethane for method 8260/5035 was outside of control limits. The % Recovery was reported [8] as 61.2 and the control limits were 62 to 123. This result was reported at a dilution of 1.

The surrogate 1,2-Dichloroethane-d4 for method 8260/5035 was outside of control limits. The % Recovery was reported

as 46.5 and the control limits were 56 to 124. This result was reported at a dilution of 1.

Report ID: 9907781 Page 12 of 14

CHAIN OF CUSTODY/

REQUEST FOR ANALYSIS



Environmental SERVICES, INC.

34 Dogwood Lane - Middletown, PA 17057 - Phone: 717-944-5541 - Fax: 717-944-1430 - www.analyticallab.com - www.alsglobal.com

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THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc. TestAmerica Edison 777 New Durham Road Edison, NJ 08817 Tel: (732)549-3900

TestAmerica Job ID: 460-110842-1 Client Project/Site: Liberty Oil #38

Revision: 1

For:

Center Point Tank Service 536 E Benjamin Franklin Douglassville, Pennsylvania 19518

Attn: Rachel Burkart



Authorized for release by: 4/7/2016 12:36:02 PM

Jill Miller, Project Manager II (732)549-3900 jill.miller@testamericainc.com

.....LINKS

Review your project results through
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Have a Question?



Visit us at: www.testamericainc.com The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Center Point Tank Service Project/Site: Liberty Oil #38 TestAmerica Job ID: 460-110842-1

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Sample Summary

Client: Center Point Tank Service Project/Site: Liberty Oil #38 TestAmerica Job ID: 460-110842-1

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Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-110842-1	MW-11(5')	Solid	03/22/16 10:25	03/23/16 13:52
460-110842-2	MW-11(11.5')	Solid	03/22/16 10:30	03/23/16 13:52
460-110842-3	SB-1(11.5')	Solid	03/22/16 12:25	03/23/16 13:52
460-110842-4	SB-2(15')	Solid	03/22/16 12:55	03/23/16 13:52
460-110842-5	SB-3(11')	Solid	03/22/16 13:25	03/23/16 13:52
460-110842-6	SB-4(11')	Solid	03/22/16 13:45	03/23/16 13:52
460-110842-7	SB-5(10')	Solid	03/22/16 14:25	03/23/16 13:52
460-110842-8	SB-6(7')	Solid	03/22/16 14:45	03/23/16 13:52
460-110842-9	SB-7(3')	Solid	03/22/16 15:05	03/23/16 13:52
460-110842-10	SB-7(5')	Solid	03/22/16 15:10	03/23/16 13:52
460-110842-11	SB-8(6')	Solid	03/22/16 15:25	03/23/16 13:52

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Definitions/Glossary

Client: Center Point Tank Service Project/Site: Liberty Oil #38 TestAmerica Job ID: 460-110842-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
	ISTD response or retention time outside acceptable limits
U	Indicates the analyte was analyzed for but not detected.
X	Surrogate is outside control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

QC

RER

RPD

TEF

TEQ

RL

Quality Control

Relative error ratio

Toxicity Equivalent Factor (Dioxin)

Toxicity Equivalent Quotient (Dioxin)

Reporting Limit or Requested Limit (Radiochemistry)

Relative Percent Difference, a measure of the relative difference between two points

Olossary	
Abbreviation	These commonly used abbreviations may or may not be present in this report.
п	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit

TestAmerica Edison

Case Narrative

Client: Center Point Tank Service Project/Site: Liberty Oil #38 TestAmerica Job ID: 460-110842-1

Job ID: 460-110842-1

Laboratory: TestAmerica Edison

Narrative

Job Narrative 460-110842-1

Comments

No additional comments.

Receipt

The samples were received on 3/23/2016 1:52 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.4° C.

Revision(1)

Client requested MDL report

Moisture

The sample duplicate precision for the following sample associated with analytical batch 460-359031 was outside control limits: MW-11(5') (460-110842-1), MW-11(11.5') (460-110842-2), SB-1(11.5') (460-110842-3), SB-2(15') (460-110842-4), SB-3(11') (460-110842-5), SB-4(11') (460-110842-6), SB-5(10') (460-110842-7), SB-6(7') (460-110842-8), SB-7(3') (460-110842-9), SB-7(5') (460-110842-10), SB-8(6') (460-110842-11), (460-110906-F-16) and (460-110906-F-16 DU).

GC/MS VOA

Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: SB-8(6') (460-110842-11). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range and due to the abundance of non-target analytes: SB-7(3') (460-110842-9). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: Internal standard (ISTD) response and surrogate recovery for the following samples were outside control limits: MW-11(5') (460-110842-1). The sample was re-analyzed with concurring results in batch 359216. The original set of data has been reported.

Method(s) 8260C: Internal standard (ISTD) response and surrogate recoveries for the following samples were outside control limits: SB-1(11.5') (460-110842-3). The sample was re-analyzed with concurring results in 359077.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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TestAmerica Job ID: 460-110842-1

Client: Center Point Tank Service Project/Site: Liberty Oil #38

Client Sample ID: MW-11(5')

Date Collected: 03/22/16 10:25

Date Received: 03/23/16 13:52

Analyte

Percent Moisture

Percent Solids

Lab Sample ID: 460-110842-1

Matrix: Solid Percent Solids: 78.9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.27	U.	1.3	0.27	ug/Kg	<u></u>	03/24/16 10:32	03/28/16 10:39	1
1,2-Dibromoethane	0.16	U.	1.3	0.16	ug/Kg	Ø	03/24/16 10:32	03/28/16 10:39	1
1,2-Dichloroethane	0.15	U	1.3	0.15	ug/Kg	- 12	03/24/16 10:32	03/28/16 10:39	1
Ethylbenzene	0.24	U.	1.3	0.24	ug/Kg	O	03/24/16 10:32	03/28/16 10:39	1
Isopropylbenzene	0.23	U*	1.3	0.23	ug/Kg	0	03/24/16 10:32	03/28/16 10:39	1
Naphthalene	0.16	U*	1.3	0.16	ug/Kg	0	03/24/16 10:32	03/28/16 10:39	1
Toluene	0.25	J.	1.3	0.25	ug/Kg	ø	03/24/16 10:32	03/28/16 10:39	1
1,2,4-Trimethylbenzene	0.45	U.	1.3	0.45	ug/Kg		03/24/16 10:32	03/28/16 10:39	1
1,3,5-Trimethylbenzene	0.17	U *	1.3	0.17	ug/Kg	0	03/24/16 10:32	03/28/16 10:39	1
Xylenes, Total	0.15	U*	2.7	0.15	ug/Kg	D	03/24/16 10:32	03/28/16 10:39	1
Methyl tert-butyl ether	0.23	U	1.3	0.23	ug/Kg	Ø	03/24/16 10:32	03/28/16 10:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Bromofluorobenzene	113		67 - 126				03/24/16 10:32	03/28/16 10:39	1
Dibromofluoromethane (Surr)	121		61 - 149				03/24/16 10:32	03/28/16 10:39	1
1,2-Dichloroethane-d4 (Surr)	119		78 - 135				03/24/16 10:32	03/28/16 10:39	1
Toluene-d8 (Surr)	137	*X	73 - 121				03/24/16 10:32	03/28/16 10:39	1
Method: 6010C - Metals (ICP)	D II	Overliffer	DI.	MDI	11-14		Dd	A1d	DII F
Analyte		Qualifier	RL	MDL	Unit	_ D	Prepared	Analyzed	Dil Fac
Lead	110		2.0		mg/Kg	ō	03/25/16 18:50	03/26/16 17:07	4
General Chemistry									
The state of the s	-		-					4 0000	

Lab Sample ID: 460-110842-2 Client Sample ID: MW-11(11.5') Date Collected: 03/22/16 10:30 Matrix: Solid Date Received: 03/23/16 13:52 Percent Solids: 91.1

RL

1.0

1.0

MDL Unit

%

%

Prepared

Analyzed

03/27/16 17:34

03/27/16 17:34

Dil Fac

Result Qualifier

21.1 78.9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.18	U	0.91	0.18	ug/Kg	Ö	03/24/16 10:32	03/28/16 11:04	1
1,2-Dibromoethane	0.11	U	0.91	0.11	ug/Kg		03/24/16 10:32	03/28/16 11:04	1
1,2-Dichloroethane	0.10	U	0.91	0.10	ug/Kg	Ø	03/24/16 10:32	03/28/16 11:04	1
Ethylbenzene	0.16	U	0.91	0.16	ug/Kg	p	03/24/16 10:32	03/28/16 11:04	1
Isopropylbenzene	0.16	U	0.91	0.16	ug/Kg	101	03/24/16 10:32	03/28/16 11:04	1
Naphthalene	0.11	U	0.91	0.11	ug/Kg	Ø	03/24/16 10:32	03/28/16 11:04	1
Toluene	0.17	U	0.91	0.17	ug/Kg	Ø	03/24/16 10:32	03/28/16 11:04	1
1,2,4-Trimethylbenzene	0.31	U	0.91	0.31	ug/Kg	Ø	03/24/16 10:32	03/28/16 11:04	1
1,3,5-Trimethylbenzene	0.12	U	0.91	0.12	ug/Kg	Ø	03/24/16 10:32	03/28/16 11:04	. 1
Xylenes, Total	0.10	U	1.8	0.10	ug/Kg	ø	03/24/16 10:32	03/28/16 11:04	1
Methyl tert-butyl ether	0.16	U	0.91	0.16	ug/Kg	ø	03/24/16 10:32	03/28/16 11:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Bromofluorobenzene	90		67 - 126				03/24/16 10:32	03/28/16 11:04	1
Dibromofluoromethane (Surr)	97		61 - 149				03/24/16 10:32	03/28/16 11:04	1
1,2-Dichloroethane-d4 (Surr)	99		78 - 135				03/24/16 10:32	03/28/16 11:04	1
Toluene-d8 (Surr)	92		73 - 121				03/24/16 10:32	03/28/16 11:04	1

TestAmerica Edison

TestAmerica Job ID: 460-110842-1

Client: Center Point Tank Service Project/Site: Liberty Oil #38

Client Sample ID: MW-11(11.5')

Date Collected: 03/22/16 10:30

Lab Sample ID: 460-110842-2

Matrix: Solid

Date Received: 03/23/16 13:52 Percent Solids: 91.1

Method: 6010C - Metals (ICP) Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	8.1		1.8		mg/Kg	Ø	03/25/16 18:50	03/26/16 17:10	4
General Chemistry Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	8.9		1.0		%			03/27/16 17:34	1
Percent Solids	91.1		1.0		%			03/27/16 17:34	1

Client Sample ID: SB-1(11.5')

Date Collected: 03/22/16 12:25 Date Received: 03/23/16 13:52 Lab Sample ID: 460-110842-3

Matrix: Solid Percent Solids: 93.4

Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.26	U	1.3	0.26	ug/Kg	Ø	03/24/16 10:34	03/28/16 22:04	
1,2-Dibromoethane	0.16	U	1.3	0.16	ug/Kg	100	03/24/16 10:34	03/28/16 22:04	1
1,2-Dichloroethane	0.14	U	1.3	0.14	ug/Kg	-	03/24/16 10:34	03/28/16 22:04	
Ethylbenzene	0.23	U	1.3	0.23	ug/Kg	O	03/24/16 10:34	03/28/16 22:04	
Isopropylbenzene	0.22	U	1.3	0.22	ug/Kg	ø	03/24/16 10:34	03/28/16 22:04	
Naphthalene	0.16	U *	1.3	0.16	ug/Kg	Ø	03/24/16 10:34	03/28/16 22:04	
Toluene	0.34	J	1.3	0.25	ug/Kg	Ø	03/24/16 10:34	03/28/16 22:04	
1,2,4-Trimethylbenzene	0.44	U*	1.3	0.44	ug/Kg	ø	03/24/16 10:34	03/28/16 22:04	
1,3,5-Trimethylbenzene	0.17	U.	1.3	0.17	ug/Kg	ø	03/24/16 10:34	03/28/16 22:04	
Xylenes, Total	0.14	U	2.6	0.14	ug/Kg	0	03/24/16 10:34	03/28/16 22:04	
Methyl tert-butyl ether	0.22	U	1.3	0.22	ug/Kg	Ø	03/24/16 10:34	03/28/16 22:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
Bromofluorobenzene	134	*X	67 - 126				03/24/16 10:34	03/28/16 22:04	
Dibromofluoromethane (Surr)	109		61 - 149				03/24/16 10:34	03/28/16 22:04	
1,2-Dichloroethane-d4 (Surr)	110		78 - 135				03/24/16 10:34	03/28/16 22:04	
Toluene-d8 (Surr)	128	X	73 - 121				03/24/16 10:34	03/28/16 22:04	
Method: 6010C - Metals (ICP) Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	9.0		1.7		mg/Kg	Q	03/25/16 18:50	03/26/16 17:14	4
General Chemistry	D II	0			11-14				DU F
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture Percent Solids	6.6 93.4		1.0		%			03/27/16 17:34 03/27/16 17:34	

Client Sample ID: SB-2(15') Date Collected: 03/22/16 12:55

Date Received: 03/23/16 13:52

Lab Sample ID: 460-110842-4 Matrix: Solid

Percent Solids: 92.9

Method: 8260C - Volatile Organic Compounds by GC/MS Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac 0.76 0.15 ug/Kg 03/24/16 10:34 03/28/16 22:29 0.16 J Benzene 1,2-Dibromoethane 0.091 U 0.76 0.091 ug/Kg © 03/24/16 10:34 03/28/16 22:29 1.2-Dichloroethane 0.084 U 0.76 0.084 ug/Kg © 03/24/16 10:34 03/28/16 22:29 Ethylbenzene 0.14 U 0.76 0.14 ug/Kg © 03/24/16 10:34 03/28/16 22:29 0.13 U © 03/24/16 10:34 03/28/16 22:29 Isopropylbenzene 0.76 0.13 ug/Kg

TestAmerica Edison

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Client: Center Point Tank Service Project/Site: Liberty Oil #38

Client Sample ID: SB-2(15') Date Collected: 03/22/16 12:55

Date Received: 03/23/16 13:52

TestAmerica Job ID: 460-110842-1

Lab Sample ID: 460-110842-4

Matrix: Solid Percent Solids: 92.9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	0.091	U	0.76	0.091	ug/Kg	ō	03/24/16 10:34	03/28/16 22:29	1
Toluene	0.21	J	0.76	0.14	ug/Kg	Ø	03/24/16 10:34	03/28/16 22:29	1
1,2,4-Trimethylbenzene	0.26	U	0.76	0.26	ug/Kg	10	03/24/16 10:34	03/28/16 22:29	1
1,3,5-Trimethylbenzene	0.099	U	0.76	0.099	ug/Kg	ø	03/24/16 10:34	03/28/16 22:29	1
Xylenes, Total	0.089	J	1.5	0.084	ug/Kg	O	03/24/16 10:34	03/28/16 22:29	1
Methyl tert-butyl ether	0.13	U	0.76	0.13	ug/Kg	0	03/24/16 10:34	03/28/16 22:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Bromofluorobenzene	111		67 - 126				03/24/16 10:34	03/28/16 22:29	1
Dibromofluoromethane (Surr)	102		61 - 149				03/24/16 10:34	03/28/16 22:29	1
1,2-Dichloroethane-d4 (Surr)	101		78 - 135				03/24/16 10:34	03/28/16 22:29	1
Toluene-d8 (Surr)	102		73 - 121				03/24/16 10:34	03/28/16 22:29	1

Method: 6010C - Metals (ICP) Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	45		1.7		mg/Kg	ō	03/25/16 18:50	03/26/16 17:29	4
General Chemistry	67.5						8 8		
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	7.1		1.0		%			03/27/16 17:34	- 1
Percent Solids	92.9		1.0		%			03/27/16 17:34	1

Client Sample ID: SB-3(11') Lab Sample ID: 460-110842-5 Date Collected: 03/22/16 13:25 Matrix: Solid Date Received: 03/23/16 13:52 Percent Solids: 89.9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.16	U	0.82	0.16	ug/Kg	Ö	03/24/16 10:35	03/28/16 12:17	1
1,2-Dibromoethane	0.099	U	0.82	0.099	ug/Kg	Ø	03/24/16 10:35	03/28/16 12:17	1
1,2-Dichloroethane	0.091	U	0.82	0.091	ug/Kg	ø	03/24/16 10:35	03/28/16 12:17	1
Ethylbenzene	0.15	U	0.82	0.15	ug/Kg	Ò	03/24/16 10:35	03/28/16 12:17	1
Isopropylbenzene	0.14	U	0.82	0.14	ug/Kg	0	03/24/16 10:35	03/28/16 12:17	1
Naphthalene	0.099	U	0.82	0.099	ug/Kg	Ø	03/24/16 10:35	03/28/16 12:17	1
Toluene	0.16	U	0.82	0.16	ug/Kg	Ø	03/24/16 10:35	03/28/16 12:17	1
1,2,4-Trimethylbenzene	0.28	U	0.82	0.28	ug/Kg	**	03/24/16 10:35	03/28/16 12:17	1
1,3,5-Trimethylbenzene	0.11	U	0.82	0.11	ug/Kg	Ø	03/24/16 10:35	03/28/16 12:17	1
Xylenes, Total	0.091	U	1.6	0.091	ug/Kg	Ø	03/24/16 10:35	03/28/16 12:17	1
Methyl tert-butyl ether	0.14	U	0.82	0.14	ug/Kg	ø	03/24/16 10:35	03/28/16 12:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Bromofluorobenzene	98		67 - 126				03/24/16 10:35	03/28/16 12:17	1
Dibromofluoromethane (Surr)	101		61 - 149				03/24/16 10:35	03/28/16 12:17	1
1,2-Dichloroethane-d4 (Surr)	104		78 - 135				03/24/16 10:35	03/28/16 12:17	1
Toluene-d8 (Surr)	97		73 - 121				03/24/16 10:35	03/28/16 12:17	1
Method: 6010C - Metals (ICP)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	7.4		1.7		mg/Kg	Ø	03/25/16 18:50	03/26/16 17:32	4

TestAmerica Edison

Client: Center Point Tank Service Project/Site: Liberty Oil #38

Client Sample ID: SB-3(11') Lab Sample ID: 460-110842-5 Date Collected: 03/22/16 13:25

Matrix: Solid

Date Received: 03/23/16 13:52 Percent Solids: 89.9

General Chemistry Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	10.1		1.0		%			03/27/16 17:34	1
Percent Solids	89.9		1.0		%			03/27/16 17:34	1

Lab Sample ID: 460-110842-6 Client Sample ID: SB-4(11')

Date Collected: 03/22/16 13:45 Matrix: Solid

Date Received: 03/23/16 13:52 Percent Solids: 90 4

Method: 8260C - Volatile Organ Analyte		unds by G Qualifier	C/MS RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.15		0.77	0.15	ug/Kg	_ ō	03/24/16 10:36		1
1,2-Dibromoethane	0.092	U	0.77	0.092	ug/Kg	Ø	03/24/16 10:36	03/28/16 12:41	1
1,2-Dichloroethane	0.084	U	0.77	0.084	ug/Kg	ø	03/24/16 10:36	03/28/16 12:41	1
Ethylbenzene	0.14	U	0.77	0.14	ug/Kg	Ø	03/24/16 10:36	03/28/16 12:41	1
Isopropylbenzene	0.13	U	0.77	0.13	ug/Kg	X	03/24/16 10:36	03/28/16 12:41	1
Naphthalene	0.55	J	0.77	0.092	ug/Kg	101	03/24/16 10:36	03/28/16 12:41	. 1
Toluene	0.18	J	0.77	0.15	ug/Kg	O	03/24/16 10:36	03/28/16 12:41	1
1,2,4-Trimethylbenzene	0.26	U	0.77	0.26	ug/Kg	i)	03/24/16 10:36	03/28/16 12:41	1
1,3,5-Trimethylbenzene	0.10	U	0.77	0.10	ug/Kg	ø	03/24/16 10:36	03/28/16 12:41	1
Xylenes, Total	0.084	U	1.5	0.084	ug/Kg	O	03/24/16 10:36	03/28/16 12:41	1
Methyl tert-butyl ether	0.13	U	0.77	0.13	ug/Kg	ø	03/24/16 10:36	03/28/16 12:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Bromofluorobenzene	92		67 - 126				03/24/16 10:36	03/28/16 12:41	1
Dibromofluoromethane (Surr)	98		61 - 149				03/24/16 10:36	03/28/16 12:41	1
1,2-Dichloroethane-d4 (Surr)	98		78 - 135				03/24/16 10:36	03/28/16 12:41	1
Toluene-d8 (Surr)	93		73 - 121				03/24/16 10:36	03/28/16 12:41	1
Method: 6010C - Metals (ICP) Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	9.5		1.7		mg/Kg	ō	03/25/16 18:50	03/26/16 17:36	4
General Chemistry Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	9.6		1.0		%			03/27/16 17:34	1
Percent Solids	90.4		1.0		%			03/27/16 17:34	1

Date Collected: 03/22/16 14:25 Matrix: Solid Date Received: 03/23/16 13:52 Percent Solids: 86.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.14	U	0.71	0.14	ug/Kg	Ø	03/24/16 10:36	03/28/16 13:05	1
1,2-Dibromoethane	0.085	U	0.71	0.085	ug/Kg	10	03/24/16 10:36	03/28/16 13:05	1
1,2-Dichloroethane	0.078	U	0.71	0.078	ug/Kg	ø	03/24/16 10:36	03/28/16 13:05	
Ethylbenzene	0.13	U	0.71	0.13	ug/Kg	ø	03/24/16 10:36	03/28/16 13:05	1
Isopropylbenzene	0.12	U	0.71	0.12	ug/Kg	Ø	03/24/16 10:36	03/28/16 13:05	1
Naphthalene	0.085	U	0.71	0.085	ug/Kg	X	03/24/16 10:36	03/28/16 13:05	1
Toluene	0.13	U	0.71	0.13	ug/Kg	Ø	03/24/16 10:36	03/28/16 13:05	1
1,2,4-Trimethylbenzene	0.24	U	0.71	0.24	ug/Kg	Ø	03/24/16 10:36	03/28/16 13:05	1
1,3,5-Trimethylbenzene	0.092	U	0.71	0.092	ug/Kg	O	03/24/16 10:36	03/28/16 13:05	1

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TestAmerica Job ID: 460-110842-1

Client: Center Point Tank Service Project/Site: Liberty Oil #38

Client Sample ID: SB-5(10')

Date Collected: 03/22/16 14:25 Date Received: 03/23/16 13:52 Lab Sample ID: 460-110842-7

Matrix: Solid Percent Solids: 86.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	0.078	U	1.4	0.078	ug/Kg	Ö	03/24/16 10:36	03/28/16 13:05	1
Methyl tert-butyl ether	0.12	U	0.71	0.12	ug/Kg	Ø	03/24/16 10:36	03/28/16 13:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	DII Fac
Bromofluorobenzene	94		67 - 126				03/24/16 10:36	03/28/16 13:05	1
Dibromofluoromethane (Surr)	95		61 - 149				03/24/16 10:36	03/28/16 13:05	1
1,2-Dichloroethane-d4 (Surr)	97		78 - 135				03/24/16 10:36	03/28/16 13:05	1
Toluene-d8 (Surr)	95		73 - 121				03/24/16 10:36	03/28/16 13:05	1

Method: 6010C - Metals (ICP) Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	12		1.9		mg/Kg	ō	03/25/16 18:50	03/26/16 17:40	4
General Chemistry									

Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
13.5	1.0		%			03/27/16 17:34	1
86.5	1.0		%			03/27/16 17:34	1
	13.5	13.5	13.5	13.5 1.0 %	13.5 1.0 %	13.5 1.0 %	13.5 1.0 % 03/27/16 17:34

Client Sample ID: SB-6(7')

Lab Sample ID: 460-110842-8

Date Collected: 03/22/16 14:45

Date Received: 03/23/16 13:52

Matrix: Solid
Percent Solids: 87.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.15	U	0.74	0.15	ug/Kg	Ö	03/24/16 10:37	03/28/16 13:29	1
1,2-Dibromoethane	0.089	U	0.74	0.089	ug/Kg	口	03/24/16 10:37	03/28/16 13:29	1
1,2-Dichloroethane	0.081	U	0.74	0.081	ug/Kg	Ø	03/24/16 10:37	03/28/16 13:29	1
Ethylbenzene	0.13	U	0.74	0.13	ug/Kg	Ø	03/24/16 10:37	03/28/16 13:29	1
Isopropylbenzene	0.13	U	0.74	0.13	ug/Kg	101	03/24/16 10:37	03/28/16 13:29	1
Naphthalene	0.089	U	0.74	0.089	ug/Kg	ø	03/24/16 10:37	03/28/16 13:29	1
Toluene	0.14	U	0.74	0.14	ug/Kg	Ø	03/24/16 10:37	03/28/16 13:29	1
1,2,4-Trimethylbenzene	0.25	U	0.74	0.25	ug/Kg	0	03/24/16 10:37	03/28/16 13:29	1
1,3,5-Trimethylbenzene	0.096	U	0.74	0.096	ug/Kg	ø	03/24/16 10:37	03/28/16 13:29	1
Xylenes, Total	0.081	U	1.5	0.081	ug/Kg	Ø	03/24/16 10:37	03/28/16 13:29	1
Methyl tert-butyl ether	0.13	U	0.74	0.13	ug/Kg	O	03/24/16 10:37	03/28/16 13:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Bromofluorobenzene	93		67 - 126				03/24/16 10:37	03/28/16 13:29	1
Dibromofluoromethane (Surr)	98		61 - 149				03/24/16 10:37	03/28/16 13:29	1
1,2-Dichloroethane-d4 (Surr)	96		78 - 135				03/24/16 10:37	03/28/16 13:29	1
Toluene-d8 (Surr)	95		73 - 121				03/24/16 10:37	03/28/16 13:29	1
Method: 6010C - Metals (ICP) Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	8.4		1.7		mg/Kg	亞	03/25/16 18:50	03/26/16 17:43	4
General Chemistry Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	12.6		1.0		%			03/27/16 17:34	1
Percent Solids	87.4		1.0		%			03/27/16 17:34	1

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TestAmerica Job ID: 460-110842-1

Client: Center Point Tank Service Project/Site: Liberty Oil #38

Date Received: 03/23/16 13:52

Lab Sample ID: 460-110842-9 Client Sample ID: SB-7(3') Date Collected: 03/22/16 15:05

Matrix: Solid

Percent Solids: 85.0

Method: 8260C - Volatile Orga		unds by G	C/MS RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1.2-Dichloroethane	36		150	36	ug/Kg	- -	03/24/16 10:44	03/27/16 18:16	100
Benzene	1900	-	150	28	ug/Kg	O	03/24/16 10:44	03/27/16 18:16	100
Toluene	2400		150	36	ug/Kg	Ø	03/24/16 10:44	03/27/16 18:16	100
Ethylbenzene	9900		150	44	ug/Kg	ò	03/24/16 10:44	03/27/16 18:16	100
Xylenes, Total	8200		290	41	ug/Kg	ò	03/24/16 10:44	03/27/16 18:16	100
1,2-Dibromoethane	28	U	150	28	ug/Kg	ø	03/24/16 10:44	03/27/16 18:16	100
Naphthalene	9300		150	38		O	03/24/16 10:44	03/27/16 18:16	100
1,2,4-Trimethylbenzene	3200		150	33	ug/Kg	ø	03/24/16 10:44	03/27/16 18:16	100
1,3,5-Trimethylbenzene	1200		150	36		Ø	03/24/16 10:44	03/27/16 18:16	100
Isopropylbenzene	5800		150		ug/Kg	0	03/24/16 10:44	03/27/16 18:16	100
Methyl tert-butyl ether	19	U	150	19	ug/Kg	Ø	03/24/16 10:44	03/27/16 18:16	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	116		69 - 145				03/24/16 10:44	03/27/16 18:16	100
Toluene-d8 (Surr)	102		72 - 136				03/24/16 10:44	03/27/16 18:16	100
Bromofluorobenzene	104		64 - 131				03/24/16 10:44	03/27/16 18:16	100
Dibromofluoromethane (Surr)	106		74 - 134				03/24/16 10:44	03/27/16 18:16	100
Method: 6010C - Metals (ICP) Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	44		1.9		mg/Kg	- ₹	03/25/16 18:50	03/26/16 17:47	4
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
raidiyto									
Percent Moisture	15.0		1.0		%			03/27/16 17:34	1

Client Sample ID: SB-7(5') Lab Sample ID: 460-110842-10 Date Collected: 03/22/16 15:10 Matrix: Solid Date Received: 03/23/16 13:52

Percent Solids: 88.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.15	U	0.76	0.15	ug/Kg	Ø	03/24/16 10:39	03/28/16 13:54	1
1,2-Dibromoethane	0.091	U	0.76	0.091	ug/Kg	Ø	03/24/16 10:39	03/28/16 13:54	1
1,2-Dichloroethane	0.083	U	0.76	0.083	ug/Kg		03/24/16 10:39	03/28/16 13:54	1
Ethylbenzene	0.14	U	0.76	0.14	ug/Kg	Ø	03/24/16 10:39	03/28/16 13:54	1
Isopropylbenzene	0.13	U	0.76	0.13	ug/Kg	口	03/24/16 10:39	03/28/16 13:54	1
Naphthalene	0.091	U	0.76	0.091	ug/Kg	ø	03/24/16 10:39	03/28/16 13:54	1
Toluene	0.15	J	0.76	0.14	ug/Kg	Ø	03/24/16 10:39	03/28/16 13:54	1
1,2,4-Trimethylbenzene	0.26	U	0.76	0.26	ug/Kg	Ø	03/24/16 10:39	03/28/16 13:54	1
1,3,5-Trimethylbenzene	0.098	U	0.76	0.098	ug/Kg	Ø	03/24/16 10:39	03/28/16 13:54	1
Xylenes, Total	0.083	U	1.5	0.083	ug/Kg	Ø	03/24/16 10:39	03/28/16 13:54	1
Methyl tert-butyl ether	0.16	J	0.76	0.13	ug/Kg	O	03/24/16 10:39	03/28/16 13:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Bromofluorobenzene	105		67 - 126				03/24/16 10:39	03/28/16 13:54	1
Dibromofluoromethane (Surr)	109		61 - 149				03/24/16 10:39	03/28/16 13:54	1
1,2-Dichloroethane-d4 (Surr)	110		78 - 135				03/24/16 10:39	03/28/16 13:54	1
Toluene-d8 (Surr)	104		73 - 121				03/24/16 10:39	03/28/16 13:54	1

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TestAmerica Job ID: 460-110842-1

Client: Center Point Tank Service Project/Site: Liberty Oil #38

Client Sample ID: SB-7(5')

Lab Sample ID: 460-110842-10

Matrix: Solid

Percent Solids: 88.3

Date Collected: 03/22/16 15:10 Date Received: 03/23/16 13:52

Method: 6010C - Metals (ICP) Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	7.3		1.7		mg/Kg	ā	03/25/16 18:50	03/29/16 16:19	4
General Chemistry Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	11.7		1.0		%			03/27/16 17:34	1
Percent Solids	88.3		1.0		96			03/27/16 17:34	1

Client Sample ID: SB-8(6')

Date Collected: 03/22/16 15:25

Lab Sample ID: 460-110842-11

Matrix: Solid

Date Received: 03/23/16 13:52 Percent Solids: 89.2

Method: 8260C - Volatile Orga Analyte		unds by G Qualifier	C/MS RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	14	U	55	14	ug/Kg	<u> </u>	03/24/16 10:45	03/27/16 17:52	50
Benzene	2400		55	10	ug/Kg	101	03/24/16 10:45	03/27/16 17:52	50
Toluene	3400		55	14	ug/Kg	-	03/24/16 10:45	03/27/16 17:52	50
Ethylbenzene	1700		55	16	ug/Kg	O	03/24/16 10:45	03/27/16 17:52	50
Xylenes, Total	12000		110	15	ug/Kg	0	03/24/16 10:45	03/27/16 17:52	50
1,2-Dibromoethane	10	U	55	10	ug/Kg	Ø	03/24/16 10:45	03/27/16 17:52	50
Naphthalene	700		55	14	ug/Kg	O	03/24/16 10:45	03/27/16 17:52	50
1,2,4-Trimethylbenzene	4400		55	13	ug/Kg	ø	03/24/16 10:45	03/27/16 17:52	50
1,3,5-Trimethylbenzene	2100		55		ug/Kg	ø	03/24/16 10:45	03/27/16 17:52	50
Isopropylbenzene	150		55	18	ug/Kg	· ·	03/24/16 10:45	03/27/16 17:52	50
Methyl tert-butyl ether	110		55	7.1	ug/Kg	Ø	03/24/16 10:45	03/27/16 17:52	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1,2-Dichloroethane-d4 (Surr)	112		69 - 145				03/24/16 10:45	03/27/16 17:52	50
Toluene-d8 (Surr)	96		72 - 136				03/24/16 10:45	03/27/16 17:52	50
Bromofluorobenzene	76		64 - 131				03/24/16 10:45	03/27/16 17:52	50
Dibromofluoromethane (Surr)	106		74 - 134				03/24/16 10:45	03/27/16 17:52	50
Method: 6010C - Metals (ICP) Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	26	Guanner	1.8	mbL	mg/Kg	- 5	03/25/16 18:50		4
Lead	20		1.0		ngng		03/23/10 10.50	03/23/10 10.22	
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	10.7		1.0		%			03/27/16 17:34	1
Percent Solids	89.3		1.0		%			03/27/16 17:34	- 1

Certification Summary

Client: Center Point Tank Service Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-110842-1

Laboratory: TestAmerica Edison

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Connecticut	State Program	1	PH-0200	09-30-16
DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	N/A	12-31-15 *
New Jersey	NELAP	2	12028	06-30-16
New York	NELAP	2	11452	03-31-17
Pennsylvania	NELAP	3	68-00522	02-28-17
Rhode Island	State Program	1	LAO00132	12-30-16 *
USDA	Federal		NJCA-003-08	04-04-17

TestAmerica Edison

^{*} Certification renewal pending - certification considered valid.

Method Summary

Client: Center Point Tank Service Project/Site: Liberty Oil #38 TestAmerica Job ID: 460-110842-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL EDI
6010C	Metals (ICP)	SW846	TAL EDI
Moisture	Percent Moisture	EPA	TAL EDI

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

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777 New Durham Road

1	Company	Received by	Time /	0/2 Date /1	. [-,	Company	Relinquished by Car	Relin
6-1	Company	Received by (2)	Time	3/23/160	re i	Company	2) AMUCHAMOU Cor	Relin 2)
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and the first state of the stat	Company	Received by	ime	Date / Time		Company		Relin
ed (Yes/No)?	Water Metals Filtered (Yes/No)?						Special Instructions	Spe
			ler:	Water:	130	7 = Other M 2 0H	6 = Other [2], 7	
		Vъ	Soil: 1/7		, 5 = NaO	$3 = H_2SO_4$, $4 = HNO_3$, $5 = NaOH$	Preservation Used: $1 = CE $, $2 = CI $, $3 = F $	Pres
		X	` ۲	4	1510	4	7 (6')	56-
	AsO-110842 Chain of Custody	X	メ		1505		7 (3')	58-
		X	メ		13/141		v (7')	SB-6
		ベ	7		1425		5(10')	56-5
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		75	×		1325		3(11')	56-3
		3	73		1255		2(15')	56-2
		x	አ		1225		l (. 5')	58-
		X	ゟ		1030		-11(11.5')	11-mm
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Project No:			2	123	Standard X	لغفرا	E. Smann Franklin 1	536
LAB USE ONLY	3 1	ANALYSIS REQUESTE	-	Analysis Turnaround Time	Analysis Tun	Andreas of the second s		Address
DKQP:	AUST	D.	76	621-11-8			TONT LAND SOURCE	くずら
Other: /A	State (Location of site): NJ: NY:	St	- Consideration of the Control		P.O.#		2	Compan
	Site/Project Identification. しかかりが まる	Si	↑ <u>ë</u>	Name (Printed	Samplers Name		Name (for report and invoice)	Name (fo
Page of 2_	Joby 1901	CHAIN OF CUSTODY / ANALYSIS REQUES	Y/AN.	CUSTOD	N OF	СНА	THE LEADER IN ENVIRONMENTAL TESTING	THE .
Section (Contraction)							lestAmerica	<u>—</u>
Edison, New Jersey Cool/ Phone: (732) 549-3679	naison, New Jersey				5			4

Massachusetts (M-NJ312), North Carolina (No. 578) foratory Certifications: New Jersey (12028),

New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132).

TAL - 0016 (0715)

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To State of the st	Edison, New Jersey 08817 Phone: (732) 549-3900 Fax: (732) 549-3679
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J) 549-3679

THE LEADER IN ENVIRONMENTAL TESTING			(j						۔	7		Page 2 of 2	
Name (for report and invoice)		Samplers Name (Printed	amplers Name (Printed)	inted)	1		Site/Pr	Site/Project Identi	ntification	N	T 1:0	#38		
Company		0.#					State (State (Location of	of site):	Z.	NY:	Ц	Other: 1A	
Center boxt Tank Services		7324-21-30	-21-	132h	,		Regula	Regulatory Program:	gram;	AUST	1		DKQP:	
Address		Analysis Turnaround Time	around Tim	9		ANALYSIS RE	ANALYSIS REQUESTED (ENTER X:BELOW TO	ER X: BELOW	TO INDICATE	INDICATE REQUEST)			LAB USE ONLY	
536 E. Bunjamin Franklin Huy		Standard 🔀	(DI	T d	ii vuo	۷.	1.7		\neg				Project No:	
Dasa assuilly PA		Rush Chargos Authorized For 2 Week	s Authorized	For	9230	asolin		J. 10			8	-	* Lob No.?	×
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Sample Identification	Date	Time !	Matrix 0	Cont.	ONIT	Leau			154			:::II	Sample Numbers	
SB-8 (6')	3/22/10	1525	50	4.	メ	X	7.							
			8											
		-									# 1 Procession			
		y.							-					
	ь		9											
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And the state of t														
Preservation Used: 1 = ICE, 2 = HCl, 3 = H ₂ SO ₄ , 4 = HNO ₃ , 5 = NaOH	, 4 = HNO ₃	5 = NaOH		Soil:	1/7	1/6								
6=Other)	7 = Other M-08	 		Water:					-					
		and an annual second	-	***************************************	Annual of the last	and an address of a farmed an address of an address of an address of a state	and the second of the second	-	-	Part of the last o				

Page 16 of 18

Special Instructions iished by New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132). Received by Water Metals Filtered (Yes/No)? Company TAL - 0016 (0715)

EDS								V				النفاذانالسو		_				25
EDS-WI-038, Rev 4, 06/09/14		Lot#ofPreservative(s)	Preservative Name/Conc.	Sample No(s). adjusted:										TALS Sample Number		Cooler#3: "C "C "C	Number of Coolers:	Job Number:
		rvative(s)	ne/Conc.	adjusted:	If pH adju					7				(pH<2)	Ammonia			
Initials:	The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted. Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.				If pH adjustments are required record the information below:							Articonomic		(pH<2)	COD	ဂို ဂို ကို		12
<i>C</i> 1	propriate Project Manager and Department Manager should be notified about the samples which were pH adj Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.				are require									(pH<2)	Nitrate Nitrite			
いり	Manager tal analysi				d record									(pH<2)	Metals .	C C C C C C C C C C C C C C C C C C C	IR Gun #	
	and Depar		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		he inform			-						(pH<2) (Hardness	Cooler#4: °C))	600
	tment Man		Volume	ų sta	ation belo									(pH 5-9) (Α,	2 2 2	100	·
	mpliance r		of Prese	ē	W:									(pH<2) (EPH or QAM PI	connected (C		in c
Date:	id be notifi	Expiration Date:	Volume of Preservative used (ml):											(pH<2) (r	Phenois S	第125章		י לוי רסנ
Date: 32 10	ed about the	Date:	d (ml):	U Said										(pH>9) (p	Sulfide 1	C coole		
0	ne sample: ast 24 hou			12 # g/t										(pH<2) (p	TKN T	er #7:		
	s which wei		1	W	Ī									(pH<2) (pH	Toc cya	C C C		
	ne pH adjus analysis			, h.									-	(pH>12) (pH<2)	Total Cyanide Total Phos	c c c		
	sted.		t		-									(2)	Phos Other			
	a														er Other	Cooler #9: °C °C	inaFila Selina Selina Selina	

Login Sample Receipt Checklist

Client: Center Point Tank Service Job Number: 460-110842-1

Login Number: 110842 List Source: TestAmerica Edison

List Number: 1

Creator: Gilmore, Julie L

Creator. Gilliore, Julie L		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td>	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	IR KOP#1 1.4
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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Results Report

Order ID: 8014712

Center Point Tank Services 536 E. Benjamin Franklin Highway Douglasville, PA 19518

Project: Liberty 38

Attn: Rachel Burkhart

Regulatory ID:

Sample Number: 8014712-01 Collector: RAB		MW-12 (7.5') ct Date: 01/25/20	018 10:12 am		mple II mple T	D: ype: Grab			
Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	Ву	Analysis Date	Ву
Inorganics									
Total Solids	87.8	%	SM 2540-G		1	01/26/18	CEK	01/30/18 21:05	MMR
<u>Metals</u>									
Lead	57.8	mg/kg dry	SW 846 6010C	0.581	1	01/30/18	RPV	01/31/18 16:02	RPV
Volatiles									
VOA, 8260, UST									
Benzene	171	μg/Kg dry	SW 846 8260B	22.7	50	01/30/18	KED	01/30/18 19:02	KED
1,2-Dibromoethane (EDB)	11.8	μg/Kg dry	SW 846 8260B	3.72	50	01/30/18	KED	01/30/18 19:02	KED
1,2-Dichloroethane	< 227	μg/Kg dry	SW 846 8260B	227	50	01/30/18	KED	01/30/18 19:02	KED
Ethyl Benzene	3970	µg/Kg dry	SW 846 8260B	22.7	50	01/30/18	KED	01/30/18 19:02	KED
Isopropylbenzene	861	µg/Kg dry	SW 846 8260B	22.7	50	01/30/18	KED	01/30/18 19:02	KED
Methyl-t-butyl ether (MTBE)	< 22.7	μg/Kg dry	SW 846 8260B	22.7	50	01/30/18	KED	01/30/18 19:02	KED
Naphthalene	2080	μg/Kg dry	SW 846 8260B	22.7	50	01/30/18	KED	01/30/18 19:02	KED
Toluene	95.8	μg/Kg dry	SW 846 8260B	22.7	50	01/30/18	KED	01/30/18 19:02	KED
1,3,5-Trimethylbenzene	4770	µg/Kg dry	SW 846 8260B	22.7	50	01/30/18	KED	01/30/18 19:02	KED
Xylenes, Total	3720	μg/Kg dry	SW 846 8260B	45.4	50	01/30/18	KED	01/30/18 19:02	KED
1,2,4-Trimethylbenzene	21500	μg/Kg dry	SW 846 8260B	114	250	02/01/18	KED	02/01/18 22:03	KED
Surrogate Recoveries	Results	Units	Method	%Recovery	DF	Limits (%Re	covery)	Analysis Date	
Surrogate: Dibromofluoromethane	18.3	μg/L	SW 846 8260B	92%	50	75-139	9	01/30/18 19:02	
Surrogate: 1,2-Dichloroethane-d4	17.7	μg/L	SW 846 8260B	88%	50	81-12	5	01/30/18 19:02	
Surrogate: Toluene-d8	18.7	μg/L	SW 846 8260B	94%	50	84-12	1	01/30/18 19:02	
Surrogate: Bromofluorobenzene	16.7	μg/L	SW 846 8260B	84%	50	72-136	6	01/30/18 19:02	
Surrogate: Dibromofluoromethane	19.2	μg/L	SW 846 8260B	96%	250	75-139	9	02/01/18 22:03	
Surrogate: 1,2-Dichloroethane-d4	19.7	μg/L	SW 846 8260B	98%	250	81-12	5	02/01/18 22:03	
Surrogate: Toluene-d8	20.0	μg/L	SW 846 8260B	100%	250	84-12	1	02/01/18 22:03	
Surrogate: Bromofluorobenzene	19.0	μg/L	SW 846 8260B	95%	250	72-136	5	02/01/18 22:03	

Report Generated On: 02/05/2018 3:31 pm 8014712







Sample Number: 8014712-02 Collector: RAB		MW-13 (3') ct Date: 01/25/20	018 12:50 pm		mple II mple T	D: ype: Grab			
Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	Ву	Analysis Date	Ву
Inorganics									
Total Solids	84.9	%	SM 2540-G		1	01/26/18	CEK	01/30/18 21:05	MMR
Metals									
Lead	33.5	mg/kg dry	SW 846 6010C	0.601	1	01/30/18	RPV	01/31/18 16:06	RPV
Volatiles									
VOA, 8260, UST									
Benzene	< 30.0	μg/Kg dry	SW 846 8260B	30.0	50	01/30/18	KED	01/30/18 19:30	KED
1,2-Dibromoethane (EDB)	< 4.93	μg/Kg dry	SW 846 8260B	4.93	50	01/30/18	KED	01/30/18 19:30	KED
1,2-Dichloroethane	< 300	μg/Kg dry	SW 846 8260B	300	50	01/30/18	KED	01/30/18 19:30	KED
Ethyl Benzene	155	µg/Kg dry	SW 846 8260B	30.0	50	01/30/18	KED	01/30/18 19:30	KED
Isopropylbenzene	41.5	µg/Kg dry	SW 846 8260B	30.0	50	01/30/18	KED	01/30/18 19:30	KED
Methyl-t-butyl ether (MTBE)	< 30.0	µg/Kg dry	SW 846 8260B	30.0	50	01/30/18	KED	01/30/18 19:30	KED
Naphthalene	67.9	µg/Kg dry	SW 846 8260B	30.0	50	01/30/18	KED	01/30/18 19:30	KED
Toluene	80.5	µg/Kg dry	SW 846 8260B	30.0	50	01/30/18	KED	01/30/18 19:30	KED
1,3,5-Trimethylbenzene	192	μg/Kg dry	SW 846 8260B	30.0	50	01/30/18	KED	01/30/18 19:30	KED
Xylenes, Total	348	μg/Kg dry	SW 846 8260B	60.1	50	01/30/18	KED	01/30/18 19:30	KED
1,2,4-Trimethylbenzene	525	μg/Kg dry	SW 846 8260B	30.0	50	02/01/18	KED	02/01/18 14:43	KED
Surrogate Recoveries	Results	Units	Method	%Recovery	DF	Limits (%Rec	overy)	Analysis Date	
Surrogate: Dibromofluoromethane	19.5	μg/L	SW 846 8260B	97%	50	75-139		01/30/18 19:30	
Surrogate: 1,2-Dichloroethane-d4	20.1	μg/L	SW 846 8260B	100%	50	81-125		01/30/18 19:30	
Surrogate: Toluene-d8	19.9	μg/L	SW 846 8260B	100%	50	84-121		01/30/18 19:30	
Surrogate: Bromofluorobenzene	19.6	μg/L	SW 846 8260B	98%	50	72-136		01/30/18 19:30	
Surrogate: Dibromofluoromethane	19.3	μg/L	SW 846 8260B	97%	50	75-139		02/01/18 14:43	
Surrogate: 1,2-Dichloroethane-d4	20.1	μg/L	SW 846 8260B	101%	50	81-125		02/01/18 14:43	
Surrogate: Toluene-d8	19.9	μg/L	SW 846 8260B	100%	50	84-121		02/01/18 14:43	
Surrogate: Bromofluorobenzene	19.6	μg/L	SW 846 8260B	98%	50	72-136		02/01/18 14:43	







Sample Number: 8014712-03 Collector: RAB		MW-13 (6.5') ct Date: 01/25/20	018 1:20 pm		ımple II ımple T	D: ype: Grab			
Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	Ву	Analysis Date	Ву
Inorganics									
Total Solids	88.7	%	SM 2540-G		1	01/26/18	CEK	01/30/18 21:05	MMR
Metals									
Lead	15.0	mg/kg dry	SW 846 6010C	0.553	1	01/30/18	RPV	01/31/18 16:10	RPV
Volatiles									
VOA, 8260, UST									
Naphthalene	< 25.8	μg/Kg dry	SW 846 8260B	25.8	50	01/30/18	KED	01/30/18 19:58	KED
Toluene	< 25.8	µg/Kg dry	SW 846 8260B	25.8	50	01/30/18	KED	01/30/18 19:58	KED
1,3,5-Trimethylbenzene	44.8	µg/Kg dry	SW 846 8260B	25.8	50	01/30/18	KED	01/30/18 19:58	KED
1,2,4-Trimethylbenzene	131	µg/Kg dry	SW 846 8260B	25.8	50	02/01/18	KED	02/01/18 14:15	KED
Benzene	1.08	µg/Kg dry	SW 846 8260B	0.564	1	01/30/18	KED	02/02/18 14:30	KED
1,2-Dibromoethane (EDB)	< 0.092	µg/Kg dry	SW 846 8260B	0.092	1	01/30/18	KED	02/02/18 14:30	KED
1,2-Dichloroethane	< 5.64	µg/Kg dry	SW 846 8260B	5.64	1	01/30/18	KED	02/02/18 14:30	KED
Ethyl Benzene	2.94	µg/Kg dry	SW 846 8260B	0.564	1	01/30/18	KED	02/02/18 14:30	KED
Isopropylbenzene	1.41	μg/Kg dry	SW 846 8260B	0.564	1	01/30/18	KED	02/02/18 14:30	KED
Methyl-t-butyl ether (MTBE)	< 0.564	μg/Kg dry	SW 846 8260B	0.564	1	01/30/18	KED	02/02/18 14:30	KED
Xylenes, Total	2.87	μg/Kg dry	SW 846 8260B	1.13	1	01/30/18	KED	02/02/18 14:30	KED
Surrogate Recoveries	Results	Units	Method	%Recovery	DF	Limits (%Red	covery)	Analysis Date	
Surrogate: Dibromofluoromethane	19.2	μg/L	SW 846 8260B	96%	50	75-139		01/30/18 19:58	
Surrogate: 1,2-Dichloroethane-d4	20.2	μg/L	SW 846 8260B	101%	50	81-125	i	01/30/18 19:58	
Surrogate: Toluene-d8	19.9	μg/L	SW 846 8260B	100%	50	84-121		01/30/18 19:58	
Surrogate: Bromofluorobenzene	19.5	μg/L	SW 846 8260B	98%	50	72-136	i	01/30/18 19:58	
Surrogate: Dibromofluoromethane	19.4	μg/L	SW 846 8260B	97%	50	75-139		02/01/18 14:15	
Surrogate: 1,2-Dichloroethane-d4	20.4	μg/L	SW 846 8260B	102%	50	81-125	i	02/01/18 14:15	
Surrogate: Bromofluorobenzene	19.0	μg/L	SW 846 8260B	95%	50	72-136		02/01/18 14:15	
Surrogate: Dibromofluoromethane	98.5	μg/L	SW 846 8260B	99%	1	75-139	ĺ	02/02/18 14:30	
Surrogate: 1,2-Dichloroethane-d4	103	μg/L	SW 846 8260B	103%	1	81-125	i	02/02/18 14:30	
Surrogate: Toluene-d8	100	μg/L	SW 846 8260B	100%	1	84-121		02/02/18 14:30	
Surrogate: Bromofluorobenzene	79.0	μg/L	SW 846 8260B	79%	·	72-136		02/02/18 14:30	







Sample Number: 8014712-04 Collector: RAB		SB-9 (3.5') ct Date: 01/25/20	018 3:11 pm		mple II mple T	D: ype: Grab			
Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	Ву	Analysis Date	Ву
<u>Inorganics</u>									
Total Solids	83.6	%	SM 2540-G		1	01/26/18	CEK	01/30/18 21:05	MMR
Metals									
Lead	7.85	mg/kg dry	SW 846 6010C	0.564	1	01/30/18	RPV	01/31/18 16:14	RPV
Volatiles									
VOA, 8260, UST									
Naphthalene	< 28.1	μg/Kg dry	SW 846 8260B	28.1	50	01/30/18	KED	01/30/18 20:25	KED
Toluene	< 28.1	μg/Kg dry	SW 846 8260B	28.1	50	01/30/18	KED	01/30/18 20:25	KED
Benzene	< 0.556	μg/Kg dry	SW 846 8260B	0.556	1	01/30/18	KED	02/02/18 15:00	KED
1,2-Dibromoethane (EDB)	< 0.091	µg/Kg dry	SW 846 8260B	0.091	1	01/30/18	KED	02/02/18 15:00	KED
1,2-Dichloroethane	< 5.56	µg/Kg dry	SW 846 8260B	5.56	1	01/30/18	KED	02/02/18 15:00	KED
Ethyl Benzene	< 0.556	µg/Kg dry	SW 846 8260B	0.556	1	01/30/18	KED	02/02/18 15:00	KED
Isopropylbenzene	< 0.556	µg/Kg dry	SW 846 8260B	0.556	1	01/30/18	KED	02/02/18 15:00	KED
Methyl-t-butyl ether (MTBE)	< 0.556	μg/Kg dry	SW 846 8260B	0.556	1	01/30/18	KED	02/02/18 15:00	KED
1,3,5-Trimethylbenzene	< 0.556	μg/Kg dry	SW 846 8260B	0.556	1	01/30/18	KED	02/02/18 15:00	KED
1,2,4-Trimethylbenzene	< 0.556	μg/Kg dry	SW 846 8260B	0.556	1	01/30/18	KED	02/02/18 15:00	KED
Xylenes, Total	< 1.11	μg/Kg dry	SW 846 8260B	1.11	1	01/30/18	KED	02/02/18 15:00	KED
Surrogate Recoveries	Results	Units	Method	%Recovery	DF	Limits (%Red	covery)	Analysis Date	
Surrogate: Dibromofluoromethane	19.3	μg/L	SW 846 8260B	97%	50	75-139		01/30/18 20:25	
Surrogate: 1,2-Dichloroethane-d4	20.3	μg/L	SW 846 8260B	101%	50	81-125		01/30/18 20:25	
Surrogate: Toluene-d8	19.9	μg/L	SW 846 8260B	100%	50	84-121		01/30/18 20:25	
Surrogate: Bromofluorobenzene	19.7	μg/L	SW 846 8260B	98%	50	72-136		01/30/18 20:25	
Surrogate: Dibromofluoromethane	99.1	μg/L	SW 846 8260B	99%	1	75-139		02/02/18 15:00	
Surrogate: 1,2-Dichloroethane-d4	106	μg/L	SW 846 8260B	106%	1	81-125		02/02/18 15:00	
Surrogate: Toluene-d8	99.6	μg/L	SW 846 8260B	100%	1	84-121		02/02/18 15:00	
Surrogate: Bromofluorobenzene	84.1	μg/L	SW 846 8260B	84%	1	72-136		02/02/18 15:00	







Sample Number: 8014712-05 Collector: RAB		SB-10 (3.5') ct Date: 01/25/20	018 3:35 pm		mple II mple T	D: ype: Grab			
Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	Ву	Analysis Date	Ву
<u>Inorganics</u>									
Total Solids	84.4	%	SM 2540-G		1	01/26/18	CEK	01/26/18 20:54	CBE
Metals									
Lead	9.62	mg/kg dry	SW 846 6010C	0.617	1	01/30/18	RPV	01/31/18 16:18	RPV
<u>Volatiles</u>									
VOA, 8260, UST									
Naphthalene	< 25.9	μg/Kg dry	SW 846 8260B	25.9	50	01/30/18	KED	01/30/18 20:53	KED
Toluene	< 25.9	μg/Kg dry	SW 846 8260B	25.9	50	01/30/18	KED	01/30/18 20:53	KED
Benzene	< 0.558	μg/Kg dry	SW 846 8260B	0.558	1	01/30/18	KED	02/02/18 15:30	KED
1,2-Dibromoethane (EDB)	< 0.091	µg/Kg dry	SW 846 8260B	0.091	1	01/30/18	KED	02/02/18 15:30	KED
1,2-Dichloroethane	< 5.58	µg/Kg dry	SW 846 8260B	5.58	1	01/30/18	KED	02/02/18 15:30	KED
Ethyl Benzene	< 0.558	µg/Kg dry	SW 846 8260B	0.558	1	01/30/18	KED	02/02/18 15:30	KED
Isopropylbenzene	< 0.558	µg/Kg dry	SW 846 8260B	0.558	1	01/30/18	KED	02/02/18 15:30	KED
Methyl-t-butyl ether (MTBE)	< 0.558	µg/Kg dry	SW 846 8260B	0.558	1	01/30/18	KED	02/02/18 15:30	KED
1,3,5-Trimethylbenzene	< 0.558	μg/Kg dry	SW 846 8260B	0.558	1	01/30/18	KED	02/02/18 15:30	KED
1,2,4-Trimethylbenzene	< 0.558	μg/Kg dry	SW 846 8260B	0.558	1	01/30/18	KED	02/02/18 15:30	KED
Xylenes, Total	< 1.12	μg/Kg dry	SW 846 8260B	1.12	1	01/30/18	KED	02/02/18 15:30	KED
Surrogate Recoveries	Results	Units	Method	%Recovery	DF	Limits (%Re	covery)	Analysis Date	
Surrogate: Dibromofluoromethane	19.1	μg/L	SW 846 8260B	95%	50	75-139	9	01/30/18 20:53	
Surrogate: 1,2-Dichloroethane-d4	20.0	μg/L	SW 846 8260B	100%	50	81-12	5	01/30/18 20:53	
Surrogate: Toluene-d8	19.6	μg/L	SW 846 8260B	98%	50	84-12	1	01/30/18 20:53	
Surrogate: Bromofluorobenzene	19.8	μg/L	SW 846 8260B	99%	50	72-136	6	01/30/18 20:53	
Surrogate: Dibromofluoromethane	98.5	μg/L	SW 846 8260B	98%	1	75-139	9	02/02/18 15:30	
Surrogate: 1,2-Dichloroethane-d4	104	μg/L	SW 846 8260B	104%	1	81-12	5	02/02/18 15:30	
Surrogate: Toluene-d8	98.7	μg/L	SW 846 8260B	99%	1	84-12	1	02/02/18 15:30	
Surrogate: Bromofluorobenzene	76.7	μg/L	SW 846 8260B	77%	1	72-136	6	02/02/18 15:30	







Sample Number: 8014712-06 Collector: RAB		SB-11 (4') ct Date: 01/25/20	118 3:52 pm		mple II mple T	D: ype: Grab			
Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	Ву	Analysis Date	Ву
Inorganics									
Total Solids	91.3	%	SM 2540-G		1	01/26/18	CEK	01/26/18 20:54	CBE
Metals									
Lead	41.8	mg/kg dry	SW 846 6010C	0.559	1	01/30/18	RPV	01/31/18 16:31	RPV
Volatiles									
VOA, 8260, UST									
Benzene	291	µg/Kg dry	SW 846 8260B	28.4	50	01/30/18	KED	01/30/18 21:21	KED
1,2-Dibromoethane (EDB)	< 4.66	μg/Kg dry	SW 846 8260B	4.66	50	01/30/18	KED	01/30/18 21:21	KED
1,2-Dichloroethane	< 284	µg/Kg dry	SW 846 8260B	284	50	01/30/18	KED	01/30/18 21:21	KED
Ethyl Benzene	107	µg/Kg dry	SW 846 8260B	28.4	50	01/30/18	KED	01/30/18 21:21	KED
Isopropylbenzene	28.4	µg/Kg dry	SW 846 8260B	28.4	50	01/30/18	KED	01/30/18 21:21	KED
Methyl-t-butyl ether (MTBE)	< 28.4	µg/Kg dry	SW 846 8260B	28.4	50	01/30/18	KED	01/30/18 21:21	KED
Naphthalene	342	µg/Kg dry	SW 846 8260B	28.4	50	01/30/18	KED	01/30/18 21:21	KED
Toluene	225	µg/Kg dry	SW 846 8260B	28.4	50	01/30/18	KED	01/30/18 21:21	KED
1,3,5-Trimethylbenzene	116	µg/Kg dry	SW 846 8260B	28.4	50	01/30/18	KED	01/30/18 21:21	KED
1,2,4-Trimethylbenzene	153	µg/Kg dry	SW 846 8260B	28.4	50	01/30/18	KED	01/30/18 21:21	KED
Xylenes, Total	467	μg/Kg dry	SW 846 8260B	56.8	50	01/30/18	KED	01/30/18 21:21	KED
Surrogate Recoveries	Results	Units	Method	%Recovery	DF	Limits (%Re	covery)	Analysis Date	
Surrogate: Dibromofluoromethane	19.1	μg/L	SW 846 8260B	95%	50	75-139	9	01/30/18 21:21	
Surrogate: 1,2-Dichloroethane-d4	20.0	μg/L	SW 846 8260B	100%	50	81-12	5	01/30/18 21:21	
Surrogate: Toluene-d8	19.6	μg/L	SW 846 8260B	98%	50	84-12	1	01/30/18 21:21	
Surrogate: Bromofluorobenzene	19.3	μg/L	SW 846 8260B	97%	50	72-136	6	01/30/18 21:21	







Sample Number: 8014712-07 Collector: RAB		SB-11 (7') ct Date: 01/25/20	018 3:58 pm		imple II	D: ype: Grab							
Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	Ву	Analysis Date	Ву				
Inorganics													
Total Solids	85.6	%	SM 2540-G		1	01/26/18	CEK	01/26/18 20:54	CBE				
Metals													
Lead	15.1	mg/kg dry	SW 846 6010C	0.573	1	01/30/18	RPV	01/31/18 16:35	RPV				
Volatiles													
VOA, 8260, UST													
Naphthalene	< 22.6	μg/Kg dry	SW 846 8260B	22.6	50	01/30/18	KED	01/30/18 21:49	KED				
Toluene	< 22.6	μg/Kg dry	SW 846 8260B	22.6	50	01/30/18	KED	01/30/18 21:49	KED				
Benzene	< 0.547	μg/Kg dry	SW 846 8260B	0.547	1	01/30/18	KED	02/02/18 16:00	KED				
1,2-Dibromoethane (EDB)	< 0.090	μg/Kg dry	SW 846 8260B	0.090	1	01/30/18	KED	02/02/18 16:00	KED				
1,2-Dichloroethane	< 5.47	μg/Kg dry	SW 846 8260B	5.47	1	01/30/18	KED	02/02/18 16:00	KED				
Ethyl Benzene	< 0.547	μg/Kg dry	SW 846 8260B	0.547	1	01/30/18	KED	02/02/18 16:00	KED				
Isopropylbenzene	< 0.547	μg/Kg dry	SW 846 8260B	0.547	1	01/30/18	KED	02/02/18 16:00	KED				
Methyl-t-butyl ether (MTBE)	< 0.547	μg/Kg dry	SW 846 8260B	0.547	1	01/30/18	KED	02/02/18 16:00	KED				
1,3,5-Trimethylbenzene	< 0.547	μg/Kg dry	SW 846 8260B	0.547	1	01/30/18	KED	02/02/18 16:00	KED				
1,2,4-Trimethylbenzene	< 0.547	μg/Kg dry	SW 846 8260B	0.547	1	01/30/18	KED	02/02/18 16:00	KED				
Xylenes, Total	< 1.09	μg/Kg dry	SW 846 8260B	1.09	1	01/30/18	KED	02/02/18 16:00	KED				
Surrogate Recoveries	Results	Units	Method	%Recovery	DF	Limits (%Re	covery)	Analysis Date					
Surrogate: Dibromofluoromethane	19.1	μg/L	SW 846 8260B	96%	50	75-139	9	01/30/18 21:49					
Surrogate: 1,2-Dichloroethane-d4	19.9	μg/L	SW 846 8260B	99%	50	81-125	5	01/30/18 21:49					
Surrogate: Toluene-d8	19.9	μg/L	SW 846 8260B	99%	50	84-121	1	01/30/18 21:49					
Surrogate: Bromofluorobenzene	19.6	μg/L	SW 846 8260B	98%	50	72-136	6	01/30/18 21:49					
Surrogate: Dibromofluoromethane	98.8	μg/L	SW 846 8260B	99%	1	75-139	9	02/02/18 16:00					
Surrogate: 1,2-Dichloroethane-d4	106	μg/L	SW 846 8260B	106%	1	81-125	5	02/02/18 16:00					
Surrogate: Toluene-d8	99.3	μg/L	SW 846 8260B	99%	1	84-121		02/02/18 16:00					
Surrogate: Bromofluorobenzene	82.3	μg/L	SW 846 8260B	82%	1	72-136		02/02/18 16:00					

Data Qualifiers:

Sample Receipt Conditions:

All samples met the sample receipt requirements for the relevant analyses.

Report Generated On: 02/05/2018 3:31 pm 8014712







All results meet the requirements of STL's TNI (NELAC) Accredited Quality System unless otherwise noted. If your results contain any data qualifiers or comments, you should evaluate useability relative to your needs.

Alara M. Kopics

If collectors initials include "STL", samples have been collected in accordance with STL SOP SL0015.

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Reviewed and Released By:

Alana Kopicz Project Manager

Report Generated On: 02/05/2018 3:31 pm

STL_Results Revision #1.6

8014712

Effective: 07/09/2014

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T	E	S	T	5	N	G	L	Α	B	s





TAT (Circle One): Standard 24hr / 48hr / 72hr / Other (Additional charges may apply for rush TAT. If not specified, standard TAT will apply)

Order ID:_____

	ana Kopicz	
Client Name: Couter Point Tank Services		LIBAY 38
Address: 50 & Benjamn Franklin Hwy	Phone: 410 365 4977 Addres	s:
Dauglassul 1/7 PA	Fax:	
Contact Name: Rachel Burkart	Email: Colo Centre uttank. car Payme	nt / P.O. Info: 08-12-4292
Comments:		

		1.000						5	See Cod	es Belo	w	
STL Sample Number	Sample Description / Site ID:	Date Sampled		Time Sampled	Samplers Initials	Test(s) Requested:	Bottle Quantity	Matrix	Sample Type	Bottle Type	Preservative	Comments / Field Data:
	MW-12 (7.5') MW-13 (3') MW-13 (4.5') SB-9 (3.5')	1/25]	18	1012	RAB	PAUST readed gasoline	4	Solid	G	9	0	
	Mm-13 (3')			1250	FAB	V						
	MW-13 (4.5')			1320	RAB		2 1					
	SB-9 (3.5°)			1511	KVNS							
	58-10 (3.5")			1535	KAB		50					
	SB-11 (4')			1552	RAIS						Ц,	
	SB-11 (7')		/	1538	RAB		1	$' \ \ V$	V	V	V	

Relinquished By:	Date: Ja-		Sample Conditions	Matrix Key	Bottle Type Key	Reporting Options
Received By: 68	Time: 17./1 Date: 1/25/18	Temp °C: 4.9 00	Submitted with COC? N Number of containers match number on COC? N N	NPW = Non-Potable Water Soild = Raw Sludge, Dewatered sludge, soil, etc. (reported as mg/kg) PW = Potable Water (not for SDWA compilance).	P = Plastic G = Glass O = Other Preservative Key	[] SDWA Reporting PWSID: [] Fax
John His	Time: 17:11	Acceptable(Y)N (Ce		SDWA = Safe Drinking Water Act Potable Sample	N = Sodium Thiosulfate	[] Email
Relinquished By: Lem Fr (28)	Date: 11 25 /18 Time: 17:11	Temp °C: 4.9 Acceptable (V) N	All containers in tact? Y N Tests within holding Y N	Sample Type Key SDWA Sample Types	A = Ascorbic Acid H = HNO ₃ C = HCl S = H ₂ SO ₄	[] Other [] Return a copy of this form with Report
Received in Lab By:	Date:	Temp °C: Acceptable: Y / N	40 mL VOA vials free of headspace? Y / N	Composite C=Check S=Special M=Maximum Composite Residence	OH = NaOH O = Other NA = None Required	*

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Page 9 of 9



Results Report

Order ID: 8014757

Center Point Tank Services 536 E. Benjamin Franklin Highway Douglasville, PA 19518

Project: Liberty 38

Attn: Rachel Burkhart

Regulatory ID:

Sample Number: 8014757-01 Collector: RAB		SB-12 (2') ct Date: 01/26/20	18 9:22 am		mple II mple T	D: ype: Grab			
Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	Ву	Analysis Date	Ву
Inorganics									
Total Solids	86.9	%	SM 2540-G		1	01/26/18	CEK	01/30/18 21:05	MMR
Metals									
Lead	34.6	mg/kg dry	SW 846 6010C	0.575	1	01/30/18	RPV	01/31/18 16:39	RPV
Volatiles									
VOA, 8260, UST									
Benzene	146	μg/Kg dry	SW 846 8260B	43.9	50	01/30/18	KED	01/30/18 22:16	KED
1,2-Dibromoethane (EDB)	< 7.19	μg/Kg dry	SW 846 8260B	7.19	50	01/30/18	KED	01/30/18 22:16	KED
1,2-Dichloroethane	< 439	μg/Kg dry	SW 846 8260B	439	50	01/30/18	KED	01/30/18 22:16	KED
Ethyl Benzene	112	μg/Kg dry	SW 846 8260B	43.9	50	01/30/18	KED	01/30/18 22:16	KED
Isopropylbenzene	64.0	µg/Kg dry	SW 846 8260B	43.9	50	01/30/18	KED	01/30/18 22:16	KED
Methyl-t-butyl ether (MTBE)	< 43.9	μg/Kg dry	SW 846 8260B	43.9	50	01/30/18	KED	01/30/18 22:16	KED
Naphthalene	91.2	μg/Kg dry	SW 846 8260B	43.9	50	01/30/18	KED	01/30/18 22:16	KED
Toluene	252	μg/Kg dry	SW 846 8260B	43.9	50	01/30/18	KED	01/30/18 22:16	KED
1,3,5-Trimethylbenzene	303	µg/Kg dry	SW 846 8260B	43.9	50	01/30/18	KED	01/30/18 22:16	KED
1,2,4-Trimethylbenzene	346	μg/Kg dry	SW 846 8260B	43.9	50	01/30/18	KED	01/30/18 22:16	KED
Xylenes, Total	997	μg/Kg dry	SW 846 8260B	87.7	50	01/30/18	KED	01/30/18 22:16	KED
Surrogate Recoveries	Results	Units	Method	%Recovery	DF	Limits (%Re	covery)	Analysis Date	
Surrogate: Dibromofluoromethane	19.1	μg/L	SW 846 8260B	95%	50	75-13	9	01/30/18 22:16	
Surrogate: 1,2-Dichloroethane-d4	20.2	μg/L	SW 846 8260B	101%	50	81-12	5	01/30/18 22:16	
Surrogate: Toluene-d8	19.8	μg/L	SW 846 8260B	99%	50	84-12	1	01/30/18 22:16	
Surrogate: Bromofluorobenzene	19.4	μg/L	SW 846 8260B	97%	50	72-13	6	01/30/18 22:16	

Data Qualifiers:

Sample Receipt Conditions:

All samples met the sample receipt requirements for the relevant analyses.

Report Generated On: 02/07/2018 3:55 pm 8014757







All results meet the requirements of STL's TNI (NELAC) Accredited Quality System unless otherwise noted. If your results contain any data qualifiers or comments, you should evaluate useability relative to your needs.

Dlava M. Kopico

If collectors initials include "STL", samples have been collected in accordance with STL SOP SL0015.

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Reviewed and Released By:

Alana Kopicz Project Manager

Report Generated On: 02/07/2018 3:55 pm

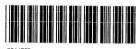
STL_Results Revision #1.6

8014757

Effective: 07/09/2014

	CII	DI	DI	3 A	
	3 U	BU	K	34	N
	TES	TIN	G	LA	BS
The same of the sa					-





TAT (Circle One): Standard 24hr / 48hr / 72hr / Other

Add	TESTING LABS IN Name: CHUTCY POINT TO PESS: 536 B Benjamn Dzuglassunly act Name: Kachel Bukart ments:	Franklin Hwy	8014757 Alana Kopicz Ph	x:		Address:	uperty 31	ř-		Order		tandard TAT will apply)
STL Sample Number	Sample Description / Site ID:	Date Sampled	Time Sampled	Samplers Initials	Test(s) Requested:	< 3	Bottle Quantity	Matrix	Sample Sample Type	Bottle Type sa	Preservative	Comments / Field Data:
	SB-812 (21)	1/24/18	0522	R AB	PAUT Leaded	and Unterdingosolike	4	Solid	G	G	0	Duta.
Relino	ulshed By:	Date: /2 / C-		19070	Sample Conditions	la de la companya de			PattieTu			
Received Received	etall flewing for this form indicates your agreement with STL's Stand	Time: 13:37 Date: 120/18 Time: 13:37 Date: 1/20/18 Time: 1/3:38 Date: 1/20/18 Time: 1/3:38	Temp °C:	Num mate All or Tests times	ber of containers in tact? N ontainers in tact? N s within holding L VOA vials free of space? Y N	NPW = Non-Potable Wa Solid = Raw Sludge, Dev (reported as mg/l PW = Potable Water (no SDWA = Safe Drinking V Sample Type Key G = Grab 8HC = 8 Hr. Composite 24HC = 24 Hr. Composite	watered sludge, soil, (g) t for SDWA complia	nce) ample Types	Bottle Ty P = Plastic G = Glass O = Other Preservat N = Sodium Thiosul A = Ascorb H = HNO ₉ C = HCl S = H ₁ SO ₄ OH = NaOH O = Other Requi	ive Key Ifate ic Acid	PWSID []Fax []Ema	all ar urn a copy of this form with

Page 3 of 3