RT Environmental Services, Inc.

REMEDIAL INVESTIGATION REPORT AND CLEANUP PLAN

5129-35 FRANKFORD AVENUE SITE
PHILADELPHIA, PENNSYLVANIA

Prepared For:

FRANKFORD COMMUNITY DEVELOPMENT CORPORATION
THE DARAL BUILDING
4667-69 PAUL STREET, 2ND FLOOR
PHILADELPHIA, PA 19124

PADEP EFACTS ID# 716772

RT PROJECT #73539-04

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1 *Introduction*

At the request of *Frankford Community Development Corporation (FCDC), RT Environmental Services, Inc. (RT)* prepared this combined *Remedial Investigation Report (RIR) and Cleanup Plan.* This investigation was completed in response to the detection of chlorinated volatile organic compounds (CVOCs), polynuclear aromatic hydrocarbons (PAHs), and dissolved lead in groundwater, and PAHs and metals in soil above Pennsylvania Department of Environmental Protection (PADEP) residential Statewide Health Standards (SHS) identified at the subject property located at 5129-35 Frankford Ave in Philadelphia, Pennsylvania (the Site).

The Site consists of approximately 1.6 acres of land located on the southern corner of the intersection of Frankford Avenue and Pratt Street in the City of Philadelphia. The site is currently occupied by an approximately 36,000 square foot vacant multitenant commercial building located on the western portion of the Site. The remaining portions of the Site are covered by an asphalt parking lot.

The Site previously went through the PADEP Act 2 process and attained nonresidential Site Specific (SSS) and Statewide Health Standards (SHS) for soil and groundwater. The PADEP efacts ID number for the Site is 716772. Lead, arsenic, barium, cadmium, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and dibenzo(a,h)anthracene in soil attained the nonresidential SSS or SHS. Tetrachloroethene (PCE), Benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(g,h,i) perylene, and dissolved lead in groundwater attained the nonresidential SSS. An Environmental Covenant which restricted groundwater use and the property use to nonresidential was required for the soil and groundwater SSS and it was recorded on May 4, 2016.

The planned future use of the Site will include a mixed commercial and residential development. Since the property will be used for a combination of commercial and residential purposes, the existing environmental covenant and attainment of nonresidential soil and groundwater SSS will need be updated to address the change in property use. Remedial Investigation activities were completed at the Site between 2022 through 2024 to collect soil and groundwater data to evaluate the current Site conditions.

Based on the remedial investigation, the following activities will be required to update the existing SSS and Environmental Covenant to account for residential use. A soil excavation will be completed in the area near the former heating oil underground storage tank (UST) to remove non aqueous phase liquid (NAPL) impacted soils identified during a geotechnical investigation and the remedial investigation. As noted in the 2015 Final Report and the remedial investigation, metals and PAH impacted soils at the Site appear to be related to historic fill and these areas are currently capped and will continue to be capped by asphalt or concrete as part of the planned redevelopment. The cap will eliminate the potential residential direct contact exposure pathway. Groundwater at the Site is not used for potable purposes and groundwater use is restricted by the existing environmental covenant, and these use restrictions will be maintained in the revised environmental covenant. The CVOCs present in groundwater will be addressed by a residential

SSS through pathway elimination. The PAHs and lead previously identified in groundwater will be addressed through a residential SSS based on pathway elimination or attainment of residential SHS. An environmental covenant will be established to restrict groundwater use and to maintain the cap to ensure the potential residential exposure pathways are incomplete.

To address the potential vapor intrusion pathway, a vapor barrier and passive ventilation system will be installed as part of new building construction. The installation of the vapor barrier and passive ventilation system will be documented in the Final Report at the completion of the project.

With the implementation of this RIR/CP, documenting the remedial actions in the Act 2 Final Report, and establishing an updated environmental covenant, Frankford Community Development Corporation will demonstrate attainment of the selected Act 2 standards for soil and groundwater, and the vapor intrusion pathway will also be eliminated. FCDC will document that there will be no significant impacts to the quality of the environment after the remedial actions have been implemented and construction has been completed.

Frankford Community Development Corporation plans to demonstrate attainment of the SSS for soil upon completion of the capping operations at the site (i.e. the completion of site work activities associated with the redevelopment). Frankford Community Development Corporation will submit a Final Act 2 Report for soil once the soil cap has been completed. The Environmental Covenant will be updated following approval of the soil Final Report; noting that groundwater use will continue to be restricted.

After cap completion, Frankford Community Development Corporation will continue to implement the groundwater program to demonstrate attainment of the SSS for groundwater. Following completion of the groundwater attainment demonstration, a Final Act 2 Report for groundwater will be submitted. Any modifications necessary to the Environmental Covenant related to groundwater will be completed upon the Department's approval of the groundwater Final Report.

2 Site Information

The Site setting is summarized in the following sections.

2.1 Site Description

The Site is located at 5129-35 Frankford Avenue, Pennsylvania. The property consists of one parcel encompassing approximately 1.6-acres. The Site is developed with an approximately 36,000 square foot multitenant commercial building. The approximate Site location coordinates are latitude 40º 14' 23.11" North and longitude 75º 38' 5.14" West. A Site Location Map is provided as **Figure 1**. Site Maps are provided as **Figures 2, 2A, 2B, and 2C**.

2.2 Topographic Setting

According to the *Frankford, PA* United States Geological Survey (USGS) 7.5-minute series topographic quadrangle map (2019), the Site is located at an elevation of approximately 53-feet above mean sea level (msl). Site topography around the property is generally level and slopes gently towards the southeast. The nearest surface water body to the project Site is Frankford Creek (approximately 0.98 miles southwest).

2.3 Site History

Based on a review of the available historical information, the Site was historically utilized for commercial purposes. In 1895, the Site was owned by the Haworth Land Co and John E. Koehler. A portion of Little Tacony Creek is depicted running through the middle of the Site on topographic maps, the creek appears to have been filled prior to development. In 1910, the Site was owned by TE Castor. The Site was undeveloped in 1920, but a 550-gallon gasoline underground storage tank was present along the northern border of the subject property. A filling station was located on the northwestern portion of the Site along with two smaller buildings in 1930 through at least the 1950s. By 1975, the Site was redeveloped with a supermarket, Penn Fruit, later Holiday Thriftway, and other commercial businesses located in multiple store fronts along Frankford Avenue. Based on a review of city directories, these businesses included financial services, restaurants, and retail sales. The supermarket closed in 2016, and the other businesses ceased operations between 2016 and 2020.

2.4 Prior Investigations

In June 2000, BL Companies conducted a Site Investigation to further evaluate the areas of concern from a former gas station that operated from at least 1939 to 1951 and the presence of a 3,000-gallon unregulated heating oil UST. Seven soil borings were installed to depths from 5 to 16 feet below ground surface (bgs). In August 2000, BL Companies (BLC) oversaw the removal of the 3,000-gallon heating oil UST and installed two test pits to confirm no additional USTs were present on the property. Three soil samples were

collected from the UST excavation and one soil sample was collected from the other two excavations. All soil and groundwater samples collected from the borings and excavations were below the most stringent Act 2 MSC's at the time. In August 2000, three monitoring wells (MW-1, MW-2, and MW-3) were installed. All target compounds were below the most stringent Act 2 SHS.

In July 2006, seven soil borings were installed at the subject property to evaluate the previous areas of concern, as well as the presence of fill material and hydrocarbon odors encountered during a geotechnical investigation. The soil results indicated that several semi-volatile organic compounds (SVOCs) were detected above their respective residential Act 2 MSCs, however none of the concentrations exceeded their respective nonresidential Direct Contact and/or Soil to Groundwater SHS. None of the analyzed VOCs were detected in soil, however PCE and vinyl chloride and several SVOCs were detected above their respective residential Act 2 SHS in groundwater.

In August 2008, MW-4 was installed downgradient and MW-2A was installed to replace damaged well MW-2. Fill material was observed at a maximum thickness of 16 feet. Groundwater occurred at approximately 10 to 12 feet bgs and the groundwater flow was to the southeast. Benzo(a)pyrene, benzo(a)anthracene, benzo(g,h,i)pyrene, benzo(b)fluoranthene, PCE, indeno(1,2,3-cd) pyrene, and vinyl chloride were detected in groundwater above the most stringent Act 2 SHS. Site specific Jonson and Ettinger (J&E) screening models were run to evaluate vapor intrusion, and the models determined that vapor intrusion was an incomplete exposure pathway for nonresidential properties, hence, no additional vapor intrusion assessment was required.

The March 2009 Remedial Investigation Report (RIR) prepared by BLC, indicated that the soil and groundwater impacts were attributed to potential releases from offsite sources and the historic fill material present at the Site. Based on the conclusions of environmental sensitivity analysis and the current and proposed use of engineering controls including the existing asphalt parking area, concrete sidewalks, and building foundations, it was concluded that the constituents of concern in soil and groundwater did not present a risk and that all soil and groundwater pathways were incomplete. No groundwater users were identified in the vicinity of the Site. Land use immediately downgradient of the Site was determined to be primarily nonresidential buildings and impervious surfaces. In addition, the Site and all properties in the area were connected to the municipal water system.

The RIR determined an Environmental Covenant would be needed to achieve the Site-Specific Standard (SSS) for soil and groundwater based on pathway elimination. The Environmental covenant would restrict property use to nonresidential and the use of Site groundwater would be restricted. The RIR recommended four groundwater sampling events and the subsequent re-evaluation of the fate and transport analysis following the completion of the quarterly sampling program. Following the quarterly sampling program, an Act 2 Final report would be submitted requesting release of liability via attaining nonresidential SHS and/or SSS.

Following the four quarterly monitoring events, the following seven constituents in groundwater were determined to not attain the nonresidential SHS; PCE, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(g,h,i)perylene, indeno(1,2,3-c,d) pyrene, and dissolved lead, therefore SSS were developed for these constituents by pathway elimination since no completed receptor pathways were identified within the modeled extent of the groundwater plume. In soil, the following four compounds achieved the nonresidential SHS; benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and dibenzo (a,h)anthracene, while the other constituents met residential SHS. A Final Report was submitted on June 26, 2014 by BLC. Excerpts of the Final Report are included in **Appendix A**. **Table 1** presents the soil analytical results and **Table 2** presents the groundwater analytical results from the 2014 Final Report

The department noted the following deficiencies in the Final Report leading to a disapproval of the report on August 26, 2014.

- The last groundwater data was in July 2011. The PADEP required additional groundwater data to be collected to evaluate the current conditions at the Site.
- It was requested that two consecutive rounds of groundwater sampling be completed. Depending on the results from groundwater sampling, additional sampling or remedial activities may be required.

BLC returned to the subject property on September 30, 2014, and December 11, 2014, to collect groundwater samples from MW-1, MW-2A, MW-3, and MW-4. The groundwater flow was similar to previous events. The groundwater analytical results were consistent with the results from the groundwater samples collected during 2008 through 2011. Based on this information, BLC determined that the conclusions of the Final Report remained valid and Act 2 Release of Liability under the SHS and the SSS were requested for the compounds identified in the previously submitted Final Report.

PADEP approved the Addendum to the Final Report on August 10, 2015. Constituents of concern in Groundwater attained an SSS via pathway elimination or the nonresidential SHS. An environmental covenant and post-remediation care plan was required to maintain the SSS in the groundwater. Constituents of concern in soil attained either the residential or nonresidential SHS. A copy of the Addendum to Final Report is included in **Appendix A**.

Based on this information, an Environmental Covenant was recorded on May 4, 2016, and closure of the monitoring wells was documented in a March 23, 2016 report. A copy of the Environmental Covenant is included in **Appendix A.**

RT completed a Phase I Environmental Site Assessment (ESA) for the Site, dated December 7, 2022. RT identified the following recognized environmental conditions (RECs) at the Site:

- Three soil borings previously installed at the Site during a geotechnical investigation, one located in the central portion of the Wells Fargo Parcel, one

on the northeast corner of the supermarket parcel, and one in the former UST area of the supermarket parcel had petroleum like odors detected during installation. Potential NAPL was reportedly observed in a geotechnical boring installed in the former UST area.

- The Philadelphia Atlas and Sanborn Maps depicted the historic presence of auto repair operations at the Site.
- A 550-gallon gasoline UST was depicted along the northern border of the subject property on the 1920 Sanborn map. A survey of the Wells Fargo Property by Rodriguez Engineers, Surveyors, and GIS from July 20, 2022 identified a suspect UST in the same area, labeled PECO H.H., Filled and Abandoned.
- An Auto Filling Station is depicted on the former supermarket parcel on the 1950 Sanborn Map.
- Drycleaning operations at adjoining properties were identified during a review of the City Directories. L&J Cleaners/Expert Alterations is located immediately upgradient and adjoins the subject property to the southwest. The former Alamars Cleaners was located cross-gradient of the subject property to the north.

A site investigation was recommended to evaluate the RECs identified in the Phase I and to evaluate the current conditions at the Site. The additional investigation activities are presented in this RIR/CP.

2.5 Site Geology

The Pennsylvania Geologic Data Exploration Map indicates that the Site is underlain by Mafic Gneiss. Hornblende-bearing mafic gneiss is a dark-colored, medium to fine-grained metamorphic rock consisting of calcic plagioclase, hypersthene, or augite, up to 30 percent quartz, and hornblende. Banding is poorly developed and massive. Its thickness is unknown (Geyer and Wilshusen, 1982).

2.6 Physiographic Province

The project area is located in the eastern portion of the Atlantic Coastal Plain Province. The Atlantic Coastal Plain is a flat low area that falls to sea level where it meets the Delaware River.

2.7 Soils

The USDA Web Soil Survey Mapping System lists the subject property as Urban Land (Ub). Slopes in this area are generally 0 to 8 percent. Surface runoff in this type of soil is rated as very high and water movement through the soil is very restricted. Urban Land soils are found in areas of high population density and have very diverse soil properties due to human interaction.

3 *Site Characterization Activities*

3.1 2022 Site Investigation

RT conducted a Phase II Environmental Site Assessment at the Site which included a ground penetrating radar (GPR) survey, soil investigation, well installation, groundwater sampling and soil gas sampling. The purpose of the investigation was to evaluate the soil impacts associated with historic operations of the Site and evaluate the current groundwater conditions based on the groundwater impacts identified in the review of historical reports and the existing Environmental Covenant.

3.1.1 Geophysical Investigation

Level A Underground Solutions (Level A) mobilized to the Site from November 21, 2022, to November 29, 2022, to complete a geophysical survey. RT mobilized to the Site on November 23, 2022, to oversee a portion of the geophysical survey. The equipment utilized included a Geophysical Survey Systems Inc. GSSI SIR-3000 cart mounted GPR control unit with a 400 MHz antenna, a radio detection RD7000+ precision utility locator, and a Fisher TW-6 pipe and cable locator. The GPR cart was traversed over the outside surface of the Site with focus given to clearing RT's proposed soil boring locations and potential historic UST locations identified at the Site. All boring locations were cleared except for the borings proximal to a suspect UST located beneath the sidewalk near the Wells Fargo building. Level A indicated that a subsurface anomaly was present consistent with a UST. Multiple utility lines were present in the area of the suspect UST, but there was uncertainty in the locations of some of the lines during the geophysical survey. Based on this information, Level A recommended that no borings should be installed proximally to the suspect UST due to the risk of encountering a utility line. It was recommended that this anomaly be further addressed during site redevelopment. The Level A geophysical survey was not conclusive regarding the presence of any other USTs or subsurface anomalies at the Site.

3.1.2 Soil Investigation

RT mobilized to the Site on December 5, 2022, to conduct a soil boring investigation utilizing track mounted Geoprobe® equipment which utilizes direct push method technology. A total of six (6) soil borings (SB-101 through SB-106) were installed across the Site. A total of five (5) soil samples were collected from the Site including one soil sample from soil borings SB-101, SB-102, SB-104, SB-105, and SB-106. Soil boring locations are depicted on **Figures 2, 2A, 2B, and 2C**.

Soil boring SB-101 was installed to investigate historic auto service at the former Keystone Garage and the adjoining drycleaner. SB-101 is also the closest boring to the sidewalk UST that was unable to be investigated due to inconclusive geophysical survey results. SB-102 was advanced to investigate historic site use as an auto service garage and the adjoining drycleaner. Soil boring SB-103 was installed to investigate the historic auto service garage and a geotechnical boring with petroleum odors. SB-104 was installed to

investigate the historic auto garage at 5102 Darrah Street. SB-105 and SB-106 were used to investigate geotechnical borings with petroleum odors. Further, SB-106 was installed to investigate the geotechnical boring observed to have product present.

Soil boring SB-101 was advanced to refusal at 11.9 ft-bgs. Soil borings SB-102, SB-103, SB-104, SB-105, and SB-106 were advanced to 15 ft-bgs.

The general soil stratigraphy at the Site consisted of asphalt or concrete from surface grade up to 1-foot bgs, historic fill including brick and cinder material from approximately 6-inches to approximately 10 ft-bgs. Groundwater was encountered at 13' bgs in SB-102, at 10' bgs in SB-103, at 10' bgs in SB-104, at 10' bgs in SB-105, and at 9' bgs in SB-106. Historic fill was observed in SB-101, SB-103, SB-104, SB-105, and SB-106. All soils recovered from the borings were screened with a photo-ionization detector (PID) to assess the potential presence of volatile organic compounds (VOCs). Elevated PID measurements were observed in multiple soil borings with SB-101 (11.5 ft-bgs) at 59.9 ppm, SB-103 (15 ft-bgs) at 86.7 ppm, SB-105 (14.5 ft-bgs) at 41.0 ppm, and SB-106 (11.5 ft-bgs) at 34.4 ppm having the highest PID readings observed at the Site. Petroleum product was observed in SB-106 at a depth of nine feet bgs.

A total of five soil samples were collected from the Site. One soil sample was collected from the 6-inch interval of the highest PID reading in SB-101, SB-104, SB-105, and SB-106 and one soil sample was collected from the 6-inch interval immediately above groundwater in soil boring SB-102. It is important to note that SB-105 and SB-106 were sampled below the water table. Soil boring SB-103 was not sampled since there were no PID readings above the water table. A groundwater grab sample was collected from the location of SB-103 and is discussed below. Soil boring logs are provided in **Appendix B**.

All soil samples were collected into laboratory supplied bottleware, placed on ice, and transported to a PADEP certified laboratory for the analysis. The following table provides the soil sample designation with their respective sampling depth intervals and respective laboratory analysis:

Sample	**Collection Depth (ft-bgs)**	**Analyses**
SB-101	11.0 – 11.5 (Historic Auto Service, and adjoining drycleaner)	• Target Compound List (TCL) VOCs • TCL Semi-volatile Organic
SB-102	12.5 - 13.0 (Historic Auto Service and adjoining drycleaner)	
SB-103	Not sampled (Historic Auto Service and Geotechnical Boring)	
SB-104	9.5 – 10.0 (5102 Darrah Street Auto Garage)	

Sample	Collection Depth (ft-bgs)	Analyses
SB-105	14.0 – 14.5 (Geotechnical Boring)	Compounds (SVOCs) • Resource Conservation and Recovery Act (RCRA) 8 metals
SB-106	11.5 – 12.0 (Geotechnical Boring with possible NAPL)	

3.1.2.1 Soil Analytical Results

Soil analytical results indicated the presence of lead exceeding its PADEP residential SHS in one soil sample, SB-106 (11.5-12') at 105,000 milligrams per kilograms (mg/kg) which exceeds the PADEP residential and nonresidential soil to groundwater numeric value of 450 mg/kg and the residential direct contact SHS for lead of 500 mg/kg. Soil analytical results indicated the presence of arsenic exceeding its PADEP residential SHS in one soil sample, SB-106 (11.5-12') at 36.0 mg/kg. The arsenic concentration in this boring exceeded the PADEP residential soil to groundwater numeric value of 29 mg/kg and the residential direct contact SHS for lead of 12 mg/kg.

As previously discussed, soil samples from SB-105 and SB-106 were collected below the water table. Hence, the soil to groundwater numeric values were also compared at 1/10th the screening value. Soil analytical results for SB-105 had arsenic detected above the 1/10th Soil to Groundwater Numeric Value (2.9 mg/kg) at 7.1 mg/kg. Soil analytical results for SB-106 had cadmium detected at 20.3 mg/kg and barium detected at 1110 mg/kg, which are above the 1/10th Soil to Groundwater Numeric Value 3.8 mg/kg and 820 mg/kg, respectively.

No other constituents of concern were detected at concentrations exceeding their respective PADEP residential SHS in any of the soil samples analyzed.

A complete summary of the analytical results is provided in **Table 2**, and the laboratory analytical report and chain of custody are provided in **Appendix C**.

3.1.3 Groundwater Investigation

Groundwater samples were collected on December 5, 2022, from temporary wells installed in two soil borings based on observations during the installation of the sol borings. The samples were collected from SB-103 based on elevated PID readings below the water table and from SB-106 due to the presence of NAPL during the installation of the soil boring. The groundwater samples were collected from the soil borings via a dedicated, disposable bailer. Approximately one inch of NAPL was observed in the bailer during the sampling at SB-106. The groundwater samples were collected in laboratory supplied

bottleware, placed on ice, and submitted to a PADEP Certified Laboratory (SGS-Analytical, Dayton NJ) for analysis of VOCs. Following the completion of groundwater sampling, both borings were abandoned.

3.1.3.1 Groundwater Analytical Results

No VOCs were detected at concentrations exceeding their respective PADEP residential groundwater SHS in either of the groundwater samples analyzed. Groundwater analytical results are summarized in **Table 3**, and the laboratory analytical report is provided in **Appendix C.**

3.1.4 Soil Gas Sampling

RT mobilized to the Site on December 2 and 5, 2022 to install five (5) soil gas sample points (SV-1, SV-2, SV-3, SV-4, and SV-5). SV-1 was placed near the Wells Fargo Building downgradient of an adjoining dry cleaner, SV-2 was placed downgradient of the suspect sidewalk UST and proximal to the former gas station, and SV-3 was placed proximal to an adjoining dry cleaner, SV-4 was placed to investigate one of the previous geotechnical borings where odors were observed and the historic auto service operations, and SV-5 was placed to investigate the geotechnical boring where NAPL was reported. A hammer drill was utilized to advance SV-1 and SV-2 to approximately 14 inches (in) bgs. SV-1 was located in the storage room under the stairs at the Wells Fargo. SV-2 was located in the basement of the former Wireless Tech. It is important to note that the basement of the former Holiday Thriftway was unable to be accessed due to the presence of multiple feet of water. A Geoprobe was utilized to advance SV-3, SV-4, and SV-5 to approximately 14 in-bgs. SV-3 was installed proximally to SB-102, SV-4 was installed proximally to SB-103, and SV-5 was installed proximally to SB-106. A 6-inch stainless steel screened implant was installed in each boring extending from a depth of 8 to 14 in-bgs. Teflon lined tubing was connected to the top of the implant to collect a soil gas sample, and the annular space around the 6-inch screened implant was filled with sand from 3 to 14 in-bgs. Saturated bentonite was then used to seal the boring 0 to 3 in-bgs. Soil gas sampling locations are depicted in **Figures 2, 2A, 2B, and 2C**.

A leak check was conducted to confirm the integrity of the vapor point seal. An inert tracer gas (helium) was released into the shroud. The atmosphere under a shroud on the concrete slab covering the vapor point was monitored using a portable helium detector for presence of helium. The helium concentration in the shroud was taken above 10%. Helium below the slab was subsequently tested and found to 0 ppm indicating leak check had been successful.

A shut-in test was performed for each sampling point to confirm that the sampling chain was sealed properly. Prior to sample collection, each of the collection lines were purged three times the total air volume of the sampling chain, at a rate of approximately 200 milliliters per minute (mL/min). A 200 mL/min regulator attached to a 6-liter SUMMA

canister was utilized to collect a soil gas sample. The soil gas samples were transported to a PADEP Certified Laboratory for analysis of Toxic Organics - 15 (TO-15).

3.1.4.1 Sub-Slab Soil Vapor and Indoor Air Quality Analytical Results

No constituents of concern were detected in any soil gas samples at concentrations exceeding their respective PADEP soil gas residential or nonresidential SHS vapor intrusion screening value. A complete summary of the soil gas analytical results is provided in **Table 4**. A copy of the laboratory reports is included in **Appendix C**.

3.2 2023 Site Investigation

Based on the results of the Phase II Investigation, RT conducted a Soil and Groundwater Investigation. The scope of work included a GPR survey, installation of delineation soil borings near the SB-105 and SB-106 Phase II soil borings, and installation of groundwater monitoring wells. The following describes investigation activities, findings, conclusions.

3.2.1 Geophysical Investigation

RT mobilized to the Site on March 24, 2023, to oversee ground penetrating radar (GPR) investigation activities. The GPR and metallic locator were utilized in a hexagonal grid pattern over accessible exterior areas of the property and selected areas for the soil borings. Based on the results of the GPR survey, all boring locations were scanned, and some were moved to avoid conflict with small unknown anomalies found on the property. There were no indications of remnant piping associated with the former UST during the survey.

3.2.2 Soil Investigation

RT mobilized to the Site on March 30, 2023, to conduct the subsurface soil boring investigation. RT advanced thirteen soil borings at the Site. Soil borings SB-1 through SB-9 were located in the area of SB-106 from previous investigation activities to delineate the NAPL and metals impacts identified during the previous investigation. Soil borings SB-10 through SB-13 were located in the area of SB-105 from previous investigation activities to delineate the metals impacts. Soil borings were advanced by direct push to approximately 20 feet bgs or boring refusal. Sampling locations are provided in **Figures 2, 2A, 2B, and 2C.**

The general soil stratigraphy observed in the soil borings consisted of concrete or asphalt from the surface to approximately 0.5 feet bgs, black gravel fill material to approximately 15 bgs, brown to grey clay with gravel to approximately 18 feet bgs, and brown sand to boring refusal. Soil boring depths ranged between 17 to 20 feet bgs. Groundwater was encountered between 9.5 and 15 feet bgs. All soil cores were screened for the potential presence of VOCs using a photo-ionization detector PID. PID detections were observed in soil borings SB-2, SB-5, SB-6, and SB-10 ranging between 3.7 ppm to 570.7 ppm. Stained soil and NAPL were observed in soil borings SB-1 at approximately 16.5 to 17.5

feet bgs, SB-2 at approximately 18 to 18.5 feet bgs, and SB-5 at approximately 18 to 18.5 feet bgs. These borings were located near the SB-106 location where NAPL was previously observed. A copy of the soil boring logs are provided in **Appendix B.**

Thirty-nine soil samples or three samples per boring, were collected from the thirteen soil borings. Grab soil samples were collected at SB-1 through SB-9 at depths ranging between 0 to 2 feet bgs, 11.5 to 12 feet bgs, and 15 to 20 feet bgs. Grab soil samples collected from SB-10 through SB-13 were collected at depths ranging between 0-2 feet bgs, 14 to 14.5 feet bgs, and 15 to 20 feet bgs. All soil samples were collected directly into laboratory supplied bottleware, placed on ice, and transported under proper chain of custody to a PADEP certified laboratory. Soil samples collected from borings SB-1 through SB-9 were submitted for arsenic, lead, cadmium, and barium analysis. Soil samples collected from SB-10 through SB-13 were submitted for analysis of arsenic.

3.2.2.1 Soil Analytical Results

Laboratory analytical results showed exceedances of lead and arsenic concentration detections above the PADEP residential SHS.

Lead exceedances were detected above the residential direct contact SHS of 500 mg/kg in soil borings SB-1-(1.5-2) at 502 mg/kg, SB-2-(11.5-12) at 3,882 mg/kg, SB-3-(1.5-2) at 1,410 mg/kg, SB-3-11.5-12) at 712 mg/kg, SB-4-(1.5-2) at 1,120 mg/kg, SB-4-(11.5-12) at 1,010 mg/kg, SB-5-(1.5-2) at 1,180 mg/kg, SB-5-(11.5-12) at 6,140 mg/kg, SB-6-(11.5-12) at 1,980 mg/kg, SB-7-(11.5-12) at 3,630 mg/kg, SB-8-(1.5-2) at 718 mg/kg, SB-8-(11.5-12) at 588 mg/kg, and SB-9-(11.5-12) at 1,440 mg/kg. Sample SB-1-(11.5-12) exceeded the lead residential soil to groundwater SHS of 450 mg/kg at a concentration of 481 mg/kg.

Arsenic concentrations exceeded the residential direct contact SHS of 12 mg/kg in soil borings SB-1-(11.5-12) at 27.4 mg/kg, SB-2-(11.5-12) at 28.2 mg/kg, SB-3-(1.5-2) at 19.8 mg/kg, SB-4-(1.5-2) at 14.9 mg/kg, SB-4-(11.5-12) at 13.3 mg/kg, SB-5-(1-1.5) at 19.6 mg/kg, SB-5-(11.5-12) at 68.1 mg/kg, SB-6-(11.5-12) at 29.4 mg/kg , and SB-7-(1-1.5) at 22.3 mg/kg. The concentration of arsenic in soil samples SB-5-(11.5-12) and SB-6-(11.5-12) also exceeded the residential and nonresidential soil to groundwater SHS for arsenic of 29 mg/kg.

A complete summary of the analytical results is provided in **Table 6** , and the laboratory analytical report and chain of custody are provided in **Appendix C. Figures 2, 2A, 2B, and 2C** present the soil boring locations.

3.2.3 Groundwater Investigation

Since the monitoring wells installed during the previous investigations were abandoned following approval of the Act 2 Final Report, RT mobilized to the Site on March 28 and March 29, 2023, to install five new monitoring wells (MW-1 through MW-5) at the Site. MW-1 was installed as an upgradient well and to evaluate whether there were any potential groundwater impacts from offsite sources such as the adjacent dry cleaner. Well MW-5 was installed as a source area well and was located near the historically impacted

wells and the former heating oil UST. Wells MW-2, MW-3, and MW-4 were installed downgradient of the source area to serve as potential point of compliance wells. The wells were installed to depths ranging from 20 to 23 feet bgs. The wells are 2-inch PVC wells constructed with 15 feet of screen. The wells were developed following installation. The soil cuttings and development water were contained in 55-gallon drums and stored at the property until offsite disposal could be arranged. The well locations are presented in **Figures 2, 2A, 2B, and 2C**. The well logs are presented in **Appendix D**.

Groundwater monitoring events were completed at the Site on April 17, 2023, and May 4, 2023. The wells were gauged prior to sampling. The depth to water ranged from 7.70 ft bgs (MW-5) to 12.81 ft bgs (MW-1) during the two groundwater monitoring events. NAPL was not detected in any of the wells during the two sampling events. The groundwater elevations are presented on **Table 7**. The groundwater contour maps are presented on **Figures 3** and **4**. Groundwater flow at the Site was to the south or southeast.

The wells were purged by low flow sampling procedures until the groundwater parameters stabilized or a total of three well volumes were purged prior to the collection of samples. The samples were collected in laboratory supplied bottleware and stored in coolers on ice. The samples were transferred under chain of custody to the Eurofins Test America laboratory for analysis. The samples were submitted for volatile organic compound VOC analysis by USEPA method 8260D, and dissolved metals arsenic, barium, cadmium, and lead by USEPA method 6020B. The dissolved metals samples were filtered by the laboratory prior to analysis. The groundwater analytical results are summarized in **Table 8**.

3.2.3.1 Groundwater Analytical Results

Tetrachloroethene (PCE) were detected in well MW-5 during both groundwater sampling events at concentrations detections above PADEP residential used aquifer SHS. PCE was detected at 25 micrograms per liter (μg/l) and 30 μg/l during the two sampling events. No exceedances of the residential used aquifer SHS for any other VOCs, arsenic, barium, cadmium, or lead were detected in any groundwater samples during the groundwater monitoring events.

Based on a review of the historic documents, PCE was previously detected in groundwater at the Site during the groundwater sampling events completed during 2008 through 2014 and was addressed with a nonresidential Site-Specific Standard based on pathway elimination in the Final Report approved by PADEP on August 10, 2015.

3.3 Septa Bus Garage File Review

The Septa Frankford Bus Facility located at Frankford and Bridge Street was identified as a potentially upgradient Site with an active environmental cleanup (eFacts Facility ID 51-07480). Since bus maintenance operations were completed at the Septa Frankford Bus Garage, there is a possibility that PCE used for parts cleaning could have been released and it could be a potential offsite source. To evaluate this possibility, a PADEP file review

for the Septa Frankford Bus Facility was completed in April 2024. Based on a review of the September 2022 Revised Remedial Action Plan for the Facility obtained in the file review, the Site has been under investigation since 2000 when an area of petroleum hydrocarbon impacted soil was identified during construction and light non aqueous phase liquid (LNAPL) was subsequently identified during construction dewatering activities in 2001. LNAPL fingerprinting determined that the LNAPL was diesel fuel. A groundwater and light non aqueous phase recovery system was installed in 2003. A Site Characterization Report and Remedial Action Plan was approved in 2009, which included the continued operation of the groundwater and LNAPL recovery system. The remedial actions also included injection of PetroCleanze in 2019. The 2022 Revised Remedial Action Report included plans to cease operating of the system on a trial basis to allow monitoring of groundwater concentrations and LNAPL to evaluate whether the system still needed to operate. Based on a review of the groundwater data, the historic groundwater exceedances at the Septa Frankford Bus Facility only included petroleum hydrocarbons, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and methyl tertiary butyl ether (MTBE). Based on this information, the Septa Frankford Bus Facility does not appear to be a potential offsite source of the PCE. Excerpts of relevant files obtained during the file review are included in **Appendix E.**

3.4 Groundwater Modeling

PCE was the only constituent of concern detected above PADEP residential used aquifer standards during the 2023 groundwater sampling events. A nonresidential SSS for PCE was previously established for the Site in the 2016 Final Report based on pathway elimination and fate and transport modelling. The fate and transport model used in the 2016 Final Report to evaluate PCE was the United States Environmental Protection Agency's BIOCHLOR model. In order to evaluate the current groundwater conditions at the Site, and evaluate the potential offsite impacts related to a residential exposure scenario, an updated BIOCHLOR model was completed based on the current groundwater concentrations at the Site. The model inputs used to prepare the BIOCHLOR model included in the 2016 Final Report were reviewed, and some of the inputs were updated based on the current Site conditions. The updated inputs included changes in the source concentrations, the hydraulic gradient, modeled area, and dispersivity. The hydraulic gradient from the 2023 groundwater monitoring is approximately twice as steep as the gradient used in the 2016 models. This change is likely related to the shutdown of the pump required to keep the basement dry after the supermarket closed. The other inputs which included hydraulic conductivity, effective porosity, soil bulk density, fractional organic carbon, first order decay coefficients, and source width and thickness were not updated since these inputs were based on published sources or were Site specific inputs which were consistent with the current Site conditions. The model inputs were:

- Hydraulic Conductivity (K): 3.72 ft/day (Average hydraulic conductivity from BL Companies 2012 slug testing at the Site)
- Hydraulic Gradient (i): 0.00905 ft/ft (2023 Average gradient)

- Effective Porosity (n): 0.25 (BIOCHLOR default value)
- Longitudinal Dispersivity (Ax): 25 feet (estimated plume length/10)
- Transverse Dispersivity (Ay): 2.5 feet (Ax/10)
- Vertical Dispersivity (Az): $1X10^{-99}$(BIOCHLOR default value)
- Soil Bulk Density-1.7kg/l (BIOCHLOR default value)
- Fractional Organic Carbon-0.005 (PADEP default value)
- First Order Decay Coefficients (λ): 0.07 PCE, 0.05 TCE, 0.18 DCE, and 0.12 vinyl chloride (BIOCHLOR default values)
- Simulation time: 30 years (PADEP default value)
- Modeled area width: 300 feet
- Modeled area length: 400 feet
- Source Thickness in Saturated Zone: 20 feet (2016 BIOCHLOR model)
- Source Width: 20 feet (2016 BIOCHLOR model)
- Source Concentrations: Maximum 2023 concentrations at MW-5, PCE-30 μg/l, TCE-2.1 μg/l, DCE-1.6 μg/l, and vinyl chloride-0.41 μg/l. Ethene was not analyzed and an assumed concentration of 1.0 μg/l was used for the model.

The updated groundwater models are attached in **Appendix F.** The maximum modeled extent of the PCE groundwater plume was be approximately 240 feet (or 100 to 120 feet offsite) from the source area after 30 years with a constant source concentration if no biotransformation is occurring based on the 2023 groundwater results. If first order decay is occurring, the maximum modeled extent of the PCE plume would be approximately 200 feet or approximately 60 to 80 feet offsite. Based on these distances, the modeled groundwater plume would attenuate to below the residential SHS for PCE before reaching any offsite residential properties. The 2023 analytical results for wells MW-2 and MW-3, which were installed on the downgradient property boundary currently meet the residential SHS, which suggests that the model may be overestimating the extent of the groundwater plume.

4 *Preliminary Risk Assessment*

A preliminary review of the site-specific human health and ecological risks based on the standard and customary approaches specified by the PADEP, under Act 2, and United States Environmental Protection Agency (USEPA) approaches as needed was completed.

The review focused on the site-specific evaluation of metals and SVOCs in soil and groundwater and PCE in groundwater and soil vapor. The preliminary risk review evaluated both exterior areas and interior areas of the Site, based on the potential for soil exposure and groundwater exposure and the previously approved Final Report and Environmental Covenant for the Site.

4.1 Human Health Risk Assessment

The Site will be capped by the building foundation, concrete, or asphalt following redevelopment which will eliminate the direct contact pathway for residents and tenants at the property and further risk assessment for this pathway is not required. The planned construction will not include any basements. The direct contact exposure pathway would likely only exist for future utility or construction workers who would be exposed to the capped soils while they are working. The soil concentrations of metals and SVOCs detected at the Site are below the current nonresidential SHS which suggests minimal risk for workers contacting soils during future work which would disturb the soils. To further reduce the risk for workers, the Environmental Covenant will identify soil management and health and safety practices for these workers.

The only constituent in groundwater detected above the SHS during the recent sampling events was PCE. Historically, SVOCs and dissolved metals were detected in groundwater above the residential SHS at the Site. The Site and surrounding area are supplied by public water and groundwater is not used for potable purposes. Groundwater models were prepared by BLC in their Final Report as part of the development of the nonresidential SSS for the Site. The previous groundwater models did not identify any competed receptor pathways. The groundwater models were updated based on the 2023 analytical data as part of the development of the residential SSS to verify there are no completed pathways. Based on the maximum modeled extent of the plume, the groundwater PCE concentrations would attenuate to below the residential SHS before reaching any offsite properties.

The groundwater PCE concentrations detected during the remedial investigation were below the residential groundwater PCE screening value. In addition, soil vapor samples collected during the remedial investigation did not detect any constituents above the residential screening values. Based on these results, further evaluation of the vapor

intrusion risk is not required at this time. The planned mixed commercial and residential redevelopment of the Site will include a vapor barrier and passive venting system which will eliminate the potential onsite vapor intrusion pathway.

4.2 Ecological Assessment

In accordance with Title 25, Section 250.311 (Evaluation of Ecological Receptors), a determination of ecological receptors is required unless:

> "light petroleum products are the only constituents detected on site"; or
>
> "the area of contaminated soil is less than two acres and the area of contaminated sediment is less than 1,000 square feet"; or
>
> "the Site has features, such as buildings, parking lots or graveled paved area, which would obviously eliminate the specific exposure pathways, such as soils exposure".

The Site is currently completely covered by building foundations, concrete sidewalks or asphalt which eliminates the potential soil pathway. The Cleanup Plan discussed in Section 7.0 will make use of asphalt parking areas, concrete sidewalks, a minimum of 2 feet of clean fill in any vegetated areas, and building foundations which will cover the entire Site. As such, the Site currently and after redevelopment will have features, such as buildings, parking areas, clean fill caps, or sidewalks, cover the entire site, which would obviously eliminate the specific ecological exposure pathways. No further ecological evaluation is warranted.

A Pennsylvania National Diversity Inventory (PNDI) survey was completed in December 2024 and finalized in January 2025. The PNDI survey did not identify any known impacts to any threatened, endangered, special concern species, or resources in the project area. No further review with any of the jurisdictional agencies was required based on the lack of known impacts.. A copy of the PNDI receipt is included in **Appendix G**.

5 *Selection of Standards*

5.1 Soil

The soil standard selected for the Site for metals is the residential SSS by pathway elimination. The soil standard selected for PAH compounds will be the residential SSS based on pathway elimination. Based on the planned redevelopment of the Site, all soils at the Site will be capped following construction, which will eliminate the potential soil direct contact pathway. The planned construction will not include any basements. An environmental covenant will be established to provide cap maintenance requirements, soil management requirements for soil disturbed during future construction or utility work, and health and safety requirements for workers managing soil.

5.2 Groundwater

Based on the recent groundwater sampling results, PCE was the only constituent detected above residential SHS in groundwater at the Site. The groundwater standard selected for the Site is the residential SSS through pathway elimination or the background standard. Potential sources of PCE including multiple dry cleaners are present in the area surrounding the Site and these potential sources will be evaluated during the groundwater monitoring program to determine whether there is evidence of a release from these dry cleaners which could be impacting groundwater at the Site. Alternatively, a SSS groundwater standard for PCE though pathway elimination and groundwater fate and transport modeling will be prepared. The planned development will be serviced by public water and an environmental covenant restricting groundwater use at the Site will be established.

5.3 Soil Vapor

The soil vapor standards selected are the residential PADEP Soil Gas Criteria and Indoor Air Quality Criteria. There were no detections of VOCs above in the nonresidential PADEP Soil Gas Criteria during the sampling event completed during the Site Investigation.

5.4 Soil Remedial Alternatives Evaluation

The remedial alternatives for the soil impacts identified at the Site during the remedial investigation and previous investigations completed at the Site were evaluated and three potential remedial actions for the Site were identified. These scenarios include no remedial action, removal of all impacted soil, or onsite capping of the impacted soil.

5.4.1 No Remedial Action

Based on a review of the analytical data collected at the Site, exceedances of the residential direct contact or soil to groundwater SHS have been detected at the Site for contaminants of concern (COCs), including VOCs, PAHs, and metals. The potential nonresidential direct contact or soil to groundwater pathways related to impacted soils at the Site would need to be addressed based on the potentially complete exposure

pathways for future residential use. The no remedial action option would not allow the Site to be redeveloped for the intended future use (mixed commercial and residential).

5.4.2 Complete Removal of Impacted Soil

The soil impacts identified at the Site are associated with the historic fill materials placed at the Site. This historic fill layer is present in thicknesses of up to 15 feet or greater throughout the entire Site. Given the nature of the impacts identified in soil at the Site, remedial excavations to address soil impacts would likely require the removal of all of the historic fill materials placed at the Site due to the heterogeneous nature of the historic fill and the distribution of materials impacted by COCs. Based on the size of the property and volume of historic fill which would need to be removed and transported offsite for disposal, this option would not economically feasible.

5.4.3 Targeted Soil Excavation/Onsite Capping

The impacted historic fill materials are already capped across the Site as part of the existing nonresidential developments at the Site. The planned mixed commercial and residential redevelopment of the Site will also result in the Site being completely capped following the completion of the construction which would effectively eliminate the potential direct contact exposure pathways from the impacted historic fill and would also reduce stormwater infiltration. The capping plan would involve minimal disturbance or management of the impacted historic fill present at the Site. Onsite capping would have minimal financial impact since these capping operations would be incorporated into the existing redevelopment plan and construction operations at the Site. The onsite capping of the materials is therefore the most feasible remedial approach for soil at the Site. A targeted soil excavation will be completed to address the NAPL impacted soils prior to construction operations at the Site to remove the NAPL to the extent practical.

5.5 Groundwater Remedial Alternatives Evaluation

The remedial alternatives for the groundwater impacts identified at the Site during the remedial investigation and previous investigations completed at the site were evaluated and three potential remedial actions for the Site were identified. These scenarios include no remedial action, active groundwater remediation, or groundwater monitoring and attainment of standards.

5.5.1 No Remedial Action

Based on a review of the analytical data collected at the Site, exceedances of the residential groundwater SHS have historically been detected at the Site for COCs including VOCs, PAHs, and metals, and only PCE has been detected above residential SHS during recent sampling completed in 2023 in one Site well. The no remedial action option would not allow the Site to be redeveloped for the intended future use (mixed commercial and residential). The potential residential groundwater pathways would need to be evaluated since the previous Final Report assumed nonresidential use and

additional data would be needed to demonstrate attainment of the residential groundwater SHS.

5.5.2 Active Groundwater Remediation

Based on a review of the analytical data collected at the Site, exceedances of the residential groundwater SHS have historically been detected at the Site for COCs including VOCs, PAHs, and metals. PCE was the only constituent of concern detected above residential SHS during recent sampling completed in 2023 in one Site well. The preliminary groundwater models completed for the current PCE concentrations, and the previous models completed to support the 2015 Act 2 Final Report, did not identify any completed groundwater receptor pathways. Since groundwater at the Site will not be used and no sensitive receptors were identified within the modeled plume extents, active groundwater remediation will not be needed to attain a residential SHS or SSS for the Site.

5.5.3 Groundwater Monitoring

The Site previously attained nonresidential SHS or SSS for groundwater. The 2015 final report did not identify any groundwater users in the vicinity of the Site and no new groundwater users in the Site vicinity were identified during the 2022 through 2024 remedial investigations. During 2023 groundwater sampling, PCE was detected above residential SHS in one Site well. A quarterly groundwater monitoring program is recommended to gather additional groundwater data after the Site redevelopment has been completed. The monitoring program would allow the collection of the necessary groundwater to develop and attain SHS or SSS based on pathway elimination and groundwater modelling. Since no currently completed receptor pathways have been identified, groundwater monitoring and attainment of SHS or SSS has been selected as the remedial option for the Site. The groundwater use restrictions included in the existing Environmental Covenant will be maintained in the updated Environmental Covenant.

6 *Site Conceptual Model*

The Site is located in a mixed residential and commercial area in the City of Philadelphia. The Site is currently vacant, and the former tenants moved out between 2016 and 2020. A vacant multitenant commercial building and former bank are located on the northern portion of the property and asphalt parking lots occupy the southern portions of the property. The recent operations included a supermarket, restaurants, retail sales, a bank, and financial services. Historical uses of the property included an auto filing station and auto service prior to the construction of the multitenant commercial building in the early 1970's. The planned redevelopment at the property will include a mixed use commercial and residential building and associated parking areas. The Site will be entirely covered by the building footprint or parking areas following redevelopment. The redevelopment plans are presented in **Figure 5**

Investigations at the Site began in 2000 with the completion of soil borings and the removal of a 3,000-gallon unregulated heating oil UST. Subsequent investigations identified petroleum-like odors in soil and the presence of NAPL near the former 3,000-gallon heating oil UST. SVOCs and metals were detected in soil and groundwater above the residential SHS, and PAHs, metals, and PCE were detected in groundwater above the residential SHS. An Act 2 Final Report was submitted in June 2014 requesting release of liability via SHS and SSS. A nonresidential SSS was established for seven constituents in groundwater PCE, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(g,h,i)perylene, indeno(1,2,3-c,d)pyrene, and dissolved lead. In soil, the four constituents achieved the nonresidential SHS; benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and dibenzo (a,h)anthracene, while all other constituents met their respective residential SHS. PADEP required the collection of additional groundwater data prior to approving the Final Report in August 2015. An environmental covenant and post-remediation care plan was required to maintain the groundwater SSS and was recorded in May 2016.

Since the planned redevelopment will include residential use, additional sampling was completed in 2022 and 2023 to evaluate the current conditions and to assess what would be required to update the previous attainment of nonresidential SHS and SSS and the environmental covenant based on the planned residential use of the property.

Groundwater currently occurs between approximately 7 to 12 feet bgs at the Site and flows to the southeast. Public water is available, and no potable supply wells are in use in the surrounding area. Based on the groundwater models included in the 2015 Final Report, no completed receptor pathways were identified within the modeled plume extent which extended to 500 feet from the source area. There are no wetlands, seeps, springs, or surface water bodies located on the Site or adjacent properties or within the modeled extent of the groundwater plume. The groundwater models were updated based on analytical data collected in 2023, and no completed pathways were identified in the

modeled 240-foot plume extent. Based on this information, there do not appear to be any potentially completed groundwater pathways.

PCE was the only constituent detected at concentrations exceeding the residential SHS in groundwater samples collected during 2023. PCE was detected above residential SHS in only one well located in the central portion of the property, MW-5. The current PCE concentrations (25 to 30 μg/l) in MW-5 are lower than the 2006 through 2014 concentrations (38.7 to 63.5 μg/l) at former well MW-3, which was installed in the same area as current well MW-5. All other constituents of concern were either not detected or detected at concentrations below the residential SHS. PCE and chlorinated degradation compounds were detected above the laboratory reporting limits in upgradient well MW-1 and downgradient well MW-2 at concentrations below the residential SHS. Based on the 2023 analytical data, the downgradient wells are not impacted by PCE or any chlorinated degradation compounds above residential SHS, which suggests that the PCE impacts above the residential SHS in groundwater are not currently migrating offsite.

The potential sources for the PCE in groundwater include offsite sources such as current and historical offsite dry cleaning and auto service operations in the surrounding area or the onsite pre-1970's auto service operations identified in historical documents. PCE has been detected in the most upgradient well, MW-1, at concentrations below the residential SHS which suggests the PCE impacts at the Site may be a detached plume migrating onto from an offsite source, but a specific offsite source or release could not be identified in the available regulatory databases or documents reviewed. Chloroform was also detected in the upgradient well. Chloroform was historically used by the drycleaning industry as a spot remover or for laundry treatments. The presence of chloroform with PCE in groundwater also suggests that the potential source of CVOCs could be an offsite dry cleaner.

A residential SSS will be developed for PCE in groundwater. The other constituents which had nonresidential groundwater SSS established in the previous Final Report and Environmental Covenant met the residential SHS during the 2023 groundwater sampling events and will be addressed by attainment of residential SHS or SSS.

Soil vapor samples did not detect any exceedances of the PADEP residential Soil Vapor Screening Values and therefore the potential vapor intrusion pathway is considered incomplete. The current groundwater concentrations are also below the PADEP Vapor intrusion screening values. The planned mixed use commercial and residential building will include a vapor barrier and passive ventilation system installed during construction. Vapor intrusion is therefore not a pathway of concern at the Site.

The metals and PAH soil impacts at the Site appear to be related to historic fill which was observed in soil borings up to sixteen feet bgs. The Site is currently capped by the existing buildings, sidewalks, and parking areas and will remain capped after the planned redevelopment. The cap will eliminate the potential soil direct contact exposure pathway and limit stormwater infiltration through the historic fill. Residential SSS will be prepared

for the metals and PAHs in historic fill detected above the current residential SHS based on pathway elimination.

Based on a preliminary ecological assessment and PNDI review, no habitats or species of concern were identified at the Site or surrounding area. The Site is currently capped by concrete or asphalt and will remain capped after redevelopment. The groundwater impacts are currently contained within the property boundary and the groundwater models did not identify any potential ecological receptors within the modeled plume extent. Based on this information, the potential ecological receptor pathways are incomplete.

NAPL was detected in soils near the former heating oil UST location in a geotechnical boring and in subsequent soil borings installed in that area. The NAPL will be addressed by excavation and removal of NAPL containing soils from the area. The NAPL appears to be related to the former heating oil UST and consists of petroleum hydrocarbons. The NAPL containing soils were delineated in 2023 and are restricted to an approximately 40 ft by 40 ft area in the central portion of the Site. The NAPL containing soils were observed at depths typically between 18 to 19 ft bgs in the area and below the water table. The NAPL presence below the water table is believed to be related to the depression of the water table due to the pumping required to keep the supermarket basement dry. NAPL was not detected in any monitoring wells during the groundwater sampling events completed in 2023, including well MW-5, which is located within the extent of the NAPL containing soils. The NAPL does not appear to be migrating from this area.

An environmental covenant will be filed to establish the cap, soil management requirements, health, and safety requirements for workers during future cap disturbance and restrict use of groundwater. This environmental covenant will replace the existing environmental covenant which restricted the Site to nonresidential use and restricted groundwater use. Overall, with implementation of the planned development of the Site, and the engineering controls and institutional controls established, there will be no completed exposure pathways for the future residents of the property or offsite receptors.

Frankford Community Development Corporation plans to demonstrate attainment of the SSS for soil upon completion of the capping operations at the site (i.e. the completion of site work activities associated with the redevelopment). Frankford Community Development Corporation will submit a Final Act 2 Report for soil once the soil cap has been completed. The Environmental Covenant will be updated following approval of the soil Final Report; noting that groundwater use will continue to be restricted.

After cap completion, Frankford Community Development Corporation will continue to implement the groundwater program to demonstrate attainment of the SSS for groundwater. Following completion of the groundwater attainment demonstration, a Final Act 2 Report for groundwater will be submitted. Any modifications necessary to the Environmental Covenant related to groundwater will be completed upon the Department's approval of the groundwater Final Report.

7 Cleanup Plan

7.1 Soil

7.1.1 Soil Excavation

The former heating oil UST area will be excavated to address the presence of NAPL identified in soil borings. The excavation will be completed to remove potential NAPL impacted soils identified below the water table in the subsurface. The estimated size of the excavation is 40 ft by 40 ft by 20 ft (total depth) based on where NAPL was observed in soil borings installed in the area to delineate the NAPL extent. The final extent of the soil excavation will be determined in the field based on visual observations, olfactory observations, and PID screening. Based on the soil borings installed in the area, NAPL impacted soils were observed at depths between 18 to 19 feet in the area. The soils between 17 to 20 feet bgs in the excavation are anticipated to be removed for offsite disposal. The estimated extent of the excavation area is presented on **Figure 6**.

Groundwater will need to be managed during the soil removal and post excavation sampling since the estimated excavation extent will extend below the water table (approximately 7 to 9 ft bgs). The groundwater generated during the excavation will be managed by discharging the water to the City of Philadelphia sewer system via an onsite stormwater catch basin under the Groundwater Discharge Permit issued on November 26, 2024.

It is anticipated that the excavation will take two to three days to complete. The work area will be secured by temporary fencing while the excavation is in process.

Post excavation samples will be collected per PADEP requirements and an analyzed for PADEP No. 2 Fuel Oil Shortlist Parameters. Based on the estimated size of the excavation, twelve post excavation samples will be required to be collected with the sampling locations and depths selected by a systematic random sampling approach. The samples will be collected from the excavator bucket since based on the proposed depth and soil conditions, the excavation will not be safe to enter. The post excavation samples will be submitted to a PADEP-certified laboratory for analysis under proper chain of custody procedures. The analytical results will be reviewed upon receipt to evaluate the success of the remedial action. Additional excavation and post excavation sampling may be completed if required to remove additional material based on the post excavation sampling results. The excavation will be backfilled with the excavated materials not designated for offsite disposal and Clean Fill in accordance with the PADEP Management of Fill Policy.

The NAPL impacted soil removed from the excavation will be temporarily stockpiled onsite and covered by plastic sheeting until it can be transported offsite for disposal at an approved facility. Waste characterization samples will be collected in accordance with the requirements of the disposal facility either prior to the excavation by soil borings or from the stockpiled soil after excavation. It is anticipated that the soil can be managed as

nonhazardous waste based on the soil concentrations observed at the Site. The non impacted soil will be returned to the excavation, and certified clean fill will be placed as needed to fill the excavated area to grade.

Well MW-5 is located within the proposed excavation extent and will be abandoned and removed during the excavation. The well will be reinstalled at an appropriate monitoring location after the Site redevelopment has been completed. Quarterly groundwater monitoring of the replacement well will be completed to confirm that the remedial action has successfully addressed the NAPL in the former UST area to the extent practical.

7.1.2 Cap Installation

The planned redevelopment of the Site will result in the entire Site being covered by the concrete building foundation, sidewalks, landscaped areas, or asphalt parking areas. The building foundation, sidewalks, 2-foot minimum clean fill in landscaped areas, and asphalt will serve as a cap which will eliminate the potential direct contact pathway and also reduce rainwater infiltration through the subsurface materials. The planned construction will not include any basements. An environmental covenant will be established to provide cap maintenance requirements, provide soil management requirements for impacted soils disturbed during construction or utility work, and health and safety requirements for workers managing soils in the impacted areas. A numerical residential SSS will be established at the highest concentrations of arsenic, lead, and PAHs detected in soil above the residential SHS during the site investigation, based on pathway elimination**.** **Figure 7** presents the extent of the cap at the Site.

7.2 Groundwater

The groundwater monitoring program will resume following the redevelopment of the Site and replacement of any wells abandoned during construction activities. It is anticipated that some of the monitoring wells may need to be abandoned during construction and replaced after the building foundation and/or other ground construction activities have been completed at the Site. Following the installation of the necessary replacement wells, a quarterly groundwater monitoring program will be completed over a minimum of eight quarters to collect sufficient groundwater analytical data to complete a demonstration of attainment of the residential SSS.

The post construction analytical results will be used to update groundwater models to evaluate fate and transport and to confirm that no completed receptor pathways exist. The groundwater concentration trends will be evaluated to confirm that the plume is stable or shrinking. The Site and surrounding area are serviced by public water and a restriction on groundwater use at the Site will be established by the environmental covenant.

7.3 Vapor Intrusion Pathway

To address the potential vapor intrusion pathway, a vapor barrier and passive ventilation system will be installed as part of new building construction. The installation of the vapor

barrier and passive ventilation system will be documented in the Final Report at the completion of the project.

The vapor barrier and passive venting system will include the following components:

- An aggregate layer approximately 4 to 6 inches thick below the slab of the new building.
- Perforated PVC piping installed within the aggregate layer, which will transition to solid PVC piping and extended to the roof for venting purposes, and
- A Drago® Wrap 15 to 20 mil polyolefin vapor barrier membrane (or equivalent) with 100% sealed seams.

The Environmental Engineer will oversee the installation of the vapor barrier and passive venting system, which will be documented in the Act 2 Final Report.

8 *Health and Safety*

8.1 General Requirements

This section presents the required elements that must be included in the Site-Specific Health and Safety Plan (HASP) of the construction contractor who will conduct the remedial excavation, capping of the historic fill materials, and cap maintenance. These elements will include:

- All OSHA requirements for construction workers as presented in 29 CFR 1926.1101;
- All OSHA requirements for all workers as presented in 29 CFR 1910.134;
- Proper personal protective equipment (PPE);
- Proper employee monitoring; and
- Proper decontamination after completion of work.

All work will be conducted in accordance with all applicable local, state, OSHA, DOT, RCRA, and CERCLA rules and regulations for industrial construction and waste handling (each where applicable). A written, Site-Specific HASP will be developed. Prior to commencing any on-Site work, the HASP will be prepared and approved by the developer's Health and Safety Officer. This HASP will be implemented, maintained, and enforced until final demobilization from the Site has occurred. The HASP, as a minimum, will address the regulations contained in this section.

The health and safety guidelines contained herein are intended to provide for a safe and risk-free work environment for on-Site personnel and to minimize the impact of activities involving contract with any hazardous materials on the general public and surrounding environment.

Personnel will utilize Level D personal protective equipment. Level D will include the following:

- Disposable protective coveralls (Tyvek);
- Disposable inner nitrile gloves and outer leather work gloves;
- High-visibility vests;
- Disposal latex over boots;
- Safety glasses;
- Steel toe boots; and,
- Hard hats.

As activities progress, protective equipment requirements may be upgraded or downgraded based on Site conditions/environmental concerns. At a minimum, Site personnel will wear hard hat, safety glasses, high visibility vest, and steel toe boots.

Suitable emergency and first aid equipment will be available in an appropriate location at the Site. Emergency and first aid equipment will include:

- First Aid kit sized to accommodate the number of Site personnel;
- Portable emergency eye wash station;
- A suitable number of fire extinguishers; and
- An emergency hand-held siren/air horn.

Emergency phone numbers will be posted near the Site telephones and select personnel will be furnished with 2-way radios and/or make use of cell phones for communication purposes.

Detailed decontamination procedures for both equipment and personnel, including collection and disposal of wash waters, sediments, and spent PPE will be discussed with all personnel working or visiting the Site. A figure of a decontamination pad large enough to accommodate the largest piece of equipment which will contact impacted soils will be provided in the Site-Specific HASP. All exterior parts of all vehicles, including vehicle tires and vehicle undersides, will be cleaned visibly free of surface contamination prior to leaving the Site.

Some tasks may have the potential for increased exposure and will require closer monitoring. A task hazard assessment for each task will be developed, addressing physical and chemical hazards of concern, and including safe work procedures to ensure the safety and health of all personnel. The task hazard assessments will be included as part of the Site-Specific HASP.

8.2 Proof of Training

Site personnel who will be working within any established exclusion zone or contamination reduction zone will be required to submit proof of Occupational Safety and Health Administration (OSHA) 40-hour safety training as required under OSHA 29 CFR 1910.120 and 29 CFR 1926.65. Additionally, personnel who will be working in a supervisory capacity will be required to possess documentation of receiving an additional 8 hours of training for supervisory personnel in accordance with OSHA 29 CFR 1910.120 and 29 CFR 1926.65.

Personnel not in possession of current training would need to be furnished with the required training before being assigned to a task or entering the exclusion zone or contamination reduction zones. The majority of this training is covered during the Site-Specific training and the 40-hour HAZWOPER training, as applicable; however, task-specific training will be conducted on an as needed basis.

8.3 Medical Surveillance

Site personnel will be required to comply with medial surveillance requirements as outlined in 29 CFR 1910.120 (f), 29 CFR 1910.134, and their corporate medical surveillance and respiratory protection programs.

8.4 Health & Safety Officer

A competent and authorized representative herein referred to as the Health & Safety Officer (HSO) will be at the Site during all work activities involving the disturbance of historic fill materials. The HSO will possess the following minimum qualifications:

- Have a minimum of 2 years' working experience specific to the activities being conducted;
- Have a basic working knowledge of state and federal occupational health and safety regulations; and
- Have formal education and/or training in occupational health and safety.

The HSO will have Stop Work authority when it is necessary or advisable to cease Site operations. The HSO will conduct daily safety meetings for the Site personnel. These meetings will include refresher training regarding existing or new equipment and protocols, review ongoing safety issues and procedures, and examination of new Site conditions as they are encountered. Additional safety meetings will be held on an as-needed basis.

A corporate Safety Manager will oversee operations as necessary to ensure that project activities are performed in accordance with the Site-Specific HASP.

8.5 Authorization to Enter

All personnel and visitors entering work areas at the Site must have completed appropriate training and medical surveillance (as described in Sections 8.2 and 8.3, respectively) in order to conduct the work activities with which they will be involved. The HSO will maintain a list of authorized persons; only personnel on the authorized persons list will be allowed within the Site work zones. Visitors must be escorted within the work areas at all times. Visitors expecting to enter exclusion zones must possess current training applicable to the area to be visited and current medical clearance.

No person will be allowed into the general work area during Site operations without first being given a Site orientation and hazard briefing. This orientation will be presented by the HSO and will consist of a review of the Site-Specific HASP. This review must cover the chemical, physical, and biological hazards, PPE, safe work practices, and emergency procedures for the project. In addition to this meeting, Daily Safety Meetings will be held each day before work begins. All people on the Site, including visitors, must document their attendance to this briefing as well as the Daily Safety Meetings. The information presented in the Daily Safety Meetings may be provided to a visitor during their general Site orientation.

8.6 Work Zones Designation

To minimize the exposure of Site workers and equipment and prevent the transfer of contamination by personnel and equipment to clean areas of off-Site locations, work zones will be established as needed. It is anticipated that most construction operations will not require the establishment of work zones.

The designation of appropriate work zones ensures that Site personnel are properly protected against the hazards, work activities and contamination are confined to specific areas, and personnel can be located, notified, and evacuated in an emergency. The distance between the zones and the size and shape of each zone is based on the conditions specific to the Site. Zone planning should ensure that the distance between zone boundaries is large enough for the required operations, provide adequate distance to limit or prevent transfer of contamination, and eliminate the potential of injury due to explosions or fires. Each zone is defined as follows.

Exclusion Zone: This zone is the innermost of the three zones and is the area where personnel and equipment will come into contact with contamination. All personnel within the exclusion zone will wear the specified level of protective clothing and equipment. The primary activity conducted within the exclusion zone will be the excavation of historic fill materials or NAPL containing soil.

Different exclusion zones may contain higher or lower concentrations of hazardous substances, require various levels of worker protection, and preset varying degrees of hazard. Establishing such sub-areas within the exclusion zone allows more flexibility in safety procedures, operations, personnel and equipment decontamination, and use of resources.

Contamination Reduction Zone (CRZ): This zone is a transition area separating the contaminated area (exclusion zone) from the clean area (support zone). The CRS is designed to reduce the probability that the support zone will be affected by contamination of other Site hazards. The concentration within the CRZ decreases as personnel and equipment moves from the edge of the exclusion area to the support zone.

The outer boundary of the CRZ is the Contamination Control Line. Access Control Points regulate the movement of personnel and equipment from the support zone into the CRZ. Personnel entering the CRZ will wear the specified PPO for activities within this zone. Prior to re-entry into the support zone, workers must decontaminate and exit via the established Access Control Point. The design of the CRZ must facilitate personnel and equipment decontamination, emergency response operations, equipment re-supply, sample preparation and packaging, worker temporary resting within predetermined areas, and drainage and collection of water or other liquids used for decontamination. The CRZ may be set up to handle single or multiple exclusion zones.

Support Zone: Non-contaminated outermost zone of the Site. This zone contains needed support equipment and administrative functions. Important factors to consider in the location of the support zone activities are accessibility of roads, highways, railroad tracks,

etc.; resources such as power lines, telephone, water, visibility to all zones, and distance of the Site; wind direction so that it is not downwind of the exclusion zone; and distances maximum possible from Exclusion Zone.

The support zone facilities and functions include:

a) Command post: Headquarters for the daily supervision and management of Site operations. The post functions are:
    - Maintenance of communications;
    - Site security;
    - Recordkeeping;
    - Reference center;
    - Conferences; and
    - Sanitation facilities.

b) Medical station: The station's functions are:
    - First aid;
    - Emergency medical response;
    - Periodic medical surveillance; and
    - Sanitation facilities.

c) Equipment and supply center: maintenance, repair, and supply of all Site equipment, vehicles, and consumables.

8.7 Construction Oversight

The RT-designated representative(s) will oversee all handling of historic fill or NAPL containing materials to ensure that best management practices (BMPs) are employed during the capping of the historic fill materials and that proper safety measures are used to ensure the worker safety for all activities.

9 *Remedial Cap System*

The property has been developed with impervious single-barrier surfaces (concrete foundations of on-slab structures, sidewalks and curbing, and asphalt pavement for roadways and parking areas). Further information on the cap types proposed is presented in the following sections. The cap extent is presented on **Figure 7**.

9.1 Concrete Cap

Typical concrete construction for the building and sidewalks includes 4 to 6 inches of compacted stone (thickness may vary depending on the area of the building). The concrete layer has a typical thickness of 4 inches (thickness may vary depending on the area of the building). Further, the proposed building will include a vapor barrier and passive ventilation system installed as presented in **Section 7.3**.

9.2 Asphalt Cap

Typical asphalt/pavement construction for the road, parking, and material storage areas of the Site include compaction of the base layer of the historic fill material, the compacted layer will be overtopped with 6 inches of stone base. Asphalt thickness over the stone base will include two layers, a base course of 2.5 inches and a wearing course of 1.5 inches.

9.3 Clean Fill Cap

The areas of the Site with a soil cap will be limited to landscaped areas. Soil capped areas will vary in thickness depending on the plantings associated with the landscape plan. At a minimum, the soil cap will be at least 2 feet (24 inches) in thickness. The soil cap can consist of 18 inches of clean fill topped with 6 inches topsoil or 24 inches of clean fill.

10 *Attainment Demonstration Approach*

The following sections summarize the attainment demonstration approach for the SHS and SSS at the Site. This attainment demonstration approach will be presented in the Final Act 2 Report upon completion of the remedial actions and will support the request for a release of liability under Act 2 for metals, PAHs, and CVOCs at the Site using the residential SHS or SSS via pathway elimination.

Frankford Community Development Corporation plans to demonstrate attainment of the SSS for soil upon completion of the capping operations at the site (i.e. the completion of site work activities associated with the redevelopment). Frankford Community Development Corporation will submit a Final Act 2 Report for soil once the soil cap has been completed. The Environmental Covenant will be updated following approval of the soil Final Report; noting that groundwater use will continue to be restricted.

After cap completion, Frankford Community Development Corporation will continue to implement the groundwater program to demonstrate attainment of the SSS for groundwater. Following completion of the groundwater attainment demonstration, a Final Act 2 Report for groundwater will be submitted. Any modifications necessary to the Environmental Covenant related to groundwater will be completed upon the Department's approval of the groundwater Final Report.

10.1 Soil Attainment Demonstration

Several types of caps will be used to demonstrate the attainment of SSS through pathway elimination. The property will be developed with impervious single-barrier surfaces (concrete foundations of on-slab structures, sidewalks and curbing, and asphalt pavement for roadways and parking areas), or otherwise capped with a minimum of 2-feet of soil that meets the requirements for clean fill in landscaped or stormwater management areas. Thus, these Site features will prohibit the direct contact ingestion exposure to the metals or PAH impacted historic fill that remains in the subsurface at the Site.

10.2 Groundwater Attainment Demonstration

The selected standards for groundwater include a combination of the PADEP residential SHS and/or SSS based on pathway elimination.

The attainment of the PADEP residential standards at the point of compliance wells will be demonstrated through the general attainment requirements for groundwater or statistical attainment methods presented in Title 25, Subpart G, 250.704 and 250.707. A nonuse aquifer determination request may be submitted to allow the use of the nonuse aquifer standards, otherwise the residential used aquifer standards will be attained for selected constituents of concern. Groundwater modelling will be completed as needed to support the attainment of the standards by showing that the onsite concentrations would not result in a future exceedance of the selected standard at the point of compliance wells.

A SSS based on pathway elimination will be attained for selected constituents of concern. Groundwater modeling will be completed to verify that the onsite groundwater concentrations will not result in impacts to groundwater receptors. An environmental covenant will be established at the Site which will restrict onsite use of groundwater.

11 *Reporting*

Frankford Community Development Corporation plans to demonstrate attainment of the SSS for soil upon completion of the capping operations at the site (i.e. the completion of site work activities associated with the redevelopment). Frankford Community Development Corporation will submit a Final Act 2 Report for soil once the soil cap has been completed. This report will document all activities conducted to address the identified impacts and the remediation measures conducted. Documentation presenting the details of the installed engineering controls will be provided.

The Environmental Covenant will be updated following approval of the soil Final Report; noting that groundwater use will continue to be restricted.

After cap completion, Frankford Community Development Corporation will continue to implement the groundwater program to demonstrate attainment of the SSS for groundwater. Following completion of the groundwater attainment demonstration, a Final Act 2 Report for groundwater will be submitted. Any modifications necessary to the Environmental Covenant related to groundwater will be completed upon the Department's approval of the groundwater Final Report.

A Post-Remediation Care Plan will be included in the Final Report which describes the future activities to be conducted to inspect and properly maintain the engineering controls. The substance of the Post-Remediation Care Plan is presented in the next section.

12 *Post Remediation Care Plan*

The Property shall be subject to the activity and use limitations detailed in an Environmental Covenant (EC) that will be prepared and recorded for the Site. The EC will restrict future use of Site soil to prevent exposure risks to human and ecological receptors and the environment. The EC will also provide a health and safety plan for cap maintenance and cap disturbance activities. The property will be developed with impervious single-barrier surfaces (including concrete foundations of on-slab structures, sidewalks and curbing, and asphalt pavement for roadways and parking areas), or otherwise capped with a minimum of 2 feet of clean soil in open and landscaped areas. The EC will include annual cap inspection and reporting requirements. The EC will also include a restriction on the use of groundwater at the Site.

13 *Notice of Intent to Remediate*

In accordance with Section 250.5(a) of the Act 2 regulations and Sections 303(h)(1)(i)(ii) / 303(h)(2) of the Act, RT Environmental Services Inc. submitted a Notice of Intent to Remediate (NIR) to the PADEP Southeast Regional Office on August 8, 2024. In addition, The City of Philadelphia was provided a copy of the NIR submission via certified mail on August 1, 2024. A summary of the NIR and Remedial Investigation Report and Cleanup Plan was published as a legal notice in The Star on July 24, 2024. The NIR states that the property owner intends to demonstrate attainment of the Site-Specific Statewide Health Standards and residential Statewide Health Standards for the constituents of concern identified at the Site. Copies of the NIR and copies of the notification documents are included in **Appendix H**.

14 *Public Involvement Plan*

RT Environmental Services, Inc. (RT) has prepared a Public Involvement Plan (PIP) for the Site in response to a request from the City of Philadelphia. The PIP defines procedures for community engagement and the communication of findings from ongoing remedial activities. In accordance with Act 2, the local municipality can request to be involved in the development of remediation and reuse plans for a site being remediated.

This PIP has been prepared to guide the collection of information and data necessary to enhance public awareness of the Site under Act 2 Section 250.6. As stated by the regulations, the requirements of the PIP are to provide public access to project documents at convenient locations, designate a central point of contact to address questions from the community, and to identify a location for public hearings and meetings near the Site.

The Site's PIP will be implemented with the establishment of document repositories, designating a central point of contact, and hosting public meetings.

The following details each of these requirements per 25 PA Code §250.1-250.6:

- Document Repository: Online access to reports and project information will be provided on the RT Environmental Services, Inc. website; www.rtenv.com, the Frankford CDC website https://frankfordcdc.org. Notifications of the availability of new documents in the online depository will be provided to the City of Philadelphia, community organizations, the District 7 Council Member, and other interested parties.
- Central Point of Contact: Christine Confer, RT Environmental Services, Inc. Phone: (610) 265-1510 Email: cconfer@rtenv.com
- Public Meetings: Notification of public meetings will be provided through newspaper notice, letters, or emails to the City of Philadelphia Public Health Department Environmental Health Services, Frankford CDC, Wissinoming Civic Association, Make It Happen Philly, and the District 7 Council Member. Additional notifications of the public meeting will be provided to other organizations or interested parties by request. An initial public meeting will be held following the submittal of the Notice of Intent to Remediate (NIR). Any public meetings will be held as virtual meetings.

Additionally, Frankford CDC has identified the following stakeholders and/or interested parties which will be directly notified by email:

- Senator Christine M. Tartaglione of District 2 of the Pennsylvania Senate christine.tartaglione@pasenate.com
- Quetcy Lozada of Councilmanic District 7

  Sloane Folks- sloane.folks@phila.gov

- State Representative Jason Dawkins (179th District)
  JDawkins@pahouse.net
- Jay Ting Walker, Community Organizer with the Clean Air Council
  jwalker@cleanair.org
- Northwood Civic Association

  Mari Carisquillo northwoodcivicassociation2022@gmail.com
- Frankford NAC RCO

  Christine DeJesus cdejesus.fcdc@gmail.com
- Diane Richardson, President of Frankford Business and Professional Association
  udirich@verizon.net
- Andrea Zimmerman, Frankford Library
  ZimmermanA@freelibrary.org
- Marcus Paul, Office of State Representative Jawson Dawkins 179th Legislative District
  mpaul@pahouse.net

The public meeting will focus on the following:

- Identification, location, and concentration of contaminants found during sampling events at the site.
- Any potential health effects of those contaminants, based on locations and the concentrations present.
- Measures to be taken to protect the community from potential exposure to contaminants.
- An overview of the site remedial activities and progress.
- Discussion of reports or other documents provided for review in the document repository.

Minutes from the meeting will be recorded and made publicly available following the meeting. These meeting minutes will include the materials presented, comments received, and discussions. A copy of the list of attendees and meeting minutes will be included in future reports submitted to PADEP and will be available on the accessible document repository.

The PIP will be periodically reviewed to determine whether any modifications to the plan are necessary and to incorporate any comments received on the PIP. If the plan is modified, notices of the changes will be provided to PADEP, the City of Philadelphia, community organizations, the District 7 Council Member, and other interested parties.

15 *Conclusions*

The Site previously attained nonresidential SHS and SSS in 2015 based on the use of the property for nonresidential purposes and pathway elimination through the completion of groundwater models which did not identify any groundwater receptors in the modeled extent of the groundwater plume. An environmental covenant was established for the Site which restricted the property to nonresidential use and restricted groundwater use.

Based on the planned residential use at the property, a remedial investigation was completed to evaluate the current conditions and to reevaluate the data collected during the previous nonresidential attainment. The Site was reentered into the PADEP Act 2 program to update the existing attainment of standards and environmental covenant based on residential use of the Site.

The remedial investigations identified exceedances of the residential SHS for metals and PAHs in soil associated with the historic fill materials placed at the Site. Groundwater at the Site is currently impacted by PCE above the residential SHS in one monitoring well potentially due to an offsite source. An area of NAPL impacted soil associated with a former heating oil UST was identified during the investigations. Soil vapor samples collected at the Site did not exceed the residential screening levels.

Residential site-specific standards for soil and groundwater will be established for the Site based on pathway elimination. The historic fill impacts will be addressed by the installation of a cap consisting of concrete, asphalt, or a minimum of two feet of clean fill in landscaped areas during construction. A vapor barrier will be included in the building foundation to address any vapor intrusion concerns. The planned developments do not include basements. Potable water will be supplied by the public water system, and there are no plans for groundwater use at the Site. No groundwater receptors were identified in the vicinity of the Site or within the extent of the groundwater models completed in 2015 or 2023. The NAPL impacted soil will be removed from the Site to the extent practical by a remedial excavation completed prior to construction. Following the implementation of these actions, the potential exposure pathways for impacted soil, groundwater, or vapor will have been eliminated.

The existing environmental covenant will be replaced with a new environmental covenant which will allow residential use of the Site, detail the cap and cap maintenance requirements, and restrict groundwater use at the Site. Post closure care for the Site would include the maintenance of the cap. There will be no significant impacts to the quality of the environment after the remedial actions and redevelopment have been completed.

Frankford Community Development Corporation plans to demonstrate attainment of the SSS for soil upon completion of the capping operations at the site (i.e. the completion of site work activities associated with the redevelopment). Frankford Community Development Corporation will submit a Final Act 2 Report for soil once the soil cap has

been completed. The Environmental Covenant will be updated following approval of the soil Final Report; noting that groundwater use will continue to be restricted.

After cap completion, Frankford Community Development Corporation will continue to implement the groundwater program to demonstrate attainment of the SSS for groundwater. Following completion of the groundwater attainment demonstration, a Final Act 2 Report for groundwater will be submitted. Any modifications necessary to the Environmental Covenant related to groundwater will be completed upon the Department's approval of the groundwater Final Report.

16 *References*

- *Berg, T. M., Edmunds, W. E., Geyer, A. R., and others, compilers, 1980, Geologic map of Pennsylvania (2nd ed.): Pennsylvania Geological Survey, 4th series, Map 1, 3 sheets, scale 1:250,000.*
- *Miles, C. E., and Whitfield, T. G., compilers, 2001, Bedrock Geology of Pennsylvania: Pennsylvania Geological Survey, 4th ser., dataset, scale 1:250,000.*
- *Pennsylvania Department of Environmental Protection, Bureau of Environmental Cleanup and Brownfields, Land Recycling Program Technical Guidance Manual (DEP ID: 261-0300-101), January 19, 2019.*
- *Shultz, Charles H., 1999, The Geology of Pennsylvania, Pennsylvania Geological Survey, 888 pp.*
- *United States Department of Agriculture (USDA), Natural Resource Conservation Service, Web Soil Survey (http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm), 5129 Frankford Avenue, Philadelphia, Pennsylvania.*
- *U. S. Geologic Survey Topographic Maps, Frankford, PA Quadrangle, 7.5 Minute Series, 2019.*
- *U. S. Geologic Survey Topographic Maps, Camden, NJ Quadrangle, 7.5 Minute Series, 2019.*

17 *Contact Information*

This Remedial Investigation Report and Cleanup Plan was prepared and submitted by:



Walter H. Hungarter III, PE

RT Environmental Services, Inc.

Contact information for the Frankford Community Development Corporation and RT Environmental Services Inc. is listed below.

Site Remediator:

Kimberley Washington, Esq.

Frankford Community Development Corporation

4667-69 Paul Street, 2nd Floor

Philadelphia, PA 19002

Consultant:

RT Environmental Services, Inc.

Walter H. Hungarter, III, PE

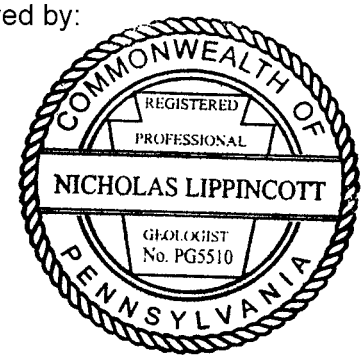
Neil F. Laird

Nicholas Lippincott, P.G

215 W. Church Road

King of Prussia, PA 19406

Groundwater and geologic interpretations associated with this Remedial Investigation Report and Cleanup Plan were reviewed and approved by:



Nicholas Lippincott 03/30/26

Nicholas Lippincott, PG

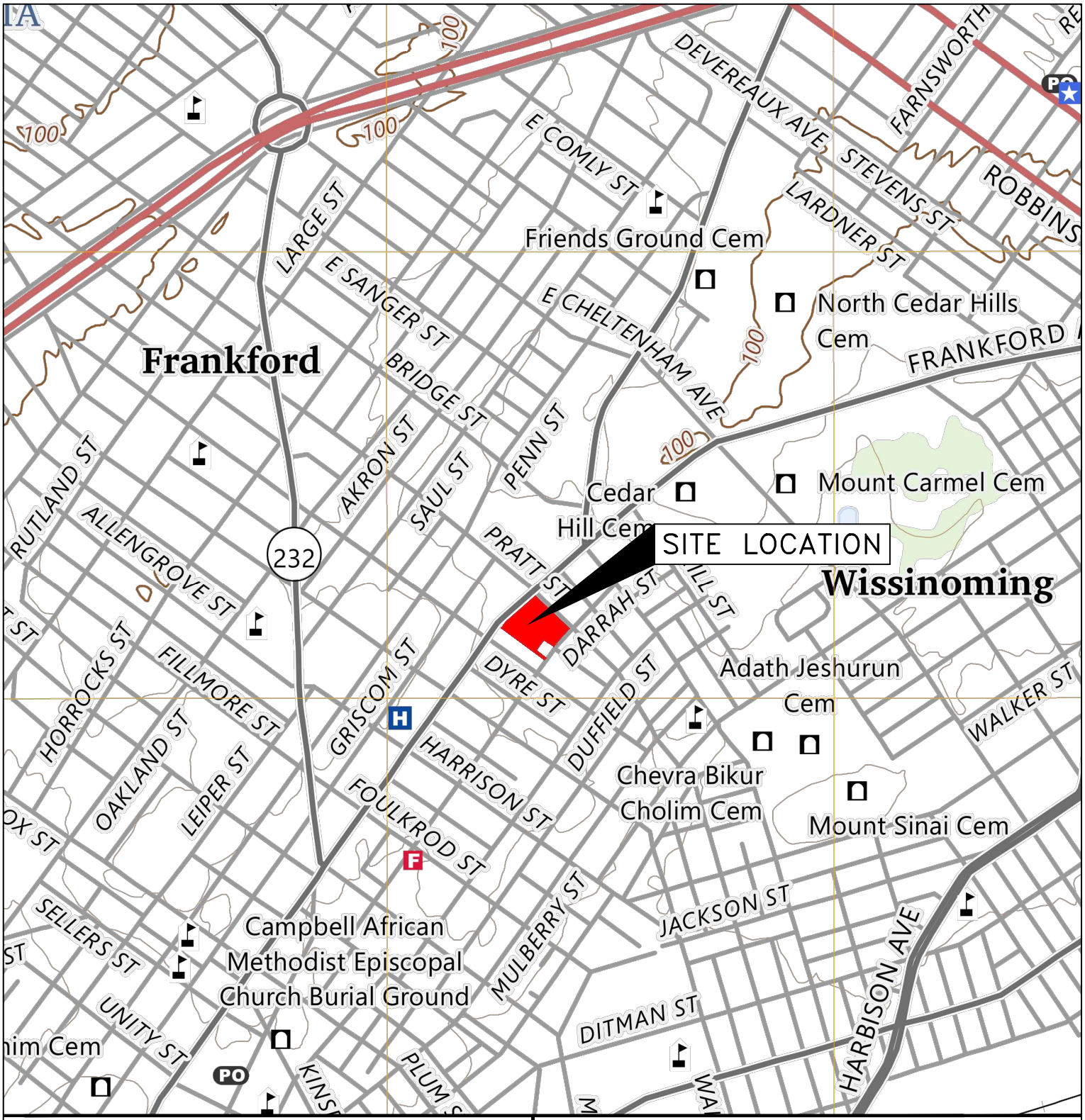
Geologist

RT Environmental Services, Inc.

Pennsylvania Registered Professional Geologist No. PG-005510

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

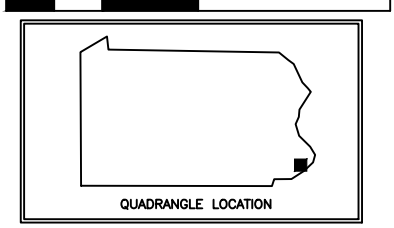
Figures



SOURCE: USGS 7.5 MINUTE TOPOGRAPHIC QUADRANGLE
FRANKFORD, PA
CONTOUR INTERVAL 10 FEET

SCALE (feet)

0 2000' 4000'



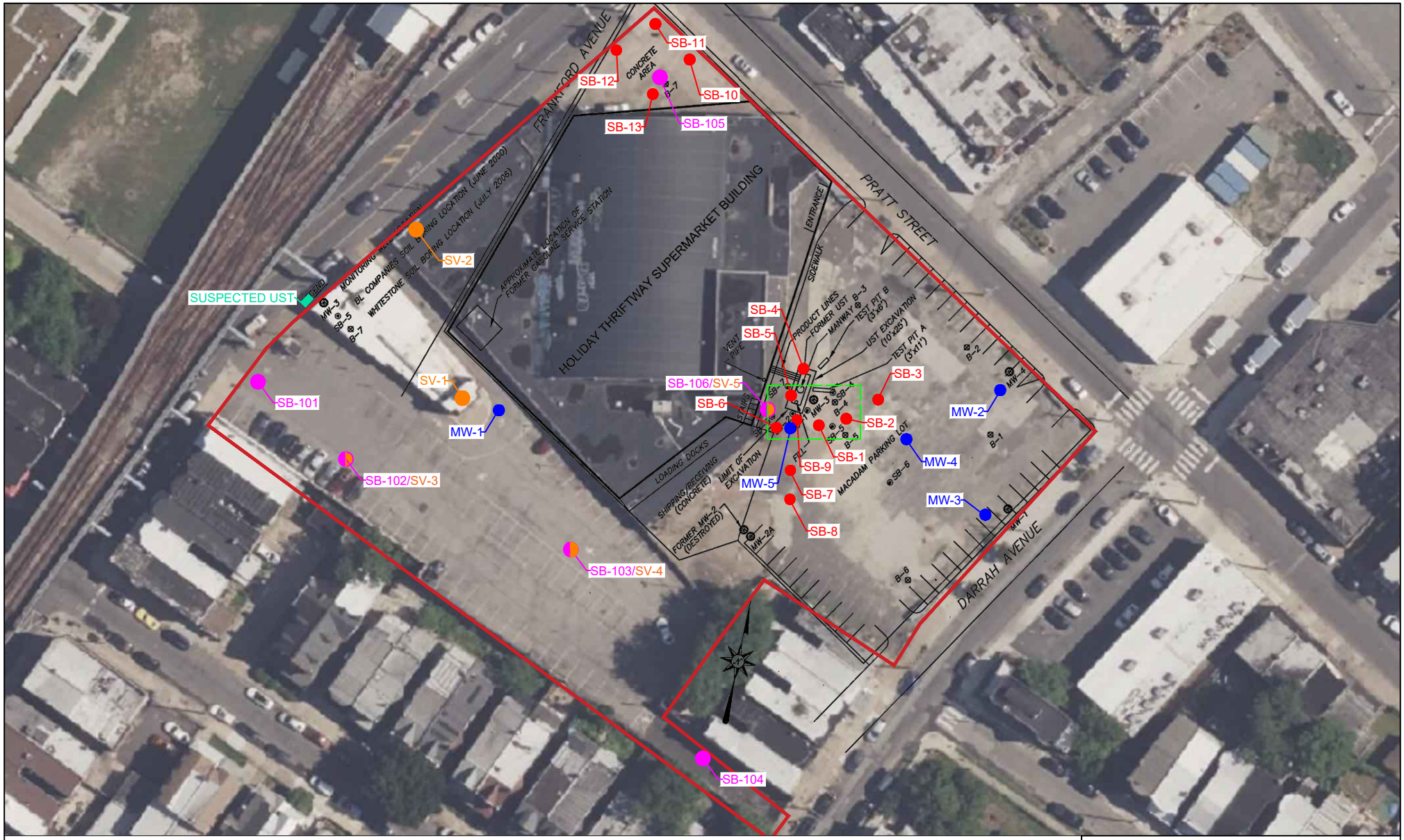
RT Environmental Services, Inc.
215 West Church Road
King of Prussia, PA 19406

FIGURE 1
SITE LOCATION MAP

5129–5135 FRANKFORD AVENUE, PHILADELPHIA, PA

Prepared For:
Frankford Community Development Corp.
4667-4669 Paul Street, 2nd Floor
Philadelphia, PA 19124

CHARGE	73539–04	AUTOCAD FILE	ENGINEER	DESIGNER	DRAFTSPERSON	JTB
SCALE	1" = 2000'	DRAWING NUMBER			REVISION	
DATE	01/21/2025	y:\rt projects\73500 series\73539-04\slm.dwg				



Proposed Excavation

Approximate Property Boundary

2023 Soil Boring Locations

2023 Monitoring Well Locations

2022 Soil Vapor Points

2022 Soil Boring Locations

NOTE:
Underlay figure based on Figure 2 by BL Companies (Project No. 00L629-B) dated 08/27/08.

0 75' 150'

N

RT Environmental Services, Inc.
215 West Church Road
King of Prussia, PA 19406

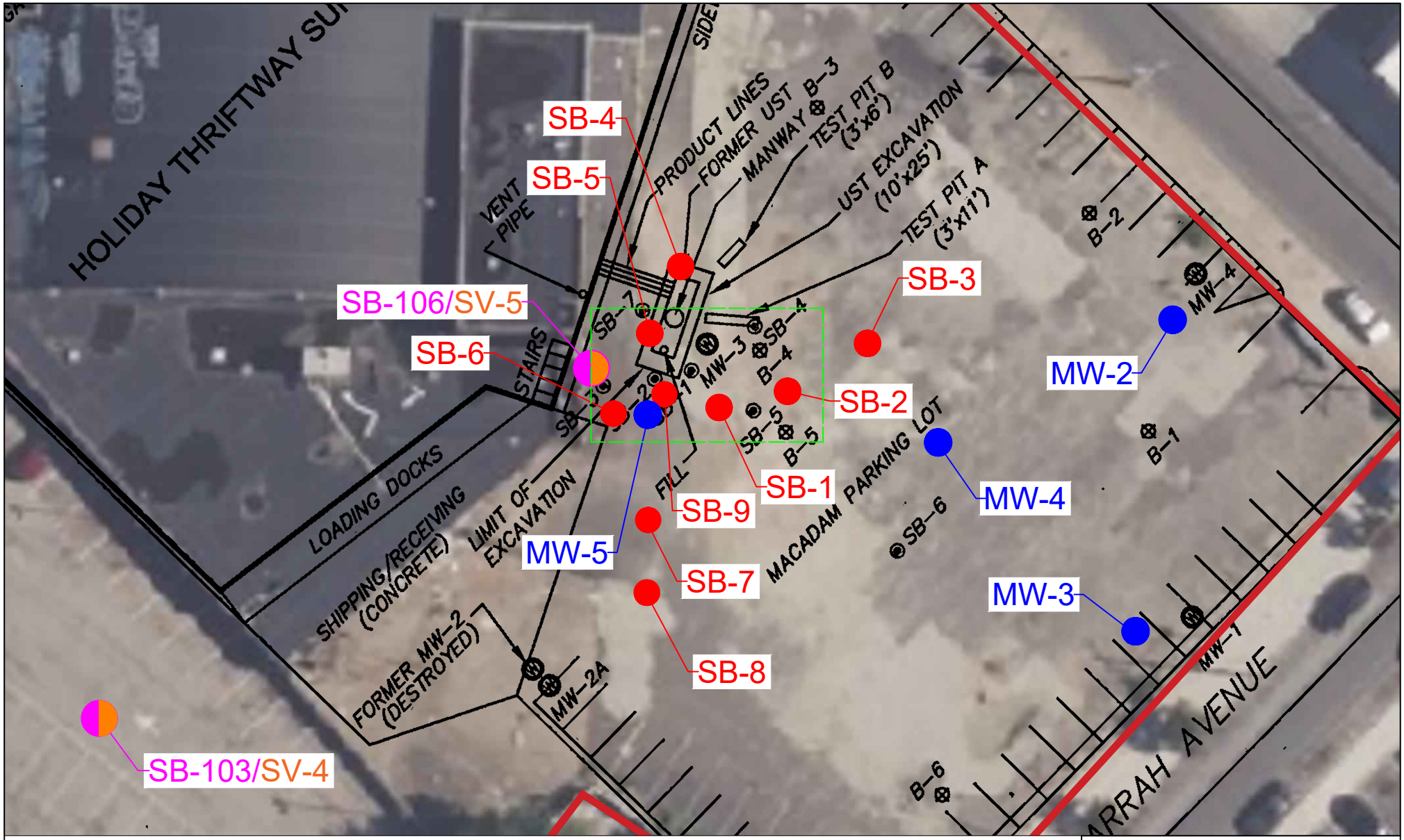
FIGURE 2
SITE MAP
5129–5135 FRANKFORD AVENUE
PHILADELPHIA, PA

Prepared For:
Frankford Community Development Corp.
4667–4669 Paul Street, 2nd Floor
Philadelphia, PA 19124

CHARGE	AUTOCAD FILE	ENGINEER	DESIGNER	DRAFTSPERSON
73539–04				JTB

SCALE	DRAWING NUMBER	REVISION
1" = 75'	Y:\RT Projects\73500 SERIES\73539-04\Updated Figures 8.2024\soil Boring Location Map.dwg	1

DATE 08/01/2024



Proposed Excavation

Approximate Property Boundary

2023 Soil Boring Locations

2023 Monitoring Well Locations

2022 Soil Vapor Points

2022 Soil Boring Locations

NOTE:
Underlay figure based on Figure 2 by BL Companies (Project No. 00L629-B) dated 08/27/08.

0 30' 60'

N

RT Environmental Services, Inc.
215 West Church Road
King of Prussia, PA 19406

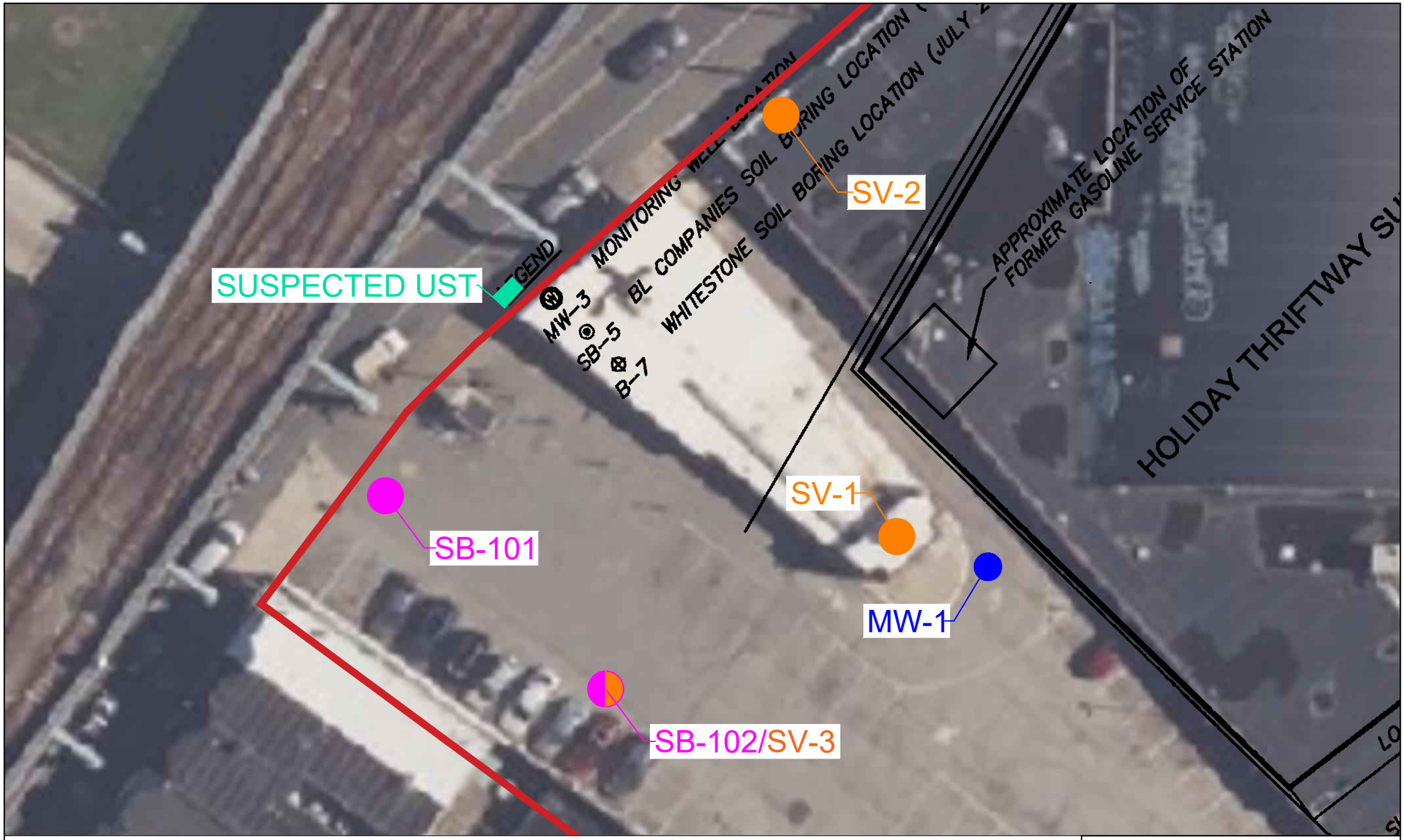
FIGURE 2A
SITE MAP
5129–5135 FRANKFORD AVENUE
PHILADELPHIA, PA

Prepared For:
Frankford Community Development Corp.
4667–4669 Paul Street, 2nd Floor
Philadelphia, PA 19124

CHARGE	AUTOCAD FILE	ENGINEER	DESIGNER	DRAFTSPERSON
73539–04				JTB

SCALE	DRAWING NUMBER	REVISION
1" = 30'	Y:\RT Projects\73500 SERIES\73539-04\Updated Figures 8.2024\soil Boring Location Map.dwg	1

DATE 01/21/2025



Proposed Excavation

Approximate Property Boundary

2023 Soil Boring Locations

2023 Monitoring Well Locations

2022 Soil Vapor Points

2022 Soil Boring Locations

NOTE:
Underlay figure based on Figure 2 by BL Companies (Project No. 00L629-B) dated 08/27/08.

0 30' 60'

N

RT Environmental Services, Inc.
215 West Church Road
King of Prussia, PA 19406

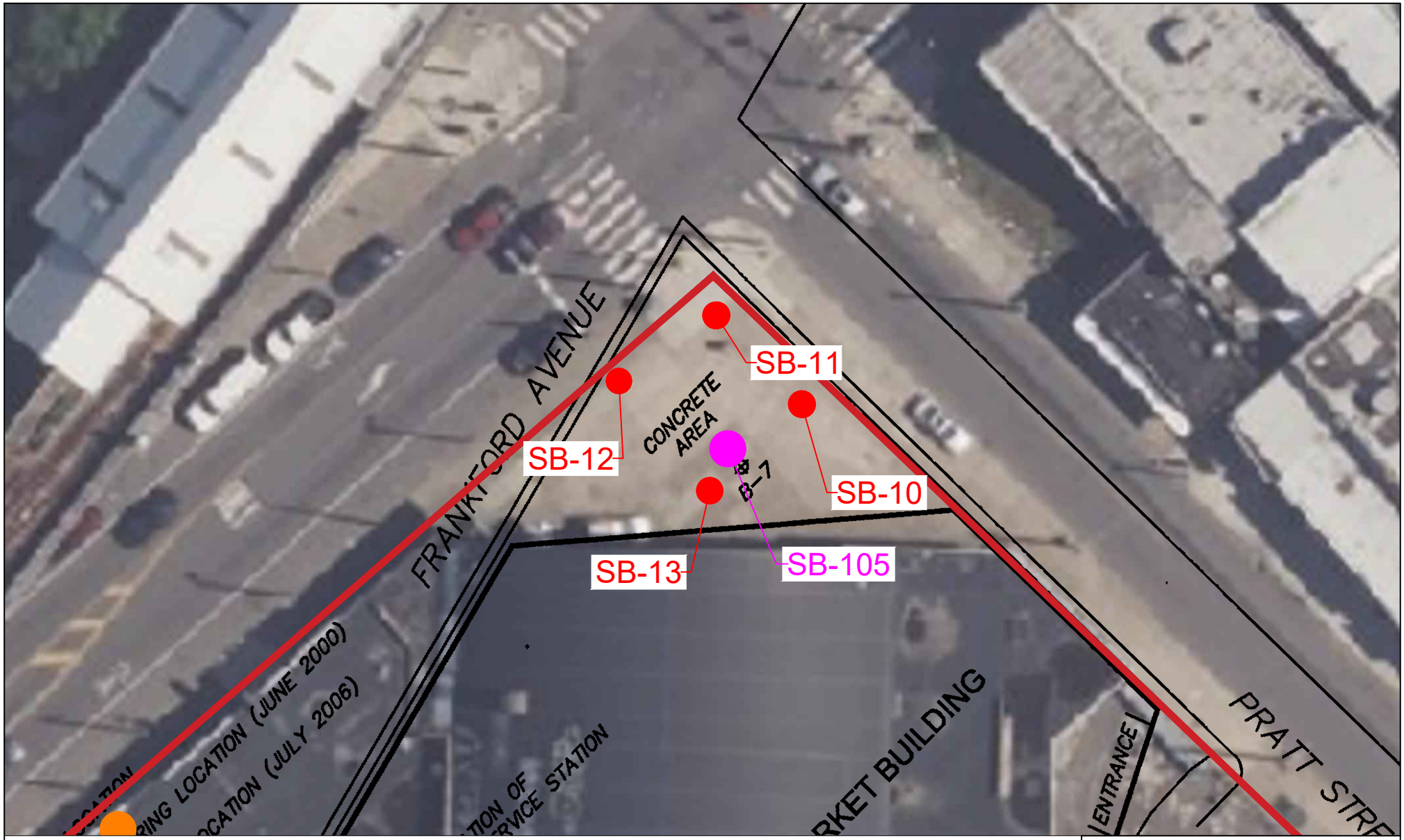
FIGURE 2B
SITE MAP
5129–5135 FRANKFORD AVENUE
PHILADELPHIA, PA

Prepared For:
Frankford Community Development Corp.
4667–4669 Paul Street, 2nd Floor
Philadelphia, PA 19124

CHARGE	AUTOCAD FILE	ENGINEER	DESIGNER	DRAFTSPERSON
73539–04				JTB

SCALE	DRAWING NUMBER	REVISION
1" = 30'	Y:\RT Projects\73500 SERIES\73539-04\Updated Figures 8.2024\soil Boring Location Map.dwg	1

DATE 01/21/2025



Proposed Excavation

Approximate Property Boundary

2023 Soil Boring Locations

2023 Monitoring Well Locations

2022 Soil Vapor Points

2022 Soil Boring Locations

NOTE:
Underlay figure based on Figure 2 by BL Companies (Project No. 00L629-B) dated 08/27/08.

0 30' 60'

N

RT Environmental Services, Inc.
215 West Church Road
King of Prussia, PA 19406

FIGURE 2C
SITE MAP
5129–5135 FRANKFORD AVENUE
PHILADELPHIA, PA

Prepared For:
Frankford Community Development Corp.
4667–4669 Paul Street, 2nd Floor
Philadelphia, PA 19124

CHARGE	AUTOCAD FILE	ENGINEER	DESIGNER	DRAFTSPERSON
73539–04				JTB

SCALE	DRAWING NUMBER	REVISION
1" = 30'	Y:\RT Projects\73500 SERIES\73539-04\Updated Figures 8.2024\soil Boring Location Map.dwg	1

DATE 01/21/2025



2023 Monitoring Well Locations

Groundwater Flow

Contour Lines

Approximate Property Boundary

NOTES:

1. Groundwater elevations recorded on April 17, 2023.
2. The building basement pump system is not operational at this time.

0 75' 150'

RT Environmental Services, Inc.
215 West Church Road
King of Prussia, PA 19406

FIGURE 3
GROUNDWATER FLOW MAP
5129–5135 FRANKFORD AVENUE
PHILADELPHIA, PA

Prepared For:
Frankford Community Development Corp.
4667–4669 Paul Street, 2nd Floor
Philadelphia, PA 19124

CHARGE	AUTOCAD FILE	ENGINEER	DESIGNER	DRAFTSPERSON
73539–04				JTB
SCALE 1" = 75'	DRAWING NUMBER			REVISION
DATE 01/21/2025	Y:\RT Projects\73500 SERIES\73539-04\Updated Figures 8.2024\grounnd Water Flow Map.dwg			1



2023 Monitoring Well Locations

Groundwater Flow

Contour Lines

Approximate Property Boundary

NOTES:

1. Groundwater elevations recorded on May 4, 2023.
2. The building basement pump system is not operational at this time.

0 75' 150'

N

RT Environmental Services, Inc.
215 West Church Road
King of Prussia, PA 19406

FIGURE 4
GROUNDWATER FLOW MAP
5129–5135 FRANKFORD AVENUE
PHILADELPHIA, PA

Prepared For:
Frankford Community Development Corp.
4667–4669 Paul Street, 2nd Floor
Philadelphia, PA 19124

CHARGE	AUTOCAD FILE	ENGINEER	DESIGNER	DRAFTSPERSON
73539-04				JTB

SCALE	DRAWING NUMBER	REVISION
1" = 75'	Y:\RT Projects\73500 SERIES\73539-04\Updated Figures 8.2024\grounnd Water Flow Map.dwg	1

DATE 01/21/2025

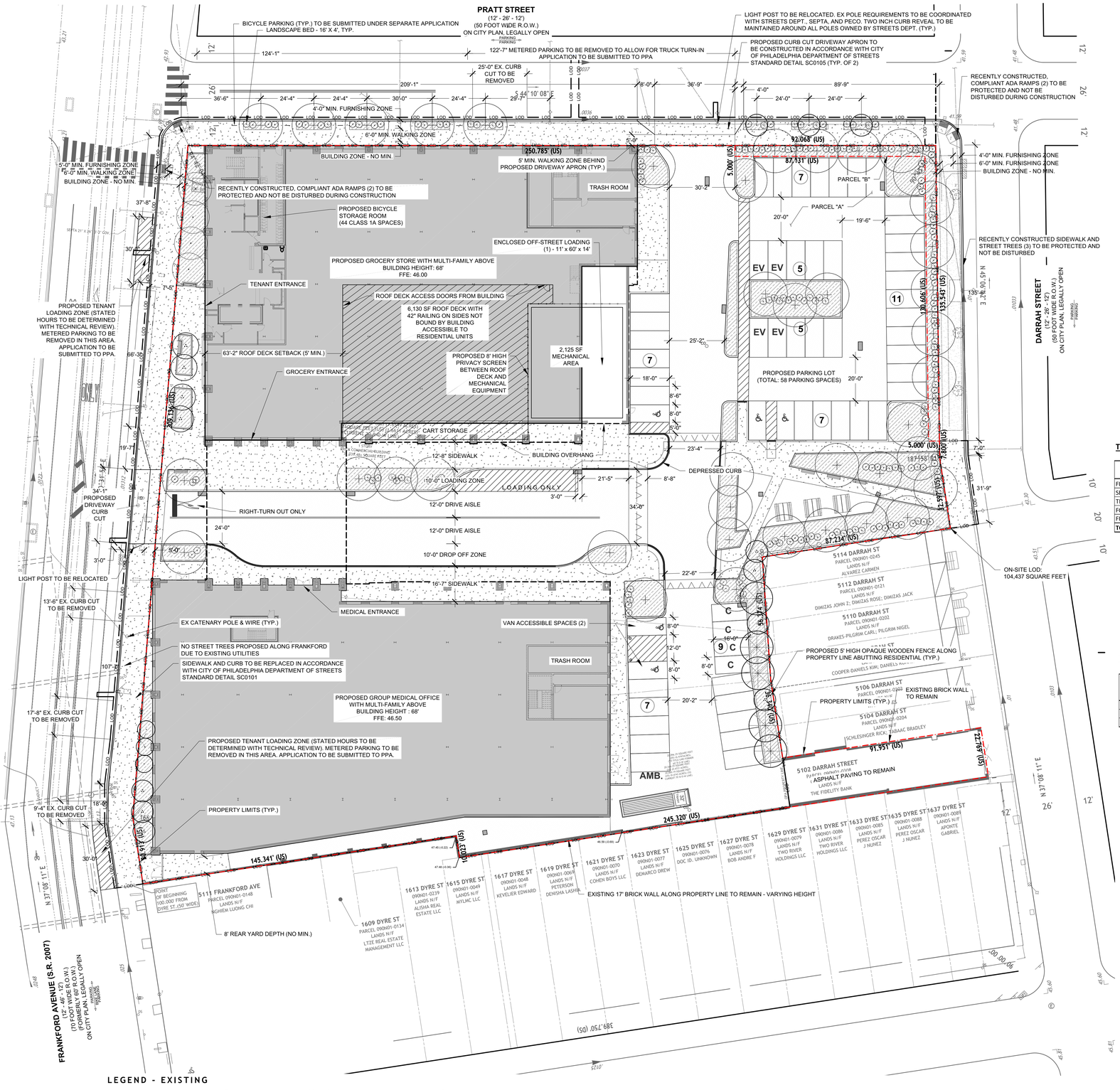


TABLE 1. ZONING COMPLIANCE TABLE, PARCEL A

CMX-3 BASE DISTRICT NEIGHBORHOOD COMMERCIAL MIXED-USE (APPROVED BILL NO. 230714) OVERLAY DISTRICTS: /TOD TRANSIT-ORIENTED DEV. /MIN MIXED INCOME NEIGHBORHOODS	PROPOSED	ALLOWABLE / REQUIRED
USES:		
MULTI-FAM (# OF DWELLING UNITS)[1.1]:	132	PERMITTED USE
RETAIL - GROCERY (SQ. FT.)[1.2]:	20,404	PERMITTED USE
OFFICE - GROUP MEDICAL (SQ. FT.)[1.2]:	43,816	PERMITTED USE
MAX. OCCUPIED AREA IN MIN (% OF LOT AREA):	45.9%	90%
MIN. SIDE YARD WIDTH (FT.):	NA	8
MIN. BUILDING HEIGHT (FT.)[1.3]:	68	25
MIN. PRIMARY STREET FRONTAGE (%)[1.4]:	80%	80%
MAX. PARKING[1.5]:	58	66
MIN. PARKING[1.6]:	58	26
MIN ADA PARKING SPACES:	5 (2 VAN)	3 (1 VAN)
MIN. EV PARKING SPACES:	4	4
CLASS 1A BICYCLE SPACES[1.7]:	44	44
BICYCLE SPACES (ALL USES EXCEPT RES.)[1.8]:	8	7
ENCLOSED OFF-STREET LOADING[1.9]:	1	2

NOTES:
(1.1): THIS IS AN AFFORDABLE HOUSING PROPERTY IN ACCORDANCE WITH APPROVED BILL NO. 230776.
(1.2): PER 14-513(4)(B), USES ARE INCLUDED UNDER REQUIRED GROUND FLOOR USES ALONG PRIMARY FRONTAGE. PRATT STREET IS PRIMARY FRONTAGE.
(1.3): PER 14-513(5)(A)(.3), MINIMUM BUILDING HEIGHT IS 25' IN A TOD.
(1.4): PER 14-513(5)(A)(.4), NEW BUILDINGS MUST BE BUILT TO THE STREET LINE AT GROUND LEVEL, ALONG AT LEAST 80% OF THE PRIMARY STREET FRONTAGE IN A TOD. PRATT STREET IS PRIMARY FRONTAGE.
(1.5): PER 14-513(5)(B)(.6)&(.7), FOR NON-RESIDENTIAL USES, ANY ACCESSORY PARKING REQUIREMENT MAY NOT BE EXCEEDED BY MORE THAN 50% IN A TOD. FOR RESIDENTIAL USES, NO MORE THAN ONE AUTO PARKING SPACE MAY BE PROVIDED PER EVERY TWO HOUSING UNITS, ROUNDING UP TO THE NEAREST WHOLE NUMBER.
(1.6): PER TABLE 14-533-5, MINIMUM PARKING SPACES IN THE MIN IS 2 PER 10 UNITS IN CMX-3.
(1.7): 1 PER 3 UNITS. CLASS 1A BICYCLE SPACES PROVIDED IN A BICYCLE STORAGE ROOM ACCESSIBLE FROM THE RIGHT-OF-WAY AND THROUGH THE INTERIOR CORRIDOR.
(1.8): 1 PER EVERY 10,000 SQ. FT. FOR ALL USES OTHER THAN RESIDENTIAL.
(1.9): CALCULATION PER TABLE 14-806-1. *WAIVER ISSUED FROM THE STREETS DEPARTMENT FOR A REDUCTION IN ENCLOSED OFF-STREET LOADING SPACES FROM 2 SPACES TO 1 SPACE.*

TABLE 2. GFA CHART, PARCEL A

FLOOR	RESIDENTIAL GFA	RETAIL + HEALTHCARE GFA	TOTAL GFA
FIRST FLOOR (SQ. FT.):	6,527	41,672	48,199
SECOND FLOOR (SQ. FT.):	19,542	22,548	42,090
THIRD FLOOR (SQ. FT.):	37,619		37,619
FOURTH FLOOR (SQ. FT.):	37,619		37,619
FIFTH FLOOR (SQ. FT.):	37,619		37,619
TOTAL (SQ. FT.):	**138,926**	**64,220**	**203,146**

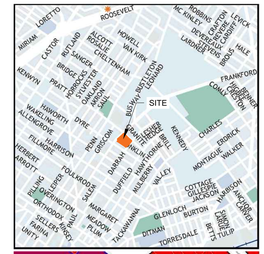
TABLE 3. FAR CALCULATION, PARCEL A

TOTAL ALLOWABLE FAR (%)[3.1]:	800%
TOTAL LOT AREA:	104,925.73
TOTAL ALLOWABLE GFA (SQ. FT.):	839,406
TOTAL PROPOSED GFA (SQ. FT.):	203,146

NOTES:
(3.1): PER TABLE 14-533-4, FAR=800% FOR CMX-3 WITHIN MIN AND TOD.

TABLE 4. COMPLETE STREETS POLICY REQUIREMENTS

LOT FRONTAGE STREET	STREET TYPE	MIN. WALKING ZONE	MIN. FURNISHING ZONE	MIN. BUILDING ZONE
FRANKFORD AVE.	WALKABLE COMMERCIAL CORRIDOR	6'	4'	No Min.
PRATT STREET	CITY NEIGHBORHOOD	6'	4'	No Min.
DARRAH STREET	CITY NEIGHBORHOOD	6'	4'	No Min.



GENERAL NOTES:

1. SITE LOCATION:
   5129-5135 FRANKFORD AVENUE, OPA #882096000
   5113-17 FRANKFORD AVENUE, OPA #885877900
   5119-25 FRANKFORD AVENUE, OPA #882754900
   5102 DARRAH STREET, OPA #622222400
   PHILADELPHIA, PA 19124
2. REGISTERED OWNER/APPLICANT:
   KIMBERLY WASHINGTON
   FRANKFORD COMMUNITY DEVELOPMENT CORPORATION
   4667-69 PAUL STREET, PHILADELPHIA PA 19124
   215-743-6580 ext. 102
   KWASHINGTON.FCDC@GMAIL.COM
3. PLAN REFERENCES SURVEY BY:
   RODRIGUEZ CONSULTING
   100 W. OXFORD STREET, SUITE E-3100
   PHILADELPHIA, PA 19122
   PLAN DATED: 01/30/2023
4. SUBJECT PROPERTY IS LOCATED WITHIN THE CMX-3 DISTRICT PER APPROVED BILL NO. 230714. ATTENTION IS CALLED TO THE ZONING REQUIREMENTS IN THE PHILADELPHIA CODE AS AMENDED.
5. THE PROJECT PROPOSES LOT LINE RELOCATION OF FOUR EXISTING PARCELS TO TWO PARCELS (PARCEL "A" AND PARCEL "B"), DEMOLITION OF AN EXISTING STRUCTURE, AND CONSTRUCTION OF A 5-STORY MULTI-USE BUILDING, INCLUDING GROCERY STORE, HEALTH CARE, AND 132 AFFORDABLE HOUSING UNITS. DEVELOPMENT INCLUDES 58 ACCESSORY, 44 CLASS 1A BICYCLE PARKING SPACES, AND 7 OUTDOOR BICYCLE SPACES.
6. THE ON-SITE AREA OF DISTURBANCE IS 104,437 SQ. FT. (2.39 AC.). THE COMBINED AREA OF DISTURBANCE IS 114,136 SF (2.62 AC.).
7. THE ENTIRE SITE CONTAINS URBAN LAND SOIL (Ub).
8. THE PROJECT IS LOCATED WITHIN THE DELAWARE DIRECT WATERSHED. PWD ERSA TRACKING NUMBER: FY24-FRAN-7646-01.
9. SUBJECT PROPERTY TO BE SERVICED BY MUNICIPAL WATER AND SEWER IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF PHILADELPHIA WATER DEPARTMENT.
10. THE EXISTING CONDITIONS PLAN AND LOT CONSOLIDATION PLAN SHOWN HEREON WAS PREPARED BY RODRIGUEZ CONSULTING (DATED 01/30/2023 AND 04/07/2023) AND PROVIDED TO STUDIO SUSTENA FOR USE. THIS REFERENCE IS FOR ALL PROPERTY AND BOUNDARY INFORMATION PRESENTED ON THIS PLAN.
11. THE VERTICAL CONTROL NETWORK IS REFERENCED TO THE CITY OF PHILADELPHIA DATM. THE CONVERSION FACTOR BETWEEN CITY DATUM AND NAVD88 IS +4.33 FEET. THE SITE BENCHMARK IS THE RIM OF A SEWER MANHOLE LOCATED ON THE INTERSECTION OF DARRAH STREET AND CONKLIN STREET. EL. +43.60' (CITY OF PHILADELPHIA DATUM)
12. THERE ARE NO WATERBODIES/WATERCOURSES WITHIN 100 FEET OF THE SITE.
13. THE LOCATION OF UNDERGROUND UTILITIES ARE APPROXIMATE. ALL LOCATIONS AND SIZES ARE BASED ON UTILITY MARK-OUTS, ABOVE GROUND STRUCTURES THAT WERE VISIBLE & ACCESSIBLE IN THE FIELD, AND MAPS SUPPLIED THROUGH THE PA ONE CALL SYSTEM WHICH WERE AVAILABLE AT THE TIME OF SURVEY. BEFORE ANY EXCAVATION IS TO BEGIN, THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE EXACT LOCATION, DEPTH, AND LIMITS OF ALL EXISTING UTILITIES.
14. BY GRAPHICAL PLOTTING THE PREMISES IS LOCATED IN ZONE 'X' PER FLOOD INSURANCE RATE MAP NUMBER: 42075701114H, COMMUNITY NAME: CITY OF PHILADELPHIA, EFFECTIVE DATE: 11/18/2015

In accordance with the terms and provisions of Section 14-533 of the Philadelphia Code pertaining to the
/MIN, MIXED-INCOME NEIGHBORHOODS OVERLAY DISTRICT
The applicant has submitted a complete form acknowledging an understanding of the requirements of Section 14-533 of the Philadelphia Code.
Applied Electronically By: MEG CAVANAGH
September 10, 2024 Ledger No.: E-5962
Philadelphia City Planning Commission

In accordance with the terms and provisions of Section 14-701 (1) (d) and 14-803 (1) (c) of the Philadelphia Code pertaining to Commission selection of
REAR LOT LINE, PRIMARY FRONTAGE, AND REAR STREET
REAR LOT LINE OPPOSITE: Pratt St
PRIMARY FRONTAGE: Pratt St
REAR STREET: L&I will determine
Applied Electronically By: MEG CAVANAGH
September 9, 2024 Ledger No.: E-5962
Philadelphia City Planning Commission

PWD ERSA: FY24-FRAN-7646-01
STREETS REVIEW: SR-2024-022360

DEPARTMENT OF LICENSES & INSPECTIONS
APPROVED FOR ZONING ONLY
09/18/24
REVIEW YOUR PLANS CONTAIN ANY OMISSION, ERROR OR DEVIATION FROM THESE APPROVED PLANS IT WILL VOID/LIMIT THE APPROVAL OF THE DEPARTMENT OF LICENSES & INSPECTIONS
Applied by L&I: Chanwoo Jung

LEGEND - EXISTING
BOLLARD; UTILITY POLE WITH LIGHT; LAMP; GAS VALVE, GAS BOX; WATER VALVE; CURB BOX UNKNOWN ORIGIN; SEWER VENT; HANDICAPPED SYMBOL; INLET; MOUTH GRATE INLET; INLET
R.O.W. LINE; PROPERTY LINE; FENCE; OVERHEAD WIRES; VERIZON LINE, MANHOLE; SANITARY SEWER, MANHOLE; GAS LINE, MANHOLE; ELECTRIC LINE, MANHOLE; WATER LINE, MANHOLE; SEPTA LINE; MINOR CONTOUR LINE; MAJOR CONTOUR LINE
ASPHALT; CONCRETE

LEGEND
BUILDING; LANDSCAPE; ASPHALT; CONCRETE; LIMIT OF DISTURBANCE
CANOPY TREE; EVERGREEN TREE; UNDERSTORY TREE; SHRUB

0' 20' 40' 60'
SCALE: 1" = 20'-0"

studio sustena
Landscape Architecture Reimagined

STIPULATION FOR REUSE
THIS DRAWING WAS PREPARED FOR USE ON A SPECIFIC SITE, AND IS NOT SUITABLE FOR USE ON A DIFFERENT PROJECT SITE OR LATER TIME. USE OF THIS DRAWING FOR REFERENCE OR EXAMPLE ON ANOTHER PROJECT REQUIRES THE SERVICES OF PROPERLY LICENSED LANDSCAPE ARCHITECTS AND ENGINEERS. PRODUCTION OF THIS DRAWING FOR REUSE ON ANOTHER PROJECT IS NOT AUTHORIZED AND MAY BE CONTRARY TO THE LAW.

PROJECT TEAM
LANDSCAPE ARCHITECT:
STUDIO SUSTENA
4537 WAYNE AVENUE
PHILADELPHIA, PA 19144
215-247-8784 | STUDIO-SUSTENA.COM
ARCHITECT:
WULFF ARCHITECTS
1515 LOCUST STREET, 2ND FLOOR
PHILADELPHIA, PA 19102
215-985-0550 | WULFFARCHITECTS.COM

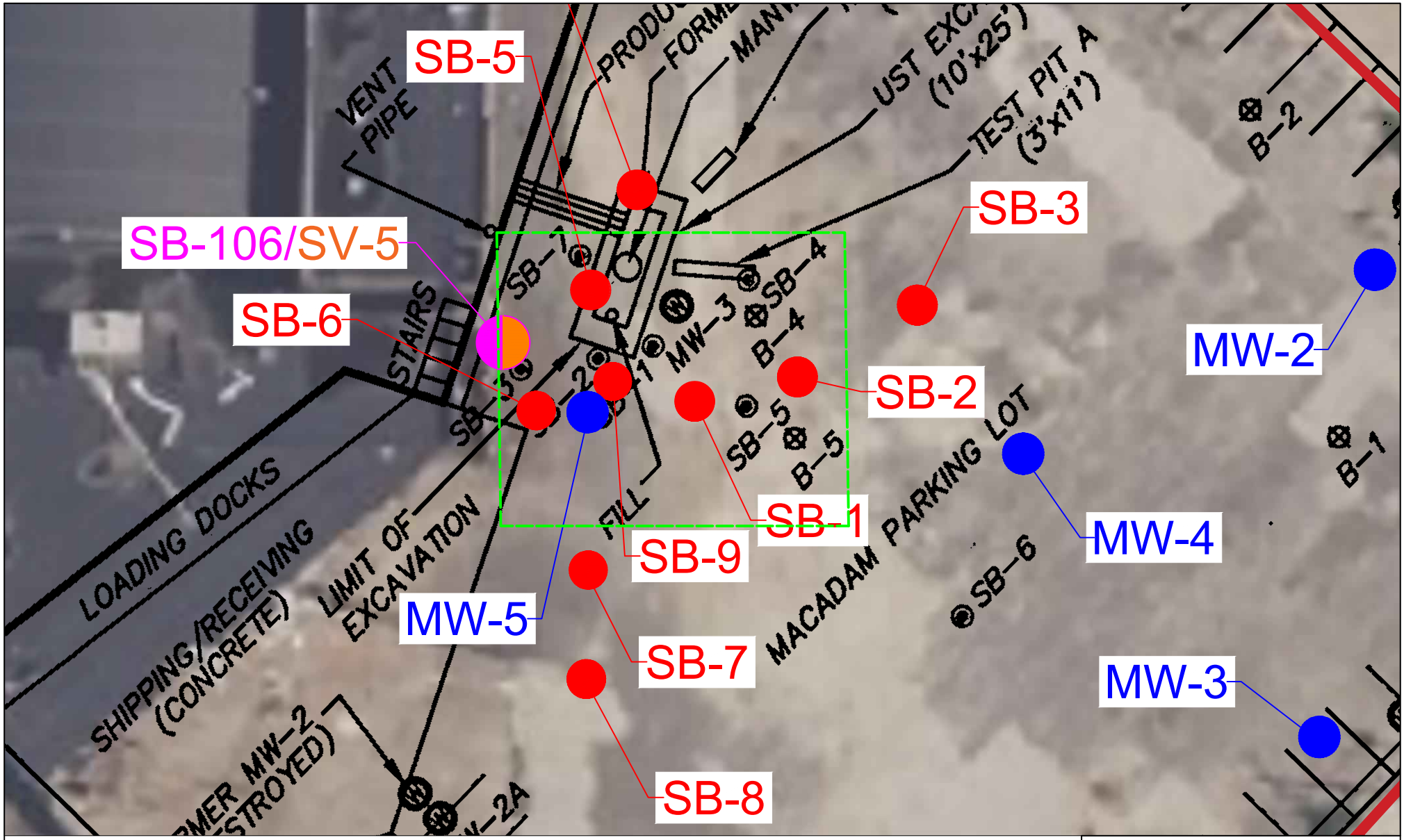
FRANKFORD PLAZA
PHILADELPHIA, PA

SEAL:
COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
SARA PILAR POINDEXTER
ENGINEER
PE060778

ISSUE BLOCK:

1	01/26/2024	ZONING 1ST SUB.
2	04/17/2024	ZONING 2ND SUB.
3	05/23/2024	ZONING 3RD SUB.
4	06/25/2024	ZONING 4TH SUB.
5	06/28/2024	CDR SUBMISSION
6	08/20/2024	ZONING 5TH SUB.

CHECKED BY: SP
DRAWN BY: CH
SCALE: AS NOTED
SHEET NAME: **ZONING PLAN**
SHEET NUMBER: **Z-100**



Proposed Excavation

Approximate Property Boundary

2023 Soil Boring Locations

2023 Monitoring Well Locations

2022 Soil Vapor Points

2022 Soil Boring Locations

NOTE:
Underlay figure based on Figure 2 by BL Companies (Project No. 00L629-B) dated 08/27/08.

0 20' 40'

N

RT Environmental Services, Inc.
215 West Church Road
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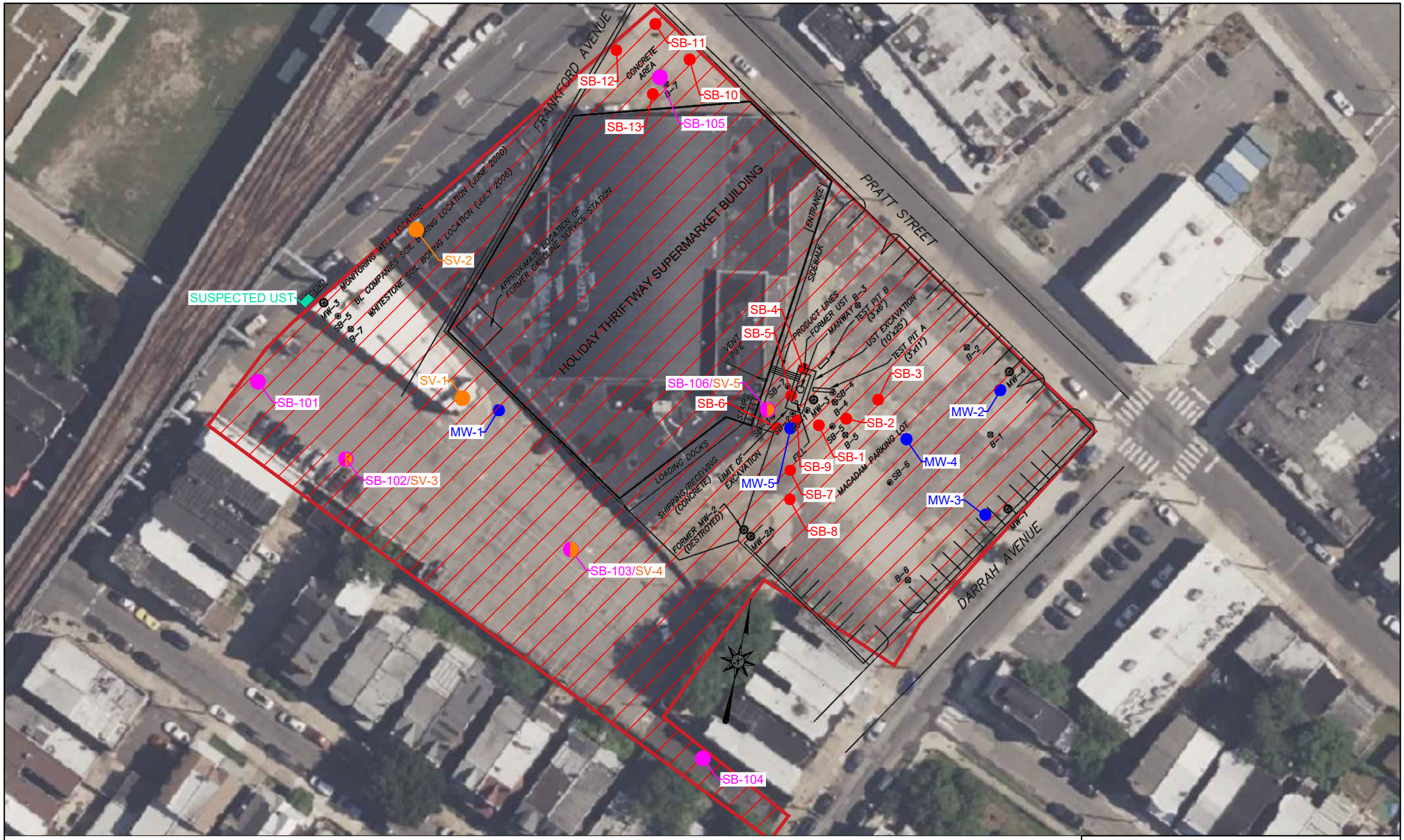
FIGURE 6
PROPOSED EXCAVATION
5129–5135 FRANKFORD AVENUE
PHILADELPHIA, PA

Prepared For:
Frankford Community Development Corp.
4667–4669 Paul Street, 2nd Floor
Philadelphia, PA 19124

CHARGE	AUTOCAD FILE	ENGINEER	DESIGNER	DRAFTSPERSON
73539–04				JTB

SCALE	DRAWING NUMBER	REVISION
1" = 20'	Y:\RT Projects\73500 SERIES\73539-04\Updated Figures 8.2024\proposed Excavation Map.dwg	1

DATE 01/21/2025



Extent of Cap Area

Approximate Property Boundary

2023 Soil Boring Locations

2023 Monitoring Well Locations

2022 Soil Vapor Points

2022 Soil Boring Locations

NOTE:
Underlay figure based on Figure 2 by BL Companies (Project No. 00L629-B) dated 08/27/08.

0 75' 150'

RT Environmental Services, Inc.
215 West Church Road
King of Prussia, PA 19406

FIGURE 7
CAP EXTENT
5129–5135 FRANKFORD AVENUE
PHILADELPHIA, PA

Prepared For:
Frankford Community Development Corp.
4667–4669 Paul Street, 2nd Floor
Philadelphia, PA 19124

CHARGE	AUTOCAD FILE	ENGINEER	DESIGNER	DRAFTSPERSON
73539–04				JTB

SCALE	DRAWING NUMBER	REVISION
1" = 75'	Y:\RT Projects\73500 SERIES\73539-04\Updated Figures 8.2024\Cap Extent.dwg	1

DATE 08/01/2024

Tables

TABLE 1

RESULTS OF CHEMICAL ANALYSES PERFORMED ON SOIL SAMPLES

FRANKFORD and DARRAH SITE

5129-5135 FRANKFORD AVENUE

CITY OF PHILADELPHIA, PHILADELPHIA COUNTY, PENNSYLVANIA

	Sample ID	Sample Depth (feet bgs)	Sample Date	Benzene	Ethylbenzene	Isopropylbenzene (Cumene)	Toluene	Acenaphthene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Carbazole	Chrysene	Dibenzo(a,h)anthracene	Dibenzofuran	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene
June 2000 Site Investigation	SB-3	11	9-Jun-2000	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.489	NA	NA	NA	4.35	NA
	SB-5	10	9-Jun-2000	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	1.06	NA
	SB-7	11	9-Jun-2000	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	1.29	NA
September 2000 UST Removal	BS (Below South End)	10	18-Aug-2000	ND	0.035	0.051	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	0.086	ND	NA
	BC (Below Center)	9.5	18-Aug-2000	ND	0.034	ND	0.024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	0.20	ND	NA
	BN (Below North End)	9	18-Aug-2000	ND	0.081	0.775	0.330	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.23	NA	NA	0.54	5.84	NA
	TA (Test Pit A)	10	18-Aug-2000	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.19	NA	NA	0.267	16.40	NA
	TB (Test Pit B)	9	18-Aug-2000	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	0.041	1.11	NA
July 2006 Phase II Investigation	B-1	9.5-10	21-Jul-2006	ND	ND	ND	ND	ND	ND	0.377	0.372	0.533	0.143	0.199	ND	0.425	ND	ND	0.691	ND	0.167	ND	ND	0.253	0.663
	B-2	9.5-10	21-Jul-2006	ND	ND	ND	ND	ND	ND	3.42	**3.25**	2.96	1.55	3.03	ND	3.64	ND	ND	7.16	ND	1.58	ND	ND	3.43	5.94
	B-3	9.5-10	21-Jul-2006	ND	ND	ND	ND	ND	ND	ND	ND	0.116	ND	ND	ND	3.64	ND	ND	0.206	ND	ND	ND	ND	0.147	0.192
	B-4	15.5-16	21-Jul-2006	ND	ND	ND	ND	ND	ND	0.139	0.131	0.155	ND	ND	ND	0.164	ND	ND	0.296	ND	ND	ND	ND	0.204	0.301
	B-5	12-12.5	21-Jul-2006	ND	ND	ND	ND	ND	8.03	**12.10**	**9.96**	**9.35**	2.76	9.11	1.90	12.90	ND	ND	28.70	3.09	3.08	ND	ND	26.00	21.80
	B-6	13.5-14	21-Jul-2006	ND	ND	ND	ND	ND	0.222	0.723	**0.726**	0.925	0.449	ND	ND	0.764	0.12	ND	1.35	ND	0.482	ND	ND	0.878	1.31
	B-7F	6-6.5	21-Jul-2006	ND	ND	ND	ND	2.27	4.49	**10.40**	**8.94**	**7.99**	19.30	2.93	3.29	11.40	**0.902**	1.65	21.30	2.51	2.71	0.861	0.179	19.10	14.90
	B-7N	10.5-11	21-Jul-2006	ND	ND	ND	ND	ND	ND	0.150	0.131	0.178	ND	ND	ND	0.171	ND	ND	0.301	ND	ND	ND	ND	0.226	0.255
ACT 2 MEDIUM-SPECIFIC CONCENTRATIONS (MSCs)																									
Residential Direct Contact 0-15'				57	10,000	7,700	10,000	13,000	66,000	5.7	0.57	5.7	13,000	57	900	570	0.57	220	8,800	8,800	5.7	880	4,400	66,000	6,600
Non-Residential Direct Contact 0-2'				290	10,000	10,000	10,000	170,000	190,000	110	11	110	170,000	1,100	4,000	11,000	11	2,800	110,000	110,000	110	11,000	56,000	190,000	84,000
Non-Residential Direct Contact 2-15'				330	10,000	10,000	10,000	190,000	190,000	190,000	190,000	190,000	190,000	190,000	190,000	190,000	190,000	190,000	190,000	190,000	190,000	10,000	190,000	190,000	190,000
Non-Residential Soil to Ground Water				0.5	70	2,500	100	4,700	350	320	46	170	180	610	83	230	160	260	3,200	3,800	28,000	1,600	25	10,000	2,200
Residential Soil to Ground Water				0.5	70	600	100	2,700	350	25	46	40	180	610	21	230	13	95	3,200	3,000	2,200	600	25	10,000	2,200

All results and MSCs expressed in milligrams per kilogram (mg/kg)

bgs = below ground surface

NA = Not Analyzed

ND = Not Detected

Bold and shaded indicates concentration exceeds most stringent (Residential; Direct Contact) Act 2 MSC, but is below the Non-Residential MSCs

TABLE 2
RESULTS OF CHEMICAL ANALYSES PERFORMED ON GROUND WATER SAMPLES
FRANKFORD and DARRAH SITE
5129-5135 FRANKFORD AVENUE
CITY OF PHILADELPHIA, PHILADELPHIA COUNTY, PENNSYLVANIA

Sample ID	Sample Date	Benzene	Toluene	Ethylbenzene	Xylenes, Total	Isopropylbenzene (Cumene)	Naphthalene	Methyl tert-butyl Ether (MTBE)	Tert-Butyl Alcohol	1-2-Dibromoethane (EDB)	1,2-Dichloroethane (EDC)	Lead, Dissolved	Fluorene	Phenanthrene	Pyrene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(g,h,i)perylene	Dibenzo(a,h)anthracene	Fluoranthene	Indeno(1,2,3-cd)pyrene	Chrysene	Acetone	Chloroform	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene (PCE)	Trichloroethene (TCE)	Anthracene	Acenaphthene	Vinyl Chloride
MW-3	21-Jul-2006	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	16.2	9.7	ND	**63.5**	4.0	NA	NA	ND
	4-Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.72	8.72	ND	**39.7**	2.83	NA	NA	ND
	17-Dec-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.54**	ND	ND	ND	ND	ND	3.17	10.1	ND	**40.9**	4.66	NA	NA	ND
	6-Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**1.01**	**1.12**	ND	**0.62**	ND	ND	ND	ND	ND	4.36	9.58	ND	**44.8**	4.86	NA	NA	ND
	11-Jun-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.26**	ND	ND	**0.55**	ND	ND	**1.10**	ND	ND	8.74	6.38	ND	**44.7**	2.53	NA	NA	ND
	10-Sep-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.44	9.32	ND	**57.0**	4.61	NA	NA	ND
	1-Dec-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.34	ND	**41.3**	3.13	NA	NA	ND
	2-Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	DN	DN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.36	7.91	ND	**50.0**	3.72	NA	NA	ND
	30-Jun-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.12	6.47	ND	**47.2**	2.10	NA	NA	ND
	14-Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.81	8.51	ND	**50.5**	4.32	NA	NA	ND
	5-Jan-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.51	6.07	ND	**43.4**	3.09	NA	NA	ND
	12-Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.87	5.71	ND	**46.9**	2.33	NA	NA	ND
	11-Jul-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.29	6.40	ND	**38.7**	3.0	NA	NA	1.51
	30-Sep-2014	ND	ND	ND	ND	NA	0.65	ND	ND	NA	ND	ND	0.032 J	ND	ND	ND	ND	0.034 J	ND	ND	ND	ND	ND	ND	ND	ND	5.5	3.8	ND	**52**	2.4	ND	0.046 J	ND
	11-Dec-2014	ND	ND	ND	ND	NA	ND	ND	9.2 J	NA	ND	ND	ND	ND	ND	ND	ND*	ND	ND	ND	ND	ND*	ND	ND	ND	8.6	3.6	ND	**41**	2.4	ND	ND	ND
MW-4	4-Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.72	ND	ND	**18.2**	ND	NA	NA	ND
	17-Dec-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.42**	ND	ND	ND	ND	ND	ND	ND	ND	2.54	ND	ND	**14.3**	ND	NA	NA	ND
	6-Mar-2009	ND	6.23	ND	ND	ND	ND	ND	ND	ND	ND	**43**	ND	ND	ND	ND	**1.05**	**1.21**	**0.85**	**0.65**	ND	ND	ND	ND	ND	ND	ND	ND	2.53	ND	NA	NA	ND
	11-Jun-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**13**	ND	ND	ND	ND	ND	**0.71**	ND	ND	ND	ND	**0.93**	ND	ND	ND	ND	ND	ND	ND	NA	NA	ND
	10-Sep-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**23**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	ND
	1-Dec-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**16**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	ND
	2-Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.72	**1.12**	**1.96**	**4.44**	**2.05**	**1.64**	ND	3.35	**1.52**	**2.96**	ND	ND	ND	ND	ND	ND	NA	NA	ND
	30-Jun-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.13	ND	NA	NA	ND
	14-Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**12**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.77	ND	NA	NA	ND
	5-Jan-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**22**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.72	ND	NA	NA	ND
	12-Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**6.4**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	ND
	11-Jul-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.45	ND	NA	NA	ND
	30-Sep-2014	ND	ND	ND	ND	NA	ND	ND	ND	NA	ND	**12**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.16 J	0.66 J	ND	1.9	0.19 J	ND	ND	ND
	11-Dec-2014	ND	ND	ND	ND	NA	ND	ND	ND	NA	ND	**7.3**	ND	ND	ND	ND	ND*	ND	ND	ND	ND	ND*	ND	ND	ND	0.45 J	0.86 J	ND	2.8	0.42 J	ND	ND	ND
ACT 2 MEDIUM-SPECIFIC CONCENTRATIONS (MSCs)																																	
Residential Used Aquifer		5	1,000	700	10,000	840	100	20	NS	0.05	5	5	1,500	1,100	130	0.29	0.2	0.29	0.55	0.26	0.029	260	0.29	1.9	33,000	80	70	100	5	5	66	2,200	2
Non-Residential Used Aquifer		5	1,000	700	10,000	3,500	100	20	NS	0.05	5	5	1,900	1,100	130	3.6	0.2	1.2	0.55	0.26	0.36	260	3.6	1.9	92,000	80	70	100	5	5	66	3,800	2
Residential Non-Use Aquifer		500	100,000	70,000	180,000	50,000	30,000	200	NS	5	50	5,000	1,900	1,100	130	11	3.8	1.2	0.55	0.26	0.6	260	62	1.9	330,000	800	700	1,000	50	50	66	3,800	20
Non-Residential Non-Use Aquifer		500	100,000	70,000	180,000	50,000	30,000	200	NS	5	50	5,000	1,900	1,100	130	11	3.8	1.2	0.55	0.26	0.6	260	62	1.9	920,000	800	700	1,000	50	50	66	3,800	20

All results expressed in micrograms per liter (µg/L)
ND = Not Detected
NA = Not Analyzed
NS = No Standard
* = Laboratory Control Sample (LCS) or Laboratory Control Sample Duplicate (LCSD) exceeds the control limits
** = MW-2A was installed to replace MW-2 after it was destroyed
Bold and shaded indicates concentration exceeds most stringent (Residential, Used Aquifer) Act 2 MSC

TABLE 2
RESULTS OF CHEMICAL ANALYSES PERFORMED ON GROUND WATER SAMPLES
FRANKFORD and DARRAH SITE
5129-5135 FRANKFORD AVENUE
CITY OF PHILADELPHIA, PHILADELPHIA COUNTY, PENNSYLVANIA

Sample ID	Sample Date	Benzene	Toluene	Ethylbenzene	Xylenes, Total	Isopropylbenzene (Cumene)	Naphthalene	Methyl tert-butyl Ether (MTBE)	Tert-Butyl Alcohol	1-2-Dibromoethane (EDB)	1,2-Dichloroethane (EDC)	Lead, Dissolved	Fluorene	Phenanthrene	Pyrene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(g,h,i)perylene	Dibenzo(a,h)anthracene	Fluoranthene	Indeno(1,2,3-cd)pyrene	Chrysene	Acetone	Chloroform	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene (PCE)	Trichloroethene (TCE)	Anthracene	Acenaphthene	Vinyl Chloride
MW-1	6-Sep-2000	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA
	21-Jul-2006	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND	NA	ND	ND	2	ND	ND	2	ND	2	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	ND
	4-Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.20	0.91	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	ND
	17-Dec-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.62	0.65	ND	1.09	ND	ND	0.75	ND	ND	ND	ND	ND	ND	ND	NA	NA	ND
	6-Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.49	0.63	1.69	1.86	1.83	2.28	1.19	1.44	2.24	1.32	ND	ND	4.70	ND	2.84	ND	NA	NA	ND
	11-Jun-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.14	ND	0.67	1.78	0.96	1.20	ND	ND	1.71	1.06	ND	ND	ND	ND	ND	ND	NA	NA	ND
	10-Sep-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.42	0.61	ND	0.22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	ND
	1-Dec-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.42	0.56	ND	0.30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	ND
	2-Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	ND
	30-Jun-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.52	9.20	11.8	6.73	ND	ND	5.67	ND	ND	ND	ND	ND	ND	ND	NA	NA	ND
	14-Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.55	0.92	0.64	0.53	ND	ND	0.52	ND	ND	ND	ND	ND	ND	ND	NA	NA	ND
	5-Jan-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.56	0.84	1.09	3.17	1.75	1.44	ND	1.89	1.35	1.98	ND	ND	ND	ND	1.96	ND	NA	NA	ND
	12-Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.667	1.08	0.853	0.337	ND	ND	ND	ND	ND	ND	6.00	ND	3.76	ND	NA	NA	ND
	11-Jul-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.276	0.400	ND	0.466	ND	ND	0.281	ND	ND	ND	ND	ND	ND	ND	NA	NA	ND
	30-Sep-2014	ND	ND	ND	ND	NA	1.2	ND	ND	NA	ND	ND	ND	0.2	0.77	0.31	0.57	1.3	0.52	1.1	0.19	0.87	0.84	0.68	ND	2	2.4	0.15 J	8.6	0.66 J	0.044 J	ND	ND
	11-Dec-2014	ND	ND	ND	ND	NA	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	0.24 J*	0.54 J	0.23 J	ND	ND	ND*	0.30 J	ND	ND	0.21 J	2.0	0.22 J	1.9	0.85 J	ND	ND	ND
MW-2	6-Sep-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-2A**	4-Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.87	ND	19	2.42	NA	NA	ND
	17-Dec-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.19	0.68	0.80	0.53	ND	0.77	ND	1.25	0.56	ND	ND	ND	10.9	2.28	9.10	2.10	NA	NA	3.45
	6-Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.98	ND	1.17	1.23	0.87	0.76	ND	ND	0.93	ND	ND	ND	3.67	ND	31.0	2.69	NA	NA	ND
	11-Jun-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.50	ND	ND	ND	ND	0.90	ND	ND	ND	17.8	2.67	11.3	2.92	NA	NA	2.54
	10-Sep-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.85	ND	27.1	3.18	NA	NA	ND
	1-Dec-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.70	ND	21.8	2.61	NA	NA	ND
	2-Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	DN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.26	ND	28.0	2.57	NA	NA	ND
	30-Jun-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.76	ND	26.1	2.40	NA	NA	ND
	14-Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.18	ND	28.3	3.82	NA	NA	ND
	5-Jan-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.76	ND	24.1	3.28	NA	NA	ND
	12-Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.252	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.87	ND	23.5	2.01	NA	NA	ND
	11-Jul-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.40	ND	23.1	2.88	NA	NA	2.12
	30-Sep-2014	ND	ND	ND	ND	NA	ND	ND	ND	NA	ND	ND	ND	ND	0.10	ND	ND	0.041 J	0.021 J	ND	ND	0.096	ND	0.038 J	ND	0.17 J	7.2	0.43 J	19	2.6	ND	ND	0.22 J
	11-Dec-2014	ND	ND	ND	ND	NA	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND*	ND	ND	ND	ND	ND*	ND	ND	3.1 J	0.25 J	11	0.78 J	14	3.6	ND	ND	0.35 J
ACT 2 MEDIUM-SPECIFIC CONCENTRATIONS (MSCs)																																	
Residential Used Aquifer		5	1,000	700	10,000	840	100	20	NS	0.05	5	5	1,500	1,100	130	0.29	0.2	0.29	0.55	0.26	0.029	260	0.29	1.9	33,000	80	70	100	5	5	66	2,200	2
Non-Residential Used Aquifer		5	1,000	700	10,000	3,500	100	20	NS	0.05	5	5	1,900	1,100	130	3.6	0.2	1.2	0.55	0.26	0.36	260	3.6	1.9	92,000	80	70	100	5	5	66	3,800	2
Residential Non-Use Aquifer		500	100,000	70,000	180,000	50,000	30,000	200	NS	5	50	5,000	1,900	1,100	130	11	3.8	1.2	0.55	0.26	0.6	260	62	1.9	330,000	800	700	1,000	50	50	66	3,800	20
Non-Residential Non-Use Aquifer		500	100,000	70,000	180,000	50,000	30,000	200	NS	5	50	5,000	1,900	1,100	130	11	3.8	1.2	0.55	0.26	0.6	260	62	1.9	920,000	800	700	1,000	50	50	66	3,800	20

TABLE 3
2022 SOIL ANALYTICAL RESULTS

Client Sample ID:	Units	PADEP Statewide Health Standards				SB-101	SB-102	SB-104
Lab Sample ID:		Residential	Non-Residential	Residential	Non-Residential	JD56679-1	JD56679-2	JD56679-4
Date Sampled:		Direct Contact		Soil to Groundwater	Soil to Groundwater	12/5/2022	12/5/2022	12/5/2022
Matrix:		0-15'	2-15'			Soil	Soil	Soil
VOCs								
Acetone	mg/kg	10000	10000	3100	8800	<0.0042	0.0233	0.0117
Benzene	mg/kg	57	330	0.5	0.5	<0.00046	<0.00051	<0.00048
Bromochloromethane	mg/kg	760	3600	9	9	<0.00057	<0.00063	<0.00059
Bromodichloromethane	mg/kg	12	69	8	8	<0.00044	<0.00048	<0.00045
Bromoform	mg/kg	400	2300	8	8	<0.0014	<0.0015	<0.0014
Bromomethane	mg/kg	95	460	1	1	<0.00078	<0.00086	<0.00080
2-Butanone (MEK)	mg/kg	10000	10000	400	400	<0.0025	<0.0027	<0.0026
Carbon disulfide	mg/kg	10000	10000	150	620	0.0024	<0.00060	<0.00056
Carbon tetrachloride	mg/kg	75	430	0.5	0.5	<0.00063	<0.00070	<0.00065
Chlorobenzene	mg/kg	950	4500	10	10	<0.00047	<0.00052	<0.00048
Chloroethane	mg/kg	10000	10000	2100	8800	<0.00060	<0.00067	<0.00062
Chloroform	mg/kg	19	110	8	8	<0.00053	<0.00058	<0.00055
Chloromethane	mg/kg	250	1400	3	3	<0.0020	<0.0022	<0.0021
Cyclohexane	mg/kg	10000	10000	1700	6900	<0.00067	<0.00074	<0.00069
1,2-Dibromo-3-chloropropane	mg/kg	0.029	0.42	0.02	0.02	<0.00071	<0.00078	<0.00073
Dibromochloromethane	mg/kg	220	10000	8	8	<0.00057	<0.00063	<0.00059
1,2-Dibromoethane	mg/kg	0.74	4.2	0.005	0.005	<0.00043	<0.00047	<0.00044
1,2-Dichlorobenzene	mg/kg	3800	10000	60	60	<0.00056	<0.00061	<0.00057
1,3-Dichlorobenzene	mg/kg	10000	10000	61	61	<0.00051	<0.00056	<0.00052
1,4-Dichlorobenzene	mg/kg	40	230	10	10	<0.00050	<0.00056	<0.00052
Dichlorodifluoromethane	mg/kg	1900	9100	100	100	<0.00074 [b]	<0.00082 [b]	<0.00076 [b]
1,1-Dichloroethane	mg/kg	280	1600	3.1	16	<0.00050	<0.00056	<0.00052
1,2-Dichloroethane	mg/kg	17	98	0.5	0.5	<0.00048	<0.00053	<0.00049
1,1-Dichloroethene	mg/kg	280	1600	0.7	0.7	<0.00067	<0.00074	<0.00069
cis-1,2-Dichloroethene	mg/kg	440	10000	7	7	<0.00086	<0.00095	<0.00088
trans-1,2-Dichloroethene	mg/kg	4400	10000	10	10	<0.00062	<0.00069	<0.00064
1,2-Dichloropropane	mg/kg	0.12	0.69	0.5	0.5	<0.00048	<0.00053	<0.00050
cis-1,3-Dichloropropene	mg/kg	-	-	-	-	<0.00048	<0.00053	<0.00050
trans-1,3-Dichloropropene	mg/kg	-	-	-	-	<0.00047	<0.00051	<0.00048
Ethylbenzene	mg/kg	180	1000	70	70	<0.00046	<0.00051	<0.00048
Freon 113	mg/kg	10000	10000	3400	10000	<0.0027	<0.0030	<0.0028
2-Hexanone	mg/kg	570	2700	6.3	26	<0.0022	<0.0024	<0.0022
Isopropylbenzene	mg/kg	7600	10000	600	2500	<0.0014	<0.0016	<0.0015
Methyl Acetate	mg/kg	10000	10000	3500	9700	<0.0014	<0.0016	<0.0015
Methylcyclohexane	mg/kg	-	-	-	-	<0.00089	<0.00099	<0.00092
Methyl Tert Butyl Ether	mg/kg	1700	9800	2	2	<0.00048	<0.00053	<0.00049
4-Methyl-2-pentanone(MIBK)	mg/kg	10000	10000	280	780	<0.0023	<0.0026	<0.0024
Methylene chloride	mg/kg	1300	10000	0.5	0.5	0.0036 J	0.0036 J	0.0032 J
Naphthalene	mg/kg	13	77	25	25	<0.0025	<0.0028	<0.0026
Styrene	mg/kg	10000	10000	24	24	<0.00041	<0.00045	<0.00042
Tert Butyl Alcohol	mg/kg	-	-	-	-	<0.0047	<0.0051	<0.0048
1,1,2,2-Tetrachloroethane	mg/kg	7.6	44	0.084	0.026	<0.00061	<0.00067	<0.00063
Tetrachloroethene	mg/kg	760	3600	0.5	0.5	<0.00059	<0.00065	<0.00061
Toluene	mg/kg	10000	10000	100	100	<0.00054	<0.00059	<0.00055
1,2,3-Trichlorobenzene	mg/kg	-	-	-	-	<0.0025	<0.0028	<0.0026
1,2,4-Trichlorobenzene	mg/kg	39	190	27	27	<0.0025	<0.0028	<0.0026
1,1,1-Trichloroethane	mg/kg	10000	10000	20	20	<0.00049	<0.00054	<0.00051
1,1,2-Trichloroethane	mg/kg	3.8	18	0.5	0.5	<0.00057	<0.00062	<0.00058
Trichloroethene	mg/kg	38	180	0.5	0.5	<0.00078	<0.00086	<0.00080
Trichlorofluoromethane	mg/kg	10000	10000	200	200	<0.00070	<0.00077	<0.00072
1,2,4-Trimethylbenzene	mg/kg	1100	5400	73	300	<0.00051	<0.00056	<0.00053
1,3,5-Trimethylbenzene	mg/kg	1100	5400	23	93	<0.00044	<0.00049	<0.00045
Vinyl chloride	mg/kg	0.93	290	0.2	0.2	<0.00049	<0.00054	<0.00051
Xylene (total)	mg/kg	1900	9100	1000	1000	<0.00047	<0.00052	<0.00048

TABLE 3
2022 SOIL ANALYTICAL RESULTS

Client Sample ID:	Units	PADEP Statewide Health Standards				SB-101	SB-102	SB-104
Lab Sample ID:		Residential	Non-Residential	Residential	Non-Residential	JD56679-1	JD56679-2	JD56679-4
Date Sampled:		Direct Contact		Soil to Groundwater	Soil to Groundwater	12/5/2022	12/5/2022	12/5/2022
Matrix:		0-15'	2-15'			Soil	Soil	Soil
SVOCs								
Acenaphthene	mg/kg	13000	190000	2600	4700	<0.012	<0.029	0.122
Acenaphthylene	mg/kg	13000	190000	2400	6600	<0.018 [c]	<0.043 [c]	0.0867
Anthracene	mg/kg	66000	190000	350	350	0.0361	<0.052	0.354
Benzo(a)anthracene	mg/kg	6.1	190000	26	340	0.0141 J	0.0287 J	1.02
Benzo(a)pyrene	mg/kg	4.2	190000	46	46	<0.016	<0.038	0.897
Benzo(b)fluoranthene	mg/kg	3.5	190000	25	170	<0.015	<0.037	1.12
Benzo(g,h,i)perylene	mg/kg	13000	190000	180	180	<0.017	<0.042	0.539
Benzo(k)fluoranthene	mg/kg	3.5	190000	200	610	<0.016	<0.039	0.353
Chrysene	mg/kg	35	190000	220	230	0.0124 J	0.0292 J	0.943
Dibenzo(a,h)anthracene	mg/kg	1	190000	23	270	<0.015	<0.037	0.169
Fluoranthene	mg/kg	8800	190000	3200	3200	0.0316 J	<0.038	2.24
Fluorene	mg/kg	8800	190000	2800	3800	<0.016	<0.039	0.119
Indeno(1,2,3-cd)pyrene	mg/kg	3.5	190000	1400	18000	<0.016	<0.039	0.66
Naphthalene	mg/kg	13	77	25	25	<0.0099	<0.024	0.0624 J
Phenanthrene	mg/kg	66000	190000	10000	10000	0.0884	<0.028	1.67
Pyrene	mg/kg	6600	190000	2200	2200	0.0891	0.0426 J	1.95
RCRA 8 Metals								
Arsenic	mg/kg	12	190000	29	29	4.7 [d]	3.1	9.9
Barium	mg/kg	44000	190000	8200	8200	117	137	110
Cadmium	mg/kg	110	190000	38	38	<1.1 [d]	<0.65	5.6
Chromium	mg/kg	-	-	-	-	28.9 [d]	18.8	26.6
Lead	mg/kg	500	190000	450	450	5.7 [d]	9.5	377
Mercury	mg/kg	35	190000	10	10	<0.033	<0.040	1.1
Selenium	mg/kg	1100	190000	26	26	<4.3 [d]	<2.6	<2.5
Silver	mg/kg	1100	190000	84	84	1.8 [d]	2.1 [d]	2
General Chemistry								
Solids, Percent	%	-	-	-	-	92.5	77.9	80.7

Footnotes:

[a] Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte.

[b] Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

[c] Associated CCV outside of control limits high, sample was ND.

[d] Elevated detection limit due to dilution required for high interfering element.

Values highlighted in orange indicate an exceedance of the most stringent PADEP SHS Medium Specfic Concentration

Values highlighted in blue indicate a detection above labortory detection limits

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TABLE 3
2022 SOIL ANALYTICAL RESULTS

5113-17, 5119-25, 5129-35 FRANKFORD AVE AND 5102 DARRAH ST
PHILADELPHIA PA

Client Sample ID:	Units	PADEP Statewide Health Standards				SB-105	SB-106
Lab Sample ID:		Residential	Non-Residential	Residential	Non-Residential	JD56679-5	JD56679-6
Date Sampled:		Direct Contact		Soil to Groundwater	Soil to Groundwater	12/5/2022	12/5/2022
Matrix:		0-15'	2-15'			Soil	Soil
		VOCs					
Acetone	mg/kg	10000	10000	310	880	<0.38 [c]	0.0286
Benzene	mg/kg	57	330	0.05	0.05	<0.042	<0.00071
Bromochloromethane	mg/kg	760	3600	0.9	0.9	<0.052	<0.00088
Bromodichloromethane	mg/kg	12	69	0.8	0.8	<0.040	<0.00067
Bromoform	mg/kg	400	2300	0.8	0.8	<0.13	<0.0021
Bromomethane	mg/kg	95	460	0.1	0.1	<0.071 [b]	<0.0012
2-Butanone (MEK)	mg/kg	10000	10000	40	40	<0.23	<0.0038
Carbon disulfide	mg/kg	10000	10000	15	15	<0.050	0.00098 J
Carbon tetrachloride	mg/kg	75	430	0.05	0.05	<0.057 [b]	<0.00097
Chlorobenzene	mg/kg	950	4500	1	1	<0.043	<0.00072
Chloroethane	mg/kg	10000	10000	210	880	<0.055	<0.00093
Chloroform	mg/kg	19	110	0.8	0.8	<0.048	<0.00081
Chloromethane	mg/kg	250	1400	0.3	0.3	<0.18	<0.0031
Cyclohexane	mg/kg	10000	10000	170	690	<0.061	<0.0010
1,2-Dibromo-3-chloropropane	mg/kg	0.029	0.42	0.002	0.002	<0.064	<0.0011
Dibromochloromethane	mg/kg	220	10000	0.8	0.8	<0.052	<0.00088
1,2-Dibromoethane	mg/kg	0.74	4.2	0.0005	0.0005	<0.039	<0.00066
1,2-Dichlorobenzene	mg/kg	3800	10000	6	6	<0.051	<0.00086
1,3-Dichlorobenzene	mg/kg	10000	10000	6.1	6.1	<0.046	<0.00078
1,4-Dichlorobenzene	mg/kg	40	230	1	1	<0.046	<0.00077
Dichlorodifluoromethane	mg/kg	1900	9100	10	10	<0.068	<0.0011 [b]
1,1-Dichloroethane	mg/kg	280	1600	0.31	1.6	<0.046	<0.00078
1,2-Dichloroethane	mg/kg	17	98	0.05	0.05	<0.044	<0.00074
1,1-Dichloroethene	mg/kg	280	1600	0.07	0.07	<0.061	<0.0010
cis-1,2-Dichloroethene	mg/kg	440	10000	0.7	0.7	<0.078	<0.0013
trans-1,2-Dichloroethene	mg/kg	4400	10000	1	1	<0.057	<0.00096
1,2-Dichloropropane	mg/kg	0.12	0.69	0.05	0.05	<0.044	<0.00074
cis-1,3-Dichloropropene	mg/kg	-	-	-	-	<0.044	<0.00074
trans-1,3-Dichloropropene	mg/kg	-	-	-	-	<0.042	<0.00072
Ethylbenzene	mg/kg	180	1000	7	7	<0.042	<0.00071
Freon 113	mg/kg	10000	10000	340	1000	<0.25 [b]	<0.0042
2-Hexanone	mg/kg	570	2700	0.63	2..6	<0.20	<0.0033
Isopropylbenzene	mg/kg	7600	10000	60	250	0.226	<0.0022
Methyl Acetate	mg/kg	10000	10000	350	970	0.193 J	<0.0022
Methylcyclohexane	mg/kg	-	-	-	-	1.24	<0.0014
Methyl Tert Butyl Ether	mg/kg	1700	9800	0.2	0.2	<0.044	<0.00074
4-Methyl-2-pentanone(MIBK)	mg/kg	10000	10000	28	78	<0.21	<0.0036
Methylene chloride	mg/kg	1300	10000	0.05	0.05	<0.24	<0.0041
Naphthalene	mg/kg	13	77	2.5	2.5	<0.23	<0.0039
Styrene	mg/kg	10000	10000	2.4	2.4	<0.037	<0.00063
Tert Butyl Alcohol	mg/kg	-	-	-	-	<0.42	<0.0072
1,1,2,2-Tetrachloroethane	mg/kg	7.6	44	0.0084	0.0026	<0.056	<0.00094
Tetrachloroethene	mg/kg	760	3600	0.05	0.05	<0.054	<0.00091
Toluene	mg/kg	10000	10000	10	10	<0.049	<0.00082
1,2,3-Trichlorobenzene	mg/kg	-	-	-	-	<0.23	<0.0039
1,2,4-Trichlorobenzene	mg/kg	39	190	2.7	2.7	<0.23	<0.0039
1,1,1-Trichloroethane	mg/kg	10000	10000	2	2	<0.045 [b]	<0.00076
1,1,2-Trichloroethane	mg/kg	3.8	18	0.05	0.05	<0.051	<0.00087
Trichloroethene	mg/kg	38	180	0.05	0.05	<0.071	<0.0012
Trichlorofluoromethane	mg/kg	10000	10000	20	20	<0.064	<0.0011
1,2,4-Trimethylbenzene	mg/kg	1100	5400	7.3	30	<0.046	<0.00078
1,3,5-Trimethylbenzene	mg/kg	1100	5400	2.3	9.3	<0.040	<0.00068
Vinyl chloride	mg/kg	0.93	290	0.02	0.02	<0.045	<0.00075
Xylene (total)	mg/kg	1900	9100	100	100	<0.043	<0.00072

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TABLE 3
2022 SOIL ANALYTICAL RESULTS

5113-17, 5119-25, 5129-35 FRANKFORD AVE AND 5102 DARRAH ST
PHILADELPHIA PA

Client Sample ID:	Units	PADEP Statewide Health Standards				SB-105	SB-106
Lab Sample ID:		Residential	Non-Residential	Residential	Non-Residential	JD56679-5	JD56679-6
Date Sampled:		Direct Contact		Soil to Groundwater*	Soil to Groundwater*	12/5/2022	12/5/2022
Matrix:		0-15'	2-15'			Soil	Soil
SVOCs							
Acenaphthene	mg/kg	13000	190000	260	470	<0.014	0.0632
Acenaphthylene	mg/kg	13000	190000	240	660	<0.021 [c]	<0.022 [c]
Anthracene	mg/kg	66000	190000	35	35	<0.025	<0.027
Benzo(a)anthracene	mg/kg	6.1	190000	2.6	34	<0.012	<0.012
Benzo(a)pyrene	mg/kg	4.2	190000	4.6	4.6	<0.019	<0.020
Benzo(b)fluoranthene	mg/kg	3.5	190000	2.5	17	<0.018	<0.019
Benzo(g,h,i)perylene	mg/kg	13000	190000	18	18	<0.020	<0.022
Benzo(k)fluoranthene	mg/kg	3.5	190000	20	61	<0.019	<0.021
Chrysene	mg/kg	35	190000	22	23	<0.013	<0.014
Dibenzo(a,h)anthracene	mg/kg	1	190000	2.3	2.7	<0.018	<0.019
Fluoranthene	mg/kg	8800	190000	320	320	<0.018	0.0305 J
Fluorene	mg/kg	8800	190000	280	380	<0.019	<0.020
Indeno(1,2,3-cd)pyrene	mg/kg	3.5	190000	140	180	<0.019	<0.021
Naphthalene	mg/kg	13	77	2.5	2.5	<0.012	0.181
Phenanthrene	mg/kg	66000	190000	1000	1000	<0.014	0.0553
Pyrene	mg/kg	6600	190000	220	220	<0.013	0.0452
RCRA 8 Metals							
Arsenic	mg/kg	12	190000	2.9	2.9	**7.1** [d]	**36.0** [d]
Barium	mg/kg	44000	190000	820	820	84.9	**1110**
Cadmium	mg/kg	110	190000	3.8	3.8	<1.3 [d]	**20.3** [d]
Chromium	mg/kg	-	-	-	-	30.4 [d]	54.4 [d]
Lead	mg/kg	500	190000	45	45	19.3 [d]	**105000**
Mercury	mg/kg	35	190000	1	1	0.043	0.16
Selenium	mg/kg	1100	190000	2.6	2.6	<5.2 [d]	<14 [d]
Silver	mg/kg	1100	190000	8.4	8.4	1.6 [d]	4.6 [d]
General Chemistry							
Solids, Percent	%	-	-	-	-	78.2	72.5

Footnotes:

[a] Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte.

[b] Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

[c] Associated CCV outside of control limits high, sample was ND.

[d] Elevated detection limit due to dilution required for high interfering element.

Values highlighted in orange indicate an exceedance of the most stringent PADEP SHS Medium Specfic Concentration

Values highlighted in blue indicate a detection above labortory detection limits

*SB-105 and SB-106 were collected from below the groundwater table, hence the soil to groundwater standards were compared to 1/10th the SHS

TABLE 4
GROUNDWATER ANALYTICAL RESULTS

Client Sample ID:	Units	PADEP Residential Groundwater MSCs	PADEP Non-Residential Groundwater MSCs	SB-103	SB-106
Lab Sample ID:				JD56679-3	JD56679-7
Date Sampled:				12/5/2022	12/5/2022
Matrix:				Ground Water	Ground Water
MS Volatiles (SW846 8260D)					
Acetone	ug/l	31000	88000	3.8 J [a]	<3.1 [b]
Benzene	ug/l	5	5	<0.43	<0.43
Bromochloromethane	ug/l	90	90	<0.48	<0.48
Bromodichloromethane	ug/l	80	80	<0.45	<0.45
Bromoform	ug/l	80	80	<0.63	<0.63
Bromomethane	ug/l	10	10	<1.6	<1.6
2-Butanone (MEK)	ug/l	4000	4000	<2.7	<2.7
Carbon disulfide	ug/l	1500	6200	<0.46	<0.46
Carbon tetrachloride	ug/l	5	5	<0.55	<0.55
Chlorobenzene	ug/l	100	100	<0.56	<0.56
Chloroethane	ug/l	21000	88000	<0.73	<0.73
Chloroform	ug/l	80	80	<0.50	<0.50
Chloromethane	ug/l	30	30	<0.76	<0.76
Cyclohexane	ug/l	13000	53000	<0.78	<0.78
1,2-Dibromo-3-chloropropane	ug/l	0.2	0.2	<0.53	<0.53
Dibromochloromethane	ug/l	80	80	<0.56	<0.56
1,2-Dibromoethane	ug/l	0.05	0.05	<0.48	<0.48
1,2-Dichlorobenzene	ug/l	600	600	<0.53	<0.53
1,3-Dichlorobenzene	ug/l	600	600	<0.54	<0.54
1,4-Dichlorobenzene	ug/l	75	75	<0.51	<0.51
Dichlorodifluoromethane	ug/l	1000	1000	<0.56	<0.56
1,1-Dichloroethane	ug/l	31	160	<0.57	<0.57
1,2-Dichloroethane	ug/l	5	5	<0.60	<0.60
1,1-Dichloroethene	ug/l	7	7	<0.59	<0.59
cis-1,2-Dichloroethene	ug/l	70	70	<0.51	<0.51
trans-1,2-Dichloroethene	ug/l	100	100	<0.54	<0.54
1,2-Dichloropropane	ug/l	5	5	<0.51	<0.51
cis-1,3-Dichloropropene	ug/l	-	-	<0.47	<0.47
trans-1,3-Dichloropropene	ug/l	-	-	<0.43	<0.43
Ethylbenzene	ug/l	700	700	<0.60	<0.60
Freon 113	ug/l	11000	44000	<0.58	<0.58
2-Hexanone	ug/l	63	260	<2.0	<2.0
Isopropylbenzene	ug/l	840	3500	<0.65	<0.65
Methyl Acetate	ug/l	35000	97000	<0.80	<0.80
Methylcyclohexane	ug/l	-	-	<0.60	<0.60
Methyl Tert Butyl Ether	ug/l	20	20	<0.51	<0.51
4-Methyl-2-pentanone(MIBK)	ug/l	2800	7800	<1.9	<1.9
Methylene chloride	ug/l	5	5	<1.0	<1.0
Naphthalene	ug/l	100	100	<2.5	<2.5
Styrene	ug/l	100	100	<0.49	<0.49
Tert Butyl Alcohol	ug/l	-	-	<5.8	<5.8
1,1,2,2-Tetrachloroethane	ug/l	0.84	4.3	<0.65	<0.65
Tetrachloroethene	ug/l	5	5	<0.56	<0.56
Toluene	ug/l	1000	1000	<0.49	<0.49
1,2,3-Trichlorobenzene	ug/l	-	-	<0.50	<0.50
1,2,4-Trichlorobenzene	ug/l	70	70	<0.50	<0.50
1,1,1-Trichloroethane	ug/l	200	200	<0.54	<0.54
1,1,2-Trichloroethane	ug/l	5	5	<0.53	<0.53
Trichloroethene	ug/l	5	5	<0.53	<0.53
Trichlorofluoromethane	ug/l	2000	2000	<0.40	<0.40
1,2,4-Trimethylbenzene	ug/l	130	530	<1.0	<1.0
1,3,5-Trimethylbenzene	ug/l	130	530	<1.0	<1.0
Vinyl chloride	ug/l	2	2	<0.52	<0.52
Xylene (total)	ug/l	10000	10000	<0.59	<0.59

Footnotes:

[a] Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected

[b] Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected

[c] Associated CCV outside of control limits high, sample was ND.

[d] Elevated detection limit due to dilution required for high interfering element.

Values highlighted in blue indicate a detection above labortory detection limits

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TABLE 5
SUB-SLAB SOIL GAS RESULTS

5113-17, 5119-25, 5129-35 FRANKFORD AVE
PHILADELPHIA PA

Client Sample ID:	Units	PADEP Sub-Slab Soil Gas SHS Vapor Intrusion Screening Values	SV-5	SV-4	SV-3	SV-1	SV-2
Lab Sample ID:			JD56787-1	JD56787-2	JD56787-3	JD56787-4	JD56787-5
Date Sampled:			12/5/2022	12/5/2022	12/5/2022	12/2/2022	12/2/2022
MS Volatiles (TO-15) - ug/m3							
Acetone (2-Propanone)	ug/m3	1200000	24	97.2	36.6	15	77.7
1,3-Butadiene	ug/m3	31	6.2	<0.75	<0.75	<0.75	1.3 J
Benzene	ug/m3	120	3.2	2.1 J	1.2 J	<0.80	1.9 J
Bromodichloromethane	ug/m3	25	<0.80	<0.80	<0.80	<0.80	<0.80
Bromoform	ug/m3	850	<2.9	<2.9	<2.9	<2.9	<2.9
Bromomethane	ug/m3	200	<1.1	<1.1	<1.1	<1.1	<1.1
Bromoethene	ug/m3	29	<1.0	<1.0	<1.0	<1.0	<1.0
Benzyl Chloride	ug/m3	19	<2.6	<2.6	<2.6	<2.6	<2.6
Carbon disulfide	ug/m3	28000	3.7	3.1	<0.56	1.9 J	2.2 J
Chlorobenzene	ug/m3	2000	<1.4	<1.4	<1.4	<1.4	<1.4
Chloroethane	ug/m3	400000	<0.71	<0.71	<0.71	<0.71	<0.71
Chloroform	ug/m3	41	<0.73	<0.73	<0.73	<0.73	<0.73
Chloromethane	ug/m3	520	<0.74	<0.74	<0.74	<0.74	<0.74
3-Chloropropene	ug/m3	40	<1.0	<1.0	<1.0	<1.0	<1.0
2-Chlorotoluene	ug/m3	-	<1.5	<1.5	<1.5	<1.5	<1.5
Carbon tetrachloride	ug/m3	160	<1.0	<1.0	<1.0	<1.0	<1.0
Cyclohexane	ug/m3	240000	2.3 J	4.8	<1.5	<1.5	<1.5
1,1-Dichloroethane	ug/m3	590	<0.93	<0.93	<0.93	<0.93	<0.93
1,1-Dichloroethylene	ug/m3	8000	<0.95	<0.95	<0.95	<0.95	<0.95
1,2-Dibromoethane (EDB)	ug/m3	1.6	<3.0	<3.0	<3.0	<3.0	<3.0
1,2-Dichloroethane	ug/m3	36	<1.1	<1.1	<1.1	<1.1	<1.1
1,2-Dichloropropane	ug/m3	94	<1.2	<1.2	<1.2	<1.2	<1.2
1,4-Dioxane	ug/m3	190	<1.7	<1.7	<1.7	<1.7	<1.7
Dichlorodifluoromethane	ug/m3	4000	2.8 J	2.6 J	2.4 J	2.8 J	3.0 J
Dibromochloromethane	ug/m3	35	<1.8	<1.8	<1.8	<1.8	<1.8
trans-1,2-Dichloroethylene	ug/m3	-	<1.1	<1.1	<1.1	<1.1	<1.1
cis-1,2-Dichloroethylene	ug/m3	-	<1.2	<1.2	<1.2	<1.2	<1.2
cis-1,3-Dichloropropene	ug/m3	-	<1.1	<1.1	<1.1	<1.1	<1.1
m-Dichlorobenzene	ug/m3	-	<0.96	<0.96	<0.96	<0.96	<0.96
o-Dichlorobenzene	ug/m3	8000	<3.7	<3.7	<3.7	<3.7	<3.7
p-Dichlorobenzene	ug/m3	85	<4.6	<4.6	<4.6	<4.6	<4.6
trans-1,3-Dichloropropene	ug/m3	-	<1.8	<1.8	<1.8	<1.8	<1.8
Ethanol	ug/m3	-	4.3	4.3	3.6 J	9.4	11
Ethylbenzene	ug/m3	370	<1.0	<1.0	<1.0	<1.0	<1.0
Ethyl Acetate	ug/m3	2800	<1.5	138	11	6.8	15
4-Ethyltoluene	ug/m3	-	<1.9	<1.9	<1.9	<1.9	<1.9
Freon 113	ug/m3	1200000	<0.92	<0.92	<0.92	<0.92	<0.92
Freon 114	ug/m3	-	<1.4	<1.4	<1.4	<1.4	<1.4
Heptane	ug/m3	-	4.1	12	1.6 J	<1.5	1.6 J
Hexachlorobutadiene	ug/m3	-	<2.7	<2.7	<2.7	<2.7	<2.7
Hexane	ug/m3	28000	20	23	16	1.9 J	6.7
2-Hexanone	ug/m3	1200	<2.4	<2.4	<2.4	<2.4	4.9
Isopropyl Alcohol	ug/m3	8000	1.8 J	1.6 J	1.4 J	6.9	7.6
Methylene chloride	ug/m3	24000	8.3	9	9	4.9	6.6
Methyl ethyl ketone	ug/m3	200000	5	13	6.8	3.8	12
Methyl Isobutyl Ketone	ug/m3	120000	<1.2	<1.2	<1.2	<1.2	2.7 J
Methyl Tert Butyl Ether	ug/m3	3600	<1.2	<1.2	<1.2	<1.2	<1.2
Methylmethacrylate	ug/m3	28000	<1.1	<1.1	<1.1	<1.1	<1.1
Propylene	ug/m3	-	39.9	21.1	23	1.3 J	5.7
Styrene	ug/m3	40000	<2.0	<2.0	<2.0	<2.0	<2.0
1,1,1-Trichloroethane	ug/m3	200000	<0.82	<0.82	<0.82	<0.82	<0.82
1,1,2,2-Tetrachloroethane	ug/m3	16	<1.3	<1.3	<1.3	<1.3	<1.3
1,1,2-Trichloroethane	ug/m3	8	<0.82	<0.82	<0.82	<0.82	<0.82
1,2,4-Trichlorobenzene	ug/m3	80	<3.6	<3.6	<3.6	<3.6	<3.6
1,2,4-Trimethylbenzene	ug/m3	2400	<1.7	<1.7	4.6	<1.7	3.1 J
1,3,5-Trimethylbenzene	ug/m3	2400	<1.6	<1.6	<1.6	<1.6	<1.6
2,2,4-Trimethylpentane	ug/m3	-	<1.8	<1.8	<1.8	<1.8	<1.8
Tertiary Butyl Alcohol	ug/m3	-	12	9.1	7	3.6	3.9
Tetrachloroethylene	ug/m3	1600	<0.38	<0.38	35	10	163
Tetrahydrofuran	ug/m3	480	<1.1	<1.1	<1.1	<1.1	<1.1
Toluene	ug/m3	200000	3.1	3.8	1.5 J	<0.87	4.9
Trichloroethylene	ug/m3	80	<0.41	1.6	<0.41	<0.41	<0.41
Trichlorofluoromethane	ug/m3	28000	<0.79	<0.79	<0.79	3.0 J	<0.79
Vinyl chloride	ug/m3	31	<0.72	<0.72	<0.72	<0.72	<0.72
Vinyl Acetate	ug/m3	8000	<1.6	<1.6	<1.6	<1.6	<1.6
m,p-Xylene	ug/m3	4000	<2.4	<2.4	<2.4	<2.4	3.4 J
o-Xylene	ug/m3	4000	<1.3	<1.3	<1.3	<1.3	2.0 J
Xylenes (total)	ug/m3	4000	<1.3	<1.3	<1.3	<1.3	5.2

Values Highlighted in blue indicate a detection above laboratory detection limits

Values Highlighted in orange indicate an exceedance of the residential PADEP Sub Slab Soil Gas Standard

SHS=Statewide Health Standard

RT Project #73539-04

TABLE 6
2023 SOIL ANALYTICAL RESULTS

5113-17 FRANKFORD AVE
5119-25 FRANKFORD AVE
PHILADELPHIA , PA

PADEP Statewide Health Standard for Soil	Residential	Analyte	Arsenic	Barium	Cadmium	Lead
		Direct Contact (0-2')	12	44000	110	500
		Soil to Groundwater*	29	8200	38	450
	Non-Residential	Direct Contact (0-2')	61	190000	1600	1000
		Direct Contact (0-15')	190000	190000	190000	190000
		Soil to Groundwater*	29	8200	38	450
LAB ID	**SAMPLE ID**	**DATE**	**RESULTS**			
460-277470-1	SB-1-(1.5-2)	03/30/2023 08:17	11.9	408	0.66	502
460-277470-2	SB-1-(11.5-12)	03/30/2023 08:24	27.4	148	< 0.69	481
460-277470-3	SB-1-(19-19.3)	03/30/2023 08:30	3.3	145	< 0.11	15.3
460-277470-4	SB-2-(1-1.5)	03/30/2023 08:45	12.0	420	0.42	314
460-277470-5	SB-2-(11.5-12)	03/30/2023 08:46	28.2	889	1.8	3880
460-277470-6	SB-2-(19-19.3)	03/30/2023 08:51	0.85	25.0	0.11	50.1
460-277470-7	SB-3-(1.5-2)	03/30/2023 09:05	19.8	419	0.34	1410
460-277470-8	SB-3-(11.5-12)	03/30/2023 09:03	10.2	835	0.59	712
460-277470-9	SB-3-(18.5-19)	03/30/2023 09:06	4.0	48.6	< 0.096	10.3
460-277470-10	SB-4-(1.5-2)	03/30/2023 09:20	14.9	505	3.0	1120
460-277470-11	SB-4-(11.5-12)	03/30/2023 09:22	13.3	1040	3.4	1010
460-277470-12	SB-4-(18.8-19.3)	03/30/2023 09:29	5.3	57.3	< 0.13	10.9
460-277470-13	SB-5-(1-1.5)	03/30/2023 09:44	19.6	377	1.8	1180
460-277470-14	SB-5-(11.5-12)	03/30/2023 09:45	68.1	2800	3.1	6140
460-277470-15	SB-5-(19.5-20)	03/30/2023 09:50	2.2	47.6	< 0.13	16.0
460-277470-16	SB-6-(1.5-2)	03/30/2023 10:05	3.6	55.5	0.58	107
460-277470-17	SB-6-(11.5-12)	03/30/2023 10:07	29.4	1180	2.0	1980
460-277470-18	SB-6-(18.5-19)	03/30/2023 10:08	3.1	151	0.20	27.1
460-277470-19	SB-7-(1-1.5)	03/30/2023 10:18	10.1	359	0.35	327
460-277470-20	SB-7-(11.5-12)	03/30/2023 10:20	22.3	430	0.68	3630
460-277470-21	SB-7-(19-19.6)	03/30/2023 10:22	4.2	116	0.17	18.2
460-277470-22	SB-8-(1.5-2)	03/30/2023 10:31	9.7	293	1.0	718
460-277470-23	SB-8-(11.5-12)	03/30/2023 10:33	6.6	293	0.87	588
460-277470-24	SB-8-(18.5-19)	03/30/2023 10:37	8.5	51.9	< 0.22	67.5
460-277470-25	SB-9-(1.5-2)	03/30/2023 10:47	4.1	66.3	1.1	101
460-277470-26	SB-9-(11.5-12)	03/30/2023 10:50	11.7	458	1.8	1440
460-277470-27	SB-9-(19.5-20)	03/30/2023 10:52	0.85	48.8	< 0.14	7.4
460-277470-28	SB-10-(1.5-2)	03/30/2023 11:13	3.6	NA	NA	NA
460-277470-29	SB-10-(14-14.5)	03/30/2023 11:18	2.9	NA	NA	NA
460-277470-30	SB-10-(19.3-19.8	03/30/2023 11:24	2.4	NA	NA	NA
460-277470-31	SB-11-(1.0-1.5)	03/30/2023 11:30	6.9	NA	NA	NA
460-277470-32	SB-11-(14-14.5)	03/30/2023 11:32	5.8	NA	NA	NA
460-277470-33	SB-11-(16.5-17)	03/30/2023 11:34	0.72	NA	NA	NA
460-277470-34	SB-12-(1.5-2)	03/30/2023 11:40	6.0	NA	NA	NA
460-277470-35	SB-12-(14-14.5)	03/30/2023 11:42	4.0	NA	NA	NA
460-277470-36	SB-12-(18.5-19)	03/30/2023 11:44	0.59	NA	NA	NA
460-277470-37	SB-13-(1-1.5)	03/30/2023 12:00	7.7	NA	NA	NA
460-277470-38	SB-13-(14-14.5)	03/30/2023 12:03	5.4	NA	NA	NA
460-277470-39	SB-13-(17.5-17.9	03/30/2023 12:06	0.70	NA	NA	NA

Notes:
Values reported in mg/kg
SHS = Statewide Health Standard
SHS for a used aquifer with TDS <2500 were utilized for comparison purposes
* The higher value between the PADEP Soil to Groundwater Generic Value and 100X GW MSC were utilized for comparison purpose
NA = Not Analyzed
Highlighted values = Detection over the lowest standard

TABLE 7
GROUNDWATER ELEVATIONS

Monitoring Well	Date	Top of Casing (TOC)	Ground Elevation	Screened Length	Total Well Depth (ft-bgs)	Depth to Groundwater (ft-bgs)	Groundwater Elevation (ft)
MW-1	4/17/2023	100.00	100.27	15	21.30	12.81	87.19
	5/4/2023					12.60	87.40
MW-2	4/17/2023	93.96	94.25	15	18.47	8.41	85.55
	5/4/2023					8.20	85.76
MW-3	4/17/2023	94.22	94.49	15	19.20	9.55	84.67
	5/4/2023					9.30	84.92
MW-4	4/17/2023	94.10	94.40	15	21.15	8.64	85.46
	5/4/2023					8.45	85.65
MW-5	4/17/2023	93.59	93.88	15	21.00	7.94	85.65
	5/4/2023					7.70	85.89

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TABLE 8
GROUNDWATER ANALYTICAL TABLE

5113-17 FRANKFORD AVE
5119-25 FRANKFORD AVE
PHILADELPHIA , PA

MONITORING WELL ID	MW-1		MW-2		MW-3		MW-4		MW-5		PADEP Used Aquifers	
LAB ID	460-278564-1	460-279729-1	460-278564-2	460-279729-2	460-278564-3	460-279729-3	460-278564-4	460-279729-4	460-278564-5	460-279729-5	Groundwater MSCs	
DATE	4/17/2023	5/4/2023	4/17/2023	5/4/2023	4/17/2023	5/4/2023	4/17/2023	5/4/2023	4/17/2023	5/4/2023	Residential	Non-Residential
VOCs												
1,1,1-Trichloroethane	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	200	200
1,1,2,2-Tetrachloroethane	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	0.84	4.3
1,1,2-Trichloro-1,2,2-trifluoroethane	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	11000	44000
1,1,2-Trichloroethane	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	5	5
1,1-Dichloroethane	< 0.26	< 0.26	< 0.26	< 0.26	< 0.26	< 0.26	< 0.26	< 0.26	< 0.26	< 0.26	31	160
1,1-Dichloroethene	< 0.26	< 0.26	< 0.26	< 0.26	< 0.26	< 0.26	< 0.26	< 0.26	< 0.26	< 0.26	7	7
1,2,4-Trichlorobenzene	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	70	70
1,2,4-Trimethylbenzene	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	130	530
1,2-Dibromo-3-Chloropropane	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	0.2	0.2
1,2-Dichlorobenzene	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	600	600
1,2-Dichloroethane	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	5	5
1,2-Dichloropropane	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	5	5
1,3,5-Trimethylbenzene	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	130	530
1,3-Dichlorobenzene	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	600	600
1,4-Dichlorobenzene	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	75	75
2-Butanone (MEK)	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	4000	4000
2-Hexanone	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	63	260
4-Methyl-2-pentanone (MIBK)	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	2800	7800
Acetone	< 4.4	< 4.4	< 4.4	< 4.4	< 4.4	< 4.4	< 4.4	< 4.4	< 4.4	< 4.4	31000	88000
Benzene	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	5	5
Bromoform	< 0.54	< 0.54	< 0.54	< 0.54	< 0.54	< 0.54	< 0.54	< 0.54	< 0.54	< 0.54	80	80
Bromomethane	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	< 0.55	10	10
Carbon disulfide	< 0.82	< 0.82	< 0.82	< 0.82	< 0.82	< 0.82	< 0.82	< 0.82	< 0.82	< 0.82	1500	6200
Carbon tetrachloride	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	5	5
Chlorobenzene	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	100	100
Chlorodibromomethane	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	80	80
Chloroethane	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	21000	88000
Chloroform	**5.9**	**5.5**	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	**1.4**	**1.6**	80	80
Chloromethane	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	30	30
cis-1,2-Dichloroethene	< 0.22	< 0.22	**0.51**	**0.84**	< 0.22	< 0.22	< 0.22	< 0.22	**1.4**	**1.6**	70	70
cis-1,3-Dichloropropene	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	NA	NA
Cyclohexane	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	13000	53000
Dichlorobromomethane	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	80	80
Dichlorodifluoromethane	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	1000	1000
Ethylbenzene	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	700	700
Ethylene Dibromide	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.05	0.05
Isopropylbenzene	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	840	3500
Methyl acetate	< 0.79	< 0.79	< 0.79	< 0.79	< 0.79	< 0.79	< 0.79	< 0.79	< 0.79	< 0.79	35000	97000
Methyl tert-butyl ether	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	**0.30**	**0.25**	< 0.22	< 0.22	20	20
Methylene Chloride	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	5	5
Naphthalene	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	100	100
Styrene	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42	100	100
Tetrachloroethene	**1.5**	**1.3**	**0.63**	**0.52**	< 0.25	< 0.25	< 0.25	< 0.25	**25**	**30**	5	5
Toluene	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	1000	1000
trans-1,2-Dichloroethene	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	100	100
trans-1,3-Dichloropropene	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	NA	NA
Trichloroethene	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	**1.9**	**2.1**	5	5
Trichlorofluoromethane	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	2000	2000
Vinyl chloride	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	0.41	2	2
Xylenes, Total	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	10000	10000

RT PROJECT #: 73539-04

TABLE 8
GROUNDWATER ANALYTICAL TABLE

5113-17 FRANKFORD AVE
5119-25 FRANKFORD AVE
PHILADELPHIA , PA

MONITORING WELL ID	MW-1		MW-2		MW-3		MW-4		MW-5		PADEP Used Aquifers	
LAB ID	460-278564-1	460-279729-1	460-278564-2	460-279729-2	460-278564-3	460-279729-3	460-278564-4	460-279729-4	460-278564-5	460-279729-5	Groundwater MSCs	
DATE	4/17/2023	5/4/2023	4/17/2023	5/4/2023	4/17/2023	5/4/2023	4/17/2023	5/4/2023	4/17/2023	5/4/2023	Residential	Non-Residential
METALS												
Arsenic	< 1.2	< 1.2	**1.3**	< 1.2	< 1.2	< 1.2	< 1.2	**2.2**	< 1.2	< 1.2	10	10
Barium	**258**	**246**	**156**	**201**	**212**	**248**	**550**	**749**	**173**	**157**	2000	2000
Cadmium	< 0.38	< 0.38	< 0.38	**0.54**	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	5	5
Lead	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	**1.6**	**2.0**	5	5

Notes:
All units are in mg/kg
Bold: indicates a detection above laboratory detection limts
Yellow: indicates an exceedance of the most stringent PADEP standard
<: indicates the analyte was detected below laboratory detection limits

Appendices

Appendix A
2015 Final Report and 2016 Environmental Covenant

BL Companies
Architecture
Engineering
Environmental
Land Surveying

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FINAL REPORT

DEMONSTRATION OF ATTAINMENT OF ACT 2 STATEWIDE HEALTH AND SITE-SPECIFIC STANDARDS

Frankford and Darrah Site
5129-5135 Frankford Avenue
City of Philadelphia
Philadelphia County, Pennsylvania
eFACTS No. 716772

Prepared For:

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June 26, 2014

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1.0 INTRODUCTION

1.1 Purpose

At the request of the Rite Aid Corporation, BL Companies has completed remedial investigation and attainment activities at the Frankford and Darrah Site, located at located at 5129-5135 Frankford Avenue in the City of Philadelphia, Philadelphia County, Pennsylvania (herein referred to as the "Site"). The purpose of the investigative and attainment activities was to further evaluate areas of concern related to the past use of the Site as a gasoline filling and service station and the former presence of a 3,000-gallon heating oil underground storage tank (UST). This Final Report was prepared in general accordance with the 25 PA Code 250 (*Land Recycling and Environmental Remediation Standards Act* [Act 2]) and includes a request to the Pennsylvania Department of Environmental Protection (PADEP) for a Release of Liability in accordance with demonstration of a combination of the Act 2 Statewide Health Standard (SHS) and the Site Specific Standard (SSS).

1.2 Act 2 Administrative Requirements and Public Involvement Plan

In accordance with Act 2 procedures, a Notice of Intent to Remediate (NIR) was submitted to the PADEP via certified mail on January 28, 2009; however, no certified receipt was returned. The NIR was reissued to the PADEP via FedEx on February 24, 2009 and was received on February 25, 2009. Public notification of the NIR was made through publication in *The Daily News* on February 2, 2009. The City of Philadelphia was also notified via certified mail on February 5, 2009. In correspondence dated March 4, 2009, the PADEP acknowledged receipt of the NIR. Copies of the NIR, the proof-of-publication, the City of Philadelphia notification letter, the certified mail receipts, and the PADEP acknowledgement letter are included in Appendix A.

The NIR stated that the property owner planned to use a combination of the SHS and SSS to demonstrate attainment of constituents of concern in soil and ground water at the Site. As stated in the newspaper publication and the correspondence to the City of Philadelphia, Act 2 provides that when a site is being remediated to a SSS, the municipality is afforded a 30-day comment period to comment on the SSS portion of the project. BL Companies received a letter from the City of Philadelphia dated March 1, 2009 requesting the development of a Public Involvement Plan (PIP) for the Site. According to the letter, this request was made in accordance with internal procedures first developed by the City in 2003, which require a PIP to be requested when a project is adjacent to residential properties. In accordance with this request and Act 2, BL Companies hosted a public meeting to discuss and receive comments on its investigation and proposed remediation of environmental conditions at the Site. The public meeting was held on March 3, 2010 at 6 p.m. at the Frankford Branch Library at 4634 Frankford Avenue. The public meeting was not attended by any interested parties. A letter dated March 11, 2010 to the City of Philadelphia documenting the completion of the PIP is included in Appendix A.

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In accordance with Act 2 procedures, a Final Report Summary (FRS) was submitted to the PADEP on June 26, 2014. Public notification of the submittal of this Final Report was made through publication in *The Daily News* on May 14, 2014. The City of Philadelphia was also notified via certified mail on May 15, 2014. Copies of the FRS, proof-of-publication, the City of Philadelphia notification letter and the certified mail receipt are included in Appendix A.

1.3 Site Description

The irregular-shaped Site consists of approximately 1.6 acres of land located at the southern corner of the intersection of Frankford Avenue and Pratt Street in the City of Philadelphia, Philadelphia County, Pennsylvania. Darrah Street borders the Site to the southeast (see Figures 1 and 2). The Site is currently occupied by a multi-tenant commercial, two-story structure (approximately 31,000 square feet) located in the western portion of the Site. The eastern portion of the Site consists of an asphalt parking lot. The primary tenant of the Site building is a Holiday Thriftway grocery store. The western corner of the Site structure along Frankford Avenue contains four smaller tenant spaces occupied by Jackson Hewitt Tax Service, Crown Fried Chicken, Beauty Depot, and Wireless Tech. The Site is currently owned by Rite Aid of Pennsylvania.

According to the City of Philadelphia's Online Zoning Map, the Site is divided into three zoning categories. The northwest portion of the Site (along Frankford Ave) is zoned Neighborhood Commercial-Mixed Use 3(CMX3), the central portion of the Site is zoned Neighborhood Commercial-Mixed Use 2 (CMX2), and the southeastern portion of the Site (along Darrah Street) is zoned Residential Multi-Family 1 (RM1). Currently, the Site building is situated on the commercially-zoned portions of the property, and the portion of the Site zoned residential is improved as a parking lot.

Surrounding properties consist of Frankford Avenue, followed by the Frankford SEPTA Transportation Center and parking lot to the north; Pratt Street, followed by commercial properties and Dunkin Donuts to the east; Darrah Street, followed by Triple A Laundromat and residential properties to the south; and a Wachovia bank, a parking lot, a dry cleaning facility (L&J Cleaners), and commercial/residential properties to the west.

1.4 Site Characterization and Remedial Investigation Activities

In June 2000, BL Companies conducted a Site Investigation to further evaluate the areas of concern identified in relation to the former use of the western portion of the Site as a gasoline filling station from at least 1939 through at least 1951, and the presence of a 3,000-gallon heating oil underground storage tank (UST) system that was located along the eastern side of the Site building. Seven soil borings were installed to depths ranging from 5 to 16 feet below ground surface (bgs) to determine if these areas of concern had adversely impacted the environmental quality of the Site. Three soil samples and three ground water samples were selected from the borings for analysis of the PADEP-specified target compounds for No. 2 heating oil.

In August 2000, BL Companies oversaw the removal of the 3,000-gallon heating oil UST. In addition, two test pits were excavated to determine the origin of additional suspect piping; however, no evidence of any additional USTs was encountered. Three soil samples were collected from the UST excavation and one soil sample was collected from the base of each test pit for analysis of the PADEP-specified target compounds for No. 2 heating oil.

The results of the chemical analyses performed on the soil samples collected from the soil borings, UST excavation , and test pits revealed concentrations of one or more target compounds above their respective laboratory detection limits; however, none of the concentrations exceeded their respective, most stringent Act 2 standards. In addition, only one target compound (cumene) was detected in one of the three ground water samples collected from the soil borings, at a level well below the most stringent Act 2 Medium-Specific Concentration (MSC).

In August 2000, three monitoring wells (MW-1, MW-2, and MW-3) were installed to further evaluate the ground water quality at the Site, and ground water samples were collected from the wells in September 2000 for analysis of the PADEP-specified target compounds for heating oil and leaded/unleaded gasoline. The results of the chemical analyses revealed that, with the exception of methyl tert-butyl ether (MTBE) in MW-1, none of the target compounds were detected at concentrations above laboratory detection limits. The MTBE concentration in MW-1 (1 microgram per liter [µg/L]) was well below the most stringent Act 2 SHS of 20 µg/L.

In July 2006, seven soil borings were installed at the Site (by others) to depths ranging from 14 to 17 bgs to further evaluate the previous areas of concern, as well as the presence of fill material and hydrocarbon odors encountered during a previous geotechnical investigation completed by others. Eight soil samples and three ground water samples were selected from the borings for analysis of volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs). The results of the chemical analyses indicated that several of the SVOCs were detected above their respective Residential Act 2 MSCs in the soil samples collected; however, none of the concentrations exceeded their respective applicable Non-Residential Direct Contact and/or Soil-to-Ground Water MSC. None of the analyzed VOCs were detected in the eight soil samples collected from the seven soil boring locations. However, two of the target VOCs (tetrachloroethene [PCE] and vinyl chloride), as well as several of the target SVOCs in the ground water samples were detected above their respective Residential Act 2 MSCs.

In August 2008, MW-4 was installed to further evaluate ground water quality along the downgradient property boundary, and MW-2A was installed to replace MW-2 along the southwestern property boundary.

On-site investigation activities determined that the Site is underlain by fill and fine-grained, low permeability soils to depths of at least 31 feet bgs. The fill material reached a maximum thickness of 16 feet at the locations of the soil borings and monitoring wells. Ground water was encountered at approximately 10 to 12 feet bgs during the installation

of the on-site monitoring wells. Based upon the ground water elevation data collected from the monitoring well network, the ground water flow direction beneath the Site is generally to the southeast towards the Delaware River, located approximately 8,000 feet away.

In September and December 2008, BL Companies completed the first two rounds of a quarterly ground water sampling program, and ground water samples collected from the four monitoring wells were analyzed for VOCs, polynuclear aromatic hydrocarbons (PAHs), and dissolved lead. The results of the chemical analyses revealed that all eight ground water samples contained between 2 and 12 target compounds at concentrations above laboratory detection limits. The ground water samples collected from MW-1 contained benzo(a)pyrene and/or benzo(g,h,i)perylene, and/or benzo(b)flouranthene above their respective, most stringent Act 2 MSCs. The ground water samples collected from MW-3 contained benzo(g,h,i)perylene and/or PCE above the most stringent Act 2 standard, and the ground water samples collected from MW-4 contained benzo(a)pyrene and/or PCE above their respective, most stringent Act 2 MSCs. The ground water sample collected from MW-2A in September 2008 contained a concentration of PCE above the most stringent Act 2 MSC. The ground water sample collected from MW-2A in December 2008 contained concentrations of benzo(a)anthracene, benzo(a)pyrene, benzo(b)flouranthene, benzo(g,h,i)perylene, indeno(1,2,3-cd)pyrene, PCE, and vinyl chloride above their respective, most stringent Act 2 MSCs.

An evaluation of the potential for vapor intrusion into the current/future on-site and off-site buildings from soil and ground water was completed in accordance with Section IV.A.4 of the Technical Guidance Manual (TGM), and additional evaluation was performed using the Johnson & Ettinger (J&E) screening models for soil and ground water. The assessment revealed that vapor intrusion is an incomplete exposure pathway for soil or ground water; thus, no additional indoor air quality (IAQ) assessment (e.g., soil-gas and/or indoor air sampling) was deemed necessary.

BL Companies' March 18, 2009 Remedial Investigation Report (RIR), which was approved by the PADEP via a letter dated June 1, 2009, concluded the following:

- The results of the chemical analyses revealed that soil and ground water at the Site are not in compliance with applicable Act 2 standards and it appears that releases from on-site and/or off-site sources, as well as the presence of non-native fill material, have adversely impacted the environmental media underlying the Site. However, with the exception of the fill material, no potential sources of contamination (i.e., former UST and/or the former gasoline service station) are known to still be present at the Site. Based on the conclusions of the environmental sensitivity analysis and the current/proposed use of engineering/institutional controls, it appears that the constituents of concern in soil and ground water will not present a risk now or in the future; thus, all potential soil and ground water exposure pathways have been eliminated.

- Land usage immediately downgradient of the Site consists of the intersection of Darrah Street and Pratt Street, a laundromat, and Dunkin Donuts. The Site and the properties located immediately downgradient of the Site have features such as non-residential buildings and impervious surfaces, which would eliminate specific exposure pathways including direct contact with soil and/or ground water and inhalation. In addition, the Site and all residential/commercial properties located within the City limits are connected and will continue to be connected to the municipal water system provided by the Philadelphia Water Department (PWD), and no potential downgradient receptors were identified within one mile of the Site. Based on the anticipated use of an Environmental Covenant to achieve the SSS, future development at the Site will be restricted to non-residential usage, and ground water usage at the Site will be prohibited. In general, the current engineering controls in place at the Site and the surrounding properties preclude any risk to human health or ecological receptors via pathway elimination. Moreover, these controls will continue to preclude any such off-site impact in the future. Based on the conclusions of the environmental sensitivity analysis, the constituents of concern currently identified in soil and ground water at the Site will not present a risk now or in the future.

BL Companies' March 18, 2009 RIR, which was approved by the PADEP via a letter dated June 1, 2009, recommended the following:

- The completion of a quarterly ground water monitoring program for a period of at least one year (four quarterly sampling events) to document compliance with the Act 2 standards for ground water. As noted previously, the first two quarterly sampling events (September and December 2008) had already been completed prior to the submittal of the March 2009 RIR.

- The re-evaluation of the fate and transport analysis following the completion of the quarterly sampling program.

- The preparation and submittal of an Act 2 Final Report to the PADEP requesting a Release of Liability under a combination of the SHS and SSS.

The results of the quarterly ground water monitoring program and re-evaluation of the fate and transport analysis are discussed in Sections 3.0 and 4.0 below.

2.0 HYDROGEOLOGICAL SETTING

Geologically, the Site is located in the Piedmont Upland Section of the Piedmont Physiographic Province (Sevon, 2000). This province is characterized by broad, moderately-dissected valleys separated by broad, rounded to flat-topped hills and shallow valleys of low to moderate relief. The underlying rock is dominated by schist, gneiss, and quartzite.

According to the Pennsylvania Topographic and Geologic Survey's *Atlas of Preliminary Geologic Quadrangle Maps of Pennsylvania* (1981), the Site is underlain by mafic gneiss, hornblende bearing. This unit is a dark color, medium to fine grained, hornblende-bearing mafic gneiss. Banding is poorly developed, and fractures are moderately to poorly formed, moderately abundant, widely to moderately spaced, open, and steeply dipping to vertical. The unit is highly resistant to weathering and is slightly weathered to a shallow depth, resulting in large rectangular blocks. Due to the highly resistant weathering properties of this unit, the mantle cover is thin. Surface drainage is good, and the unit exhibits extremely low primary porosity and permeability (Geyer and Wilshusen, 1982).

According to the *Soil Survey of Bucks and Philadelphia Counties, Pennsylvania*, the Site is located in an area comprised of one soil type, known as Urban Land, with estimated slopes between 0 and 1 percent. Although specific physical and chemical properties and interpretations for an area of Urban Land cannot be listed, the Urban Land complex indicates that the predominant soil type has been disturbed and covered with an impervious layer, generally consisting of buildings, sidewalks, streets, and other structures (USDA, 1975).

On-site investigation activities determined that the Site is underlain by fill and fine-grained, low permeability soils to depths of at least 31 feet bgs. The fill material reached a maximum thickness of 16 feet at the locations of the soil borings and monitoring wells. The fill material was composed of gravel with pieces of brick and wood within a matrix of blackish-brown sand, which was underlain by mostly silty-sand mixtures. Auger refusal, assumed to be bedrock, was encountered during the installation of MW-2A at a depth of approximately 24 feet bgs. Ground water was encountered at approximately 10 to 12 feet bgs during the installation of the on-site monitoring wells.

Topographically, the Site is relatively flat, having an approximate average elevation of 70 feet above mean sea level. Ground water elevation data collected from the on-site monitoring wells revealed that ground water flow beneath the Site is to the southeast towards the Delaware River, located approximately 8,000 feet away. Therefore, hydraulically upgradient facilities lie to the northwest.

3.0 ATTAINMENT MONITORING ACTIVITIES

3.1 Quarterly Ground Water Sampling

A quarterly ground water monitoring program was initiated in September 2008 and continued through July 2011 (12 consecutive quarters). Details of the first two quarterly ground water sampling events were discussed in BL Companies' March 2009 RIR.

BL Companies returned to the Site on March 6, 2009, June 11, 2009, September 10, 2009, December 1, 2009, March 2, 2010, June 30, 2010, October 14, 2010, January 5, 2011, April 12, 2011, and July 11, 2011 to collect ground water samples from the four monitoring wells. During these sampling events, the static water levels in MW-1 through MW-4 were measured to the nearest ±0.01-foot immediately prior to well purging and sampling (see Table 2). Plots of the ground water potentiometric surface during each event were prepared from the relative ground water elevation data (see Figures 3 through 12). Based on the potentiometric surface data, the ground water flow direction beneath the Site is generally to the southeast, which is consistent with previous determinations.

A minimum of three well volumes of water was purged from MW-1 through MW-4 using new polyethylene hose and a pre-cleaned submersible pump. The purge water was passed through an activated carbon filter prior to surface discharge. The purge water from MW-1, MW-3, and MW-4 did not contain any indications of impairment during purging or sampling activities; however, slight weathered petroleum odors were detected in the purge water from MW-2A. After purging each well, ground water samples were collected with single-use polyethylene bailers and placed into pre-cleaned glass sample containers fitted with Teflon-lined lids, preserved with the appropriate reagent, and stored at 4 degrees Centigrade or less until delivery to American Westech, Inc./Microbac Laboratories, Inc. for analysis. The ground water samples collected from the monitoring well network were analyzed for a broad list of VOCs, as well as PAHs and dissolved lead.

3.2 Results of Chemical Analyses

The results of the laboratory analyses performed on the ground water samples collected during this investigation are summarized in Table 3. Copies of the laboratory analytical reports and chain of custody documentation are included as Appendix B. The results were compared to the applicable Act 2 regulatory standards.

The results of the analyses performed on the samples collected from all four monitoring wells between September 2008 and July 2011 revealed the following:

MW-1

- No VOCs detected above their respective, Residential Act 2 MSCs;
- Between two and seven of the PAHs detected above their respective, Residential Act 2 MSCs during 11 of the 12 quarterly events.
- Dissolved lead not detected during any of the quarterly events.

MW-2A

- One or two VOCs (PCE and/or vinyl chloride) detected above their respective, Residential Act 2 MSCs during all 12 quarterly events.
- Between one and five PAHs detected above their respective, Residential Act 2 MSCs during the December 2008, March 2009, and April 2011 quarterly events.
- Dissolved lead not detected during any of the quarterly events.

MW-3

- One VOC (PCE) detected above the Residential Act 2 MSC during all 12 quarterly events.
- Between one and three PAHs detected above their respective, Residential Act 2 MSCs during the December 2008, March 2009, and June 2009 quarterly events.
- Dissolved lead not detected during any of the quarterly events.

MW-4

- One VOC (PCE) detected above the Residential Act 2 MSC during the first two quarterly events.
- Between one and seven PAHs detected above their respective, Residential Act 2 MSCs during the December 2008, March 2009, June 2009, and March 2010 quarterly events.
- Dissolved lead detected above the Residential Act 2 MSC during seven of the 12 quarterly events (March 2009, June 2009, September 2009, December 2009, October 2010, January 2011, and April 2011).

In general, the constituents of concern have exhibited stable or decreasing trends over the period of quarterly sampling, most notably PCE, TCE, and dissolved lead. Concentrations of PAHs have shown some minor fluctuations over time, but have decreased from detectable and/or above-standard concentrations through late 2009/early 2010 to non-detect in wells MW-2A, MW-3, and MW-4. PAH concentrations in MW-1 have remained relatively stable over the period of attainment monitoring. The trends exhibited by the quarterly ground water data are indicative of natural attenuation.

3.3 Demonstration of Attainment

3.3.1 Ground Water Attainment Demonstration

In accordance with 25 PA Code §250.707 (b)(2)(i), application of the 75%/10X statistical test for attainment demonstration was applied to the analytical results of the ground water samples collected during the period of attainment monitoring. This statistical test method states that 75 percent of all samples collected within each compliance monitoring well over time shall be equal to or less than the SHS or the limit related to Practical Quantitation Limit (PQLs) with no individual sample exceeding either of the following:

- 10 times the SHS on the property; and
- two times the SHS beyond the property boundary.

The statistical test was applied to the results in all four monitoring wells, regardless of whether they would be considered as "Point of Compliance" wells. Based on the analytical results of the ground water samples collected during the period of attainment monitoring (September 2008 through July 2011), attainment of the Residential Act 2 SHS for the following 21 compounds in ground water has been successfully demonstrated by the 75%/10X statistical method in accordance with Act 2:

Chemical Name	CAS Number
Benzene	71-43-2
Toluene	98-82-8
Ethylbenzene	100-41-4
Xylenes, Total	1330-20-7
Isopropylbenzene (Cumene)	98-82-8
Methyl tert-butyl ether (MTBE)	1634-04-4
Naphthalene	91-20-3
1,2-Dibromoethane (EDB)	106-93-4
1,2-Dichloroethane (EDC)	107-06-2
Benzo(a)anthracene	56-55-3
Chrysene	218-01-9
Dibenzo(a,h)anthracene	53-70-3
Fluoranthene	206-44-0
Fluorene	86-73-7
Phenanthrene	85-01-8
Pyrene	129-00-0
Chloroform	67-66-3
Cis-1,2-Dichloroethylene (cis-1,2,-DCE)	156-59-2
Trans-1,2-Dichloroethylene (trans-1,2,-DCE)	156-60-5
Trichloroethylene (TCE)	79-01-6
Vinyl chloride	75-01-4

Therefore, a demonstration of attainment of SHS has been made for these constituents.

The concentrations of the following seven constituents of concern detected during the period of attainment monitoring do not satisfy the 75%/10X criteria:

Chemical Name	CAS Number
Tetrachloroethylene (PCE)	127-18-4
Benzo(a)pyrene	50-32-8
Benzo(b)fluoranthene	205-99-2
Benzo(k)fluoranthene	207-08-9
Benzo(g,h,i)perylene	191-24-2
Indeno(1,2,3-c,d)pyrene	193-39-5
Lead, Dissolved	7439-92-1

These seven constituents were evaluated under the SSS as specified in 25 PA Code §250.404 (Pathway Identification and Elimination). Ground water conditions at/in the area of the Site, as well as the identification and elimination of all pathways for exposure (see Sections 4.0 and 5.0 of this report), demonstrate attainment of the SSS for these compounds in ground water in accordance with Act 2.

3.3.2 Soil Attainment Demonstration

As discussed in detail in BL Companies' March 2009 RIR, seven soil borings were installed at the Site in June 2000 to determine if the former use of the western portion of the Site as a gasoline filling station and the presence of a 3,000-gallon heating oil UST system along the eastern side of the Site building had adversely impacted the Site. Three soil samples were selected from the borings for analysis of the PADEP-specified target compounds for No. 2 heating oil. In August 2000, the above-mentioned heating oil UST system was removed. In addition, two test pits were excavated to determine the origin of additional suspect piping; however, no evidence of any additional USTs was encountered. Three soil samples were collected from the UST excavation and one soil sample was collected from the base of each test pit for analysis of the PADEP-specified target compounds for No. 2 heating oil. The results of the chemical analyses performed on the soil samples revealed that all eight of the soil samples collected from the soil borings, UST excavation, and test pits contained concentrations of one or more target compounds above their respective laboratory detection limits; however, none of the concentrations exceeded their respective, most stringent Act 2 MSCs.

As discussed in detail in BL Companies' March 2009 RIR, seven soil borings were installed in July 2006 to further evaluate the previous areas of concern, as well as the presence of fill material and hydrocarbon odors encountered during a previous geotechnical investigation. Eight soil samples were selected from the borings for analysis of VOCs and SVOCs. The results of the chemical analyses indicated that four of the SVOCs were detected above their respective, Residential Act 2 MSCs in the soil samples collected; however, none of the concentrations exceeded their respective applicable Non-Residential Direct Contact and/or Soil-to-Ground Water criteria. In addition, none of the analyzed VOCs were detected in the eight soil samples collected from the seven soil boring locations.

Based on the analytical results of soil samples collected at the Site (see Table 1), attainment of the Residential Act 2 MSCs for the following 18 compounds have been successfully demonstrated in accordance with Act 2:

Chemical Name	CAS Number
Benzene	71-43-2
Toluene	98-82-8
Ethylbenzene	100-41-4
Isopropylbenzene (Cumene)	98-82-8
Naphthalene	91-20-3

Acenaphthene	83-32-9
Anthracene	120-12-7
Benzo(k)fluoranthene	207-08-9
Benzo(g,h,i)perylene	191-24-2
Indeno(1,2,3-c,d)pyrene	193-39-5
Chrysene	218-01-9
Fluoranthene	206-44-0
Fluorene	86-73-7
Phenanthrene	85-01-8
Pyrene	129-00-0
Carbazole	86-74-8
Dibenzofuran	132-64-9
2-Methylnaphthalene	91-57-6

In addition, attainment of the Non-Residential Act 2 MSCs for the following four compounds has been successfully demonstrated in accordance with Act 2:

Chemical Name	**CAS Number**
Benzo(a)anthracene	56-55-3
Benzo(a)pyrene	50-32-8
Benzo(b)fluoranthene	205-99-2
Dibenzo(a,h)anthracene	53-70-3

4.0 ENVIRONMENTAL SENSITIVITY ANALYSIS

4.1 Aquifer Testing

Rising head aquifer (slug) tests were performed at MW-1 through MW-4 to obtain data for estimating hydraulic conductivity (K), a relative measure of the capacity of the ground water-bearing formation to transmit water. This information was used to evaluate ground water flow velocity, aiding in the determination of the potential fate and movement of dissolved-phase target compounds through the aquifer. It should be noted that slug tests were performed in November 2008, the results of which were included in the March 2009 RIR. However, the calculated K values based on those slug tests were considered unrealistically high for the geologic materials beneath the Site, and thus, new slug tests were performed on the monitoring well network in May 2012.

The 2012 slug tests were performed by placing a cylinder (slug) into the well and displacing a known volume of water. Following water table equilibration, the slug was removed creating artificial drawdown within the well. An electric pressure-transducer, with data logging capability, placed in the test well measured water table rebound (rising head) in a logarithmic sequence after the slug was removed. Data obtained from the rising head tests were used to estimate K using the Bouwer-Rice analysis method. Aquifer test data and the hydraulic conductivity calculations are included as Appendix C. The average calculated K value for the four monitoring wells was 2.58×10^{-3} feet per minute (ft/min), with values ranging from 2.87×10^{-4} ft/min (MW-4) to 4.87×10^{-3} ft/min (MW-2A). The resulting K values are within the range expected for an unconsolidated mixture of sand, silt, and clay (Maidment, 1993).

4.2 Conceptual Site Model

Ground water at the Site exists under water table conditions in an unconfined aquifer system comprised of unconsolidated sand, silt, and clay, and non-native fill materials. Based on monitoring well gauging data collected during each sampling event, the ground water flow direction has been calculated to be to the southeast with an average gradient of 0.0043 ft/ft. This average hydraulic gradient value was derived from the average ground water elevation difference between MW-2A and MW-1 and MW-3 and MW-4 during the first two quarterly sampling events, divided by the approximate distances between the wells (110 and 80 feet, respectively). Aquifer test data has been used to calculate an average hydraulic conductivity for the Site aquifer of 3.72 feet/day, which is consistent with subsurface materials encountered at the Site.

As noted above, the ground water flow direction is to the southeast, at an average hydraulic gradient of 0.0043 ft/ft. This information was used to calculate the natural groundwater velocity (V_N) at the Site. V_N is defined as:

$$V_N = Ki / n_\theta$$

where:

K = hydraulic conductivity (ft/day),

i = hydraulic gradient (ft/ft), and
n_θ = effective porosity of geologic material.

Although the Site subsurface consists of a heterogeneous mix of fill and unconsolidated sand, silts, and clays, the water-bearing zone consists primarily of sand and silty sand; therefore, the published estimated effective porosity (Maidment, 1993) for dirty sand with plastic fines (Unified Soil Classification System – SC), 19.7 percent, was used in the equation. Thus,

V_N = (3.72 ft/day) x (0.0043 ft/ft) / 0.197
V_N = 0.081 ft/day

Based on these values, ground water at the Site could potentially migrate approximately 30 feet downgradient over a period of one year. However, due to partitioning effects, primarily sorption, retardation, and biodegradation, dissolved-phase constituents generally migrate at a speed less than that of the bulk ground water movement. The advective transport of dissolved-phase constituents is dependent upon the amount these constituents are retarded (i.e., sorption of dissolved-phase constituents by soil/aquifer matrix). The advective transport of dissolved-phase constituents is generally less than the natural ground water velocity (average linear velocity).

4.3 Revised Fate and Transport Analysis

As part of the remedial investigation, a fate and transport analysis was completed utilizing the Quick Domenico (QD) model spreadsheet published by the PADEP, as well as the USEPA's BIOCHLOR model. The QD model was used to predict how far downgradient the SVOCs detected in ground water had the potential to migrate from the Site. QD is primarily intended for use in unconsolidated (soil) aquifers with reasonably uniform physical and hydrogeological properties; therefore, BL Companies believes that the Site aquifer (unconsolidated sand with fines and fill material) behaves as a relatively uniform porous medium. It should also be noted that the QD model was developed for fate and transport of dissolved-phase constituents through soils and assumes a "continuous source"; thus, for this Site where the source of the SVOC impact is attributed to the non-native fill material encountered between approximately 0 and 16 feet bgs across the Site, the results obtained utilizing the QD model to predict the downgradient SVOC concentrations are expected to be representative of actual Site conditions.

The maximum detected concentrations of the eight SVOCs (benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(g,h,i)perylene, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene, and chrysene) detected above their respective, most stringent Act 2 MSCs in the monitoring wells were applied to the QD model to predict the concentrations at various distances downgradient from MW-1, where all of the maximum concentrations were detected. By using the maximum concentrations, the model produces the most conservative (i.e. worst-case) results. The remaining input parameters for this model included: hydraulic gradient – 0.0043;

porosity (decimal fraction) – 0.25 (PADEP default value); soil bulk density – 1.8 g/cm^3 (PADEP default value); KOC – chemical-specific values obtained from Table 5A of 25 PA Code 250; and fractional organic carbon – 0.005 (PADEP default value). Chemical-specific degradation coefficients (lambda values) were also obtained from Table 5A of 25 PA Code 250. Using the average K value calculated from the slug tests (3.72 feet/day), MW-1 as the "source area", and the highest concentrations of the eight SVOCs detected in MW-1, the projected results of the QD analysis indicate that the dissolved-phase SVOCs would migrate less than 100 feet over the modeled period of 30 years. Furthermore, the non-native fill material encountered beneath the Site is likely to be present beneath other properties in the area of the Site, meaning that downgradient SVOC concentrations will be influenced by off-site conditions as well. Copies of the QD model output data are provided as Appendix D.

BL Companies utilized the USEPA's BIOCHLOR model to determine if the dissolved-phase chlorinated solvent compounds detected in ground water at the Site would adversely impact the nearest downgradient receptor (Delaware River), while taking into account natural fate and transport/attenuation processes (i.e. retardation, biological degradation, dispersion, dilution, diffusion, and/or reductive dechlorination). Copies of the BIOCHLOR model output data are provided as Appendix D.

Data used by BL Companies in the BIOCHLOR model included the following:

- *Seepage Velocity* – 97.9 ft/year (calculated by BIOCHLOR model based on the K, i, and n values below).
- *Hydraulic Conductivity (K)* – 3.72 feet/day (1.3 x 10^{-3} cm/sec).
- *Hydraulic Gradient (i)* – 0.0043 foot/foot.
- *Effective Porosity (n)* – 0.25 (BIOCHLOR default value).
- *Longitudinal Dispersivity (A_x)* – 800 feet; calculated based on $A_x = X/10$.
- *Transverse Dispersivity (A_y)* – 80 feet; calculated based on $A_y = A_x/10$.
- *Vertical Dispersivity (A_z)* – 0.0001 (BIOCHLOR default value).
- *Soil Bulk Density* – 1.8 kg/L (BIOCHLOR default value).
- *Fractional Organic Carbon* – 0.005 (PADEP default value).
- *First-Order Decay Coefficients (lambda)* – 0.07 (PCE), 0.05 (TCE), 0.18 (DCE), 0.12 (vinyl chloride) (BIOCHLOR default values).
- *Simulation Time* – 30 years (Act 2 default value).
- *Modeled Area Width* – 500 feet.
- *Modeled Area Length* – 8,000 feet (approximate distance from Site to Delaware River).
- *Source Thickness in Saturated Zone* – 20 feet.
- *Source Width* – 20 feet.
- *"Source" Concentrations* – Maximum concentrations detected in upgradient MW-3 or MW-2A (PCE - 63.5 µg/L, TCE - 4.86 µg/L, DCE – 17.8 µg/L, vinyl chloride – 3.45 µg/L, and ethene - 1 µg/L [assumed].

Results of the BIOCHLOR analysis indicate that PCE and its reductive daughter compounds attenuate to non-detectable concentrations at distances of less than 500 feet downgradient of the Site over the modeled period of 30 years. Specifically, PCE, TCE,

DCE, and vinyl chloride, are predicted to degrade to below-standard concentrations at distances of approximately 70 feet or less. Furthermore, the "worst-case" model output which assumes no biodegradation indicates that the chlorinated solvent compounds will attenuate to non-detectable concentrations at distances of less than 500 feet downgradient over the 30-year modeling period. It should be noted that ground water data collected during the period of attainment monitoring did not indicate the migration of VOCs to the two most downgradient wells at concentrations in excess of used aquifer MSCs.

4.4 Ecological Risk Assessment

In accordance with Act 2, an ecological risk assessment was conducted in accordance with Section IV.H of the Land Recycling Program Technical Guidance Manual (TGM).

The Site is currently a commercial property located within a highly developed area comprised of commercial and residential land uses. The entire eastern portion of the Site is currently capped with asphalt/concrete and the entire western portion is occupied by the Site structure and concrete sidewalks. Adjacent properties also consist primarily of commercial land uses and impervious surfaces. In accordance with the proposed Environmental Covenant that will be required to demonstrate attainment of the SSS, the Site will continue to be covered by features such as paved parking lots, driveways, and sidewalks and/or non-residential building(s) that would eliminate specific exposure pathways to any impacted media.

No individuals of threatened or endangered species were observed on the Site or the surrounding properties. In addition, BL Companies conducted a Pennsylvania Natural Diversity Inventory (PNDI) search to evaluate the potential for any known impacts on special concern species or resources within the project area. Based on the results of the PNDI search, no further coordination was required by the Pennsylvania Game Commission, the Pennsylvania Fish and Boat Commission, or the Pennsylvania Department of Conservation and Natural Resources with regard to special concern species, natural communities, or outstanding geologic features. In addition, no impacts to federally listed, proposed, or candidate species were identified; therefore, no further consultation under the Endangered Species Act is required with the United States Fish and Wildlife Service. A copy of the PNDI report is provided as Appendix E.

No exceptional wetlands have been identified or mapped on the Site or surrounding properties.

Based on the information presented in this report, no additional ecological evaluation is warranted.

4.5 Sensitive Receptor Survey

A sensitive receptor survey of the Site and surrounding area was conducted by BL Companies to identify potential pathways for exposure to the target compounds

detected in soil and ground water identified at the Site. The receptor survey focused primarily on the Site and the downgradient properties. The survey included a desktop well search using Pennsylvania Ground Water Information Software (PAGWIS) and FirstSearch, a local well search conducted by BL Companies personnel to identify any wells within proximity of the Site, and identification of engineering controls that will eliminate potential exposure pathways.

As noted previously, the Site is situated in an area of commercial and residential land usage, and land usage immediately downgradient of the Site consists of the intersection of Pratt Street and Darrah Street, a laundromat, and Dunkin Donuts, followed by residential properties. Cross-gradient properties include residential row homes, vacant lots, and commercial properties. The Site and the properties located immediately downgradient of the Site have features, such as commercial buildings and paved parking lots/driveways, which would eliminate specific exposure pathways including direct contact with soil and/or ground water and inhalation. In addition, the Site and all residential/commercial properties located within the City limits are connected and will continue to be connected to the municipal water system provided by the Philadelphia Water Department (PWD).

A desktop well search was performed by BL Companies on January 20, 2009 via the online PAGWIS database and on July 29, 2010 via FirstSearch (see Appendix F). The PAGWIS database identified 18 wells within a one-mile radius of the Site; however, 16 of the 18 wells were listed as "destroyed" or "unused." Two of the 18 wells were listed as "withdrawal", and therefore, additional investigation was conducted to ascertain the locations of these two wells with respect to the Site. One well was identified at the Greenwood Cemetery, and was reportedly drilled to a depth of 125 feet in 1983. The other well was identified at the Ward Chocolate Company, and was reportedly drilled to a depth of 250 feet in 1950. The latitude and longitude coordinates for the two wells were plotted, and it was determined that these wells are located approximately 4,700 feet upgradient and 4,800 feet crossgradient, respectively. Therefore, neither of these wells would be expected to be adversely affected by the target compounds detected in ground water at the Site. Total depths of the 18 wells ranged from 77 to 916 feet bgs, and static water levels ranged from approximately 12 to 33 feet bgs. The desktop well search generated via FirstSearch on July 29, 2010 revealed one State/Federal Well identified as "Aquarium Bar/PH 380", located approximately 0.1-mile southeast of the Site. This well was listed with a depth of 80 feet, and the water use was listed as "unused." The next closest downgradient State or Federal well identified by the FirstSearch report was located approximately one mile to the southeast. The remainder of the wells identified by the FirstSearch report were located crossgradient or upgradient of the Site, and at least 0.36-miles away. No monitoring wells or supply wells were observed in the vicinity of the Site during the local well search conducted on November 7, 2008. Therefore, the exposure to constituents of concern via ingestion or direct contact from ground water is eliminated as a potential exposure pathway.

In a correspondence dated May 12, 2011 (Appendix G), the Philadelphia Department of Public Health (PDPH) indicated that the Philadelphia Plumbing Code requires that the location, design, installation, and monitoring of potable drinking water wells be reported

and approved by the PDPH prior to use. Ms. Lauren Glazer indicated that her recent review of department records did not indicate the presence of any potable drinking water wells within 1,000 feet of the Site. Ms. Glazer further confirmed that these areas are serviced by the municipal water system.

As noted previously, ground water elevation data collected from the on-site monitoring well network revealed that ground water flow beneath the Site is to the southeast towards the Delaware River, located approximately 8,000 feet away from the Site. Based on the results of the fate and transport analysis (see above), the constituents of concern detected at the Site will not adversely affect the nearest downgradient surface water receptor, the Delaware River.

4.6 Assessment of Vapor Intrusion

In accordance with Section IV.A.4 of the Land Recycling Program TGM (*Vapor Intrusion into Buildings from Ground Water and Soil under the Act 2 SHS*), BL Companies assessed the potential for vapor intrusion into current/future on-site buildings from ground water and soil. This guidance is applicable to facilities where soil and/or ground water concentrations have attained the SHS. However, all of the volatile compounds analyzed in soil were in compliance with the applicable SHS, and only two of the volatile compounds analyzed in ground water (PCE and vinyl chloride) exceeded their respective MSCs. Therefore, the initial assessment consisted of following the ground water and soil indoor air quality (IAQ) decision matrices contained in the aforementioned section of the TGM.

The soil IAQ decision matrix showed that no further IAQ activity for soil is required because no separate phase liquid (SPL) is present at the Site, no preferential pathways exist, there is more than five feet of "soil-like material" overlying the existing contamination, and none of the analyzed VOCs (chemicals of potential indoor air concern [COPIACs] or non-COPIACs) were detected above their respective Act 2 Soil to Ground Water MSCs in the soil samples collected at the Site. Only two COPIACs (ethylbenzene and toluene) were detected in soil at the Site; however, the concentrations were several orders of magnitude below the most stringent Act 2 Direct Contact, Soil-to-Ground Water, and Volatilization to Indoor Air Standards.

To further evaluate the potential threat of vapor intrusion from the VOCs detected in Site soils (ethylbenzene, toluene, and cumene), a screening model was completed for these compounds using SL-SCREEN.xls (Version 02/04), as referenced in the TGM. Data used by BL Companies in the SL-SCREEN.xls models included the following:

- *Initial Soil Concentration* – highest concentration detected in the soil samples collected during the soil quality investigation (ethylbenzene - 0.081 mg/kg, toluene – 0.33 mg/kg, and cumene – 0.775 mg/kg).
- *Depth below grade to bottom of exposed space floor* – 15 or 200 centimeters (cm); 200 cm was chosen based on the presence of a basement beneath the current Site building.

- *Depth below grade to top of contamination* – depth at which the highest concentration was detected during the soil quality investigations (9 feet or 274 centimeters).
- *Average soil temperature* – 12.7°C (Figure 8 of USEPA's *User's Guide for Evaluating Vapor Intrusion into Buildings*, June 2003).
- *Vadose zone SCS soil type* – sandy loam (SL; determined during soil quality investigations as the primary soil type above 16 feet bgs, and reflective of unconsolidated fill material).
- *Vadose zone soil dry bulk density* – 1.62 grams per cubic centimeter (g/cm^3) (soil-specific J&E default value).
- *Vadose zone soil total porosity*– 0.387 (soil-specific J&E default value).
- *Vadose zone soil water-filled porosity for sandy loam* – 0.103 (soil-specific J&E default value).
- *Vadose zone soil organic carbon fraction* – 0.002 (soil-specific J&E default value).
- *Averaging time for carcinogens* – 70 years (Act 2 default value; *Table 7* TGM).
- *Averaging time for non-carcinogens* – 25 years (Act 2 default value [non-residential]; *Table 7* of TGM).
- *Exposure duration* – 25 years (Act 2 default value [non-residential]; *Table 7* of TGM).
- *Exposure frequency* – 250 days/year (Act 2 default value [non-residential]; *Table 7* of TGM).
- *Acceptable risk range for carcinogens* – 10^{-6} to 10^{-5} (Act 2 default values; *Table 7* of TGM).
- *Target risk for non-carcinogens* – 1 (Act 2 default value; *Table 7* of TGM).

Based on the results of the SL-SCREEN models completed for ethylbenzene, toluene, and cumene, the calculated incremental risks and/or hazard quotients from vapor intrusion to indoor air (carcinogen and non-carcinogen, respectively) for each compound were below the acceptable risk range for carcinogens (10^{-6} to 10^{-5}) and/or the target hazard quotient for non-carcinogens (1.0). Furthermore, the cumulative incremental risk and hazard quotient values were below 1×10^{-6} and 1.0, respectively. Therefore, no further IAQ activity is deemed necessary for soil. Copies of the SL-SCREEN model Data Entry and Results sheets for each constituent are included as Appendix H.

For ground water, no further IAQ activity is required because no SPL is present at the Site, no preferential exposure pathways exist, there is more than five feet of "soil-like material" overlying the existing contamination, and the ground water concentrations for all the compounds detected during characterization activities are well below the Residential and Non-residential Volatilization to Indoor Air Screening Levels (i.e., Johnson & Ettinger [J&E] values) listed on Tables 1 and 2 of the TGM, respectively. It should also be noted that the constituents of concern (PCE, TCE, cis-1,2-DCE, trans-1,2-DCE, and vinyl chloride) are non-COPIACs, and (with the exception of PCE concentrations detected in MW-3 in July 2006, September 2009, and October 2010) the reported concentrations of these compounds in ground water are less than their respective Act 2 Non-Use Aquifer MSCs. As noted previously, the Delaware River is the probable local discharge point for the shallow ground water system at the Site; therefore, the potential for off-site exposure via vapor intrusion is not anticipated.

To further evaluate the potential threat of vapor intrusion from the VOCs detected in Site ground water (PCE, TCE, cis-1,2-DCE, trans-1,2-DCE, and vinyl chloride), a screening model was completed for these compounds using GW-SCREEN.xls (Version 02/04), as referenced in the TGM. Data used by BL Companies in the GW-SCREEN.xls models included the following:

- *Initial Ground Water Concentration* – highest concentration detected in the ground water samples collected at the Site (PCE – 63.5 µg/L, TCE – 4.86 µg/L, cis-1,2-DCE – 17.8 µg/L, trans-1,2-DCE – 2.67 µg/L, and vinyl chloride – 3.45 µg/L).
- *Depth below grade to bottom of exposed space floor* – 15 or 200 cm; 200 cm was chosen based on the presence of a basement beneath the current Site building and/or the potential presence of basements beneath off-site buildings.
- *Depth below grade to water table* – average depth at which ground water was encountered in the wells (10.5 feet or 320 cm).
- *Average soil temperature* – 12.7°C (Figure 8 of USEPA's *User's Guide for Evaluating Vapor Intrusion into Buildings*, June 2003).
- *SCS soil type directly above water table* – sandy loam (SL; determined during soil quality investigations as the primary soil type above the water table).
- *Vadose zone SCS soil type* – sandy loam (SL; determined during soil quality investigations as the primary soil type above 16 feet bgs, and reflective of unconsolidated fill material).
- *Vadose zone soil dry bulk density* – 1.62 grams per cubic centimeter (g/cm^3) (soil-specific J&E default value).
- *Vadose zone soil total porosity*– 0.387 (soil-specific J&E default value).
- *Vadose zone soil water-filled porosity for sandy loam* – 0.103 (soil-specific J&E default value).
- *Averaging time for carcinogens* – 70 years (Act 2 default value; *Table 7* of TGM).
- *Averaging time for non-carcinogens* – 25 years (Act 2 default value [non-residential]; *Table 7* of TGM).
- *Exposure duration* – 25 years (Act 2 default value [non-residential]; *Table 7* of TGM).
- *Exposure frequency* – 250 days/year (Act 2 default value [non-residential]; *Table 7* of TGM).
- *Acceptable risk range for carcinogens* – 10^{-6} to 10^{-5} (Act 2 default values; *Table 7* of TGM).
- *Target risk for non-carcinogens* – 1 (Act 2 default value; *Table 7* of TGM).

Based on the results of the GW-SCREEN models completed for PCE, TCE, cis-1,2-DCE, trans-1,2-DCE, and vinyl chloride, the calculated incremental risks and/or hazard quotients from vapor intrusion to indoor air (carcinogen and non-carcinogen, respectively) for each compound were at or below the acceptable risk range for carcinogens (10^{-6} to 10^{-5}) and/or the target hazard quotient for non-carcinogens (1.0). Furthermore, the cumulative incremental risk and hazard quotient values were below 1×10^{-5} and 1.0, respectively. Therefore, no further IAQ activity is deemed necessary for ground water. Copies of the GW-SCREEN model Data Entry and Results sheets for each constituent are included as Appendix H.

In summary, the results of the vapor intrusion assessment indicated that vapor intrusion is an incomplete exposure pathway for soil and ground water at the Site; thus, no additional IAQ assessment (e.g., soil-gas and/or indoor air sampling) is warranted.

4.7 Pathway Elimination Summary

Currently, no known potential sources for hazardous substances or petroleum products are present at the Site. The only constituents of concern are those identified in the soil and ground water at the Site. Therefore, based upon the results of this study and the current use of the Site and the surrounding properties, the following useful judgments regarding risk characterization can be made:

- the vapor intrusion analysis indicates that the potential volatilization (i.e., inhalation) pathways from soil and ground water are incomplete for the Site and downgradient properties;

- the fate and transport model indicates that none of the constituents of concern will adversely affect the Delaware River (the nearest downgradient receptor), located approximately 8,000 feet from the Site;

- based on the results of a local well search and the distance to the nearest downgradient surface water body, no potential receptors were identified within a one-mile radius of the Site;

- potable water is provided to the Site and all other residential/commercial properties within the City limits by the PWD;

- in correspondence dated May 12, 2011, the PDPH indicated that the Philadelphia Plumbing Code requires that the location, design, installation, and monitoring of potable drinking water wells be reported and approved by the PDPH prior to use.

- no special concern species, natural communities, outstanding geologic features, or impacts to federally listed, proposed, or candidate species were identified by a PNDI search; therefore, no further consultation under the Endangered Species Act is required with the United States Fish and Wildlife Service.

- An Environmental Covenant will be recorded for the Site to document a continuing duty to prohibit the use of ground water at the Site for potable purposes.

- Based on the results of the attainment sampling and the fate and transport analysis, Rite Aid requests a waiver from any requirement to record Environmental Covenants on any downgradient properties. As noted above, an Environmental Covenant will be recorded to prohibit the use of ground water for potable purposes on the Site.

Based on the results of the environmental sensitivity analysis and pathway elimination, the constituents of concern currently identified in soil and ground water at the Site will not present a risk of harm to human health or the environment now or in the future.

5.0 POST-REMEDIATION CARE PLAN

Data collected from the Site, in combination with the results of the pathway elimination, indicates that Site soils and ground water meet the criteria for attainment of a combination of the SHS and SSS under Act 2. When engineering and/or institutional controls are needed to maintain a standard, a Post-Remediation Care Plan is required in accordance with 25 PA Code §250.411.

The proposed Post-Remediation Care Plan includes institutional controls in order to maintain the SSS. As noted previously, an Environmental Covenant will be implemented with the following activity and use limitations (AULs):

- Until such time as a party demonstrates attainment with Residential MSCs for the above-described regulated substances exceeding Residential MSCs in ground water at the Property in accordance with the requirements of Act 2, ground water at and under the Property shall not be used for potable purposes.

6.0 CONCLUSIONS AND RECOMMENDATIONS

BL Companies has drawn the following conclusions based on the information gathered during site characterization, remedial investigation, and attainment monitoring activities at the Frankford & Darrah Site located at 5129-5135 Frankford Avenue in Philadelphia, Pennsylvania:

- The concentrations of benzene, toluene, ethylbenzene, xylenes, cumene, MTBE, naphthalene, EDB, EDC, benzo(a)anthracene, chrysene, dibenzo(a,h)anthracene, fluoranthene, fluorene, phenanthrene, pyrene, chloroform, cis-1,2-DCE, trans-1,2-DCE, TCE, and vinyl chloride in ground water during attainment monitoring satisfy the 75%/10X criteria and are not expected to present an unacceptable risk to human health and/or the environment. Therefore, BL Companies respectfully requests a Release of Liability for these 21 compounds in ground water under the Residential SHS.

- The concentrations of PCE, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(g,h,i)perylene, indeno(1,2,3-cd)pyrene, and dissolved lead in ground water during attainment monitoring do not satisfy the 75%/10X criteria; however, based on the results of the fate and transport analysis, the identification and elimination of potential exposure pathways, and the proposed engineering/institutional controls, these constituents do not currently represent an unacceptable risk. Therefore, attainment of the SSS for these compounds has been demonstrated. Thus, BL Companies respectfully requests an Act 2 Release of Liability under the SSS for these seven constituents in ground water.

- The concentrations of benzene, toluene, ethylbenzene, cumene, naphthalene, acenaphthene, anthracene, benzo(k)fluoranthene, benzo(g,h,i)perylene, indeno(1,2,3-cd)pyrene, chrysene, fluoranthene, fluorene, phenanthrene, pyrene, carbazole, dibenzofuran, and 2-methylnaphthalene in soil do not currently exceed their respective, Residential Act 2 MSCs and are not expected to present an unacceptable risk to human health and/or the environment. Therefore, BL Companies respectfully requests an Act 2 Release of Liability under the Residential SHS for these 18 compounds in soil.

- The concentrations of benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and dibenzo(a,h)anthracene in soil do not currently exceed their respective, Non-Residential Act 2 MSCs and are not expected to present an unacceptable risk to human health and/or the environment. Therefore, BL Companies respectfully requests an Act 2 Release of Liability under the Non-Residential SHS for these four compounds in soil.

BL Companies recommends that the on-site monitoring wells be properly abandoned in accordance with the PADEP regulations upon issuance of a Release of Liability for ground water at the Site.

7.0 LIMITATIONS

The conclusions stated are based solely on the information described in this report. The data generated during this assessment reflects the conditions found on the project Site on the dates and at the locations specified. The data cannot be extrapolated to locations on the Site that were not tested, or to compounds for which tests were not conducted.

8.0 REFERENCES

Berg, Thomas M. and Christine M. Dodge, Atlas of Preliminary Geologic Quadrangle Maps of Pennsylvania, Pennsylvania Geological Survey, 4th Series, Harrisburg, Pennsylvania, 1981.

Geyer, Alan R. and J. Peter Wilshusen. Engineering Characteristics of the Rocks of Pennsylvania, Pennsylvania Geological Survey, 4th Series, Harrisburg, Pennsylvania, 1982.

Maidment, David R, Handbook of Hydrology, McGraw-Hill, Inc., New York, 1993

Sevon, W.D., 2000, Physiographic Provinces of Pennsylvania, Bureau of Topographic and Geologic Survey, Harrisburg, Pennsylvania.

USDA, 1975, Soil Survey of Bucks and Philadelphia Counties, Pennsylvania, Soil Conservation Service.

United States Geological Survey, 7.5-Minute Series Topographic Quadrangle of Frankford, Pennsylvania – New Jersey, 1967 (photorevised 1983).

TABLES

Table 1 – Results of Chemical Analyses Performed on Soil Samples

Table 2 – Summary of Monitoring Well Construction and Elevation Data

Table 3 – Results of Chemical Analyses Performed on Ground Water Samples

TABLE 1

Results of Chemical Analyses Performed on Soil Samples

TABLE 1

RESULTS OF CHEMICAL ANALYSES PERFORMED ON SOIL SAMPLES

FRANKFORD and DARRAH SITE

5129-5135 FRANKFORD AVENUE

CITY OF PHILADELPHIA, PHILADELPHIA COUNTY, PENNSYLVANIA

	Sample ID	Sample Depth (feet bgs)	Sample Date	Benzene	Ethylbenzene	Isopropylbenzene (Cumene)	Toluene	Acenaphthene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Carbazole	Chrysene	Dibenzo(a,h)anthracene	Dibenzofuran	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene
June 2000 Site Investigation	SB-3	11	9-Jun-2000	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.489	NA	NA	NA	4.35	NA
	SB-5	10	9-Jun-2000	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	1.06	NA
	SB-7	11	9-Jun-2000	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	1.29	NA
September 2000 UST Removal	BS (Below South End)	10	18-Aug-2000	ND	0.035	0.051	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	0.086	ND	NA
	BC (Below Center)	9.5	18-Aug-2000	ND	0.034	ND	0.024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	0.20	ND	NA
	BN (Below North End)	9	18-Aug-2000	ND	0.081	0.775	0.330	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.23	NA	NA	0.54	5.84	NA
	TA (Test Pit A)	10	18-Aug-2000	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.19	NA	NA	0.267	16.40	NA
	TB (Test Pit B)	9	18-Aug-2000	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	0.041	1.11	NA
July 2006 Phase II Investigation	B-1	9.5-10	21-Jul-2006	ND	ND	ND	ND	ND	ND	0.377	0.372	0.533	0.143	0.199	ND	0.425	ND	ND	0.691	ND	0.167	ND	ND	0.253	0.663
	B-2	9.5-10	21-Jul-2006	ND	ND	ND	ND	ND	ND	3.42	**3.25**	2.96	1.55	3.03	ND	3.64	ND	ND	7.16	ND	1.58	ND	ND	3.43	5.94
	B-3	9.5-10	21-Jul-2006	ND	ND	ND	ND	ND	ND	ND	ND	0.116	ND	ND	ND	3.64	ND	ND	0.206	ND	ND	ND	ND	0.147	0.192
	B-4	15.5-16	21-Jul-2006	ND	ND	ND	ND	ND	ND	0.139	0.131	0.155	ND	ND	ND	0.164	ND	ND	0.296	ND	ND	ND	ND	0.204	0.301
	B-5	12-12.5	21-Jul-2006	ND	ND	ND	ND	ND	8.03	**12.10**	**9.96**	**9.35**	2.76	9.11	1.90	12.90	ND	ND	28.70	3.09	3.08	ND	ND	26.00	21.80
	B-6	13.5-14	21-Jul-2006	ND	ND	ND	ND	ND	0.222	0.723	**0.726**	0.925	0.449	ND	ND	0.764	0.12	ND	1.35	ND	0.482	ND	ND	0.878	1.31
	B-7F	6-6.5	21-Jul-2006	ND	ND	ND	ND	2.27	4.49	**10.40**	**8.94**	**7.99**	19.30	2.93	3.29	11.40	**0.902**	1.65	21.30	2.51	2.71	0.861	0.179	19.10	14.90
	B-7N	10.5-11	21-Jul-2006	ND	ND	ND	ND	ND	ND	0.150	0.131	0.178	ND	ND	ND	0.171	ND	ND	0.301	ND	ND	ND	ND	0.226	0.255
ACT 2 MEDIUM-SPECIFIC CONCENTRATIONS (MSCs)																									
Residential Direct Contact 0-15'				57	10,000	7,700	10,000	13,000	66,000	5.7	0.57	5.7	13,000	57	900	570	0.57	220	8,800	8,800	5.7	880	4,400	66,000	6,600
Non-Residential Direct Contact 0-2'				290	10,000	10,000	10,000	170,000	190,000	110	11	110	170,000	1,100	4,000	11,000	11	2,800	110,000	110,000	110	11,000	56,000	190,000	84,000
Non-Residential Direct Contact 2-15'				330	10,000	10,000	10,000	190,000	190,000	190,000	190,000	190,000	190,000	190,000	190,000	190,000	190,000	190,000	190,000	190,000	190,000	10,000	190,000	190,000	190,000
Non-Residential Soil to Ground Water				0.5	70	2,500	100	4,700	350	320	46	170	180	610	83	230	160	260	3,200	3,800	28,000	1,600	25	10,000	2,200
Residential Soil to Ground Water				0.5	70	600	100	2,700	350	25	46	40	180	610	21	230	13	95	3,200	3,000	2,200	600	25	10,000	2,200

All results and MSCs expressed in milligrams per kilogram (mg/kg)

bgs = below ground surface

NA = Not Analyzed

ND = Not Detected

Bold and shaded indicates concentration exceeds most stringent (Residential; Direct Contact) Act 2 MSC, but is below the Non-Residential MSCs

TABLE 2

Summary of Monitoring Well Construction and Elevation Data

TABLE 2
SUMMARY OF MONITORING WELL CONSTRUCTION AND ELEVATION DATA
FRANKFORD and DARRAH SITE
5129-5135 FRANKFORD AVENUE
CITY OF PHILADELPHIA, PHILADELPHIA COUNTY, PENNSYLVANIA

Well No.	Total Depth (feet bgs)	Screened Interval (feet bgs)	Relative TOC Elevation* (feet)	Static Water Level (feet below TOC)													
				9/6/00	7/21/06	9/4/08	12/17/08	3/6/09	6/11/09	9/10/09	12/1/09	3/2/10	6/30/10	10/14/10	1/5/11	4/12/11	7/11/11
MW-1	31	11 - 31	94.67	10.47	10.80	10.29	9.88	10.35	10.00	9.90	10.10	9.80	10.17	10.16	10.50	10.10	10.24
MW-2	31	11 - 31	95.90	11.02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-2A	24	4 - 24	95.96	NA	NA	11.00	10.81	11.12	10.83	10.92	10.98	10.63	11.02	10.91	11.20	10.98	11.17
MW-3	31	11 - 31	94.80	10.17	10.20	9.69	9.69	10.12	9.68	9.86	9.98	9.25	9.86	9.35	9.60	10.07	10.01
MW-4	30	5 - 30	94.67	NA	NA	10.00	9.85	10.31	9.83	9.90	9.96	9.85	9.96	9.97	10.25	10.00	10.08

Well No.	Total Depth (feet bgs)	Screened Interval (feet bgs)	Relative TOC Elevation* (feet)	Ground Water Elevation (feet AMSL)													
				9/6/00	7/21/06	9/4/08	12/17/08	3/6/09	6/11/09	9/10/09	12/1/09	3/2/10	6/30/10	10/14/10	1/5/11	4/12/11	7/11/11
MW-1	31	11 - 31	94.67	84.20	83.87	84.38	84.79	84.32	84.67	84.77	84.57	84.87	84.50	84.51	84.17	84.57	84.43
MW-2	31	11 - 31	95.90	84.88	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-2A	24	4 - 24	95.96	NA	NA	84.96	85.15	84.84	85.13	85.04	84.98	85.33	84.94	85.05	84.76	84.98	84.79
MW-3	31	11 - 31	94.80	84.63	84.60	85.11	85.11	84.68	85.12	84.94	84.82	85.55	84.94	85.45	85.20	84.73	84.79
MW-4	30	5 - 30	94.67	NA	NA	84.67	84.82	84.36	84.84	84.77	84.71	84.82	84.71	84.70	84.42	84.67	84.59

Notes:
bgs = below ground surface
TOC = Top of Casing
* = Relative to an arbitrary benchmark.

TABLE 3

Results of Chemical Analyses Performed on Ground Water Samples

TABLE 3
RESULTS OF CHEMICAL ANALYSES PERFORMED ON GROUND WATER SAMPLES
FRANKFORD and DARRAH SITE
5129-5135 FRANKFORD AVENUE
CITY OF PHILADELPHIA, PHILADELPHIA COUNTY, PENNSYLVANIA

Sample ID	Sample Date	Benzene	Toluene	Ethylbenzene	Xylenes, Total	Isopropylbenzene (Cumene)	Naphthalene	Methyl tert-butyl Ether (MTBE)	1,2-Dibromoethane (EDB)	1,2-Dichloroethane (EDC)	Lead, Dissolved	Fluorene	Fluoranthene	Pyrene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo[g,h,i]perylene	Dibenz(a,h)anthracene	Fluoranthene	Indeno(1,2,3-cd)pyrene	Chrysene	Chloroform	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene (PCE)	Trichloroethene (TCE)	Vinyl Chloride
MW-1	6-Sep-2000	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	21-Jul-2006	ND	ND	ND	ND	NA	ND	NA	ND	ND	NA	ND	ND	2	ND	ND	2	ND	2	ND	2	ND	ND	ND	ND	ND	ND	ND	ND
	4-Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.20	0.91	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	17-Dec-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.62	0.65	ND	1.09	ND	ND	0.75	ND	ND	ND	ND	ND	ND	ND
	6-Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.49	0.53	1.69	1.86	1.83	2.28	1.19	1.44	2.24	1.32	ND	4.70	ND	2.84	ND	ND
	11-Jun-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.14	ND	0.67	1.78	0.96	1.20	ND	ND	1.71	1.06	ND	ND	ND	ND	ND	ND
	10-Sep-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.42	0.81	ND	0.22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	1-Dec-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.42	0.56	ND	0.30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	2-Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	30-Jun-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.55	9.20	11.8	6.73	ND	ND	5.67	ND	ND	ND	ND	ND	ND	ND
	14-Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.55	0.92	0.64	0.53	ND	ND	0.52	ND	ND	ND	ND	ND	ND	ND
	5-Jan-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.56	0.84	1.09	3.17	1.75	1.44	ND	1.89	1.35	1.98	ND	ND	ND	1.96	ND	ND
	12-Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.667	1.08	0.853	0.337	ND	ND	ND	ND	ND	6.00	ND	3.76	ND	ND
	11-Jul-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.276	0.400	ND	0.466	ND	ND	0.261	ND	ND	ND	ND	ND	ND	ND
MW-2	6-Sep-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-2A*	4-Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.87	ND	ND	ND	3.58	ND	19	2.42	ND
	17-Dec-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.19	0.68	0.60	0.53	ND	0.77	ND	1.25	0.56	ND	ND	10.9	2.28	9.10	2.10	3.45
	6-Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.98	ND	1.17	1.23	0.87	0.76	ND	ND	0.93	ND	ND	3.67	ND	31.0	2.69	ND
	11-Jun-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.50	ND	ND	ND	ND	0.90	ND	ND	17.8	2.67	11.3	2.92	2.54
	10-Sep-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.85	ND	27.1	3.18	ND
	1-Dec-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.70	ND	21.8	2.61	ND
	2-Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	DN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.26	ND	26.0	2.57	ND
	30-Jun-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.76	ND	26.1	2.40	ND
	14-Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.18	ND	28.3	3.82	ND
	5-Jan-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.76	ND	24.1	3.28	ND
	12-Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.252	ND	ND	ND	ND	ND	ND	ND	ND	4.87	ND	23.5	2.01	ND
	11-Jul-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.40	ND	23.1	2.88	2.12
MW-3	6-Sep-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	21-Jul-2006	ND	ND	ND	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	16.2	9.7	ND	63.5	4.0	ND
	4-Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.72	8.72	ND	39.7	2.83	ND
	17-Dec-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.64	ND	ND	ND	ND	3.17	10.1	ND	40.9	4.66	ND
	6-Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.01	1.12	ND	0.62	ND	ND	ND	ND	4.36	9.58	ND	44.8	4.86	ND
	11-Jun-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.26	ND	ND	0.55	ND	ND	1.10	ND	8.74	6.38	ND	44.7	2.53	ND
	10-Sep-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.44	9.32	ND	57.0	4.61	ND
	1-Dec-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.34	ND	41.3	3.13	ND
	2-Mar-2010	ND	ND	ND	ND	ND	ND	ND	DN	DN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.36	7.91	ND	50.0	3.72	ND
	30-Jun-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.12	6.47	ND	47.2	2.10	ND
	14-Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.81	8.51	ND	50.5	4.32	ND
	5-Jan-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.51	6.07	ND	43.4	3.09	ND
	12-Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.87	5.71	ND	46.9	2.33	ND
	11-Jul-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.29	6.40	ND	38.7	3.0	1.51
MW-4	4-Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.72	ND	ND	18.2	ND	ND
	17-Dec-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.42	ND	ND	ND	ND	ND	ND	ND	2.54	ND	ND	14.3	ND	ND
	6-Mar-2009	ND	6.23	ND	ND	ND	ND	ND	ND	ND	.43	ND	ND	ND	ND	1.05	1.21	0.85	0.65	ND	ND	ND	ND	ND	ND	ND	2.53	ND	ND
	11-Jun-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	.13	ND	ND	ND	ND	ND	0.71	ND	ND	ND	ND	0.93	ND	ND	ND	ND	ND	ND	ND
	10-Sep-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	.23	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	1-Dec-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	.16	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	2-Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.72	1.12	1.96	4.44	2.05	1.64	ND	3.35	1.52	2.96	ND	ND	ND	ND	ND	ND
	30-Jun-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.13	ND	ND
	14-Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	.12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.77	ND	ND
	5-Jan-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	.22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.72	ND	ND
	12-Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11-Jul-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.45	ND	ND
ACT 2 MEDIUM-SPECIFIC CONCENTRATIONS (MSCs)																													
Residential Used Aquifer		5	1,000	700	10,000	840	100	20	0.05	5	5	1,500	1,100	130	0.29	0.2	0.29	0.55	0.26	0.029	260	0.29	1.9	80	70	100	5	5	2
Non-Residential Used Aquifer		5	1,000	700	10,000	3,500	100	20	0.05	5	5	1,900	1,100	130	3.6	0.2	1.2	0.55	0.26	0.36	260	3.6	1.9	80	70	100	5	5	2
Residential Non-Use Aquifer		500	100,000	70,000	180,000	50,000	30,000	200	5	50	5,000	1,900	1,100	130	11	3.8	1.2	0.55	0.26	0.6	260	62	1.9	800	700	1,000	50	50	20
Non-Residential Non-Use Aquifer		500	100,000	70,000	180,000	50,000	30,000	200	5	50	5,000	1,900	1,100	130	11	3.8	1.2	0.55	0.26	0.6	260	62	1.9	800	700	1,000	50	50	20

All results expressed in micrograms per liter (µg/L)
ND = Not Detected
NA = Not Analyzed
* = MW-2A was installed to replace MW-2 after it was destroyed
Bold and shaded indicates concentration exceeds most stringent (Residential, Used Aquifer) Act 2 MSC

FIGURES

FIG 1 - Site Location Map

FIG 2 – Site Plan

FIG 3 - Ground Water Flow Map (03-06-09)

FIG 4 - Ground Water Flow Map (06-11-09)

FIG 5 - Ground Water Flow Map (09-10-09)

FIG 6 - Ground Water Flow Map (12-01-09)

FIG 7 - Ground Water Flow Map (03-02-10)

FIG 8 - Ground Water Flow Map (06-30-10)

FIG 9 - Ground Water Flow Map (10-14-10)

FIG 10 - Ground Water Flow Map (01-05-11)

FIG 11 - Ground Water Flow Map (04-12-11)

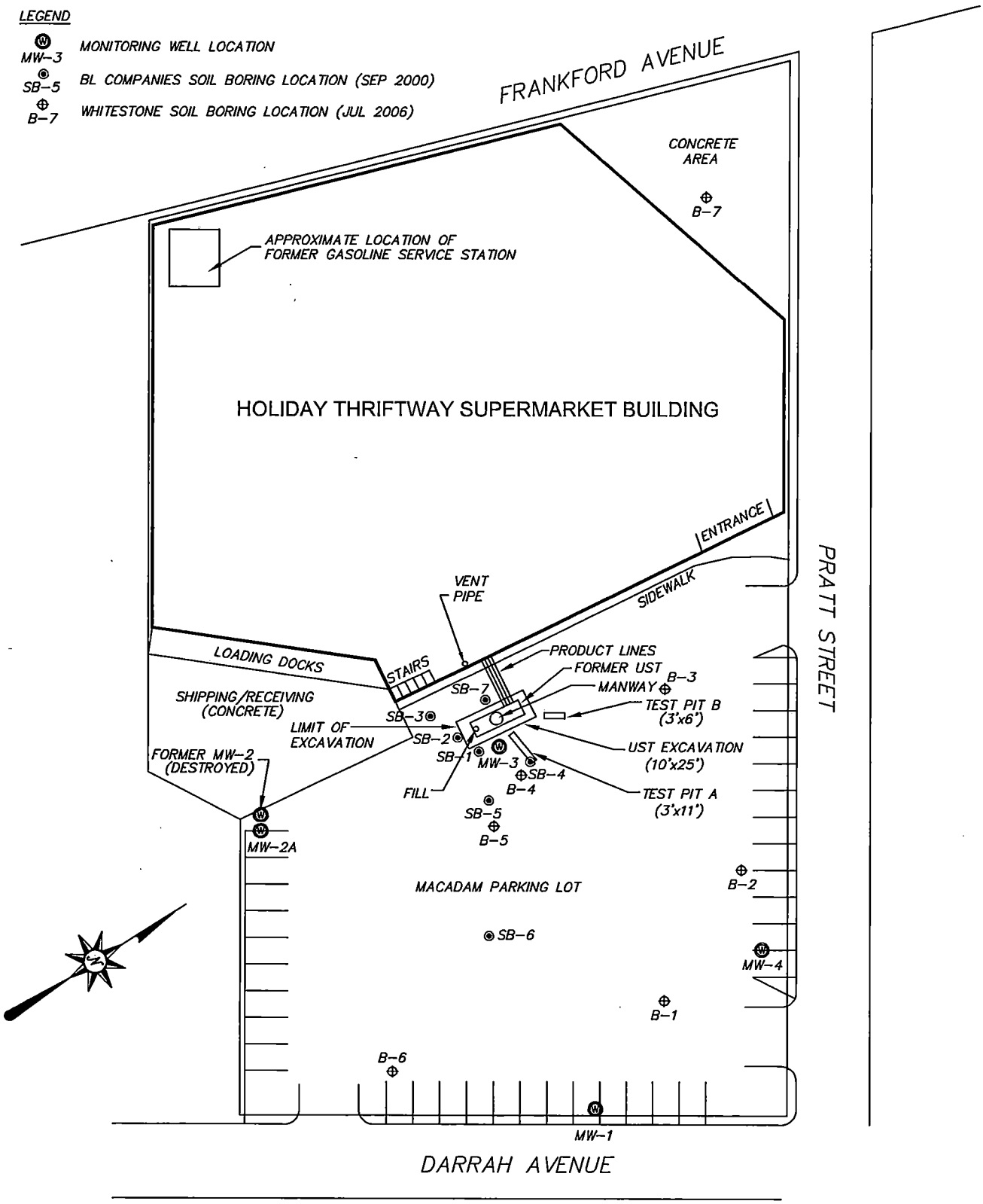
FIG 12 - Ground Water Flow Map (07-11-11)



Name: FRANKFORD
Date: 1/20/2009
Scale: 1 inch equals 2000 feet

Location: 040° 01' 18.7" N 075° 04' 43.4" W
Caption: FIG 1 - Site Location Map
Map created in 1967 (revised 1983)
Contour Interval = 20 feet

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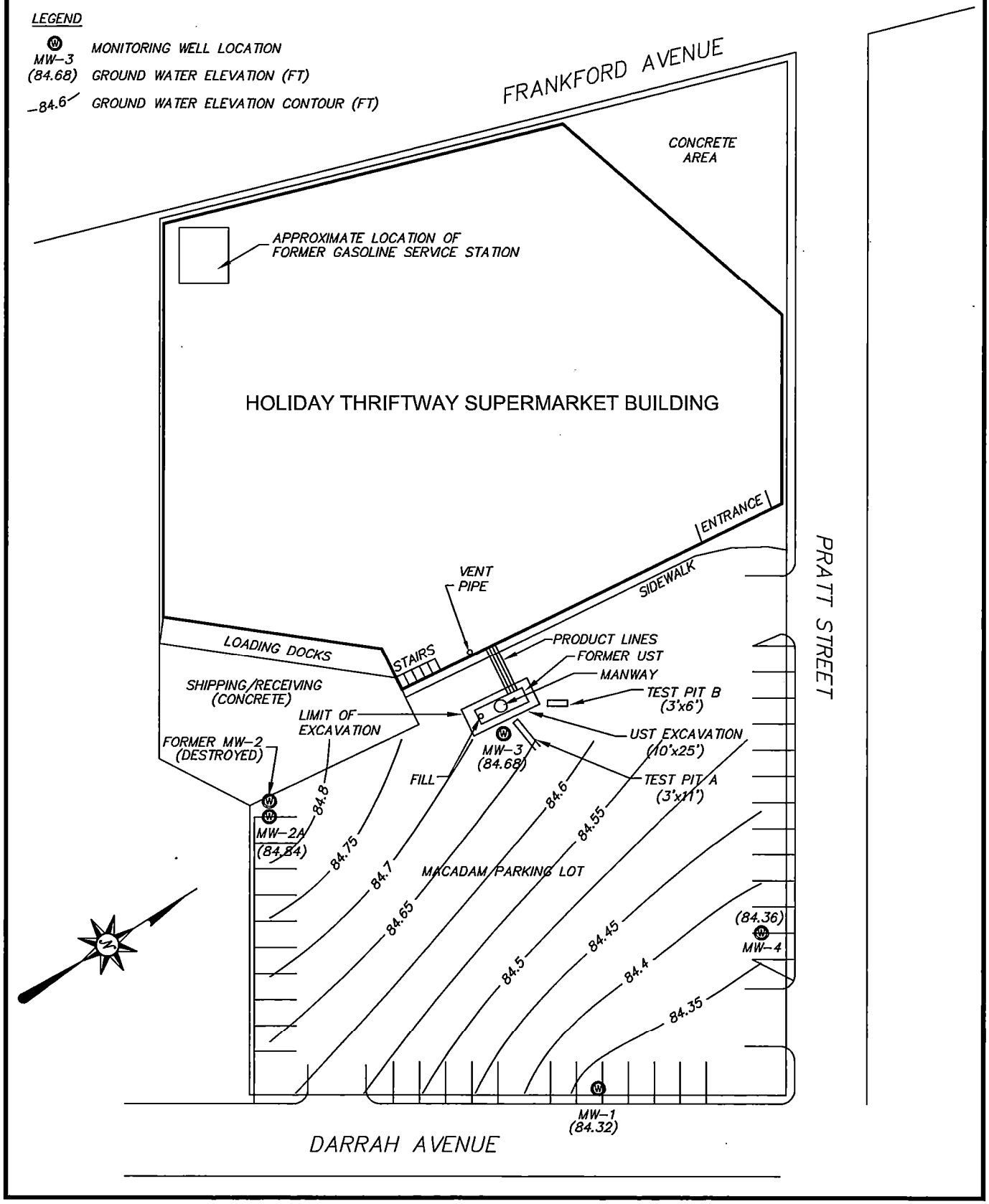


SITE PLAN

5129–5135 FRANKFORD AVENUE SITE
CITY OF PHILADELPHIA
PHILADELPHIA COUNTY, PENNSYLVANIA

Designed	
Drawn	J.R.T.
Checked	B.S.W.
Approved	
Scale	NOT TO SCALE
Project No.	00L629-B
Date	08/27/08
CAD File	EV00L629B01

FIG 2



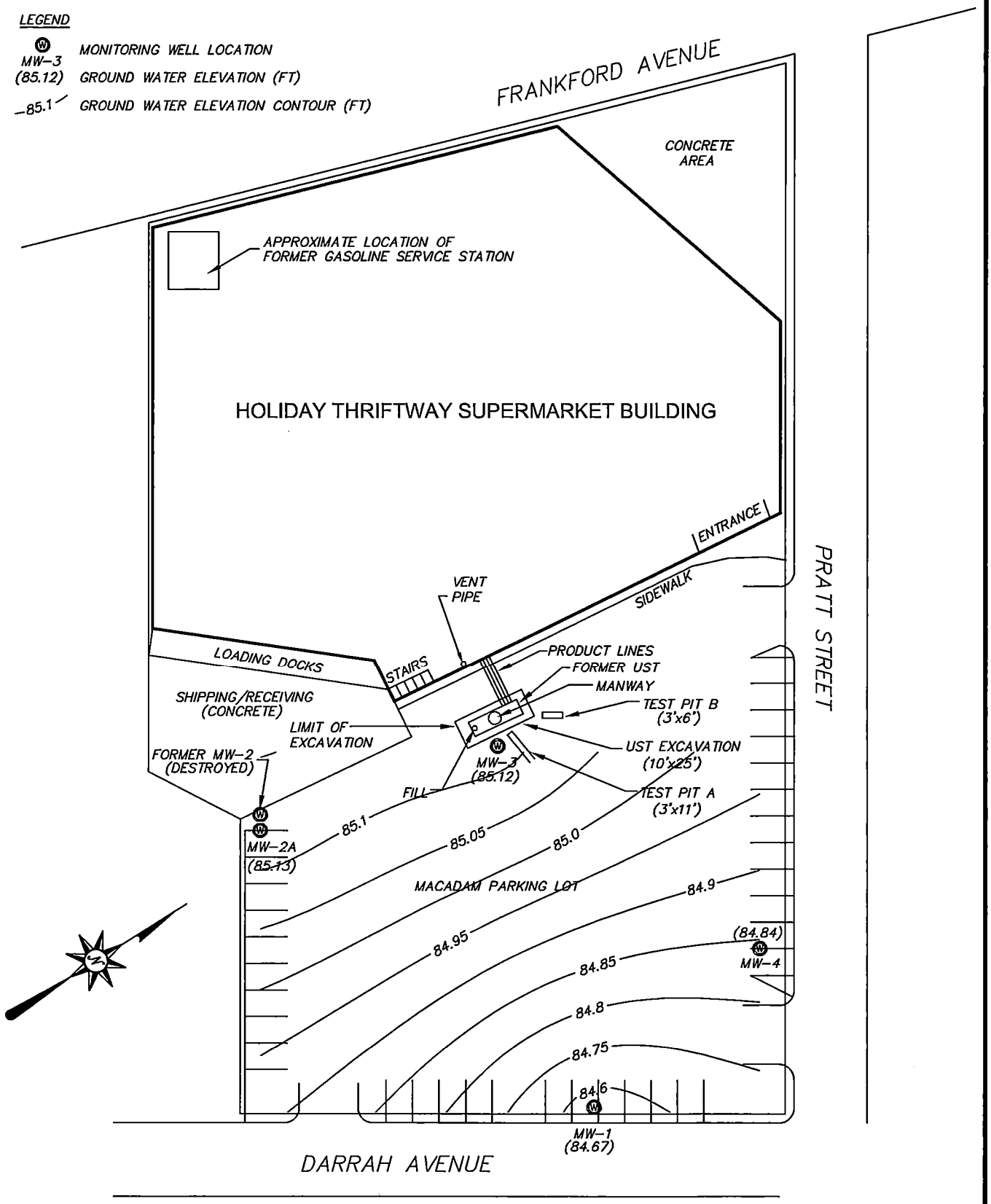
BL Companies

GROUND WATER FLOW MAP - 03-06-09

5129-5135 FRANKFORD AVENUE SITE
CITY OF PHILADELPHIA
PHILADELPHIA COUNTY, PENNSYLVANIA

Designed	
Drawn	J.R.T.
Checked	B.S.W.
Approved	
Scale	NOT TO SCALE
Project No.	00L629-B
Date	03/16/09
CAD File	EV00L629B05

FIG 3



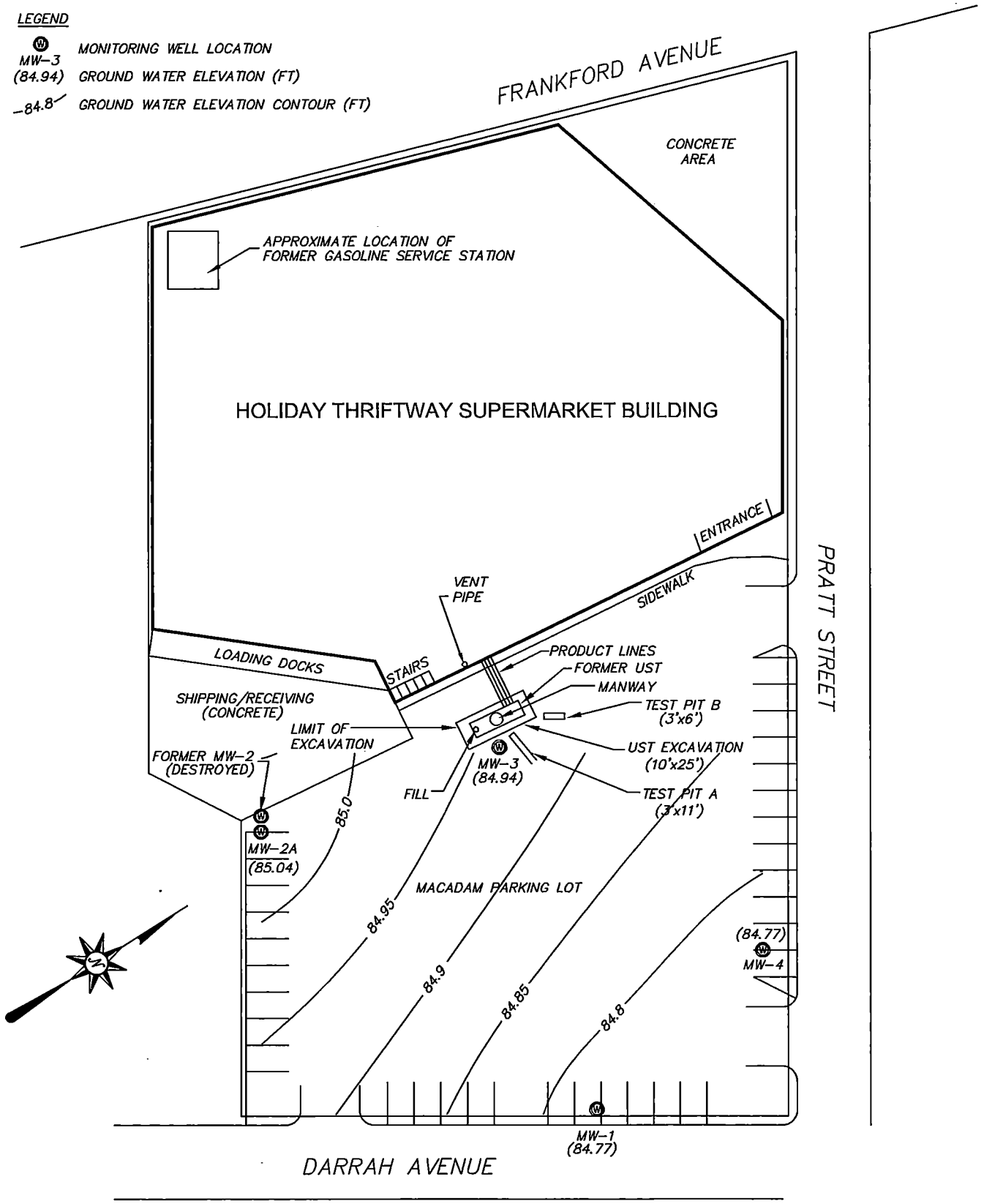
BL Companies

GROUND WATER FLOW MAP - 06-11-09

5129-5135 FRANKFORD AVENUE SITE
CITY OF PHILADELPHIA
PHILADELPHIA COUNTY, PENNSYLVANIA

Designed	
Drawn	J.R.T.
Checked	B.S.W.
Approved	
Scale	NOT TO SCALE
Project No.	00L629-B
Date	09/21/09
CAD File	EV00L629B06

FIG 4



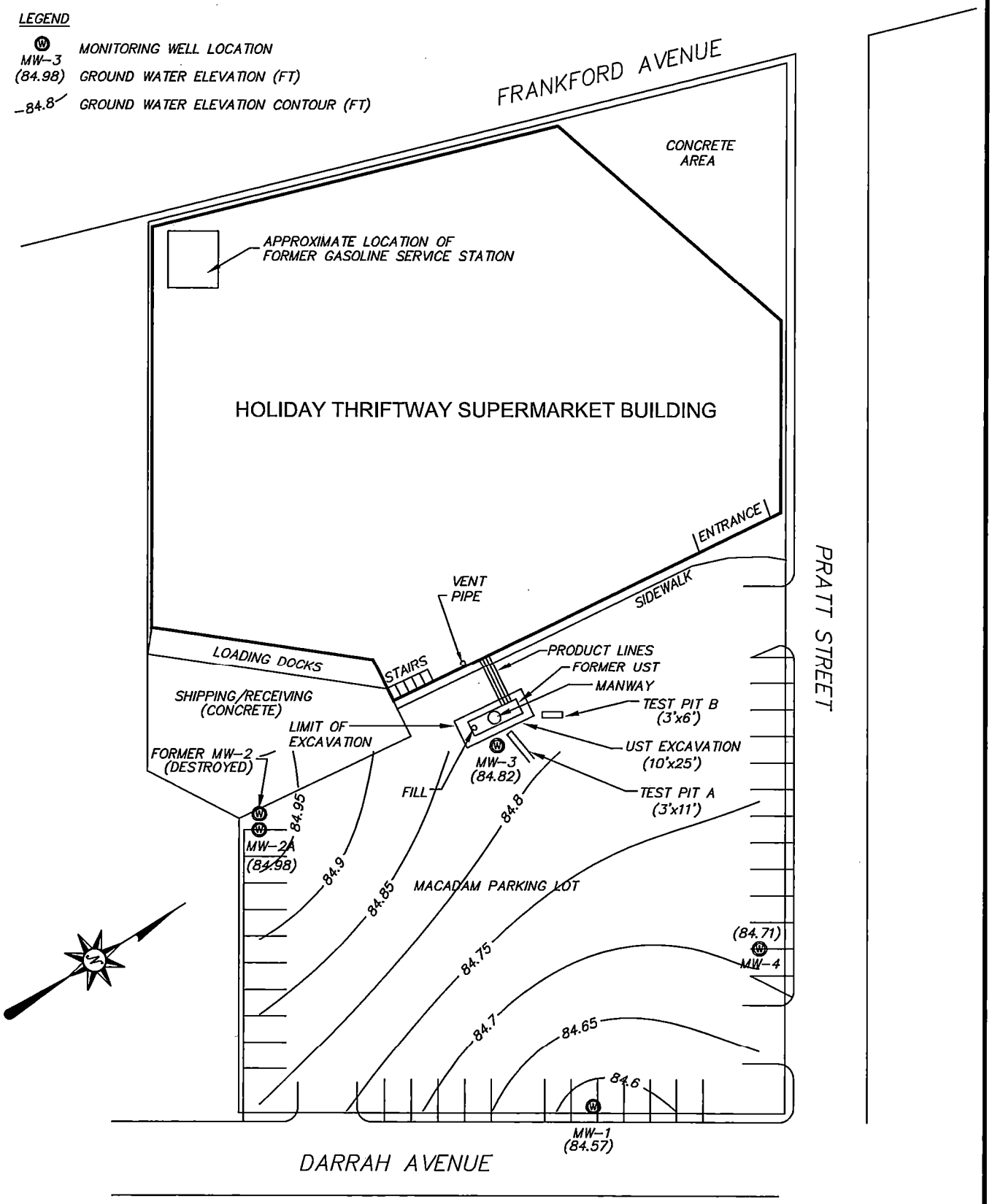
BL Companies

GROUND WATER FLOW MAP - 09-10-09

5129-5135 FRANKFORD AVENUE SITE
CITY OF PHILADELPHIA
PHILADELPHIA COUNTY, PENNSYLVANIA

Designed	
Drawn	J.R.T.
Checked	B.S.W.
Approved	
Scale	NOT TO SCALE
Project No.	00L629-B
Date	09/21/09
CAD File	EV00L629B07

FIG 5



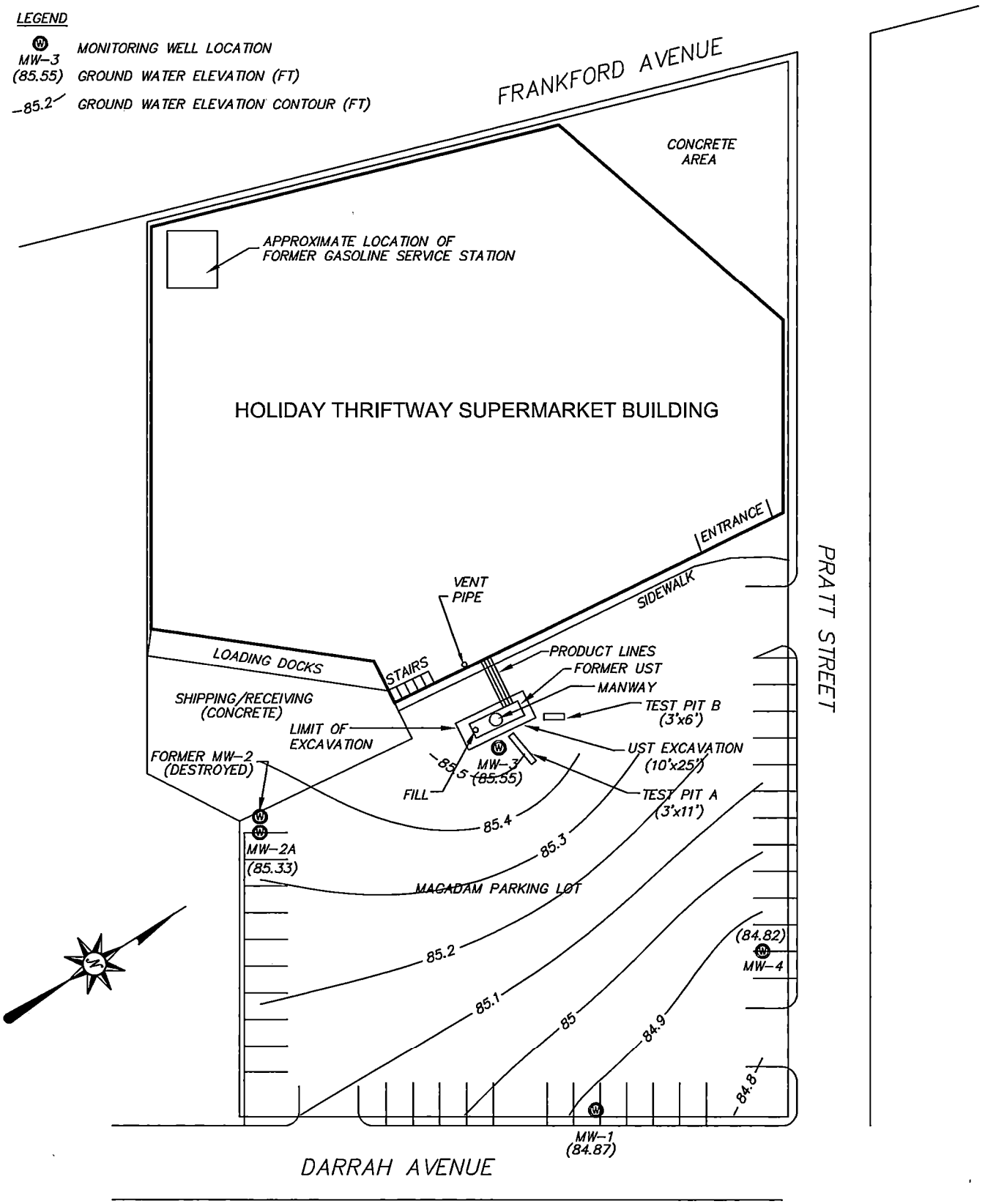
Companies

GROUND WATER FLOW MAP - 12-01-09

5129-5135 FRANKFORD AVENUE SITE
CITY OF PHILADELPHIA
PHILADELPHIA COUNTY, PENNSYLVANIA

Designed	
Drawn	J.R.T.
Checked	B.S.W.
Approved	
Scale	NOT TO SCALE
Project No.	00L629-B
Date	12/22/09
CAD File	EV00L629B08

FIG 6



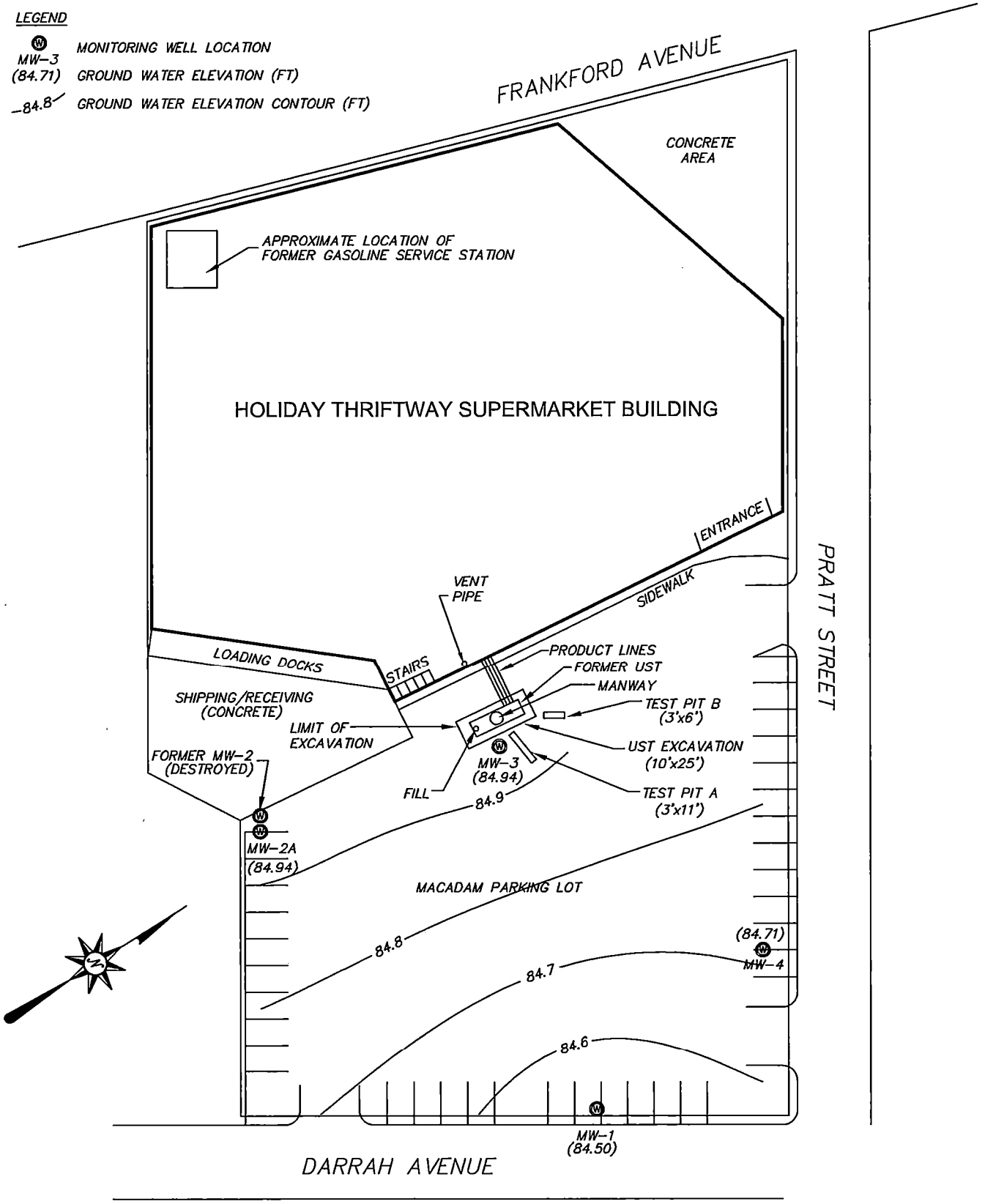
BL Companies

GROUND WATER FLOW MAP - 03-02-10

5129–5135 FRANKFORD AVENUE SITE
CITY OF PHILADELPHIA
PHILADELPHIA COUNTY, PENNSYLVANIA

Designed	
Drawn	J.R.T.
Checked	B.S.W.
Approved	
Scale	NOT TO SCALE
Project No.	00L629-B
Date	03/11/10
CAD File	EV00L629B09

FIG 7



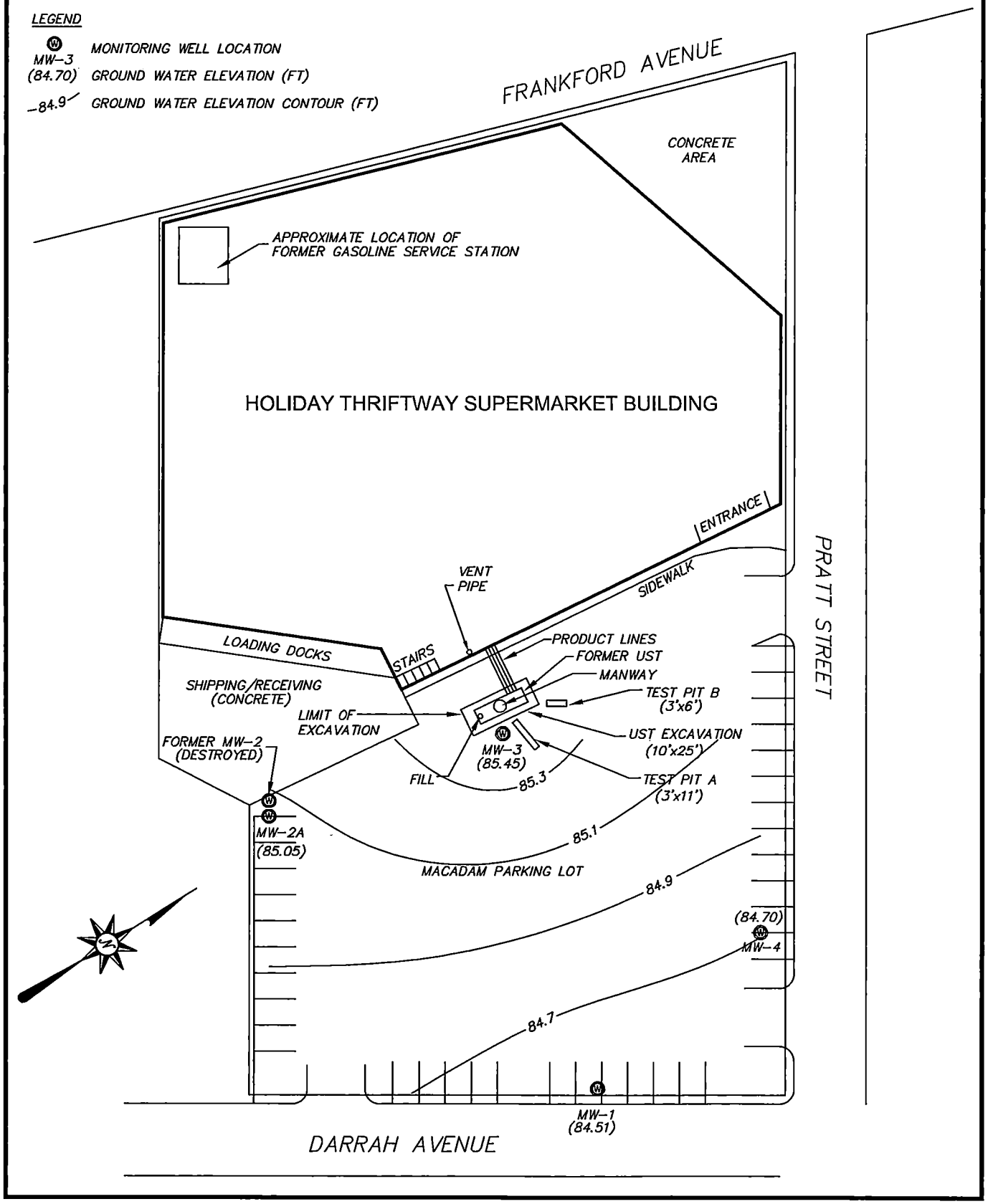
BL Companies

GROUND WATER FLOW MAP - 06-30-10

5129-5135 FRANKFORD AVENUE SITE
CITY OF PHILADELPHIA
PHILADELPHIA COUNTY, PENNSYLVANIA

Designed	
Drawn	J.R.T.
Checked	B.S.W.
Approved	
Scale	NOT TO SCALE
Project No.	00L629-B
Date	07/12/10
CAD File	EV00L629B10

FIG 8



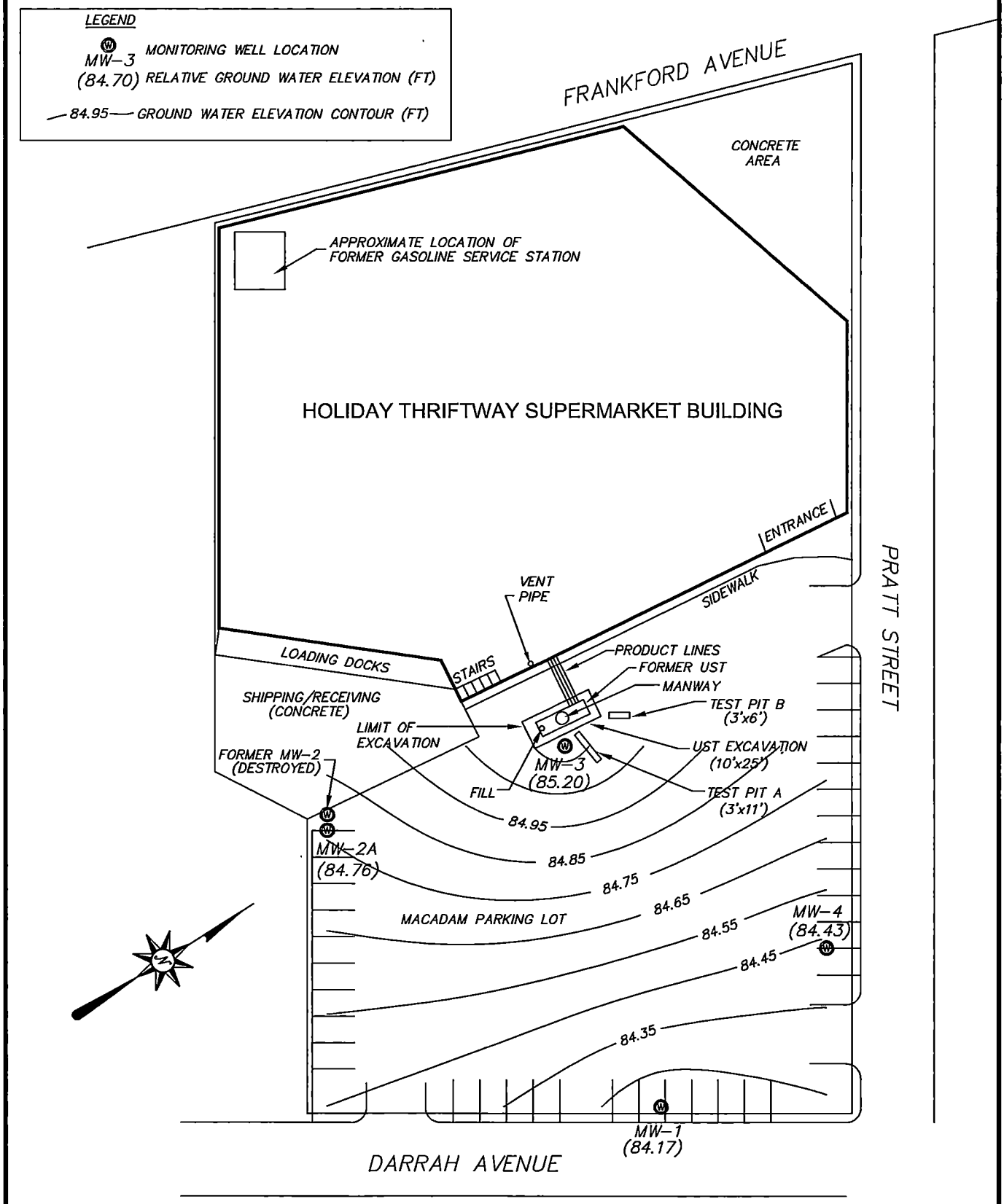
BL Companies

GROUND WATER FLOW MAP - 10-14-10

5129-5135 FRANKFORD AVENUE SITE
CITY OF PHILADELPHIA
PHILADELPHIA COUNTY, PENNSYLVANIA

Designed	
Drawn	J.R.T.
Checked	B.S.W.
Approved	
Scale	NOT TO SCALE
Project No.	00L629-B
Date	11/02/10
CAD File	EV00L629B11

FIG 9



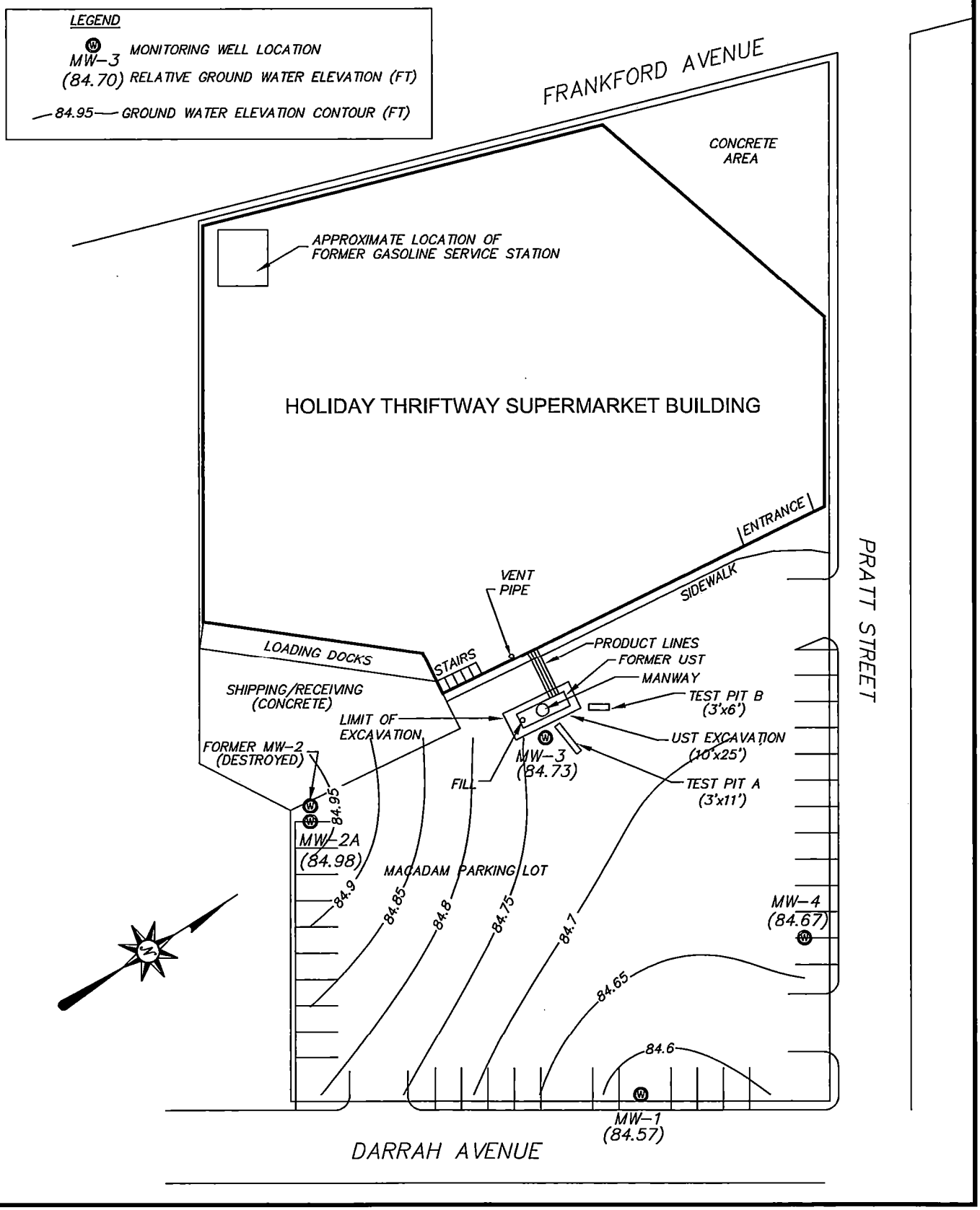
BL Companies

GROUND WATER FLOW MAP (01-05-11)

5129-5135 FRANKFORD AVENUE SITE
CITY OF PHILADELPHIA
PHILADELPHIA COUNTY, PENNSYLVANIA

Designed	
Drawn	J.R.T.
Checked	B.S.W.
Approved	
Scale	NOT TO SCALE
Project No.	00L629-B
Date	01/27/11
CAD File	EV00L629B12

FIG 10



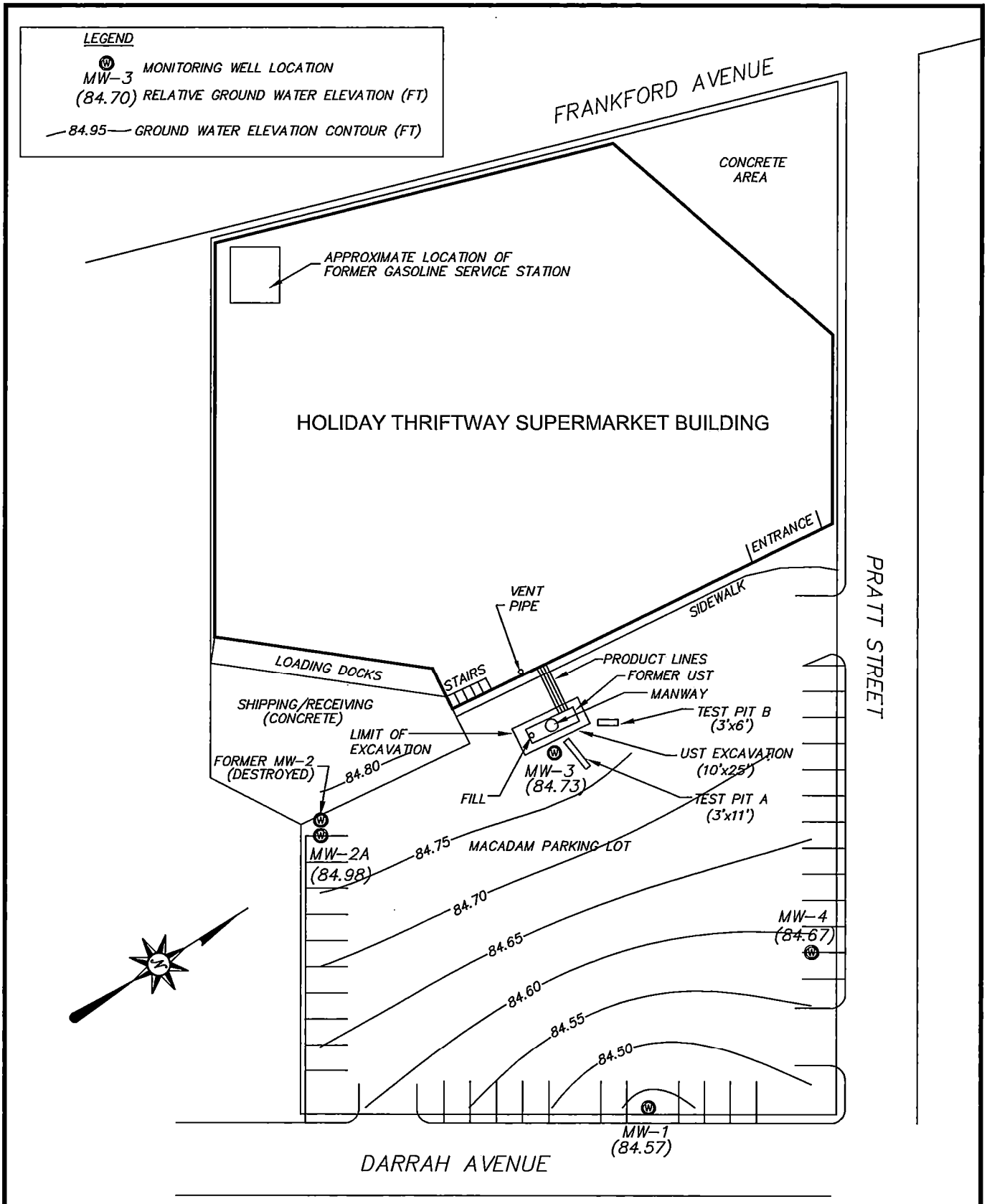
BL Companies

GROUND WATER FLOW MAP (04-12-11)

5129-5135 FRANKFORD AVENUE SITE
CITY OF PHILADELPHIA
PHILADELPHIA COUNTY, PENNSYLVANIA

Designed	
Drawn	J.R.T.
Checked	B.S.W.
Approved	
Scale	NOT TO SCALE
Project No.	00L629-B
Date	04/29/11
CAD File	EV00L629B13

FIG 11



Companies

GROUND WATER FLOW MAP (07-11-11)

5129-5135 FRANKFORD AVENUE SITE
CITY OF PHILADELPHIA
PHILADELPHIA COUNTY, PENNSYLVANIA

Designed	
Drawn	J.R.T.
Checked	B.S.W.
Approved	
Scale	NOT TO SCALE
Project No.	00L629-B
Date	07/21/11
CAD File	EV00L629B14

FIG 12

APPENDICES

Appendix A	Act 2 Supporting Documentation
Appendix B	Laboratory Analytical Reports and Chain of Custody Documentation
Appendix C	Aquifer Testing Data and Hydraulic Conductivity Calculations
Appendix D	Ground Water Fate and Transport Model Output
Appendix E	PNDI Receipt
Appendix F	Local Well Search Report
Appendix G	Philadelphia Department of Health Correspondence
Appendix H	Vapor Intrusion Model Output

APPENDIX A

Act 2 Supporting Documentation

BL Companies

February 24, 2009

Mr. Stephen Sinding
Pennsylvania Department of Environmental Protection
Environmental Cleanup Program
Southeast Regional Office
2 East Main Street
Norristown, Pennsylvania 19401

RE: Notice of Intent to Remediate
Frankford and Darrah Site
5129-5135 Frankford Avenue
City of Philadelphia, Philadelphia County
BL Project No. 00L629-B

Dear Mr. Sinding:

In accordance with the requirements of Act 2, we are formally notifying you of our client's (Rite Aid Corporation's) intent to remediate the above referenced site. Two hard copies of the Notice of Intent to Remediate (NIR) are enclosed. A hard copy of the NIR has been provided to City of Philadelphia, and the NIR summary was published in The Daily News on February 2, 2009.

If you have any questions regarding the enclosed NIR, please contact the undersigned at your convenience.

Respectfully submitted,

BL Companies

John R. Thatcher, PG
Project Manager

Bradley S. Wolf, BS
Principal

Enclosures

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

NOTICE OF INTENT TO REMEDIATE

Act 1995-2 requires 4 general informational items to be included in the NIR: the general location, listing of contaminants, intended use of the property, and proposed remediation measures. In addition attach a site map if available.

Property Name Frankford and Darrah Site

Address/Location 5129-5135 Frankford Avenue

City Philadelphia **Zip Code** 19124

Municipality (if more than one, list all) City of Philadelphia

County Philadelphia

Latitude 40 °(deg.) 01 '(min) 18.7 "(sec) **Longitude** -75 °(deg.) 04 '(min) 43.4 "(sec)

Horizontal Collection Method: Topographic map

Horizontal Reference Datum: NAD83 **Reference Point:** Unknown

Wish to participate in the DEP/EPA MOA: ☐

Contact Dave Hess at dahess@state.pa.us for details.

EPA ID Number, if known:

Provide a general description of the site contamination in plain language (e.g. fuel oil spill, historical chemical industrial area contamination), the names of any known primary contaminants to be addressed, and the intended future use of the property:

SITE DESCRIPTION:

The site consists of one approximately 1.6-acre parcel located at 5129-5135 Frankford Avenue, City of Philadelphia, Philadelphia County, Pennsylvania. The site is located at the southern corner of the intersection of Frankford Avenue (to the northwest) and Pratt Street (to the northeast), and Darrah Street borders the site to the southeast. The site is currently occupied by a multi-tenant commercial, two-story structure (approximately 31,000 square feet) located in the northern portion of the site, while the portion to the south of the building consists of an asphalt parking lot and a concrete loading dock area, and the perimeter of the site is bordered by concrete sidewalks. The primary tenant of the site building is a Holiday Thriftway grocery store, and the western corner of the structure along Frankford Avenue contains four smaller tenant spaces most recently occupied by Jackson Hewitt Tax Service, Crown Fried Chicken, Beauty Depot, and Wireless Tech. The site is currently owned by Rite Aid of Pennsylvania.

SITE CONTAMINATION:

Between June and September 2000, BL Companies conducted a Site Investigation and Underground Storage Tank Closure at the site in response to areas of concern identified during a Phase I Environmental Site Assessment (ESA) completed by others in May 1997. The areas of concern included: (1) the presence of one 3,000-gallon heating oil underground storage tank (UST) located along the eastern side of the site building and, (2) the historical usage of the western portion of the site as a gasoline service station from at least 1939 through at least 1951. No information was available regarding the decommissioning process of the former gasoline service station, and the location of the former gasoline station could not be directly investigated due to the location of the existing site building at the time of the investigation.

BL Companies' Site Investigation included sampling and analysis of the soil and ground water at the site to assess subsurface conditions prior to the removal of the heating oil UST. The scope of work included the installation of seven borings (designated SB-1 through SB-7) adjacent to the UST area using direct-push sampling methods and the collection of three soil samples and three ground water samples from the borings for chemical analyses. The locations of the soil borings are shown on the attached Site Plan. Laboratory analytical results of the soil and ground water samples revealed detectable concentrations of fluorene and/or phenanthrene in all three of the soil samples and isopropylbenzene (cumene) in one of the three ground water samples; however, none of the concentrations exceeded their respective, most stringent

Act 2 standards. Following the soil boring investigation, the heating oil UST was removed, and five confirmatory soil samples were collected from underneath the UST and from adjacent test pits by BL Companies. Laboratory analytical results of the soil samples revealed detectable concentrations of at least three of the Pennsylvania Department of Environmental Protection (PADEP)-specified target compounds for No. 2 heating oil in all five of the soil samples; however, none of the concentrations exceeded their respective Act 2 standards. Based upon the results of the soil and/or ground water samples collected from the soil borings and during the UST removal, three ground water monitoring wells (MW-1, MW-2, and MW-3) were subsequently installed and sampled to further evaluate the condition of the ground water beneath the site. The ground water samples collected from the monitoring wells were analyzed for the PADEP-specified No. 2 heating oil target compounds, as well as the PADEP-specified target compounds for leaded and unleaded gasoline target compounds to address the former presence of the gasoline service station located on the western, upgradient portion of the site. One target compound was detected in two of the six ground water samples collected from the soil borings and the monitoring wells, but neither of the concentrations exceeded their respective, most stringent Act 2 standards.

In July 2006, a Phase I ESA was conducted at the Site by Whitestone Associates, Inc. (Whitestone), and four areas of concern were identified. The purpose of Whitestone's investigation was to further evaluate the extent of soil and ground water impacts at the site prior to the potential redevelopment of the site as a Rite Aid Pharmacy. The areas of concern included: (1) the historical usage of the western portion of the site as a gasoline service station, (2) the presence of fill material, including cinders, ash, metal, wood, and other miscellaneous debris, encountered during a June 2006 geotechnical investigation, (3) the former presence of one 3,000-gallon heating oil UST, and (4) the presence of two ground water monitoring wells (MW-1 and MW-3) remaining from BL Companies' Site Investigation. The third monitoring well installed in September 2000 (MW-2) was apparently not located by Whitestone during their investigation. A subsequent Phase II ESA, including a geophysical survey, a soil boring and sampling program, and gauging/sampling of the two remaining on-site monitoring wells, was conducted in July 2006 by Whitestone to address these four areas of concern. The results of the Phase II ESA indicated that several of the analyzed semi-volatile organic compounds (SVOCs) were detected above their respective, Residential Act 2 standards in the soil samples collected; however, none of the concentrations exceeded their respective applicable Non-Residential Direct Contact and/or Soil-to-Ground Water criteria. In addition, none of the analyzed VOCs were detected in the eight soil samples collected from the seven soil boring locations. Laboratory analytical results of the ground water samples collected at the site revealed that two of the target VOCs (tetrachloroethene [PCE] and vinyl chloride), as well as several of the target SVOCs, were detected above their respective Non-Residential Act 2 standards.

In August 2008, two new monitoring wells were installed at the site. MW-2A was installed along the southwestern site boundary to replace MW-2, and MW-4 was installed along the eastern site boundary to further evaluate ground water quality along the downgradient side of the site.

In September and December 2008, BL Companies completed the first two rounds of a quarterly ground water sampling program, and ground water samples collected from the four monitoring wells were analyzed for VOCs, PAHs, and dissolved lead. The results of the chemical analyses revealed that the ground water samples collected from MW-1 contained benzo(a)pyrene and/or benzo(g,h,I)perylene above their respective, most stringent Act 2 standards. The ground water samples collected from MW-3 contained PCE above the most stringent Act 2 standard, and the ground water samples collected from MW-4 contained benzo(a)pyrene and/or PCE above their respective, most stringent Act 2 standards. The ground water sample collected from MW-2A in September 2008 contained a detectable concentration of PCE above the most stringent Act 2 standard. The ground water sample collected from MW-2A in December 2008 contained detectable concentrations of benzo(a)pyrene, benzo(g,h,I)perylene, PCE, and vinyl chlorde above their respective, most stringent Act 2 standards.

INTENDED FUTURE USE OF THE PROPERTY:

The intended future use of the property will be for non-residential purposes.

Provide a general description of proposed remediation measures:

In order to pursue an Act 2 Release of Liability for the site, BL Companies intends to: (1) complete a quarterly ground water attainment monitoring program (at least 4 consecutive quarters) to document seasonal variation over a period of at least one year, (2) conduct aquifer testing and fate and transport analysis, (3) prepare and submit a Remedial Investigation Report to the PADEP, (3) develop a Conceptual Site Model, and (4) prepare and submit an Act 2 Final Report to the PADEP requesting a Release of Liability under a combination of the Statewide Health and Site-Specific Standards. It is anticipated that an an Environmental Covenant will be required to attain the Site-Specific Standard for target compounds detected above their respective Act 2 standards in soil and ground water at the site.

Will remediation be to a site-specific standard ☒ or as a special industrial area ☐? If so, the municipality or municipalities must be provided 30-day comment period.
Remediator/Property Owner/Consultant. For each of these recipients of the approval of the final report, complete form below.

Remediator
Contact Person: Robert Lerner
Relationship to site (e.g. owner, remediator, participating in cleanup, consultant): Remediator
Phone Number: 717 761-2633
Company Name: Rite Aid Corporation
Address (street, city, state, zip): 30 Hunter Lane, Camp Hill, PA 17011
Email Address: blerner@riteaid.com
Property Owner
Contact Person: Lawrence Gelman
Relationship to site (e.g. owner, remediator, participating in cleanup, consultant): Owner
Phone Number: 717 975-5715
Company Name: Rite Aid of Pennsylvania, Inc.
Address (street, city, state, zip): 30 Hunter Lane, Camp Hill, PA 17011
Email Address: lgelman@riteaid.com
Consultant
Contact Person: Bradley S. Wolf
Relationship to site (e.g. owner, remediator, participating in cleanup, consultant): Consultant
Phone Number: 717-651-9850
Company Name: BL Companies, Inc.
Address (street, city, state, zip): 213 Market Street, 6th Floor, Harrisburg, PA 17101
Email Address: bwolf@blcompanies.com

Preparer of Notice of Intent to Remediate:

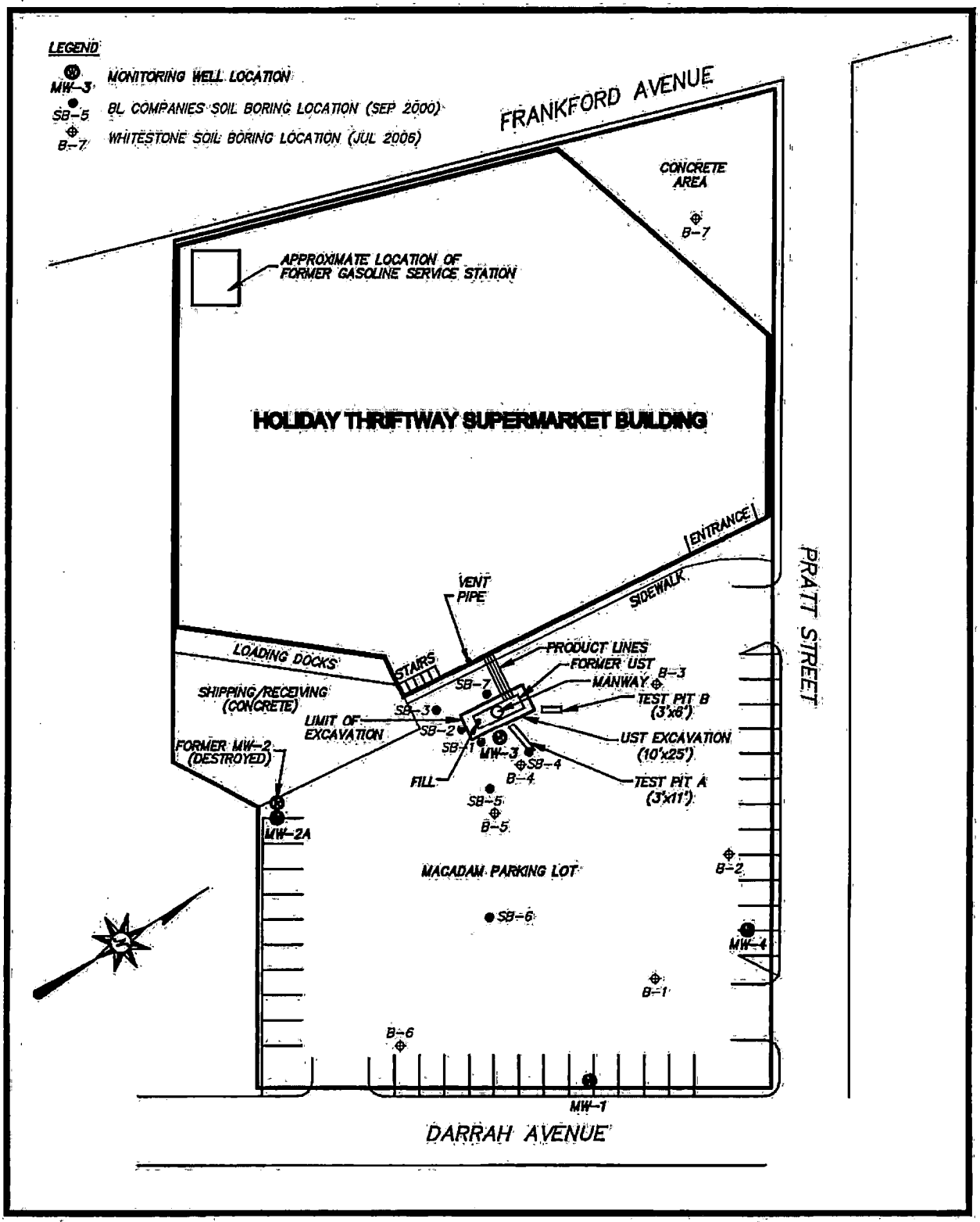
Name: John R. Thatcher
Title: Project Manager
Address: BL Companies, Inc.
213 Market St, 6th Floor, Harrisburg, PA 17101
Telephone: 717-651-9850
Email Address: jthatcher@blcompanies.com



Name: FRANKFORD
Date: 1/20/2009
Scale: 1 inch equals 2000 feet

Location: 040° 01' 18.7" N 075° 04' 43.4" W
Caption: FIG 1 - Site Location Map
Map created in 1967 (revised 1983)
Contour Interval = 20 feet

Copyright (C) 1997, Maptech, Inc.



BL Companies

SITE PLAN

5129-5135 FRANKFORD AVENUE SITE
CITY OF PHILADELPHIA
PHILADELPHIA COUNTY, PENNSYLVANIA

Designed	
Drawn	J.R.T.
Checked	B.S.W.
Approved	
Scale	NOT TO SCALE
Project No.	00L629-B
Date	08/27/08
CAD File	EV00L629B01

FIG 2

BL Companies

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

January 28, 2009

Philadelphia Department of Public Health
Environmental Engineering Section
321 University Avenue
Philadelphia, Pennsylvania 19104

RE: Notice of Intent to Remediate
Frankford and Darrah Site
5129-5135 Frankford Avenue
City of Philadelphia, Philadelphia County
BL Project No. 00L629-B

To Whom It May Concern:

The Land Recycling and Environmental Remediation Standards Act (Act 2) requires that a Notice of Intent to Remediate (NIR) be provided to the municipality in which the site is located. Act 2 also stipulates that when a site is being remediated to a Site-Specific Standard, the municipality is afforded a 30-day comment period. In accordance with the provisions of the Act, we are formally notifying you of our client's (Rite Aid Corporation) intent to remediate the above referenced site. A copy of the Notice of Intent to Remediate, which has been sent to the Pennsylvania Department of Environmental Protection (PADEP), is enclosed. This notice will be published in the Pennsylvania Bulletin, and a summary of the notice will appear in The Daily News.

Publication of this notice in a local newspaper initiates the 30-day public and municipal comment period. During this time, the municipality may request to become involved in the development of the remediation and reuse plans for the site. If the municipality wishes to become involved in this project, please send your comments to:

Mr. Stephen Sinding, Environmental Cleanup Program Manager
Pennsylvania Department of Environmental Protection
Southeast Regional Office
2 East Main Street
Norristown, Pennsylvania 19401

If you have any questions or comments regarding the proposed remediation, please contact the undersigned at your convenience.

Respectfully submitted;

BL Companies

John R. Thatcher, PG
Project Manager

Bradley S. Wolf, BS
Principal

Enclosure

RECEIVED MAR 9 - 2009

Pennsylvania Department of Environmental Protection

2 East Main Street
Norristown, PA 19401
March 4, 2009

Southeast Regional Office

Phone: 484-250-5960
Fax: 484-250-5961

Mr. Bradley S. Wolf
BL Companies, Inc.
213 Market Street, 6th Floor
Harrisburg, PA 17101

Re: ECP - Special Projects - Act 2
Receipt of Site-Specific/SIA NIR
Frankford and Darrah Site
EFACTS No. 716772
5129-5135 Frankford Avenue
City of Philadelphia
Philadelphia County
Latitude: 40 01 18.7
Longitude: -75 04 43.4

Dear Mr. Wolf:

This letter acknowledges receipt of your Notice of Intent to Remediate (NIR) on February 25, 2009, pertaining to the subject site and submitted in accordance with the Land Recycling and Environmental Remediation Standards Act (Act 2).

The procedures set forth in Act 2 must be followed in order for your site to qualify for the liability protection provided by the Act. Please ensure that proper municipal and public notifications of your NIR submission have been completed. Sites remediated to a Site-Specific Standard or managed pursuant to the requirements for special industrial areas shall provide for a 30-day comment period following submission of the NIR, during which time the municipality may request to be involved in development of remediation and reuse plans for the site. If the municipality requests a public involvement plan, any comments and responses must be included in the submission of the cleanup plan and/or baseline environmental report. The Department of Environmental Protection (Department) will not accept plans and reports until after the 30-day comment period. In addition, special industrial area projects require the execution of a Special Industrial Area Consent Order and Agreement after the Department approves the baseline environmental report. You are encouraged to become familiar with the process for developing this agreement.

The Department and the county conservation districts (CCD) have implemented a coordinated effort in their respective reviews of Act 2 Remediation and Erosion and Sedimentation (E&S) Plans to ensure compliance with Chapter 102 and the National Pollutant Discharge Elimination System (NPDES) permitting requirements. Certain earthmoving activities associated with concurrent Act remediation,

demolition, and site redevelopment need to be regulated to ensure the prevention of sediment pollution and release of contaminants to area waterways. These activities include:

- Where earthmoving activities are less than 5,000 square feet, Best Management Practices will be followed.
- Earthmoving impacting less than one acre requires an approved E&S Plan meeting the requirements of Chapter 102 and the E&S Manual.
- Earthmoving impacting or disturbing more than one acre requires an NPDES Stormwater Permit and E&S Plan approvals.

NPDES Permit applications for site remediation/redevelopment conducted under Act 2 are to be submitted to the respective CCD in which the site is located and copied to the Environmental Cleanup Program. Permit applications for sites located within the City of Philadelphia are to be submitted to Mr. Domenic Rocco, Chief, Permits and Technical Services Section, Southeast Regional Office. As a reminder, any project requiring a Department permit will need to go through a Pennsylvania Natural Diversity Index (PNDI) screening and have any potential conflicts with threatened and endangered species resolved prior to submitting an application.

Attach a copy of this letter to Plans/Permit applications being submitted to the Watershed Management Program or the CCD.

Further guidance can be located on the program's website.

Upon completion of a site characterization, risk assessment, cleanup plan, and/or baseline environmental report, please submit the plan and/or reports, as required by Act 2, to the Department accompanied by the required fees and documentation verifying compliance with the public notification requirements.

I am the case manager assigned to your project and look forward to working with you towards the remediation of your site. I will be calling either you or your environmental consultant in the coming days to introduce myself, discuss your tentative schedule for this project, and to suggest a framework for providing advice, conducting intermediate project reviews, addressing problems that may occur, and assisting in the goal of making your project a success. In part, we measure our success as a public service agency on the ultimate success of projects such as yours. Our Department has resources to assist the remediator in financial, transactional, and intra and inter state agency coordination of activities related to your project. We encourage frequent contact between your representatives and our staff throughout this process. Please note the web address below, as a resource for technical and program information: http://www.dep.state.pa.us/dep/deputate/airwaste/wm/landrecy/Vol_Clnup.htm . On this web page is a link to FORMS AND LISTS that includes a link to the online final report summary form,

which we ask that you complete online at the time of your final report submittal. The forms and lists link also includes optional checklists helpful in assuring your reports are complete before submittal. Whether or not you choose to use the checklists, our office will perform a technical completeness check (based on the checklists) whenever plans and/or reports are submitted.

If you have any questions or need further clarifications of our procedures, please contact me at the above phone number.

Sincerely,

Thomas D. Buterbaugh
Geologic Specialist
Environmental Cleanup

cc: Mr. Gelman (Rite Aid of Pennsylvania, Inc)
Mr. Lerner (Rite Aid Corporation)
Mr. Delaney (Philadelphia County Health Department)
Mr. Rocco
Ms. Fries
Mr. Gallagher
Mr. N. Molina
Mr. Payne
Ms. Bass
Re 30 (CB09ECP) 63.6

Proof of Publication in The Philadelphia Daily News
Under Act. No 587, Approved May 16, 1929

STATE OF PENNSYLVANIA
COUNTY OF PHILADELPHIA

Anna Dickerson being duly sworn, deposes and says that **The Philadelphia Daily News** is a newspaper published daily, except Sunday, at Philadelphia, Pennsylvania, and was established in said city in 1925, since which date said newspaper has been regularly issued in said County, and that a copy of the printed notice of publication is attached hereto exactly as the same was printed and published in the regular editions and issues of the said newspaper on the following dates:

February 2, 2009

Affiant further deposes and says that she is an employee of the publisher of said newspaper and has been authorized to verify the foregoing statement and that she is not interested in the subject matter of the aforesaid notice of publication, and that all allegations in the foregoing statement as to time, place and character of publication are true.

Anna Dickerson

Sworn to and subscribed before me this 2nd day of February, 2009.

Mary Anne Logan
Notary Public

My Commission Expires:

NOTARIAL SEAL
Mary Anne Logan, Notary Public
City of Philadelphia, Phila. County
My Commission Expires 3/30/2009

Copy of Notice of Publication

Pursuant to the Land Recycling and Environmental Remediation Standards Act, the act of May 19, 1995, P.L. 4, No. 1995-2, notice is hereby given that Rite Aid Corporation has submitted to the PADEP a Notice of Intent to Remediate a site located at 5129-5135 Frankford Avenue in the City of Philadelphia, Philadelphia County. This Notice of Intent to Remediate states that soil and ground water at the site have been found to be contaminated with volatile and semi-volatile organic compounds. Rite Aid Corporation has indicated that the proposed remediation measures will be ground water monitoring and attainment demonstration via modeling and pathway elimination. The proposed future use of the property will be for non-residential purposes.

Rite Aid Corporation plans to use a combination of the statewide health and site-specific standards to demonstrate attainment at the site. The Act provides for a 30-day public comment standard remediations. The 30-day comment period is initiated with the publication date of this notice. During the 30-day comment period, the City of Philadelphia may submit a request to Rite Aid Corporation to be involved in the development of the remediation and reuse plans for the site, or to develop and implement a public involvement plan. Copies of these requests and of any comments should also be submitted to the PADEP at 2 East Main Street, Norristown, PA 19401.

SENDER: *COMPLETE THIS SECTION*

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Philadelphia Dept. of Public Health
Environmental Engineering Section
321 University Avenue
Philadelphia, PA 19104

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X Wayne Faust ☑ Agent ☐ Addressee

B. Received by (Printed Name) Wayne Faust C. Date of Delivery 2/5/09

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☑ No

3. Service Type
☒ Certified Mail ☐ Express Mail
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John Thatcher
BL Companies
213 Market St., 6th Floor
Harrisburg, PA 17101

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CITY OF PHILADELPHIA

DEPARTMENT OF PUBLIC HEALTH
1401 JFK Boulevard, Suite 600
Philadelphia, PA 19102
Tel: (215) 686-5206
Fax: (215) 686-5212

DONALD F. SCHWARZ, MD, MPH
Deputy Mayor, Health & Opportunity
Health Commissioner

NAN FEYLER, JD, MPH
Chief of Staff

March 1, 2009

Bradley S. Wolf, PG
BL Companies, Inc.
213 Market Street
6th Floor
Harrisburg, PA 17101

Dear Mr. Wolf:

On February 26, 2009, the City of Philadelphia Department of Public Health, Environmental Engineering Unit received a Notice of Intent to Remediate (NIR) from your firm, under the provisions of the Pennsylvania Land Recycling and Environmental Remediation Standards Act (Act 2) regarding the project located at 5129-5135 Frankford Ave, Philadelphia, PA.

Through the Notice of Intent (NIR) provisions of Act 2, the City of Philadelphia hereby requests that you develop a Public Involvement Plan (PIP) for this site. This request is made in accordance with internal procedures first developed by the City in 2003 for this purpose. These procedures recommend our municipality request a PIP if the project is adjacent to residential, educational (schools/daycare), medical, religious, recreational or park properties. These procedures also compel us to request a PIP if the redevelopment of the land will be transformed from industrial usage to sensitive usages such as residential, educational (schools/daycare), medical, religious, and recreational and parkland. Since this project is adjacent to residential properties, we are obligated to request a PIP be developed. In addition to the reasons above, a number of the members of the interdepartmental review team which review NIRs submitted to the City have recommended a PIP in this instance.

The venue for this PIP will be an appropriately publicized meeting of interested parties (impacted community and businesses) you will host to discuss this site, to be held at a suitable location and time, allowing interested parties to attend. An approximate 30 days advance notice of the meeting must be provided, during which time all relevant sampling and background investigation material should be made available for public inspection at a suitable location, such as the nearest school or public library.

The meeting would focus on the following:

- Identity, location and concentration of contaminants and hazardous substances found in sampling events at the site;
- Any potential health effects of those contaminants, based on locations and concentrations noted;
- Measures to be taken to protect the community, workers and any nearby school and recreation areas from possible exposure;
- Further definition of the remediation methodology to be employed
- Discussion of specific procedures, such as dust control, sedimentation and erosion control

Following the meeting, all supplemental material, which will include presentation materials, attendance list, and questions and answers will append the material provided earlier, which will be given to PaDEP, with a copy to the City.

Please notify the Department of Public Health in writing of the date, time and location of the public meeting, and the location of the document depository as noted above.

This PIP request is specifically concerned with final questions regarding the proposed remediation to be employed on the site in its current condition. Accordingly, your presentation can be geared specifically to the remediation strategy, and the questions noted above.

Should you have any questions, please contact Raymond Delaney of our Department's Environmental Engineering section at 215-685-7344 or raymond.delaney@phila.gov.

Yours truly,

Nan Feyler, JD/MPH
Chief of Staff

cc: Stephan Sinding, PADEP
Izzat Melhem, Acting Director, Environmental Health Services
Raymond Delaney, Asst. Chief, Environmental Engineering
Patrick O'Neill, Senior Attorney
Members, Hazardous Waste Technical Subcommittee

BL Companies

March 11, 2010

Mr. Raymond Delaney
City of Philadelphia
Department of Public Health
1401 John F. Kennedy Boulevard, Suite 600
Philadelphia, PA 19102

RE: Public Meeting and Document Repository
for Act 2 PIP – 5129-5135 Frankford Avenue, Philadelphia, PA

Dear Mr. Delaney:

Pursuant to the Land Recycling and Environmental Remediation Standards Act ("Act 2"), the City of Philadelphia's guidelines for Act 2 Public Involvement Plans ("PIPs"), and our previous correspondence dated January 27, 2010, BL Companies hosted a public meeting to discuss and receive comments on its investigation and proposed remediation of environmental conditions at the 5129-5135 Frankford Avenue site ("Site") bounded by Frankford Avenue, Pratt Street, and Darrah Street, Philadelphia. The public meeting was held on March 3, 2010, at 6 p.m. at the Frankford Branch Library ("Frankford Branch"), 4634 Frankford Avenue, Philadelphia. The public meeting was not attended by any interested parties.

Please feel free to contact me should you have any questions in this matter.

Very truly yours,

BL Companies

John R. Thatcher, PG
Project Manager

One South Market Square 213 Market Street, 6th Floor Harrisburg, PA 17101 Tel. (717) 651-9850 Fax (717) 651-9858
Architecture ▪ Engineering ▪ Planning ▪ Landscape Architecture ▪ Land Surveying ▪ Environmental Sciences
BL Companies Pennsylvania, Inc. ▪ David G. Ball, AIA ▪ Mark S. Koellner, PG ▪ Michael A. Lozanoff, PE ▪ Rainer A. Muhlbauer, AIA ▪ Stanley C. Novak, PE

Proof of Publication in The Philadelphia Daily News
Under Act. No 587, Approved May 16, 1929

STATE OF PENNSYLVANIA
COUNTY OF PHILADELPHIA

Florence Devlin being duly sworn, deposes and says that **The Philadelphia Daily News** is a newspaper published daily, except Sunday, at Philadelphia, Pennsylvania, and was established in said city in 1925, since which date said newspaper has been regularly issued in said County, and that a copy of the printed notice of publication is attached hereto exactly as the same was printed and published in the regular editions and issues of the said newspaper on the following dates:

May 14, 2014

Affiant further deposes and says that she is an employee of the publisher of said newspaper and has been authorized to verify the foregoing statement and that she is not interested in the subject matter of the aforesaid notice of publication, and that all allegations in the foregoing statement as to time, place and character of publication are true.

Florence Devlin

Sworn to and subscribed before me this 14th day of May, 2014.

Mary Anne Logan
Notary Public

My Commission Expires:

COMMONWEALTH OF PENNSYLVANIA
NOTARIAL SEAL
MARY ANNE LOGAN, Notary Public
City of Philadelphia, Phila. County
My Commission Expires March 30, 2017

Copy of Notice of Publication

Pursuant to the Land Recycling and Environmental Remediation Standards Act, the Act of May 19, 1995, P.L. #4, No. 1995-2, notice is hereby given that on behalf of our client (Rite Aid Corporation), BL Companies will be submitting a Final Report to the Pennsylvania Department of Environmental Protection, Southeast Regional Office, for the site located at 5129-5135 Frankford Avenue in Philadelphia, Philadelphia County. The Final Report indicates that the site characterization and remedial investigation activities performed at the site have attained compliance with a combination of the site-specific and statewide health cleanup standards for regulated substances in soil and ground water.

BL Companies
Architecture
Engineering
Environmental
Land Surveying

An Employee-Owned Company

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

May 12, 2014

Philadelphia Department of Public Health
Environmental Engineering Section
321 University Avenue
Philadelphia, Pennsylvania 19104

RE: Submission of Final Report
Frankford & Darrah Site
5129-5135 Frankford Avenue
City of Philadelphia, Philadelphia County
BL Project No. 00L629-B

Dear Sir or Madam:

Notice is hereby given that on behalf of our client (Rite Aid Corporation), BL Companies will be submitting a Final Report to the Pennsylvania Department of Environmental Protection (PADEP), Southeast Regional Office for the site located at 5129-5135 Frankford Avenue in the City of Philadelphia, Philadelphia County. The Final Report indicates that the site characterization and remedial investigation activities performed at the above referenced site have attained compliance with a combination of the site-specific and statewide health cleanup standards for regulated substances detected in soil and ground water.

This notice is made under the provision of the Land Recycling and Environmental Remediation Standards Act, the Act of May 19, 1995, P.L. #4, No. 2.

Respectfully submitted,

BL Companies, Inc.

John R. Thatcher
Project Manager

Kenneth M. Yoder, PG
Principle Environmental Scientist

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Philadelphia Department of Public Health
Environmental Engineering Section
321 University Avenue
Philadelphia, Pennsylvania 19104

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APPENDIX B

Laboratory Analytical Reports and Chain of Custody Documentation

AMERICAN Westech INCORPORATED

Revised Laboratory Result Summary

Laboratory Project ID: 0903122

BL Companies
Scott Treherne
213 Market St.
6th Floor
Harrisburg, PA 17101

Contact: Scott Treherne
Project Name: Frankford & Darriah
Project Number: 00L629-B
Purchase Order Number: N/A
Sampled By: Scott Treherne
Date Received: March 10, 2009
Time Received: 9:23 AM

Analytical Testing Parameters

Client Sample ID: **MW-1**
Lab Sample ID: **0903122-01**
Collection Date: **3/6/2009**
Collection Time: **10:30 AM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<50.0	ug/L	50.0	SW846 8260B	3/10/2009	3:11 PM	DSW
Benzene	<1.00	ug/L	1.00	SW846 8260B	3/10/2009	3:11 PM	DSW
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
Bromodichloromethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
Bromoform	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
2-Butanone (MEK)	<3.00	ug/L	3.00	SW846 8260B	3/10/2009	3:11 PM	DSW
n-Butylbenzene	<4.00	ug/L	4.00	SW846 8260B	3/10/2009	3:11 PM	DSW
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	3/10/2009	3:11 PM	DSW
Carbon Tetrachloride	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
Chlorodibromomethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
Chloroform	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
Chloromethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
1,1-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
cis-1,2-Dichloroethene	**4.70**	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
1,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
Hexachlorobutadiene	<3.00	ug/L	3.00	SW846 8260B	3/10/2009	3:11 PM	DSW
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	3/10/2009	3:11 PM	DSW
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
4-Isopropyltoluene	<10.0	ug/L	10.0	SW846 8260B	3/10/2009	3:11 PM	DSW
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	3/10/2009	3:11 PM	DSW
Methylene Chloride	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
Naphthalene	<10.0	ug/L	10.0	SW846 8260B	3/10/2009	3:11 PM	DSW
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
Styrene	<4.00	ug/L	4.00	SW846 8260B	3/10/2009	3:11 PM	DSW
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
1,1,2,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
Tetrachloroethene	**2.84**	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
Toluene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	3/10/2009	3:11 PM	DSW
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	3/10/2009	3:11 PM	DSW
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
Trichloroethene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
Vinyl Chloride	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	3/10/2009	3:11 PM	DSW
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	3/10/2009	3:11 PM	DSW

- The Bromomethane concentration was determined by a library search of the appropriate retention time and mass spectral ion pattern.

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.91	ug/L	0.91	SW846 8270C	3/13/2009	11:22 PM	CGS
Acenaphthylene	<0.91	ug/L	0.91	SW846 8270C	3/13/2009	11:22 PM	CGS
Anthracene	<0.91	ug/L	0.91	SW846 8270C	3/13/2009	11:22 PM	CGS
Benzo(a)anthracene	**0.63**	ug/L	0.51	SW846 8270C	3/13/2009	11:22 PM	CGS
Benzo(a)pyrene	**1.69**	ug/L	0.20	SW846 8270C	3/13/2009	11:22 PM	CGS
Benzo(b)fluoranthene	**1.86**	ug/L	0.51	SW846 8270C	3/13/2009	11:22 PM	CGS
Benzo(g,h,i)perylene	**2.28**	ug/L	0.20	SW846 8270C	3/13/2009	11:22 PM	CGS
Benzo(k)fluoranthene	**1.83**	ug/L	0.51	SW846 8270C	3/13/2009	11:22 PM	CGS
Chrysene	**1.32**	ug/L	0.91	SW846 8270C	3/13/2009	11:22 PM	CGS
Dibenzo(a,h)anthracene	**1.19**	ug/L	0.51	SW846 8270C	3/13/2009	11:22 PM	CGS
Fluoranthene	**1.44**	ug/L	0.91	SW846 8270C	3/13/2009	11:22 PM	CGS
Fluorene	<0.91	ug/L	0.91	SW846 8270C	3/13/2009	11:22 PM	CGS
Indeno(1,2,3-cd)pyrene	**2.24**	ug/L	0.51	SW846 8270C	3/13/2009	11:22 PM	CGS
1-Methylnaphthalene	<1.01	ug/L	1.01	SW846 8270C	3/13/2009	11:22 PM	CGS

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
2-Methylnaphthalene	<1.01	ug/L	1.01	SW846 8270C	3/13/2009	11:22 PM	CGS
Naphthalene	<0.91	ug/L	0.91	SW846 8270C	3/13/2009	11:22 PM	CGS
Phenanthrene	<0.91	ug/L	0.91	SW846 8270C	3/13/2009	11:22 PM	CGS
Pyrene	**1.49**	ug/L	0.91	SW846 8270C	3/13/2009	11:22 PM	CGS

- Although it is not required to be monitored in the reference methodology, the internal standards yielded low recoveries. All of the surrogates however, were recovered within acceptable quality control guidelines.

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	<0.005	mg/L	0.005	SW846 7421	3/10/2009	4:42 PM	BEH

Analytical Testing Parameters

Client Sample ID: **MW-2A** Collection Date: **3/6/2009**
Lab Sample ID: **0903122-02** Collection Time: **11:00 AM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<50.0	ug/L	50.0	SW846 8260B	3/10/2009	3:39 PM	DSW
Benzene	<1.00	ug/L	1.00	SW846 8260B	3/10/2009	3:39 PM	DSW
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
Bromodichloromethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
Bromoform	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
2-Butanone (MEK)	<3.00	ug/L	3.00	SW846 8260B	3/10/2009	3:39 PM	DSW
n-Butylbenzene	<4.00	ug/L	4.00	SW846 8260B	3/10/2009	3:39 PM	DSW
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	3/10/2009	3:39 PM	DSW
Carbon Tetrachloride	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
Chlorodibromomethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
Chloroform	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
Chloromethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
1,1-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
cis-1,2-Dichloroethene	**3.67**	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
1,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
Hexachlorobutadiene	<3.00	ug/L	3.00	SW846 8260B	3/10/2009	3:39 PM	DSW
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	3/10/2009	3:39 PM	DSW
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
4-Isopropyltoluene	<10.0	ug/L	10.0	SW846 8260B	3/10/2009	3:39 PM	DSW
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	3/10/2009	3:39 PM	DSW
Methylene Chloride	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
Naphthalene	<10.0	ug/L	10.0	SW846 8260B	3/10/2009	3:39 PM	DSW
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
Styrene	<4.00	ug/L	4.00	SW846 8260B	3/10/2009	3:39 PM	DSW
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
1,1,2,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
Tetrachloroethene	**31.0**	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
Toluene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	3/10/2009	3:39 PM	DSW
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	3/10/2009	3:39 PM	DSW
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
Trichloroethene	**2.69**	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
Vinyl Chloride	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	3/10/2009	3:39 PM	DSW
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	3/10/2009	3:39 PM	DSW

- The Bromomethane concentration was determined by a library search of the appropriate retention time and mass spectral ion pattern.

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.95	ug/L	0.95	SW846 8270C	3/13/2009	11:59 PM	CGS
Acenaphthylene	<0.95	ug/L	0.95	SW846 8270C	3/13/2009	11:59 PM	CGS
Anthracene	<0.95	ug/L	0.95	SW846 8270C	3/13/2009	11:59 PM	CGS
Benzo(a)anthracene	<0.53	ug/L	0.53	SW846 8270C	3/13/2009	11:59 PM	CGS
Benzo(a)pyrene	**1.17**	ug/L	0.21	SW846 8270C	3/13/2009	11:59 PM	CGS
Benzo(b)fluoranthene	**1.23**	ug/L	0.53	SW846 8270C	3/13/2009	11:59 PM	CGS
Benzo(g,h,i)perylene	**0.76**	ug/L	0.21	SW846 8270C	3/13/2009	11:59 PM	CGS
Benzo(k)fluoranthene	**0.87**	ug/L	0.53	SW846 8270C	3/13/2009	11:59 PM	CGS
Chrysene	<0.95	ug/L	0.95	SW846 8270C	3/13/2009	11:59 PM	CGS
Dibenzo(a,h)anthracene	<0.53	ug/L	0.53	SW846 8270C	3/13/2009	11:59 PM	CGS

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Fluoranthene	<0.95	ug/L	0.95	SW846 8270C	3/13/2009	11:59 PM	CGS
Fluorene	<0.95	ug/L	0.95	SW846 8270C	3/13/2009	11:59 PM	CGS
Indeno(1,2,3-cd)pyrene	**0.93**	ug/L	0.53	SW846 8270C	3/13/2009	11:59 PM	CGS
1-Methylnaphthalene	<1.05	ug/L	1.05	SW846 8270C	3/13/2009	11:59 PM	CGS
2-Methylnaphthalene	<1.05	ug/L	1.05	SW846 8270C	3/13/2009	11:59 PM	CGS
Naphthalene	<0.95	ug/L	0.95	SW846 8270C	3/13/2009	11:59 PM	CGS
Phenanthrene	<0.95	ug/L	0.95	SW846 8270C	3/13/2009	11:59 PM	CGS
Pyrene	**0.98**	ug/L	0.95	SW846 8270C	3/13/2009	11:59 PM	CGS

- Although it is not required to be monitored in the reference methodology, the internal standards yielded low recoveries. All of the surrogates however, were recovered within acceptable quality control guidelines.

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	<0.005	mg/L	0.005	SW846 7421	3/10/2009	4:46 PM	BEH

Analytical Testing Parameters

Client Sample ID: **MW-3**
Lab Sample ID: **0903122-03**
Collection Date: **3/6/2009**
Collection Time: **11:15 AM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<50.0	ug/L	50.0	SW846 8260B	3/10/2009	4:08 PM	DSW
Benzene	<1.00	ug/L	1.00	SW846 8260B	3/10/2009	4:08 PM	DSW
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
Bromodichloromethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
Bromoform	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
2-Butanone (MEK)	<3.00	ug/L	3.00	SW846 8260B	3/10/2009	4:08 PM	DSW
n-Butylbenzene	<4.00	ug/L	4.00	SW846 8260B	3/10/2009	4:08 PM	DSW
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	3/10/2009	4:08 PM	DSW
Carbon Tetrachloride	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
Chlorodibromomethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
Chloroform	**4.36**	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
Chloromethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
1,1-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
cis-1,2-Dichloroethene	**9.58**	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
1,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
Hexachlorobutadiene	<3.00	ug/L	3.00	SW846 8260B	3/10/2009	4:08 PM	DSW
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	3/10/2009	4:08 PM	DSW
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
4-Isopropyltoluene	<10.0	ug/L	10.0	SW846 8260B	3/10/2009	4:08 PM	DSW
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	3/10/2009	4:08 PM	DSW
Methylene Chloride	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
Naphthalene	<10.0	ug/L	10.0	SW846 8260B	3/10/2009	4:08 PM	DSW
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
Styrene	<4.00	ug/L	4.00	SW846 8260B	3/10/2009	4:08 PM	DSW
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
1,1,2,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
Tetrachloroethene	**44.8**	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
Toluene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	3/10/2009	4:08 PM	DSW
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	3/10/2009	4:08 PM	DSW
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
Trichloroethene	**4.86**	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
Vinyl Chloride	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	3/10/2009	4:08 PM	DSW
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	3/10/2009	4:08 PM	DSW

- The Bromomethane concentration was determined by a library search of the appropriate retention time and mass spectral ion pattern.

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.90	ug/L	0.90	SW846 8270C	3/14/2009	2:28 AM	CGS
Acenaphthylene	<0.90	ug/L	0.90	SW846 8270C	3/14/2009	2:28 AM	CGS
Anthracene	<0.90	ug/L	0.90	SW846 8270C	3/14/2009	2:28 AM	CGS
Benzo(a)anthracene	<0.50	ug/L	0.50	SW846 8270C	3/14/2009	2:28 AM	CGS
Benzo(a)pyrene	**1.01**	ug/L	0.20	SW846 8270C	3/14/2009	2:28 AM	CGS
Benzo(b)fluoranthene	**1.12**	ug/L	0.50	SW846 8270C	3/14/2009	2:28 AM	CGS

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Benzo(g,h,i)perylene	**0.62**	ug/L	0.20	SW846 8270C	3/14/2009	2:28 AM	CGS
Benzo(k)fluoranthene	<0.50	ug/L	0.50	SW846 8270C	3/14/2009	2:28 AM	CGS
Chrysene	<0.90	ug/L	0.90	SW846 8270C	3/14/2009	2:28 AM	CGS
Dibenzo(a,h)anthracene	<0.50	ug/L	0.50	SW846 8270C	3/14/2009	2:28 AM	CGS
Fluoranthene	<0.90	ug/L	0.90	SW846 8270C	3/14/2009	2:28 AM	CGS
Fluorene	<0.90	ug/L	0.90	SW846 8270C	3/14/2009	2:28 AM	CGS
Indeno(1,2,3-cd)pyrene	<0.50	ug/L	0.50	SW846 8270C	3/14/2009	2:28 AM	CGS
1-Methylnaphthalene	<1.00	ug/L	1.00	SW846 8270C	3/14/2009	2:28 AM	CGS
2-Methylnaphthalene	<1.00	ug/L	1.00	SW846 8270C	3/14/2009	2:28 AM	CGS
Naphthalene	<0.90	ug/L	0.90	SW846 8270C	3/14/2009	2:28 AM	CGS
Phenanthrene	<0.90	ug/L	0.90	SW846 8270C	3/14/2009	2:28 AM	CGS
Pyrene	<0.90	ug/L	0.90	SW846 8270C	3/14/2009	2:28 AM	CGS

- Although it is not required to be monitored in the reference methodology, the internal standards yielded low recoveries. All of the surrogates however, were recovered within acceptable quality control guidelines.

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	<0.005	mg/L	0.005	SW846 7421	3/10/2009	4:51 PM	BEH

Analytical Testing Parameters

Client Sample ID: **MW-4** Collection Date: **3/6/2009**
Lab Sample ID: **0903122-04** Collection Time: **10:45 AM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<50.0	ug/L	50.0	SW846 8260B	3/10/2009	4:36 PM	DSW
Benzene	<1.00	ug/L	1.00	SW846 8260B	3/10/2009	4:36 PM	DSW
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
Bromodichloromethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
Bromoform	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
2-Butanone (MEK)	<3.00	ug/L	3.00	SW846 8260B	3/10/2009	4:36 PM	DSW
n-Butylbenzene	<4.00	ug/L	4.00	SW846 8260B	3/10/2009	4:36 PM	DSW
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	3/10/2009	4:36 PM	DSW
Carbon Tetrachloride	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
Chlorodibromomethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
Chloroform	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
Chloromethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
1,1-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
cis-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
1,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
Hexachlorobutadiene	<3.00	ug/L	3.00	SW846 8260B	3/10/2009	4:36 PM	DSW
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	3/10/2009	4:36 PM	DSW
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
4-Isopropyltoluene	<10.0	ug/L	10.0	SW846 8260B	3/10/2009	4:36 PM	DSW
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	3/10/2009	4:36 PM	DSW
Methylene Chloride	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
Naphthalene	<10.0	ug/L	10.0	SW846 8260B	3/10/2009	4:36 PM	DSW
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
Styrene	<4.00	ug/L	4.00	SW846 8260B	3/10/2009	4:36 PM	DSW
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
1,1,2,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
Tetrachloroethene	**2.53**	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
Toluene	**6.23**	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	3/10/2009	4:36 PM	DSW
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	3/10/2009	4:36 PM	DSW
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
Trichloroethene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
Vinyl Chloride	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
m,p-Xylene	**4.14**	ug/L	4.00	SW846 8260B	3/10/2009	4:36 PM	DSW
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	3/10/2009	4:36 PM	DSW

- The Bromomethane concentration was determined by a library search of the appropriate retention time and mass spectral ion pattern.

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.92	ug/L	0.92	SW846 8270C	3/14/2009	3:08 AM	CGS
Acenaphthylene	<0.92	ug/L	0.92	SW846 8270C	3/14/2009	3:08 AM	CGS
Anthracene	<0.92	ug/L	0.92	SW846 8270C	3/14/2009	3:08 AM	CGS
Benzo(a)anthracene	<0.51	ug/L	0.51	SW846 8270C	3/14/2009	3:08 AM	CGS
Benzo(a)pyrene	**1.05**	ug/L	0.21	SW846 8270C	3/14/2009	3:08 AM	CGS
Benzo(b)fluoranthene	**1.21**	ug/L	0.51	SW846 8270C	3/14/2009	3:08 AM	CGS
Benzo(g,h,i)perylene	**0.65**	ug/L	0.21	SW846 8270C	3/14/2009	3:08 AM	CGS
Benzo(k)fluoranthene	**0.85**	ug/L	0.51	SW846 8270C	3/14/2009	3:08 AM	CGS
Chrysene	<0.92	ug/L	0.92	SW846 8270C	3/14/2009	3:08 AM	CGS
Dibenzo(a,h)anthracene	<0.51	ug/L	0.51	SW846 8270C	3/14/2009	3:08 AM	CGS
Fluoranthene	<0.92	ug/L	0.92	SW846 8270C	3/14/2009	3:08 AM	CGS
Fluorene	<0.92	ug/L	0.92	SW846 8270C	3/14/2009	3:08 AM	CGS
Indeno(1,2,3-cd)pyrene	<0.51	ug/L	0.51	SW846 8270C	3/14/2009	3:08 AM	CGS
1-Methylnaphthalene	<1.02	ug/L	1.02	SW846 8270C	3/14/2009	3:08 AM	CGS
2-Methylnaphthalene	<1.02	ug/L	1.02	SW846 8270C	3/14/2009	3:08 AM	CGS
Naphthalene	<0.92	ug/L	0.92	SW846 8270C	3/14/2009	3:08 AM	CGS
Phenanthrene	<0.92	ug/L	0.92	SW846 8270C	3/14/2009	3:08 AM	CGS
Pyrene	<0.92	ug/L	0.92	SW846 8270C	3/14/2009	3:08 AM	CGS

- Although it is not required to be monitored in the reference methodology, the internal standards yielded low recoveries. All of the surrogates however, were recovered within acceptable quality control guidelines.

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	**0.043**	mg/L	0.010	SW846 7421	3/10/2009	4:58 PM	BEH

Report Comments:

The **PQL** is the **Practical Quantitation Limit**, which is defined as the lowest quantitation level of an analyte that can be readily achieved within the specified limits of precision and accuracy of an analytical method during routine laboratory operating conditions. The value may be raised depending on the characteristics or behavior of the target analyte.

All samples were analyzed **"as received"** from the client. American Westech Inc. can only assume that all samples were collected and submitted by the CLIENT following the appropriate protocols set forth by the regulatory requirements. This document shall not be reproduced, except in full, without the written approval of American Westech Inc. If there are any questions pertaining to this laboratory report please contact a Client Services Coordinator or the Laboratory Director at (717) 651-9700.

Laboratory Certifications:

- NELAP accredited by the PADEP (22-00578) & NJDEP (PA019) for numerous solid and chemical materials and non-potable water parameters. Please refer to our certified parameter lists for each state for specific information on the approved methodologies.
- PADEP accredited for various drinking water parameters including: Volatile Organic Compounds, Metals, Inorganics, and Microbiology (22-00578). Please refer to our certified parameter list for specific information on the approved methodologies

Reviewed and Approved By:

William W. Smith, Jr.
Laboratory Director

Date Reviewed and Approved:
3-23-09

American Westech Incorporated
4359 Linglestown Road, Harrisburg, PA 17112
Phone: (717) 651-9700 Fax: (717) 657-0752

SAMPLE SUBMITTAL FORM

NELAP accredited by PADEP & NJDEP. Please call for specific parameter accreditations.
PADEP ID (22-00578) - NJDEP ID (PA019)

LABORATORY PROJECT NUMBER: **0903122**

PROJECT DETAILS

Company: BL COMPANIES
Contact: SCOTT TREHERNE
Address: 213 MARKET STREET 6TH FLOOR
City: HARRISBURG State: PA Zip: 17101
Phone: 717-651-9850 Fax: 717-651-9858
Project Name: FRANKFORD ARSENAL
Project No.: 00L629-B
Client P.O. No.:
Westech Proposal/BPA No.:
Purpose: ☒ Regulatory ☐ Informational ☐ PWSID:
Data Deliverables: ☐ Level I ☐ Level II ☐ Level III ☐ Level IV
Report Delivery: ☐ Fax ☒ Email - Address: STREHERNE@BLCOMPANIES.COM
Please Mark TAT Requested * : ☐ 10 Day (Standard) ☒ 5 Day ☐ 72 Hour ☐ 48 Hour ☐ 24 Hour ☐ Same Day

INVOICING INFORMATION

Company: BL COMPANIES
Contact: SAME
Address:
City: State: Zip:
Phone: Fax:
Invoice Delivery: ☒ Mail w/Report ☐ Email (enter address below)
WESTECH Field Services Used? ☒ NO ☐ YES - *(See Field Services Log)*

SAMPLE TYPE (Key): SS = Solid/Sludge; OL = Oil; DW = Drinking Water; GW = Groundwater; SW = Storm/Surface Water; WW = Wastewater; AR = Air; O = Other: _____

* Turnaround times based on business days only. All "RUSH" TATs must be pre-arranged with WESTECH and are subject to "RUSH" surcharges.

SAMPLE RECEIVING INFORMATION *(lab use only)*

Samples received on ice? Temp: 2.0 °C	✓	N	NA	
Cooler temp. within acceptable limits?	✓	N	NA	
Correct bottles used for requested analysis?	✓	N	NA	
Sample bottles in good condition (unbroken)?	✓	N	NA	
Zero headspace samples collected correctly?	✓	N	NA	
Samples within required holding time?	✓	N	NA	
Samples preserved to pH <2 and/or pH >12?	✓	N	NA	62

Shipping Carrier? ☐ Drop Off ☐ WESTECH Pickup ☐ Outside Courier:

LAB ID	SAMPLE IDENTIFICATION / LOCATION DESCRIPTION	SAMPLE DATE	SAMPLE TIME	SAMPLE DETAILS: Total # of Bottles	Sample Type: (See "Sample Type" Key)	Grab: "G" or Composite: "C"	ANALYSIS REQUESTED: VOCs (8260-B)	PAHs (8270-C)	Diss. Pb
01	MW-1	03.06.09	10:30	5	GW	G	X	X	X
02	MW-2A	↓	11:00	5	↓	↓	X	X	X
03	MW-3		11:15	5			X	X	X
04	MW-4	↓	10:45	5	↓	↓	X	X	X
05				5					
06									
07									
08									
09									
10									

	PRINT NAME	SIGNATURE	DATE	TIME
Sampled By:	Scott Treherne	Scott Treherne	03.06.09	11:30
Relinquished By (Sampler):	Scott Treherne	Scott Treherne	03.09.09	
Accepted By:				
Relinquished to WESTECH By:				
Accepted at WESTECH By:	JESSI PEITTER		3/10/09	0923

COMMENTS OR SPECIAL INSTRUCTIONS: *SAMPLE RESULTS MUST MEET MINIMUM PA ACT 2 REQUIREMENTS

AMERICAN Westech INCORPORATED

Laboratory Result Summary

Laboratory Project ID: 0906223

BL Companies
Scott Treherne
213 Market St.
6th Floor
Harrisburg, PA 17101

Contact: Scott Treherne
Project Name: Frankford & Darrah
Project Number: 00L629-B
Purchase Order Number: N/A
Sampled By: Scott Treherne
Date Received: June 12, 2009
Time Received: 11:18 AM

Analytical Testing Parameters

Client Sample ID: **MW-1**
Lab Sample ID: **0906223-01**
Collection Date: **6/11/2009**
Collection Time: **11:00 AM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<50.0	ug/L	50.0	SW846 8260B	6/12/2009	4:51 PM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	6/12/2009	4:51 PM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
Bromodichloromethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
2-Butanone (MEK)	<3.00	ug/L	3.00	SW846 8260B	6/12/2009	4:51 PM	JMS
n-Butylbenzene	<4.00	ug/L	4.00	SW846 8260B	6/12/2009	4:51 PM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	6/12/2009	4:51 PM	JMS
Carbon Tetrachloride	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
Chlorodibromomethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
Chloroform	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
Chloromethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
1,1-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
cis-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
1,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
Hexachlorobutadiene	<3.00	ug/L	3.00	SW846 8260B	6/12/2009	4:51 PM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	6/12/2009	4:51 PM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
4-Isopropyltoluene	<10.0	ug/L	10.0	SW846 8260B	6/12/2009	4:51 PM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	6/12/2009	4:51 PM	JMS
Methylene Chloride	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
Naphthalene	<10.0	ug/L	10.0	SW846 8260B	6/12/2009	4:51 PM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
Styrene	<4.00	ug/L	4.00	SW846 8260B	6/12/2009	4:51 PM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
1,1,2,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
Tetrachloroethene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	6/12/2009	4:51 PM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	6/12/2009	4:51 PM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
Trichloroethene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
Vinyl Chloride	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	6/12/2009	4:51 PM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	6/12/2009	4:51 PM	JMS

- The Bromomethane concentration was determined by a library search of the appropriate retention time and mass spectral ion pattern.

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.90	ug/L	0.90	SW846 8270C	6/17/2009	12:57 AM	CGS
Acenaphthylene	<0.90	ug/L	0.90	SW846 8270C	6/17/2009	12:57 AM	CGS
Anthracene	<0.90	ug/L	0.90	SW846 8270C	6/17/2009	12:57 AM	CGS
Benzo(a)anthracene	<0.50	ug/L	0.50	SW846 8270C	6/17/2009	12:57 AM	CGS
Benzo(a)pyrene	**0.67**	ug/L	0.20	SW846 8270C	6/17/2009	12:57 AM	CGS
Benzo(b)fluoranthene	**1.78**	ug/L	0.50	SW846 8270C	6/17/2009	12:57 AM	CGS
Benzo(g,h,i)perylene	**1.20**	ug/L	0.20	SW846 8270C	6/17/2009	12:57 AM	CGS
Benzo(k)fluoranthene	**0.96**	ug/L	0.50	SW846 8270C	6/17/2009	12:57 AM	CGS
Chrysene	**1.06**	ug/L	0.90	SW846 8270C	6/17/2009	12:57 AM	CGS
Dibenzo(a,h)anthracene	<0.50	ug/L	0.50	SW846 8270C	6/17/2009	12:57 AM	CGS
Fluoranthene	**1.41**	ug/L	0.90	SW846 8270C	6/17/2009	12:57 AM	CGS
Fluorene	<0.90	ug/L	0.90	SW846 8270C	6/17/2009	12:57 AM	CGS
Indeno(1,2,3-cd)pyrene	**1.71**	ug/L	0.50	SW846 8270C	6/17/2009	12:57 AM	CGS
1-Methylnaphthalene	<1.00	ug/L	1.00	SW846 8270C	6/17/2009	12:57 AM	CGS
2-Methylnaphthalene	<1.00	ug/L	1.00	SW846 8270C	6/17/2009	12:57 AM	CGS

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Naphthalene	<0.90	ug/L	0.90	SW846 8270C	6/17/2009	12:57 AM	CGS
Phenanthrene	<0.90	ug/L	0.90	SW846 8270C	6/17/2009	12:57 AM	CGS
Pyrene	**1.14**	ug/L	0.90	SW846 8270C	6/17/2009	12:57 AM	CGS

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	<0.005	mg/L	0.005	SW846 7421	6/15/2009	2:52 PM	JAW

Analytical Testing Parameters

Client Sample ID: **MW-2A** Collection Date: **6/11/2009**

Lab Sample ID: **0906223-02** Collection Time: **11:15 AM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<50.0	ug/L	50.0	SW846 8260B	6/12/2009	5:19 PM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	6/12/2009	5:19 PM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
Bromodichloromethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
2-Butanone (MEK)	<3.00	ug/L	3.00	SW846 8260B	6/12/2009	5:19 PM	JMS
n-Butylbenzene	<4.00	ug/L	4.00	SW846 8260B	6/12/2009	5:19 PM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	6/12/2009	5:19 PM	JMS
Carbon Tetrachloride	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
Chlorodibromomethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
Chloroform	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
Chloromethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
1,1-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
cis-1,2-Dichloroethene	**17.8**	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
trans-1,2-Dichloroethene	**2.67**	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
1,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
Hexachlorobutadiene	<3.00	ug/L	3.00	SW846 8260B	6/12/2009	5:19 PM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	6/12/2009	5:19 PM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
4-Isopropyltoluene	<10.0	ug/L	10.0	SW846 8260B	6/12/2009	5:19 PM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	6/12/2009	5:19 PM	JMS
Methylene Chloride	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
Naphthalene	<10.0	ug/L	10.0	SW846 8260B	6/12/2009	5:19 PM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
Styrene	<4.00	ug/L	4.00	SW846 8260B	6/12/2009	5:19 PM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
1,1,2,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
Tetrachloroethene	**11.3**	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	6/12/2009	5:19 PM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	6/12/2009	5:19 PM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
Trichloroethene	**2.92**	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
Vinyl Chloride	**2.54**	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	6/12/2009	5:19 PM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	6/12/2009	5:19 PM	JMS

- The Bromomethane concentration was determined by a library search of the appropriate retention time and mass spectral ion pattern.

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.84	ug/L	0.84	SW846 8270C	6/17/2009	1:37 AM	CGS
Acenaphthylene	<0.84	ug/L	0.84	SW846 8270C	6/17/2009	1:37 AM	CGS
Anthracene	<0.84	ug/L	0.84	SW846 8270C	6/17/2009	1:37 AM	CGS
Benzo(a)anthracene	<0.47	ug/L	0.47	SW846 8270C	6/17/2009	1:37 AM	CGS
Benzo(a)pyrene	<0.19	ug/L	0.19	SW846 8270C	6/17/2009	1:37 AM	CGS
Benzo(b)fluoranthene	**0.50**	ug/L	0.47	SW846 8270C	6/17/2009	1:37 AM	CGS
Benzo(g,h,i)perylene	<0.19	ug/L	0.19	SW846 8270C	6/17/2009	1:37 AM	CGS
Benzo(k)fluoranthene	<0.47	ug/L	0.47	SW846 8270C	6/17/2009	1:37 AM	CGS
Chrysene	<0.84	ug/L	0.84	SW846 8270C	6/17/2009	1:37 AM	CGS
Dibenzo(a,h)anthracene	<0.47	ug/L	0.47	SW846 8270C	6/17/2009	1:37 AM	CGS
Fluoranthene	<0.84	ug/L	0.84	SW846 8270C	6/17/2009	1:37 AM	CGS
Fluorene	<0.84	ug/L	0.84	SW846 8270C	6/17/2009	1:37 AM	CGS
Indeno(1,2,3-cd)pyrene	**0.90**	ug/L	0.47	SW846 8270C	6/17/2009	1:37 AM	CGS
1-Methylnaphthalene	<0.93	ug/L	0.93	SW846 8270C	6/17/2009	1:37 AM	CGS

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
2-Methylnaphthalene	<0.93	ug/L	0.93	SW846 8270C	6/17/2009	1:37 AM	CGS
Naphthalene	<0.84	ug/L	0.84	SW846 8270C	6/17/2009	1:37 AM	CGS
Phenanthrene	<0.84	ug/L	0.84	SW846 8270C	6/17/2009	1:37 AM	CGS
Pyrene	<0.84	ug/L	0.84	SW846 8270C	6/17/2009	1:37 AM	CGS

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	<0.005	mg/L	0.005	SW846 7421	6/15/2009	2:56 PM	JAW

Analytical Testing Parameters

Client Sample ID: **MW-3** Collection Date: **6/11/2009**

Lab Sample ID: **0906223-03** Collection Time: **11:30 AM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<50.0	ug/L	50.0	SW846 8260B	6/12/2009	5:48 PM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	6/12/2009	5:48 PM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
Bromodichloromethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
2-Butanone (MEK)	<3.00	ug/L	3.00	SW846 8260B	6/12/2009	5:48 PM	JMS
n-Butylbenzene	<4.00	ug/L	4.00	SW846 8260B	6/12/2009	5:48 PM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	6/12/2009	5:48 PM	JMS
Carbon Tetrachloride	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
Chlorodibromomethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
Chloroform	**8.74**	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
Chloromethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
1,1-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
cis-1,2-Dichloroethene	**6.38**	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
1,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
Hexachlorobutadiene	<3.00	ug/L	3.00	SW846 8260B	6/12/2009	5:48 PM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	6/12/2009	5:48 PM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
4-Isopropyltoluene	<10.0	ug/L	10.0	SW846 8260B	6/12/2009	5:48 PM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	6/12/2009	5:48 PM	JMS
Methylene Chloride	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
Naphthalene	<10.0	ug/L	10.0	SW846 8260B	6/12/2009	5:48 PM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
Styrene	<4.00	ug/L	4.00	SW846 8260B	6/12/2009	5:48 PM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
1,1,2,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
Tetrachloroethene	**44.7**	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	6/12/2009	5:48 PM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	6/12/2009	5:48 PM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
Trichloroethene	**2.53**	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
Vinyl Chloride	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	6/12/2009	5:48 PM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	6/12/2009	5:48 PM	JMS

- The Bromomethane concentration was determined by a library search of the appropriate retention time and mass spectral ion pattern.

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.83	ug/L	0.83	SW846 8270C	6/17/2009	2:16 AM	CGS
Acenaphthylene	<0.83	ug/L	0.83	SW846 8270C	6/17/2009	2:16 AM	CGS
Anthracene	<0.83	ug/L	0.83	SW846 8270C	6/17/2009	2:16 AM	CGS
Benzo(a)anthracene	<0.46	ug/L	0.46	SW846 8270C	6/17/2009	2:16 AM	CGS
Benzo(a)pyrene	**0.26**	ug/L	0.19	SW846 8270C	6/17/2009	2:16 AM	CGS
Benzo(b)fluoranthene	<0.46	ug/L	0.46	SW846 8270C	6/17/2009	2:16 AM	CGS
Benzo(g,h,i)perylene	**0.55**	ug/L	0.19	SW846 8270C	6/17/2009	2:16 AM	CGS
Benzo(k)fluoranthene	<0.46	ug/L	0.46	SW846 8270C	6/17/2009	2:16 AM	CGS
Chrysene	<0.83	ug/L	0.83	SW846 8270C	6/17/2009	2:16 AM	CGS
Dibenzo(a,h)anthracene	<0.46	ug/L	0.46	SW846 8270C	6/17/2009	2:16 AM	CGS
Fluoranthene	<0.83	ug/L	0.83	SW846 8270C	6/17/2009	2:16 AM	CGS
Fluorene	<0.83	ug/L	0.83	SW846 8270C	6/17/2009	2:16 AM	CGS
Indeno(1,2,3-cd)pyrene	**1.10**	ug/L	0.46	SW846 8270C	6/17/2009	2:16 AM	CGS

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
1-Methylnaphthalene	<0.93	ug/L	0.93	SW846 8270C	6/17/2009	2:16 AM	CGS
2-Methylnaphthalene	<0.93	ug/L	0.93	SW846 8270C	6/17/2009	2:16 AM	CGS
Naphthalene	<0.83	ug/L	0.83	SW846 8270C	6/17/2009	2:16 AM	CGS
Phenanthrene	<0.83	ug/L	0.83	SW846 8270C	6/17/2009	2:16 AM	CGS
Pyrene	<0.83	ug/L	0.83	SW846 8270C	6/17/2009	2:16 AM	CGS

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	<0.005	mg/L	0.005	SW846 7421	6/15/2009	3:01 PM	JAW

Analytical Testing Parameters

Client Sample ID: **MW-4** Collection Date: **6/11/2009**

Lab Sample ID: **0906223-04** Collection Time: **10:45 AM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<50.0	ug/L	50.0	SW846 8260B	6/12/2009	6:16 PM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	6/12/2009	6:16 PM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
Bromodichloromethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
2-Butanone (MEK)	<3.00	ug/L	3.00	SW846 8260B	6/12/2009	6:16 PM	JMS
n-Butylbenzene	<4.00	ug/L	4.00	SW846 8260B	6/12/2009	6:16 PM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	6/12/2009	6:16 PM	JMS
Carbon Tetrachloride	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
Chlorodibromomethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
Chloroform	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
Chloromethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
1,1-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
cis-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
1,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
Hexachlorobutadiene	<3.00	ug/L	3.00	SW846 8260B	6/12/2009	6:16 PM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	6/12/2009	6:16 PM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
4-Isopropyltoluene	<10.0	ug/L	10.0	SW846 8260B	6/12/2009	6:16 PM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	6/12/2009	6:16 PM	JMS
Methylene Chloride	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
Naphthalene	<10.0	ug/L	10.0	SW846 8260B	6/12/2009	6:16 PM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
Styrene	<4.00	ug/L	4.00	SW846 8260B	6/12/2009	6:16 PM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
1,1,2,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
Tetrachloroethene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	6/12/2009	6:16 PM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	6/12/2009	6:16 PM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
Trichloroethene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
Vinyl Chloride	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	6/12/2009	6:16 PM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	6/12/2009	6:16 PM	JMS

- The Bromomethane concentration was determined by a library search of the appropriate retention time and mass spectral ion pattern.

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.85	ug/L	0.85	SW846 8270C	6/17/2009	2:56 AM	CGS
Acenaphthylene	<0.85	ug/L	0.85	SW846 8270C	6/17/2009	2:56 AM	CGS
Anthracene	<0.85	ug/L	0.85	SW846 8270C	6/17/2009	2:56 AM	CGS
Benzo(a)anthracene	<0.47	ug/L	0.47	SW846 8270C	6/17/2009	2:56 AM	CGS
Benzo(a)pyrene	<0.19	ug/L	0.19	SW846 8270C	6/17/2009	2:56 AM	CGS
Benzo(b)fluoranthene	0.71	ug/L	0.47	SW846 8270C	6/17/2009	2:56 AM	CGS
Benzo(g,h,i)perylene	<0.19	ug/L	0.19	SW846 8270C	6/17/2009	2:56 AM	CGS
Benzo(k)fluoranthene	<0.47	ug/L	0.47	SW846 8270C	6/17/2009	2:56 AM	CGS
Chrysene	<0.85	ug/L	0.85	SW846 8270C	6/17/2009	2:56 AM	CGS
Dibenzo(a,h)anthracene	<0.47	ug/L	0.47	SW846 8270C	6/17/2009	2:56 AM	CGS
Fluoranthene	<0.85	ug/L	0.85	SW846 8270C	6/17/2009	2:56 AM	CGS
Fluorene	<0.85	ug/L	0.85	SW846 8270C	6/17/2009	2:56 AM	CGS

Laboratory Project ID: 0906223

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Indeno(1,2,3-cd)pyrene	**0.93**	ug/L	0.47	SW846 8270C	6/17/2009	2:56 AM	CGS
1-Methylnaphthalene	<0.94	ug/L	0.94	SW846 8270C	6/17/2009	2:56 AM	CGS
2-Methylnaphthalene	<0.94	ug/L	0.94	SW846 8270C	6/17/2009	2:56 AM	CGS
Naphthalene	<0.85	ug/L	0.85	SW846 8270C	6/17/2009	2:56 AM	CGS
Phenanthrene	<0.85	ug/L	0.85	SW846 8270C	6/17/2009	2:56 AM	CGS
Pyrene	<0.85	ug/L	0.85	SW846 8270C	6/17/2009	2:56 AM	CGS

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	**0.013**	mg/L	0.005	SW846 7421	6/15/2009	3:05 PM	JAW

Report Comments:

Note: Due to the extremely short holding time of 15 minutes, the following test procedures, if reported, were performed outside the recommended holding time: Total Residual Chlorine, laboratory pH, Dissolved Oxygen, Orthophosphate, and Sulfite.

The **PQL** is the **Practical Quantitation Limit,** which is defined as the lowest quantitation level of an analyte that can be readily achieved within the specified limits of precision and accuracy of an analytical method during routine laboratory operating conditions. The value may be raised depending on the characteristics or behavior of the target analyte.

All samples were analyzed **"as received"** from the client. American Westech Inc. can only assume that all samples were collected and submitted by the CLIENT following the appropriate protocols set forth by the regulatory requirements. This document shall not be reproduced, except in full, without the written approval of American Westech Inc. If there are any questions pertaining to this laboratory report please contact a Client Services Coordinator or the Laboratory Director at (717) 651-9700.

Laboratory Certifications:

- NELAP accredited by the PADEP (22-00578) & NJDEP (PA019) for numerous solid and chemical materials and non-potable water parameters. Please refer to our certified parameter lists for each state for specific information on the approved methodologies.
- PADEP accredited for various drinking water parameters including: Volatile Organic Compounds, Metals, Inorganics, and Microbiology (22-00578). Please refer to our certified parameter list for specific information on the approved methodologies.

Reviewed and Approved By:

William W. Smith, Jr.
Laboratory Director

Date Reviewed and Approved:

6-22-09

AMERICAN Westech INCORPORATED

Laboratory Result Summary

Laboratory Project ID: 0909208

BL Companies
Scott Treherne
213 Market St.
6th Floor
Harrisburg, PA 17101

Contact: Scott Treherne
Project Name: Frankford & Darriah
Project Number: 00L629-B
Purchase Order Number: N/A
Sampled By: Greg Holtzman
Date Received: September 10, 2009
Time Received: 4:52 PM

Analytical Testing Parameters

Client Sample ID: **MW - 1**
Lab Sample ID: **0909208-01**

Collection Date: **9/10/2009**
Collection Time: **1:20 PM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<60.0	ug/L	60.0	SW846 8260B	9/11/2009	2:51 PM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	9/11/2009	2:51 PM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
Bromodichloromethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
2-Butanone (MEK)	<6.00	ug/L	6.00	SW846 8260B	9/11/2009	2:51 PM	JMS
n-Butylbenzene	<5.00	ug/L	5.00	SW846 8260B	9/11/2009	2:51 PM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	9/11/2009	2:51 PM	JMS
Carbon Tetrachloride	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
Chlorodibromomethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
Chloroform	<4.00	ug/L	4.00	SW846 8260B	9/11/2009	2:51 PM	JMS
Chloromethane	<4.00	ug/L	4.00	SW846 8260B	9/11/2009	2:51 PM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
1,2-Dibromo-3-chloropropane	<4.00	ug/L	4.00	SW846 8260B	9/11/2009	2:51 PM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
1,1-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
cis-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
1,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
Hexachlorobutadiene	<5.00	ug/L	5.00	SW846 8260B	9/11/2009	2:51 PM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	9/11/2009	2:51 PM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
4-Isopropyltoluene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	9/11/2009	2:51 PM	JMS
Methylene Chloride	<3.00	ug/L	3.00	SW846 8260B	9/11/2009	2:51 PM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
Naphthalene	<15.0	ug/L	15.0	SW846 8260B	9/11/2009	2:51 PM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
Styrene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
1,1,2,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
Tetrachloroethene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
1,2,3-Trichlorobenzene	<20.0	ug/L	20.0	SW846 8260B	9/11/2009	2:51 PM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	9/11/2009	2:51 PM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
Trichloroethene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
1,2,4-Trimethylbenzene	<3.00	ug/L	3.00	SW846 8260B	9/11/2009	2:51 PM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
Vinyl Chloride	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	9/11/2009	2:51 PM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	9/11/2009	2:51 PM	JMS

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<1.00	ug/L	1.00	SW846 8270C	9/15/2009	2:02 PM	CGS
Acenaphthylene	<1.00	ug/L	1.00	SW846 8270C	9/15/2009	2:02 PM	CGS
Anthracene	<1.00	ug/L	1.00	SW846 8270C	9/15/2009	2:02 PM	CGS
Benzo(a)anthracene	<0.50	ug/L	0.50	SW846 8270C	9/15/2009	2:02 PM	CGS
Benzo(a)pyrene	**0.42**	ug/L	0.20	SW846 8270C	9/15/2009	2:02 PM	CGS
Benzo(b)fluoranthene	**0.61**	ug/L	0.50	SW846 8270C	9/15/2009	2:02 PM	CGS
Benzo(g,h,i)perylene	**0.22**	ug/L	0.20	SW846 8270C	9/15/2009	2:02 PM	CGS
Benzo(k)fluoranthene	<0.50	ug/L	0.50	SW846 8270C	9/15/2009	2:02 PM	CGS
Chrysene	<0.50	ug/L	0.50	SW846 8270C	9/15/2009	2:02 PM	CGS
Dibenzo(a,h)anthracene	<0.50	ug/L	0.50	SW846 8270C	9/15/2009	2:02 PM	CGS
Fluoranthene	<1.00	ug/L	1.00	SW846 8270C	9/15/2009	2:02 PM	CGS
Fluorene	<1.00	ug/L	1.00	SW846 8270C	9/15/2009	2:02 PM	CGS
Indeno(1,2,3-cd)pyrene	<0.50	ug/L	0.50	SW846 8270C	9/15/2009	2:02 PM	CGS
1-Methylnaphthalene	<0.50	ug/L	0.50	SW846 8270C	9/15/2009	2:02 PM	CGS
2-Methylnaphthalene	<0.50	ug/L	0.50	SW846 8270C	9/15/2009	2:02 PM	CGS
Naphthalene	<0.50	ug/L	0.50	SW846 8270C	9/15/2009	2:02 PM	CGS

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Phenanthrene	<1.00	ug/L	1.00	SW846 8270C	9/15/2009	2:02 PM	CGS
Pyrene	<1.00	ug/L	1.00	SW846 8270C	9/15/2009	2:02 PM	CGS

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	<0.005	mg/L	0.005	SW846 7421	9/16/2009	4:05 AM	BEH

Analytical Testing Parameters

Client Sample ID: **MW - 2A** Collection Date: **9/10/2009**

Lab Sample ID: **0909208-02** Collection Time: **1:30 PM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<60.0	ug/L	60.0	SW846 8260B	9/11/2009	3:19 PM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	9/11/2009	3:19 PM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
Bromodichloromethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
2-Butanone (MEK)	<6.00	ug/L	6.00	SW846 8260B	9/11/2009	3:19 PM	JMS
n-Butylbenzene	<5.00	ug/L	5.00	SW846 8260B	9/11/2009	3:19 PM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	9/11/2009	3:19 PM	JMS
Carbon Tetrachloride	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
Chlorodibromomethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
Chloroform	<4.00	ug/L	4.00	SW846 8260B	9/11/2009	3:19 PM	JMS
Chloromethane	<4.00	ug/L	4.00	SW846 8260B	9/11/2009	3:19 PM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
1,2-Dibromo-3-chloropropane	<4.00	ug/L	4.00	SW846 8260B	9/11/2009	3:19 PM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
1,1-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
cis-1,2-Dichloroethene	**4.85**	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
1,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
Hexachlorobutadiene	<5.00	ug/L	5.00	SW846 8260B	9/11/2009	3:19 PM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	9/11/2009	3:19 PM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
4-Isopropyltoluene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	9/11/2009	3:19 PM	JMS
Methylene Chloride	<3.00	ug/L	3.00	SW846 8260B	9/11/2009	3:19 PM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
Naphthalene	<15.0	ug/L	15.0	SW846 8260B	9/11/2009	3:19 PM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
Styrene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
1,1,2,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
Tetrachloroethene	**27.1**	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
1,2,3-Trichlorobenzene	<20.0	ug/L	20.0	SW846 8260B	9/11/2009	3:19 PM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	9/11/2009	3:19 PM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
Trichloroethene	**3.18**	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
1,2,4-Trimethylbenzene	<3.00	ug/L	3.00	SW846 8260B	9/11/2009	3:19 PM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
Vinyl Chloride	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	9/11/2009	3:19 PM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	9/11/2009	3:19 PM	JMS

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<1.00	ug/L	1.00	SW846 8270C	9/15/2009	2:37 PM	CGS
Acenaphthylene	<1.00	ug/L	1.00	SW846 8270C	9/15/2009	2:37 PM	CGS
Anthracene	<1.00	ug/L	1.00	SW846 8270C	9/15/2009	2:37 PM	CGS
Benzo(a)anthracene	<0.50	ug/L	0.50	SW846 8270C	9/15/2009	2:37 PM	CGS
Benzo(a)pyrene	<0.20	ug/L	0.20	SW846 8270C	9/15/2009	2:37 PM	CGS
Benzo(b)fluoranthene	<0.50	ug/L	0.50	SW846 8270C	9/15/2009	2:37 PM	CGS
Benzo(g,h,i)perylene	<0.20	ug/L	0.20	SW846 8270C	9/15/2009	2:37 PM	CGS
Benzo(k)fluoranthene	<0.50	ug/L	0.50	SW846 8270C	9/15/2009	2:37 PM	CGS
Chrysene	<0.50	ug/L	0.50	SW846 8270C	9/15/2009	2:37 PM	CGS
Dibenzo(a,h)anthracene	<0.50	ug/L	0.50	SW846 8270C	9/15/2009	2:37 PM	CGS
Fluoranthene	<1.00	ug/L	1.00	SW846 8270C	9/15/2009	2:37 PM	CGS
Fluorene	<1.00	ug/L	1.00	SW846 8270C	9/15/2009	2:37 PM	CGS
Indeno(1,2,3-cd)pyrene	<0.50	ug/L	0.50	SW846 8270C	9/15/2009	2:37 PM	CGS
1-Methylnaphthalene	<0.50	ug/L	0.50	SW846 8270C	9/15/2009	2:37 PM	CGS
2-Methylnaphthalene	<0.50	ug/L	0.50	SW846 8270C	9/15/2009	2:37 PM	CGS
Naphthalene	<0.50	ug/L	0.50	SW846 8270C	9/15/2009	2:37 PM	CGS
Phenanthrene	<1.00	ug/L	1.00	SW846 8270C	9/15/2009	2:37 PM	CGS

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Pyrene	<1.00	ug/L	1.00	SW846 8270C	9/15/2009	2:37 PM	CGS

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	<0.005	mg/L	0.005	SW846 7421	9/16/2009	4:10 AM	BEH

Analytical Testing Parameters

Client Sample ID: **MW - 3** Collection Date: **9/10/2009**

Lab Sample ID: **0909208-03** Collection Time: **1:45 PM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<60.0	ug/L	60.0	SW846 8260B	9/11/2009	3:46 PM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	9/11/2009	3:46 PM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
Bromodichloromethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
2-Butanone (MEK)	<6.00	ug/L	6.00	SW846 8260B	9/11/2009	3:46 PM	JMS
n-Butylbenzene	<5.00	ug/L	5.00	SW846 8260B	9/11/2009	3:46 PM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	9/11/2009	3:46 PM	JMS
Carbon Tetrachloride	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
Chlorodibromomethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
Chloroform	**5.44**	ug/L	4.00	SW846 8260B	9/11/2009	3:46 PM	JMS
Chloromethane	<4.00	ug/L	4.00	SW846 8260B	9/11/2009	3:46 PM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
1,2-Dibromo-3-chloropropane	<4.00	ug/L	4.00	SW846 8260B	9/11/2009	3:46 PM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
1,1-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
cis-1,2-Dichloroethene	**9.32**	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
1,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Hexachlorobutadiene	<5.00	ug/L	5.00	SW846 8260B	9/11/2009	3:46 PM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	9/11/2009	3:46 PM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
4-Isopropyltoluene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	9/11/2009	3:46 PM	JMS
Methylene Chloride	<3.00	ug/L	3.00	SW846 8260B	9/11/2009	3:46 PM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
Naphthalene	<15.0	ug/L	15.0	SW846 8260B	9/11/2009	3:46 PM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
Styrene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
1,1,2,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
Tetrachloroethene	**57.0**	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
1,2,3-Trichlorobenzene	<20.0	ug/L	20.0	SW846 8260B	9/11/2009	3:46 PM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	9/11/2009	3:46 PM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
Trichloroethene	**4.61**	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
1,2,4-Trimethylbenzene	<3.00	ug/L	3.00	SW846 8260B	9/11/2009	3:46 PM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
Vinyl Chloride	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	9/11/2009	3:46 PM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	9/11/2009	3:46 PM	JMS

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<1.01	ug/L	1.01	SW846 8270C	9/15/2009	3:11 PM	CGS
Acenaphthylene	<1.01	ug/L	1.01	SW846 8270C	9/15/2009	3:11 PM	CGS
Anthracene	<1.01	ug/L	1.01	SW846 8270C	9/15/2009	3:11 PM	CGS
Benzo(a)anthracene	<0.51	ug/L	0.51	SW846 8270C	9/15/2009	3:11 PM	CGS
Benzo(a)pyrene	<0.20	ug/L	0.20	SW846 8270C	9/15/2009	3:11 PM	CGS
Benzo(b)fluoranthene	<0.51	ug/L	0.51	SW846 8270C	9/15/2009	3:11 PM	CGS
Benzo(g,h,i)perylene	<0.20	ug/L	0.20	SW846 8270C	9/15/2009	3:11 PM	CGS
Benzo(k)fluoranthene	<0.51	ug/L	0.51	SW846 8270C	9/15/2009	3:11 PM	CGS
Chrysene	<0.51	ug/L	0.51	SW846 8270C	9/15/2009	3:11 PM	CGS
Dibenzo(a,h)anthracene	<0.51	ug/L	0.51	SW846 8270C	9/15/2009	3:11 PM	CGS
Fluoranthene	<1.01	ug/L	1.01	SW846 8270C	9/15/2009	3:11 PM	CGS
Fluorene	<1.01	ug/L	1.01	SW846 8270C	9/15/2009	3:11 PM	CGS
Indeno(1,2,3-cd)pyrene	<0.51	ug/L	0.51	SW846 8270C	9/15/2009	3:11 PM	CGS
1-Methylnaphthalene	<0.51	ug/L	0.51	SW846 8270C	9/15/2009	3:11 PM	CGS
2-Methylnaphthalene	<0.51	ug/L	0.51	SW846 8270C	9/15/2009	3:11 PM	CGS
Naphthalene	<0.51	ug/L	0.51	SW846 8270C	9/15/2009	3:11 PM	CGS
Phenanthrene	<1.01	ug/L	1.01	SW846 8270C	9/15/2009	3:11 PM	CGS
Pyrene	<1.01	ug/L	1.01	SW846 8270C	9/15/2009	3:11 PM	CGS

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	<0.005	mg/L	0.005	SW846 7421	9/16/2009	4:14 AM	BEH

Analytical Testing Parameters

Client Sample ID: **MW - 4** Collection Date: **9/10/2009**

Lab Sample ID: **0909208-04** Collection Time: **1:50 PM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<60.0	ug/L	60.0	SW846 8260B	9/11/2009	4:13 PM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	9/11/2009	4:13 PM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
Bromodichloromethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
2-Butanone (MEK)	<6.00	ug/L	6.00	SW846 8260B	9/11/2009	4:13 PM	JMS
n-Butylbenzene	<5.00	ug/L	5.00	SW846 8260B	9/11/2009	4:13 PM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	9/11/2009	4:13 PM	JMS
Carbon Tetrachloride	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
Chlorodibromomethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
Chloroform	<4.00	ug/L	4.00	SW846 8260B	9/11/2009	4:13 PM	JMS
Chloromethane	<4.00	ug/L	4.00	SW846 8260B	9/11/2009	4:13 PM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
1,2-Dibromo-3-chloropropane	<4.00	ug/L	4.00	SW846 8260B	9/11/2009	4:13 PM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
1,1-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
cis-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
1,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
Hexachlorobutadiene	<5.00	ug/L	5.00	SW846 8260B	9/11/2009	4:13 PM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	9/11/2009	4:13 PM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
4-Isopropyltoluene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	9/11/2009	4:13 PM	JMS
Methylene Chloride	<3.00	ug/L	3.00	SW846 8260B	9/11/2009	4:13 PM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
Naphthalene	<15.0	ug/L	15.0	SW846 8260B	9/11/2009	4:13 PM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
Styrene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
1,1,2,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
Tetrachloroethene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
1,2,3-Trichlorobenzene	<20.0	ug/L	20.0	SW846 8260B	9/11/2009	4:13 PM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	9/11/2009	4:13 PM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
Trichloroethene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
1,2,4-Trimethylbenzene	<3.00	ug/L	3.00	SW846 8260B	9/11/2009	4:13 PM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
Vinyl Chloride	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	9/11/2009	4:13 PM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	9/11/2009	4:13 PM	JMS

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<1.01	ug/L	1.01	SW846 8270C	9/15/2009	3:46 PM	CGS
Acenaphthylene	<1.01	ug/L	1.01	SW846 8270C	9/15/2009	3:46 PM	CGS
Anthracene	<1.01	ug/L	1.01	SW846 8270C	9/15/2009	3:46 PM	CGS
Benzo(a)anthracene	<0.51	ug/L	0.51	SW846 8270C	9/15/2009	3:46 PM	CGS
Benzo(a)pyrene	<0.20	ug/L	0.20	SW846 8270C	9/15/2009	3:46 PM	CGS
Benzo(b)fluoranthene	<0.51	ug/L	0.51	SW846 8270C	9/15/2009	3:46 PM	CGS
Benzo(g,h,i)perylene	<0.20	ug/L	0.20	SW846 8270C	9/15/2009	3:46 PM	CGS
Benzo(k)fluoranthene	<0.51	ug/L	0.51	SW846 8270C	9/15/2009	3:46 PM	CGS
Chrysene	<0.51	ug/L	0.51	SW846 8270C	9/15/2009	3:46 PM	CGS
Dibenzo(a,h)anthracene	<0.51	ug/L	0.51	SW846 8270C	9/15/2009	3:46 PM	CGS
Fluoranthene	<1.01	ug/L	1.01	SW846 8270C	9/15/2009	3:46 PM	CGS
Fluorene	<1.01	ug/L	1.01	SW846 8270C	9/15/2009	3:46 PM	CGS
Indeno(1,2,3-cd)pyrene	<0.51	ug/L	0.51	SW846 8270C	9/15/2009	3:46 PM	CGS
1-Methylnaphthalene	<0.51	ug/L	0.51	SW846 8270C	9/15/2009	3:46 PM	CGS
2-Methylnaphthalene	<0.51	ug/L	0.51	SW846 8270C	9/15/2009	3:46 PM	CGS
Naphthalene	<0.51	ug/L	0.51	SW846 8270C	9/15/2009	3:46 PM	CGS
Phenanthrene	<1.01	ug/L	1.01	SW846 8270C	9/15/2009	3:46 PM	CGS
Pyrene	<1.01	ug/L	1.01	SW846 8270C	9/15/2009	3:46 PM	CGS

Laboratory Project ID: 0909208

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	**0.023**	mg/L	0.005	SW846 7421	9/16/2009	4:19 AM	BEH

Report Comments:

The **PQL** is the **Practical Quantitation Limit,** which is defined as the lowest quantitation level of an analyte that can be readily achieved within the specified limits of precision and accuracy of an analytical method during routine laboratory operating conditions. The value may be raised depending on the characteristics or behavior of the target analyte.

All samples were analyzed **"as received"** from the client. American Westech Inc. can only assume that all samples were collected and submitted by the CLIENT following the appropriate protocols set forth by the regulatory requirements. This document shall not be reproduced, except in full, without the written approval of American Westech Inc. If there are any questions pertaining to this laboratory report please contact a Client Services Coordinator or the Laboratory Director at (717) 651-9700.

Laboratory Certifications:

- NELAP accredited by the PADEP (22-00578) & NJDEP (PA019) for numerous solid and chemical materials and non-potable water parameters. Please refer to our certified parameter lists for each state for specific information on the approved methodologies.
- PADEP accredited for various drinking water parameters including: Volatile Organic Compounds, Metals, Inorganics, and Microbiology (22-00578). Please refer to our certified parameter list for specific information on the approved methodologies

Reviewed and Approved By:

William W. Smith, Jr.
Laboratory Director

Date Reviewed and Approved:

9-17-09

AMERICAN Westech INCORPORATED

American Westech Incorporated
4359 Linglestown Road, Harrisburg, PA 17112
Phone: (717) 651-9700 Fax: (717) 657-0752

SAMPLE SUBMITTAL FORM

ACCREDITED IN ACCORDANCE WITH nelac

NELAP accredited by PADEP & NJDEP. Please call for specific parameter accreditations.

PADEP ID (22-00578) - NJDEP ID (PA019)

LABORATORY PROJECT NUMBER

0909208

SUBMIT LAB REPORT TO (Westech Client Information):	SUBMIT INVOICE TO:
Company: BL COMPANIES	Company:
Contact: SCOTT TREHERNE	Contact: BL COMPANIES
Address: 213 MARKET STREET 6TH FLOOR	Address:
City: HARRISBURG State: PA Zip: 17101	City: State: Zip:
Phone: 717-651-9850 Fax: 717-651-9858	Phone: Fax:
	Invoice Delivery: ☑ Mail w/Report ☐ Email (enter address below)

CLIENT PROJECT INFORMATION

Project Name: FRANKFORD & DARRAH
Project/PO No.: COL 629-B
Westech Quote/MSA No.:
Purpose: ☑ *Regulatory* ☐ *Informational* ☐ *PWSID:*
Data Deliverables: ☐ Level I ☐ Level II ☐ Level III ☐ Level IV
Report Delivery: ☐ Mail ☐ Fax ☑ Email (email address): STREHERNE@BLCOMPANIES.COM
Results TAT Requested * : ☐ **6-10 Day (Standard)** **OR** ☐ **RUSH* (Indicate Due Date):** ☑ 5 DAY

WESTECH Field Services Used? ☑ NO ☐ YES - *(See Field Services Log)*

SAMPLE TYPE (Key): SS = Solid/Sludge; OL = Oil; DW = Drinking Water; GW = Groundwater; SW = Storm/Surface Water; WW = Wastewater; AR = Air; O = Other: _____

* Turnaround times based on business days only. All "RUSH" TATs must be pre-arranged with WESTECH and are subject to "RUSH" surcharges.

SAMPLE RECEIVING INFORMATION *(lab use only)*

Samples received on ice? Temp: 7.8 °C	Y	N	NA
Cooler temp. within acceptable limits?	Y	N	NA
Correct bottles used for requested analysis?	Y	N	NA
Sample bottles in good condition (unbroken)?	Y	N	NA
Samples within required holding time?	Y	N	NA
Zero headspace samples collected correctly?	Y	N	NA
Samples preserved to pH <2 and/or pH >12?	Y	N	NA

Shipping Carrier? ☑ Drop Off ☐ WESTECH Pickup ☐ Outside Courier:

LAB ID	SAMPLE IDENTIFICATION / LOCATION DESCRIPTION	SAMPLE DATE	SAMPLE TIME	Total # of Bottles	Sample Type: (See "Sample Type" Key)	Grab "G" or Composite "C"	VOCs (8260-B)	PAHs (8270-C)	DISS. PB
01	MW-1	9.10.09	1320	5	GW	G	X	X	X
02	MW-2A	↓	1330	5	↓	↓	X	X	X
03	MW-3		1345	5			X	X	X
04	MW-4		1350	5			X	X	X
05									
06									
07									
08									
09									
10									

	PRINT NAME	SIGNATURE	DATE	TIME
Sampled By:	GREG HOLTZMAN		9.10.09	1400
Relinquished By (Sampler):	GREG HOLTZMAN		9.10.09	1652
Accepted By:				
Relinquished to WESTECH By:				
Accepted at WESTECH By:	Danielle Rile		9/10/09	1652

COMMENTS OR SPECIAL INSTRUCTIONS

* SAMPLE RESULTS MUST MEET MINIMUM PA ACT 2 REQUIREMENTS

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WHITE - Original YELLOW - Laboratory Copy PINK - Client Copy

AMERICAN Westech INCORPORATED

Laboratory Result Summary

Laboratory Project ID: 0912032

BL Companies
John Thatcher
213 Market St.
6th Floor
Harrisburg, PA 17101

Contact: John Thatcher
Project Name: Frankfort & Darrah
Project Number: 00L629-B
Purchase Order Number: N/A
Sampled By: Steve Vedder
Date Received: December 2, 2009
Time Received: 3:22 PM

Analytical Testing Parameters

Client Sample ID: **MW-1**
Lab Sample ID: **0912032-01**
Collection Date: **12/1/2009**
Collection Time: **3:45 PM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<60.0	ug/L	60.0	SW846 8260B	12/4/2009	4:05 PM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	12/4/2009	4:05 PM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
Bromodichloromethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
2-Butanone (MEK)	<6.00	ug/L	6.00	SW846 8260B	12/4/2009	4:05 PM	JMS
n-Butylbenzene	<5.00	ug/L	5.00	SW846 8260B	12/4/2009	4:05 PM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	12/4/2009	4:05 PM	JMS
Carbon Tetrachloride	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
Chlorodibromomethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
Chloroform	<4.00	ug/L	4.00	SW846 8260B	12/4/2009	4:05 PM	JMS
Chloromethane	<4.00	ug/L	4.00	SW846 8260B	12/4/2009	4:05 PM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
1,2-Dibromo-3-chloropropane	<4.00	ug/L	4.00	SW846 8260B	12/4/2009	4:05 PM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
1,1-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
cis-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
1,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
Hexachlorobutadiene	<5.00	ug/L	5.00	SW846 8260B	12/4/2009	4:05 PM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	12/4/2009	4:05 PM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
4-Isopropyltoluene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	12/4/2009	4:05 PM	JMS
Methylene Chloride	<3.00	ug/L	3.00	SW846 8260B	12/4/2009	4:05 PM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
Naphthalene	<15.0	ug/L	15.0	SW846 8260B	12/4/2009	4:05 PM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
Styrene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
1,1,2,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
Tetrachloroethene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
1,2,3-Trichlorobenzene	<20.0	ug/L	20.0	SW846 8260B	12/4/2009	4:05 PM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	12/4/2009	4:05 PM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
Trichloroethene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
1,2,4-Trimethylbenzene	<3.00	ug/L	3.00	SW846 8260B	12/4/2009	4:05 PM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
Vinyl Chloride	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	12/4/2009	4:05 PM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	12/4/2009	4:05 PM	JMS

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.91	ug/L	0.91	SW846 8270C	12/11/2009	1:48 PM	BEH
Acenaphthylene	<0.91	ug/L	0.91	SW846 8270C	12/11/2009	1:48 PM	BEH
Anthracene	<0.91	ug/L	0.91	SW846 8270C	12/11/2009	1:48 PM	BEH
Benzo(a)anthracene	<0.51	ug/L	0.51	SW846 8270C	12/11/2009	1:48 PM	BEH
Benzo(a)pyrene	**0.42**	ug/L	0.20	SW846 8270C	12/11/2009	1:48 PM	BEH
Benzo(b)fluoranthene	**0.56**	ug/L	0.51	SW846 8270C	12/11/2009	1:48 PM	BEH
Benzo(g,h,i)perylene	**0.30**	ug/L	0.20	SW846 8270C	12/11/2009	1:48 PM	BEH
Benzo(k)fluoranthene	<0.51	ug/L	0.51	SW846 8270C	12/11/2009	1:48 PM	BEH
Chrysene	<0.91	ug/L	0.91	SW846 8270C	12/11/2009	1:48 PM	BEH
Dibenzo(a,h)anthracene	<0.51	ug/L	0.51	SW846 8270C	12/11/2009	1:48 PM	BEH
Fluoranthene	<0.91	ug/L	0.91	SW846 8270C	12/11/2009	1:48 PM	BEH
Fluorene	<0.91	ug/L	0.91	SW846 8270C	12/11/2009	1:48 PM	BEH
Indeno(1,2,3-cd)pyrene	<0.51	ug/L	0.51	SW846 8270C	12/11/2009	1:48 PM	BEH
1-Methylnaphthalene	<1.01	ug/L	1.01	SW846 8270C	12/11/2009	1:48 PM	BEH
2-Methylnaphthalene	<1.01	ug/L	1.01	SW846 8270C	12/11/2009	1:48 PM	BEH

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Naphthalene	<0.91	ug/L	0.91	SW846 8270C	12/11/2009	1:48 PM	BEH
Phenanthrene	<0.91	ug/L	0.91	SW846 8270C	12/11/2009	1:48 PM	BEH
Pyrene	<0.91	ug/L	0.91	SW846 8270C	12/11/2009	1:48 PM	BEH

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	<0.005	mg/L	0.005	SW846 7421	12/7/2009	9:44 PM	JAW

Analytical Testing Parameters

Client Sample ID: **MW-2A** Collection Date: **12/1/2009**

Lab Sample ID: **0912032-02** Collection Time: **4:15 PM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<60.0	ug/L	60.0	SW846 8260B	12/4/2009	4:33 PM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	12/4/2009	4:33 PM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
Bromodichloromethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
2-Butanone (MEK)	<6.00	ug/L	6.00	SW846 8260B	12/4/2009	4:33 PM	JMS
n-Butylbenzene	<5.00	ug/L	5.00	SW846 8260B	12/4/2009	4:33 PM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	12/4/2009	4:33 PM	JMS
Carbon Tetrachloride	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
Chlorodibromomethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
Chloroform	<4.00	ug/L	4.00	SW846 8260B	12/4/2009	4:33 PM	JMS
Chloromethane	<4.00	ug/L	4.00	SW846 8260B	12/4/2009	4:33 PM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
1,2-Dibromo-3-chloropropane	<4.00	ug/L	4.00	SW846 8260B	12/4/2009	4:33 PM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
1,1-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
cis-1,2-Dichloroethene	**6.70**	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
1,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
Hexachlorobutadiene	<5.00	ug/L	5.00	SW846 8260B	12/4/2009	4:33 PM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	12/4/2009	4:33 PM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
4-Isopropyltoluene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	12/4/2009	4:33 PM	JMS
Methylene Chloride	<3.00	ug/L	3.00	SW846 8260B	12/4/2009	4:33 PM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
Naphthalene	<15.0	ug/L	15.0	SW846 8260B	12/4/2009	4:33 PM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
Styrene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
1,1,2,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
Tetrachloroethene	**21.8**	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
1,2,3-Trichlorobenzene	<20.0	ug/L	20.0	SW846 8260B	12/4/2009	4:33 PM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	12/4/2009	4:33 PM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
Trichloroethene	**2.61**	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
1,2,4-Trimethylbenzene	<3.00	ug/L	3.00	SW846 8260B	12/4/2009	4:33 PM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
Vinyl Chloride	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	12/4/2009	4:33 PM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	12/4/2009	4:33 PM	JMS

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.85	ug/L	0.85	SW846 8270C	12/11/2009	2:27 PM	BEH
Acenaphthylene	<0.85	ug/L	0.85	SW846 8270C	12/11/2009	2:27 PM	BEH
Anthracene	<0.85	ug/L	0.85	SW846 8270C	12/11/2009	2:27 PM	BEH
Benzo(a)anthracene	<0.47	ug/L	0.47	SW846 8270C	12/11/2009	2:27 PM	BEH
Benzo(a)pyrene	<0.19	ug/L	0.19	SW846 8270C	12/11/2009	2:27 PM	BEH
Benzo(b)fluoranthene	<0.47	ug/L	0.47	SW846 8270C	12/11/2009	2:27 PM	BEH
Benzo(g,h,i)perylene	<0.19	ug/L	0.19	SW846 8270C	12/11/2009	2:27 PM	BEH
Benzo(k)fluoranthene	<0.47	ug/L	0.47	SW846 8270C	12/11/2009	2:27 PM	BEH
Chrysene	<0.85	ug/L	0.85	SW846 8270C	12/11/2009	2:27 PM	BEH
Dibenzo(a,h)anthracene	<0.47	ug/L	0.47	SW846 8270C	12/11/2009	2:27 PM	BEH
Fluoranthene	<0.85	ug/L	0.85	SW846 8270C	12/11/2009	2:27 PM	BEH
Fluorene	<0.85	ug/L	0.85	SW846 8270C	12/11/2009	2:27 PM	BEH
Indeno(1,2,3-cd)pyrene	<0.47	ug/L	0.47	SW846 8270C	12/11/2009	2:27 PM	BEH
1-Methylnaphthalene	<0.94	ug/L	0.94	SW846 8270C	12/11/2009	2:27 PM	BEH

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
2-Methylnaphthalene	<0.94	ug/L	0.94	SW846 8270C	12/11/2009	2:27 PM	BEH
Naphthalene	<0.85	ug/L	0.85	SW846 8270C	12/11/2009	2:27 PM	BEH
Phenanthrene	<0.85	ug/L	0.85	SW846 8270C	12/11/2009	2:27 PM	BEH
Pyrene	<0.85	ug/L	0.85	SW846 8270C	12/11/2009	2:27 PM	BEH

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	<0.005	mg/L	0.005	SW846 7421	12/7/2009	9:49 PM	JAW

Analytical Testing Parameters

Client Sample ID: **MW-3** Collection Date: **12/1/2009**

Lab Sample ID: **0912032-03** Collection Time: **4:30 PM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<60.0	ug/L	60.0	SW846 8260B	12/4/2009	5:00 PM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	12/4/2009	5:00 PM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
Bromodichloromethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
2-Butanone (MEK)	<6.00	ug/L	6.00	SW846 8260B	12/4/2009	5:00 PM	JMS
n-Butylbenzene	<5.00	ug/L	5.00	SW846 8260B	12/4/2009	5:00 PM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	12/4/2009	5:00 PM	JMS
Carbon Tetrachloride	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
Chlorodibromomethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
Chloroform	<4.00	ug/L	4.00	SW846 8260B	12/4/2009	5:00 PM	JMS
Chloromethane	<4.00	ug/L	4.00	SW846 8260B	12/4/2009	5:00 PM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
1,2-Dibromo-3-chloropropane	<4.00	ug/L	4.00	SW846 8260B	12/4/2009	5:00 PM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
1,1-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
cis-1,2-Dichloroethene	**8.34**	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
1,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
Hexachlorobutadiene	<5.00	ug/L	5.00	SW846 8260B	12/4/2009	5:00 PM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	12/4/2009	5:00 PM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
4-Isopropyltoluene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	12/4/2009	5:00 PM	JMS
Methylene Chloride	<3.00	ug/L	3.00	SW846 8260B	12/4/2009	5:00 PM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
Naphthalene	<15.0	ug/L	15.0	SW846 8260B	12/4/2009	5:00 PM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
Styrene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
1,1,2,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
Tetrachloroethene	**41.3**	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
1,2,3-Trichlorobenzene	<20.0	ug/L	20.0	SW846 8260B	12/4/2009	5:00 PM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	12/4/2009	5:00 PM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
Trichloroethene	**3.13**	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
1,2,4-Trimethylbenzene	<3.00	ug/L	3.00	SW846 8260B	12/4/2009	5:00 PM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
Vinyl Chloride	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	12/4/2009	5:00 PM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	12/4/2009	5:00 PM	JMS

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.90	ug/L	0.90	SW846 8270C	12/11/2009	3:07 PM	BEH
Acenaphthylene	<0.90	ug/L	0.90	SW846 8270C	12/11/2009	3:07 PM	BEH
Anthracene	<0.90	ug/L	0.90	SW846 8270C	12/11/2009	3:07 PM	BEH
Benzo(a)anthracene	<0.50	ug/L	0.50	SW846 8270C	12/11/2009	3:07 PM	BEH
Benzo(a)pyrene	<0.20	ug/L	0.20	SW846 8270C	12/11/2009	3:07 PM	BEH
Benzo(b)fluoranthene	<0.50	ug/L	0.50	SW846 8270C	12/11/2009	3:07 PM	BEH
Benzo(g,h,i)perylene	<0.20	ug/L	0.20	SW846 8270C	12/11/2009	3:07 PM	BEH
Benzo(k)fluoranthene	<0.50	ug/L	0.50	SW846 8270C	12/11/2009	3:07 PM	BEH
Chrysene	<0.90	ug/L	0.90	SW846 8270C	12/11/2009	3:07 PM	BEH
Dibenzo(a,h)anthracene	<0.50	ug/L	0.50	SW846 8270C	12/11/2009	3:07 PM	BEH
Fluoranthene	<0.90	ug/L	0.90	SW846 8270C	12/11/2009	3:07 PM	BEH
Fluorene	<0.90	ug/L	0.90	SW846 8270C	12/11/2009	3:07 PM	BEH
Indeno(1,2,3-cd)pyrene	<0.50	ug/L	0.50	SW846 8270C	12/11/2009	3:07 PM	BEH

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
1-Methylnaphthalene	<1.00	ug/L	1.00	SW846 8270C	12/11/2009	3:07 PM	BEH
2-Methylnaphthalene	<1.00	ug/L	1.00	SW846 8270C	12/11/2009	3:07 PM	BEH
Naphthalene	<0.90	ug/L	0.90	SW846 8270C	12/11/2009	3:07 PM	BEH
Phenanthrene	<0.90	ug/L	0.90	SW846 8270C	12/11/2009	3:07 PM	BEH
Pyrene	<0.90	ug/L	0.90	SW846 8270C	12/11/2009	3:07 PM	BEH

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	<0.005	mg/L	0.005	SW846 7421	12/7/2009	9:53 PM	JAW

Analytical Testing Parameters

Client Sample ID: **MW-4** Collection Date: **12/1/2009**

Lab Sample ID: **0912032-04** Collection Time: **4:05 PM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<60.0	ug/L	60.0	SW846 8260B	12/4/2009	5:28 PM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	12/4/2009	5:28 PM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
Bromodichloromethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
2-Butanone (MEK)	<6.00	ug/L	6.00	SW846 8260B	12/4/2009	5:28 PM	JMS
n-Butylbenzene	<5.00	ug/L	5.00	SW846 8260B	12/4/2009	5:28 PM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	12/4/2009	5:28 PM	JMS
Carbon Tetrachloride	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
Chlorodibromomethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
Chloroform	<4.00	ug/L	4.00	SW846 8260B	12/4/2009	5:28 PM	JMS
Chloromethane	<4.00	ug/L	4.00	SW846 8260B	12/4/2009	5:28 PM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
1,2-Dibromo-3-chloropropane	<4.00	ug/L	4.00	SW846 8260B	12/4/2009	5:28 PM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
1,1-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
cis-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
1,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS

Laboratory Project ID: 0912032

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
Hexachlorobutadiene	<5.00	ug/L	5.00	SW846 8260B	12/4/2009	5:28 PM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	12/4/2009	5:28 PM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
4-Isopropyltoluene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	12/4/2009	5:28 PM	JMS
Methylene Chloride	<3.00	ug/L	3.00	SW846 8260B	12/4/2009	5:28 PM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
Naphthalene	<15.0	ug/L	15.0	SW846 8260B	12/4/2009	5:28 PM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
Styrene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
1,1,2,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
Tetrachloroethene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
1,2,3-Trichlorobenzene	<20.0	ug/L	20.0	SW846 8260B	12/4/2009	5:28 PM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	12/4/2009	5:28 PM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
Trichloroethene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
1,2,4-Trimethylbenzene	<3.00	ug/L	3.00	SW846 8260B	12/4/2009	5:28 PM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
Vinyl Chloride	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	12/4/2009	5:28 PM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	12/4/2009	5:28 PM	JMS

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.90	ug/L	0.90	SW846 8270C	12/11/2009	3:45 PM	BEH
Acenaphthylene	<0.90	ug/L	0.90	SW846 8270C	12/11/2009	3:45 PM	BEH
Anthracene	<0.90	ug/L	0.90	SW846 8270C	12/11/2009	3:45 PM	BEH
Benzo(a)anthracene	<0.50	ug/L	0.50	SW846 8270C	12/11/2009	3:45 PM	BEH
Benzo(a)pyrene	<0.20	ug/L	0.20	SW846 8270C	12/11/2009	3:45 PM	BEH
Benzo(b)fluoranthene	<0.50	ug/L	0.50	SW846 8270C	12/11/2009	3:45 PM	BEH
Benzo(g,h,i)perylene	<0.20	ug/L	0.20	SW846 8270C	12/11/2009	3:45 PM	BEH
Benzo(k)fluoranthene	<0.50	ug/L	0.50	SW846 8270C	12/11/2009	3:45 PM	BEH
Chrysene	<0.90	ug/L	0.90	SW846 8270C	12/11/2009	3:45 PM	BEH
Dibenzo(a,h)anthracene	<0.50	ug/L	0.50	SW846 8270C	12/11/2009	3:45 PM	BEH
Fluoranthene	<0.90	ug/L	0.90	SW846 8270C	12/11/2009	3:45 PM	BEH
Fluorene	<0.90	ug/L	0.90	SW846 8270C	12/11/2009	3:45 PM	BEH

Laboratory Project ID: 0912032

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Indeno(1,2,3-cd)pyrene	<0.50	ug/L	0.50	SW846 8270C	12/11/2009	3:45 PM	BEH
1-Methylnaphthalene	<1.00	ug/L	1.00	SW846 8270C	12/11/2009	3:45 PM	BEH
2-Methylnaphthalene	<1.00	ug/L	1.00	SW846 8270C	12/11/2009	3:45 PM	BEH
Naphthalene	<0.90	ug/L	0.90	SW846 8270C	12/11/2009	3:45 PM	BEH
Phenanthrene	<0.90	ug/L	0.90	SW846 8270C	12/11/2009	3:45 PM	BEH
Pyrene	<0.90	ug/L	0.90	SW846 8270C	12/11/2009	3:45 PM	BEH

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	**0.016**	mg/L	0.005	SW846 7421	12/7/2009	9:58 PM	JAW

Report Comments:

The **PQL** is the **Practical Quantitation Limit**, which is defined as the lowest quantitation level of an analyte that can be readily achieved within the specified limits of precision and accuracy of an analytical method during routine laboratory operating conditions. The value may be raised depending on the characteristics or behavior of the target analyte.

All samples were analyzed **"as received"** from the client. American Westech Inc. can only assume that all samples were collected and submitted by the CLIENT following the appropriate protocols set forth by the regulatory requirements. This document shall not be reproduced, except in full, without the written approval of American Westech Inc. If there are any questions pertaining to this laboratory report please contact a Client Services Coordinator or the Laboratory Director at (717) 651-9700.

Laboratory Certifications:

- NELAP accredited by the PADEP (22-00578) & NJDEP (PA019) for numerous solid and chemical materials and non-potable water parameters. Please refer to our certified parameter lists for each state for specific information on the approved methodologies.
- PADEP accredited for various drinking water parameters including: Volatile Organic Compounds, Metals, Inorganics, and Microbiology (22-00578). Please refer to our certified parameter list for specific information on the approved methodologies.

Reviewed and Approved By:

William W. Smith, Jr.
Laboratory Director

Date Reviewed and Approved:

12-21-09

AMERICAN Westech INCORPORATED

AMERICAN WESTECH, INC.

4359 Linglestown Road, Harrisburg, PA 17112, (717) 651-9700

1015 Bridge Road, Suite D, Collegeville, PA 19426, (610) 489-1234

SAMPLE SUBMITTAL FORM

ACCREDITED IN ACCORDANCE WITH nelac

PADEP ID (22-00578) - NJDEP ID (PA019)

NELAP accredited by PADEP & NJDEP. Please call for specific parameter accreditations.

LABORATORY PROJECT NUMBER

0912032

SUBMIT LAB REPORT TO (Westech Client Information):			SUBMIT INVOICE TO:		
Company:	BC Companies		Company:		
Contact:	John Thatcher		Contact:		
Address:			Address:		
Address:			Address:		
City:	State:	Zip:	City:	State:	Zip:
Phone:	Fax:		Phone:	Fax:	
Report Delivery: ☐ Mail ☐ Fax ☐ Email (enter address below)			Invoice Delivery: ☐ Mail ☐ Email (enter address below)		

SAMPLE RECEIVING INFORMATION (lab use only)				
Samples received on ice? Temp: 4.7 °C	Y	N	NA	
Cooler temp. within acceptable limits?	Y	N	NA	
Correct bottles/enough volume sent for analysis?	Y	N	NA	
Sample bottles in good condition (unbroken)?	Y	N	NA	
Samples within required holding time?	Y	N	NA	
Zero headspace samples collected correctly?	Y	N	NA	
Samples preserved to pH <2 and/or pH >12?	Y	N	NA	

Shipping Carrier? ☑ Drop Off ☐ WESTECH Pickup ☐ Outside Courier:

CLIENT PROJECT INFORMATION (Required)

Project Name: Frankfort & Darrah (FD)

Project/PO Number: 00L629-B

Purpose: ☐ *Regulatory* ☐ *Informational* ☐ *PWSID:*

WESTECH Field Services Used? ☐ NO ☐ YES - *(See Field Services Log)*

Westech Quote/MSA No.:

Data Deliverables: ☐ *Level I (Standard)* OR

Additional Fee Deliverables: ☐ *Level II* ☐ *Level III* ☐ *Level IV*

Results TAT Requested * : ☒ 6-10 Day (Standard) OR ☐ RUSH** (INDICATE DUE DATE):

NOTES: *Turnaround times begin at 5pm on the day the samples were received by WESTECH. Results will be considered due by 5pm on the due date.

**RUSH TATs will include surcharge unless otherwise agreed to in writing and must be pre-arranged to ensure the due date can be met.

SS = Solid or Sludge
GW = Groundwater
WW = Wastewater
DW = Drinking Water
SW = Storm or Surface Water
OL = Oil A = Air O = Other

LAB ID	SAMPLE IDENTIFICATION / LOCATION DESCRIPTION	SAMPLED BY	SAMPLE DATE	SAMPLE TIME	Total # of Containers	Sample Type:	Grab "G" or Composite "C"	VOCs	PAHs	dissolved lead
01	MW-1	SW	12/1/09	1545	5	GW	G	X	X	X
02	MW-2A	"	"	1615	1	"	"	X		
03	MW-3	"	"	1630	1	"	"	X		
04	MW-4	"	"	1605	1	"	"	X		
05										
06										
07										
08										
09										
10										

	PRINT NAME	SIGNATURE	DATE	TIME
Relinquished by CLIENT:	Steve Vedder	Steve Vedder	12/2/09	1500
Accepted by WESTECH:	Scott V. Wenner	Scott V. Wenner	12/2/09	1500
Relinquished by WESTECH:				
Accepted by WESTECH:				
Relinquished by WESTECH:				
Accepted by WESTECH:				
Relinquished by WESTECH:				
Accepted at WESTECH Lab:	Danielle Love	Danielle Love	12/2/09	1522

COMMENTS, NOTES, OR SPECIAL INSTRUCTIONS

By relinquishing this form to WESTECH, I hereby agree to the terms & conditions printed on the reverse side. *WHITE - Original YELLOW - Laboratory Copy PINK - Client Copy*

AMERICAN Westech INCORPORATED

Laboratory Result Summary

Laboratory Project ID: 1003035

BL Companies
Scott Treherne
213 Market St.
6th Floor
Harrisburg, PA 17101

Contact: Scott Treherne
Project Name: Frankford & Darrah
Project Number: 00L629-B
Purchase Order Number: N/A
Sampled By: Greg Holtzman
Date Received: March 3, 2010
Time Received: 8:37 AM

Analytical Testing Parameters

Client Sample ID: **MW-1**
Lab Sample ID: **1003035-01**
Collection Date: **3/2/2010**
Collection Time: **1:15 PM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<50.0	ug/L	50.0	SW846 8260B	3/5/2010	12:19 AM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	12:19 AM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
Bromodichloromethane	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	12:19 AM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
2-Butanone (MEK)	<3.00	ug/L	3.00	SW846 8260B	3/5/2010	12:19 AM	JMS
n-Butylbenzene	<4.00	ug/L	4.00	SW846 8260B	3/5/2010	12:19 AM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	3/5/2010	12:19 AM	JMS
Carbon Tetrachloride	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	12:19 AM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
Chlorodibromomethane	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	12:19 AM	JMS
Chloroform	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
Chloromethane	<3.00	ug/L	3.00	SW846 8260B	3/5/2010	12:19 AM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
1,1-Dichloroethene	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	12:19 AM	JMS
cis-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
1,2-Dichloropropane	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	12:19 AM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
Hexachlorobutadiene	<3.00	ug/L	3.00	SW846 8260B	3/5/2010	12:19 AM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	3/5/2010	12:19 AM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
4-Isopropyltoluene	<10.0	ug/L	10.0	SW846 8260B	3/5/2010	12:19 AM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	3/5/2010	12:19 AM	JMS
Methylene Chloride	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
Naphthalene	<15.0	ug/L	15.0	SW846 8260B	3/5/2010	12:19 AM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
Styrene	<4.00	ug/L	4.00	SW846 8260B	3/5/2010	12:19 AM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
1,1,2,2-Tetrachloroethane	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	12:19 AM	JMS
Tetrachloroethene	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	12:19 AM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	3/5/2010	12:19 AM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	3/5/2010	12:19 AM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
Trichloroethene	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	12:19 AM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
Vinyl Chloride	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	12:19 AM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	3/5/2010	12:19 AM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	3/5/2010	12:19 AM	JMS

- The Bromomethane concentration was determined by a library search of the appropriate retention time and mass spectral ion pattern.

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.86	ug/L	0.86	SW846 8270C	3/5/2010	4:10 PM	BEH
Acenaphthylene	<0.86	ug/L	0.86	SW846 8270C	3/5/2010	4:10 PM	BEH
Anthracene	<0.86	ug/L	0.86	SW846 8270C	3/5/2010	4:10 PM	BEH
Benzo(a)anthracene	<0.48	ug/L	0.48	SW846 8270C	3/5/2010	4:10 PM	BEH
Benzo(a)pyrene	<0.19	ug/L	0.19	SW846 8270C	3/5/2010	4:10 PM	BEH
Benzo(b)fluoranthene	<0.48	ug/L	0.48	SW846 8270C	3/5/2010	4:10 PM	BEH
Benzo(g,h,i)perylene	<0.19	ug/L	0.19	SW846 8270C	3/5/2010	4:10 PM	BEH
Benzo(k)fluoranthene	<0.48	ug/L	0.48	SW846 8270C	3/5/2010	4:10 PM	BEH
Chrysene	<0.86	ug/L	0.86	SW846 8270C	3/5/2010	4:10 PM	BEH
Dibenzo(a,h)anthracene	<0.48	ug/L	0.48	SW846 8270C	3/5/2010	4:10 PM	BEH
Fluoranthene	<0.86	ug/L	0.86	SW846 8270C	3/5/2010	4:10 PM	BEH
Fluorene	<0.86	ug/L	0.86	SW846 8270C	3/5/2010	4:10 PM	BEH
Indeno(1,2,3-cd)pyrene	<0.48	ug/L	0.48	SW846 8270C	3/5/2010	4:10 PM	BEH
1-Methylnaphthalene	<0.95	ug/L	0.95	SW846 8270C	3/5/2010	4:10 PM	BEH
2-Methylnaphthalene	<0.95	ug/L	0.95	SW846 8270C	3/5/2010	4:10 PM	BEH

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Naphthalene	<0.86	ug/L	0.86	SW846 8270C	3/5/2010	4:10 PM	BEH
Phenanthrene	<0.86	ug/L	0.86	SW846 8270C	3/5/2010	4:10 PM	BEH
Pyrene	<0.86	ug/L	0.86	SW846 8270C	3/5/2010	4:10 PM	BEH

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	<0.005	mg/L	0.005	SW846 7421	3/5/2010	3:03 PM	JAW

- The sample was filtered and preserved at the laboratory for the dissolved Lead analysis.

Analytical Testing Parameters

Client Sample ID: **MW-2A** Collection Date: **3/2/2010**

Lab Sample ID: **1003035-02** Collection Time: **1:20 PM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<50.0	ug/L	50.0	SW846 8260B	3/5/2010	12:47 AM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	12:47 AM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
Bromodichloromethane	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	12:47 AM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
2-Butanone (MEK)	<3.00	ug/L	3.00	SW846 8260B	3/5/2010	12:47 AM	JMS
n-Butylbenzene	<4.00	ug/L	4.00	SW846 8260B	3/5/2010	12:47 AM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	3/5/2010	12:47 AM	JMS
Carbon Tetrachloride	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	12:47 AM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
Chlorodibromomethane	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	12:47 AM	JMS
Chloroform	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
Chloromethane	<3.00	ug/L	3.00	SW846 8260B	3/5/2010	12:47 AM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
1,1-Dichloroethene	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	12:47 AM	JMS
cis-1,2-Dichloroethene	**5.26**	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
1,2-Dichloropropane	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	12:47 AM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
Hexachlorobutadiene	<3.00	ug/L	3.00	SW846 8260B	3/5/2010	12:47 AM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	3/5/2010	12:47 AM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
4-Isopropyltoluene	<10.0	ug/L	10.0	SW846 8260B	3/5/2010	12:47 AM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	3/5/2010	12:47 AM	JMS
Methylene Chloride	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
Naphthalene	<15.0	ug/L	15.0	SW846 8260B	3/5/2010	12:47 AM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
Styrene	<4.00	ug/L	4.00	SW846 8260B	3/5/2010	12:47 AM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
1,1,2,2-Tetrachloroethane	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	12:47 AM	JMS
Tetrachloroethene	**28.0**	ug/L	1.00	SW846 8260B	3/5/2010	12:47 AM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	3/5/2010	12:47 AM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	3/5/2010	12:47 AM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
Trichloroethene	**2.57**	ug/L	1.00	SW846 8260B	3/5/2010	12:47 AM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
Vinyl Chloride	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	12:47 AM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	3/5/2010	12:47 AM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	3/5/2010	12:47 AM	JMS

- The Bromomethane concentration was determined by a library search of the appropriate retention time and mass spectral ion pattern.

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.87	ug/L	0.87	SW846 8270C	3/5/2010	4:51 PM	BEH
Acenaphthylene	<0.87	ug/L	0.87	SW846 8270C	3/5/2010	4:51 PM	BEH
Anthracene	<0.87	ug/L	0.87	SW846 8270C	3/5/2010	4:51 PM	BEH
Benzo(a)anthracene	<0.48	ug/L	0.48	SW846 8270C	3/5/2010	4:51 PM	BEH
Benzo(a)pyrene	<0.19	ug/L	0.19	SW846 8270C	3/5/2010	4:51 PM	BEH
Benzo(b)fluoranthene	<0.48	ug/L	0.48	SW846 8270C	3/5/2010	4:51 PM	BEH
Benzo(g,h,i)perylene	<0.19	ug/L	0.19	SW846 8270C	3/5/2010	4:51 PM	BEH
Benzo(k)fluoranthene	<0.48	ug/L	0.48	SW846 8270C	3/5/2010	4:51 PM	BEH
Chrysene	<0.87	ug/L	0.87	SW846 8270C	3/5/2010	4:51 PM	BEH
Dibenzo(a,h)anthracene	<0.48	ug/L	0.48	SW846 8270C	3/5/2010	4:51 PM	BEH
Fluoranthene	<0.87	ug/L	0.87	SW846 8270C	3/5/2010	4:51 PM	BEH
Fluorene	<0.87	ug/L	0.87	SW846 8270C	3/5/2010	4:51 PM	BEH
Indeno(1,2,3-cd)pyrene	<0.48	ug/L	0.48	SW846 8270C	3/5/2010	4:51 PM	BEH

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
1-Methylnaphthalene	<0.96	ug/L	0.96	SW846 8270C	3/5/2010	4:51 PM	BEH
2-Methylnaphthalene	<0.96	ug/L	0.96	SW846 8270C	3/5/2010	4:51 PM	BEH
Naphthalene	<0.87	ug/L	0.87	SW846 8270C	3/5/2010	4:51 PM	BEH
Phenanthrene	<0.87	ug/L	0.87	SW846 8270C	3/5/2010	4:51 PM	BEH
Pyrene	<0.87	ug/L	0.87	SW846 8270C	3/5/2010	4:51 PM	BEH

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	<0.005	mg/L	0.005	SW846 7421	3/5/2010	3:08 PM	JAW

- The sample was filtered and preserved at the laboratory for the dissolved Lead analysis.

Analytical Testing Parameters

Client Sample ID: **MW-3** Collection Date: **3/2/2010**

Lab Sample ID: **1003035-03** Collection Time: **12:50 PM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<50.0	ug/L	50.0	SW846 8260B	3/5/2010	1:16 AM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	1:16 AM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
Bromodichloromethane	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	1:16 AM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
2-Butanone (MEK)	<3.00	ug/L	3.00	SW846 8260B	3/5/2010	1:16 AM	JMS
n-Butylbenzene	<4.00	ug/L	4.00	SW846 8260B	3/5/2010	1:16 AM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	3/5/2010	1:16 AM	JMS
Carbon Tetrachloride	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	1:16 AM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
Chlorodibromomethane	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	1:16 AM	JMS
Chloroform	**6.36**	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
Chloromethane	<3.00	ug/L	3.00	SW846 8260B	3/5/2010	1:16 AM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
1,1-Dichloroethene	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	1:16 AM	JMS
cis-1,2-Dichloroethene	**7.91**	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
1,2-Dichloropropane	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	1:16 AM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
Hexachlorobutadiene	<3.00	ug/L	3.00	SW846 8260B	3/5/2010	1:16 AM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	3/5/2010	1:16 AM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
4-Isopropyltoluene	<10.0	ug/L	10.0	SW846 8260B	3/5/2010	1:16 AM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	3/5/2010	1:16 AM	JMS
Methylene Chloride	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
Naphthalene	<15.0	ug/L	15.0	SW846 8260B	3/5/2010	1:16 AM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
Styrene	<4.00	ug/L	4.00	SW846 8260B	3/5/2010	1:16 AM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
1,1,2,2-Tetrachloroethane	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	1:16 AM	JMS
Tetrachloroethene	**50.0**	ug/L	1.00	SW846 8260B	3/5/2010	1:16 AM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	3/5/2010	1:16 AM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	3/5/2010	1:16 AM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
Trichloroethene	**3.72**	ug/L	1.00	SW846 8260B	3/5/2010	1:16 AM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
Vinyl Chloride	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	1:16 AM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	3/5/2010	1:16 AM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	3/5/2010	1:16 AM	JMS

- The pH of the VOC vial was above the recommended limit of <2. The Bromomethane concentration was determined by a library search of the appropriate retention time and mass spectral ion pattern.

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.90	ug/L	0.90	SW846 8270C	3/9/2010	2:22 PM	BEH
Acenaphthylene	<0.90	ug/L	0.90	SW846 8270C	3/9/2010	2:22 PM	BEH
Anthracene	<0.90	ug/L	0.90	SW846 8270C	3/9/2010	2:22 PM	BEH
Benzo(a)anthracene	<0.50	ug/L	0.50	SW846 8270C	3/9/2010	2:22 PM	BEH
Benzo(a)pyrene	<0.20	ug/L	0.20	SW846 8270C	3/9/2010	2:22 PM	BEH
Benzo(b)fluoranthene	<0.50	ug/L	0.50	SW846 8270C	3/9/2010	2:22 PM	BEH
Benzo(g,h,i)perylene	<0.20	ug/L	0.20	SW846 8270C	3/9/2010	2:22 PM	BEH
Benzo(k)fluoranthene	<0.50	ug/L	0.50	SW846 8270C	3/9/2010	2:22 PM	BEH
Chrysene	<0.90	ug/L	0.90	SW846 8270C	3/9/2010	2:22 PM	BEH
Dibenzo(a,h)anthracene	<0.50	ug/L	0.50	SW846 8270C	3/9/2010	2:22 PM	BEH

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Fluoranthene	<0.90	ug/L	0.90	SW846 8270C	3/9/2010	2:22 PM	BEH
Fluorene	<0.90	ug/L	0.90	SW846 8270C	3/9/2010	2:22 PM	BEH
Indeno(1,2,3-cd)pyrene	<0.50	ug/L	0.50	SW846 8270C	3/9/2010	2:22 PM	BEH
1-Methylnaphthalene	<1.00	ug/L	1.00	SW846 8270C	3/9/2010	2:22 PM	BEH
2-Methylnaphthalene	<1.00	ug/L	1.00	SW846 8270C	3/9/2010	2:22 PM	BEH
Naphthalene	<0.90	ug/L	0.90	SW846 8270C	3/9/2010	2:22 PM	BEH
Phenanthrene	<0.90	ug/L	0.90	SW846 8270C	3/9/2010	2:22 PM	BEH
Pyrene	<0.90	ug/L	0.90	SW846 8270C	3/9/2010	2:22 PM	BEH

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	<0.005	mg/L	0.005	SW846 7421	3/5/2010	3:13 PM	JAW

- The sample was filtered and preserved at the laboratory for the dissolved Lead analysis.

Analytical Testing Parameters

Client Sample ID: **MW-4**
Lab Sample ID: **1003035-04**
Collection Date: **3/2/2010**
Collection Time: **1:10 PM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<50.0	ug/L	50.0	SW846 8260B	3/5/2010	1:44 AM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	1:44 AM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
Bromodichloromethane	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	1:44 AM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
2-Butanone (MEK)	<3.00	ug/L	3.00	SW846 8260B	3/5/2010	1:44 AM	JMS
n-Butylbenzene	<4.00	ug/L	4.00	SW846 8260B	3/5/2010	1:44 AM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	3/5/2010	1:44 AM	JMS
Carbon Tetrachloride	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	1:44 AM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
Chlorodibromomethane	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	1:44 AM	JMS
Chloroform	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
Chloromethane	<3.00	ug/L	3.00	SW846 8260B	3/5/2010	1:44 AM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
1,1-Dichloroethene	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	1:44 AM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
cis-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
1,2-Dichloropropane	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	1:44 AM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
Hexachlorobutadiene	<3.00	ug/L	3.00	SW846 8260B	3/5/2010	1:44 AM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	3/5/2010	1:44 AM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
4-Isopropyltoluene	<10.0	ug/L	10.0	SW846 8260B	3/5/2010	1:44 AM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	3/5/2010	1:44 AM	JMS
Methylene Chloride	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
Naphthalene	<15.0	ug/L	15.0	SW846 8260B	3/5/2010	1:44 AM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
Styrene	<4.00	ug/L	4.00	SW846 8260B	3/5/2010	1:44 AM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
1,1,2,2-Tetrachloroethane	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	1:44 AM	JMS
Tetrachloroethene	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	1:44 AM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	3/5/2010	1:44 AM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	3/5/2010	1:44 AM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
Trichloroethene	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	1:44 AM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
Vinyl Chloride	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	1:44 AM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	3/5/2010	1:44 AM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	3/5/2010	1:44 AM	JMS

- The Bromomethane concentration was determined by a library search of the appropriate retention time and mass spectral ion pattern.

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.95	ug/L	0.95	SW846 8270C	3/5/2010	6:09 PM	BEH
Acenaphthylene	<0.95	ug/L	0.95	SW846 8270C	3/5/2010	6:09 PM	BEH
Anthracene	<0.95	ug/L	0.95	SW846 8270C	3/5/2010	6:09 PM	BEH
Benzo(a)anthracene	**1.12**	ug/L	0.53	SW846 8270C	3/5/2010	6:09 PM	BEH
Benzo(a)pyrene	**1.96**	ug/L	0.21	SW846 8270C	3/5/2010	6:09 PM	BEH
Benzo(b)fluoranthene	**4.44**	ug/L	0.53	SW846 8270C	3/5/2010	6:09 PM	BEH
Benzo(g,h,i)perylene	**1.64**	ug/L	0.21	SW846 8270C	3/5/2010	6:09 PM	BEH
Benzo(k)fluoranthene	**2.05**	ug/L	0.53	SW846 8270C	3/5/2010	6:09 PM	BEH

Laboratory Project ID: 1003035

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Chrysene	**2.96**	ug/L	0.95	SW846 8270C	3/5/2010	6:09 PM	BEH
Dibenzo(a,h)anthracene	<0.53	ug/L	0.53	SW846 8270C	3/5/2010	6:09 PM	BEH
Fluoranthene	**3.35**	ug/L	0.95	SW846 8270C	3/5/2010	6:09 PM	BEH
Fluorene	<0.95	ug/L	0.95	SW846 8270C	3/5/2010	6:09 PM	BEH
Indeno(1,2,3-cd)pyrene	**1.52**	ug/L	0.53	SW846 8270C	3/5/2010	6:09 PM	BEH
1-Methylnaphthalene	<1.05	ug/L	1.05	SW846 8270C	3/5/2010	6:09 PM	BEH
2-Methylnaphthalene	<1.05	ug/L	1.05	SW846 8270C	3/5/2010	6:09 PM	BEH
Naphthalene	<0.95	ug/L	0.95	SW846 8270C	3/5/2010	6:09 PM	BEH
Phenanthrene	<0.95	ug/L	0.95	SW846 8270C	3/5/2010	6:09 PM	BEH
Pyrene	**2.72**	ug/L	0.95	SW846 8270C	3/5/2010	6:09 PM	BEH

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	<0.005	mg/L	0.005	SW846 7421	3/5/2010	3:17 PM	JAW

- The sample was filtered and preserved at the laboratory for the dissolved Lead analysis.

Report Comments:

Note: Due to the extremely short holding time of 15 minutes, the following test procedures, if reported, were performed outside the recommended holding time: Total Residual Chlorine, laboratory pH, Dissolved Oxygen, Orthophosphate, and Sulfite.

The **PQL** is the **Practical Quantitation Limit**, which is defined as the lowest quantitation level of an analyte that can be readily achieved within the specified limits of precision and accuracy of an analytical method during routine laboratory operating conditions. The value may be raised depending on the characteristics or behavior of the target analyte.

All samples were analyzed **"as received"** from the client. American Westech Inc. can only assume that all samples were collected and submitted by the CLIENT following the appropriate protocols set forth by the regulatory requirements. This document shall not be reproduced, except in full, without the written approval of American Westech Inc. If there are any questions pertaining to this laboratory report please contact a Client Services Coordinator or the Laboratory Director at (717) 651-9700.

Laboratory Certifications:

- NELAP accredited by the PADEP (22-00578) & NJDEP (PA019) for numerous solid and chemical materials and non-potable water parameters. Please refer to our certified parameter lists for each state for specific information on the approved methodologies.
- PADEP accredited for various drinking water parameters including: Volatile Organic Compounds, Metals, Inorganics, and Microbiology (22-00578). Please refer to our certified parameter list for specific information on the approved methodologies.

Reviewed and Approved By:

William W. Smith, Jr.
Laboratory Director

Date Reviewed and Approved:

3-10-10

SAMPLE SUBMITTAL FORM

American Westech Incorporated
4359 Linglestown Road, Harrisburg, PA 17112
Phone: (717) 651-9700 Fax: (717) 657-0752

NELAP accredited by PADEP & NJDEP. Please call for specific parameter accreditations.
PADEP ID (22-00578) - NJDEP ID (PA019)

LABORATORY PROJECT NUMBER: 1003035

PROJECT DETAILS

Company: BL COMPANIES
Contact: SCOTT TREHERNE
Address: 213 MARKET STREET
City: HARRISBURG State: PA Zip: 17101
Phone: 717-651-9850 Fax: 717-651-9858
Project Name: FRANKFORD ARSENAL
Project No.: 001629-B
Client P.O. No.:
Westech Proposal/BPA No.:
Purpose: ☒ Regulatory ☐ Informational ☐ PWSID:
Data Deliverables: ☐ Level I ☐ Level II ☐ Level III ☐ Level IV
Report Delivery: ☐ Fax ☒ Email - Address: STREHERNE@BLCOMPANIES.COM
Please Mark TAT Requested * : ☐ 10 Day (Standard) ☒ 5 Day
☐ 72 Hour ☐ 48 Hour ☐ 24 Hour ☐ Same Day

* Turnaround times based on business days only. All "RUSH" TATs must be pre-arranged with WESTECH and are subject to "RUSH" surcharges.

INVOICING INFORMATION

Company:
Contact:
Address: BL COMPANIES
City: State: Zip:
Phone: Fax:
Invoice Delivery: ☒ Mail w/Report ☐ Email (enter address below)
WESTECH Field Services Used? ☒ NO ☐ YES - *(See Field Services Log)*

SAMPLE TYPE (Key)
SS = Solid/Sludge SW = Storm/Surface Water
OL = Oil WW = Wastewater
DW = Drinking Water AR = Air
GW = Groundwater O = Other: _____

SAMPLE RECEIVING INFORMATION *(lab use only)*

Samples received on ice? Temp: 0.2 °C	Y	N	NA	
Cooler temp. within acceptable limits?	Y	N	NA	
Correct bottles used for requested analysis?	Y	~~N~~	NA	
Sample bottles in good condition (unbroken)?	Y	N	NA	
Zero headspace samples collected correctly?	Y	N	NA	
Samples within required holding time?	Y	N	NA	
Samples preserved to pH <2 and/or pH >12?	Y	N	NA	

Shipping Carrier? ☐ Drop Off ☐ WESTECH Pickup ☐ Outside Courier:

SAMPLE DETAILS / ANALYSIS REQUESTED

LAB ID	SAMPLE IDENTIFICATION / LOCATION DESCRIPTION	SAMPLE DATE	SAMPLE TIME	Total # of Bottles	Sample Type: (See "Sample Type" Key)	Grab: "G" or Composite: "C"	VOCs (8260-B)	PAHs (8270-C)	DISS. Pb
01	MW-1	3.2.2010	1315	5	GW	G	X	X	X
02	MW-2A		1320				X	X	X
03	MW-3		1250				X	X	X
04	MW-4		1310				X	X	X
05									
06									
07									
08									
09									
10									

	PRINT NAME	SIGNATURE	DATE	TIME
Sampled By:	GREG HOLTZMAN	Greg Holtzman	3.2.2010	1330
Relinquished By (Sampler):				
Accepted By:				
Relinquished to WESTECH By:				
Accepted at WESTECH By:	DLowe	Dan Lowe	3/3/10	837

COMMENTS OR SPECIAL INSTRUCTIONS
* SAMPLE RESULTS MUST MEET PA ACT 2 REQUIREMENTS
* LAB TO FILTER *

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WHITE - Original YELLOW - Laboratory Copy PINK - Client Copy

AMERICAN Westech INCORPORATED

Laboratory Result Summary

Laboratory Project ID: 1007023

BL Companies
Scott Treherne
213 Market St.
6th Floor
Harrisburg, PA 17101

Contact: Scott Treherne
Project Name: Frankford and Darrah
Project Number: 00L629-B
Purchase Order Number: N/A
Sampled By: Matt Adukeintis
Date Received: July 1, 2010
Time Received: 3:00 PM

Analytical Testing Parameters

Client Sample ID: **MW-2A**
Lab Sample ID: **1007023-01**
Collection Date: **6/30/2010**
Collection Time: **10:15 AM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<50.0	ug/L	50.0	SW846 8260B	7/7/2010	5:23 PM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	5:23 PM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
Bromodichloromethane	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	5:23 PM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
2-Butanone (MEK)	<5.00	ug/L	5.00	SW846 8260B	7/7/2010	5:23 PM	JMS
n-Butylbenzene	<4.00	ug/L	4.00	SW846 8260B	7/7/2010	5:23 PM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	7/7/2010	5:23 PM	JMS
Carbon Tetrachloride	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	5:23 PM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
Chlorodibromomethane	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	5:23 PM	JMS
Chloroform	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
Chloromethane	<3.00	ug/L	3.00	SW846 8260B	7/7/2010	5:23 PM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
1,1-Dichloroethene	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	5:23 PM	JMS
cis-1,2-Dichloroethene	**5.76**	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
1,2-Dichloropropane	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	5:23 PM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
Hexachlorobutadiene	<3.00	ug/L	3.00	SW846 8260B	7/7/2010	5:23 PM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	7/7/2010	5:23 PM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
4-Isopropyltoluene	<10.0	ug/L	10.0	SW846 8260B	7/7/2010	5:23 PM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	7/7/2010	5:23 PM	JMS
Methylene Chloride	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
Naphthalene	<15.0	ug/L	15.0	SW846 8260B	7/7/2010	5:23 PM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
Styrene	<4.00	ug/L	4.00	SW846 8260B	7/7/2010	5:23 PM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
1,1,2,2-Tetrachloroethane	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	5:23 PM	JMS
Tetrachloroethene	**26.1**	ug/L	1.00	SW846 8260B	7/7/2010	5:23 PM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	7/7/2010	5:23 PM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	7/7/2010	5:23 PM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
Trichloroethene	**2.40**	ug/L	1.00	SW846 8260B	7/7/2010	5:23 PM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
Vinyl Chloride	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	5:23 PM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	7/7/2010	5:23 PM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	7/7/2010	5:23 PM	JMS

- The Bromomethane concentration was determined by a library search of the appropriate retention time and mass spectral ion pattern.

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.86	ug/L	0.86	SW846 8270C	7/8/2010	4:17 PM	BEH
Acenaphthylene	<0.86	ug/L	0.86	SW846 8270C	7/8/2010	4:17 PM	BEH
Anthracene	<0.86	ug/L	0.86	SW846 8270C	7/8/2010	4:17 PM	BEH
Benzo(a)anthracene	<0.48	ug/L	0.48	SW846 8270C	7/8/2010	4:17 PM	BEH
Benzo(a)pyrene	<0.19	ug/L	0.19	SW846 8270C	7/8/2010	4:17 PM	BEH
Benzo(b)fluoranthene	<0.48	ug/L	0.48	SW846 8270C	7/8/2010	4:17 PM	BEH
Benzo(g,h,i)perylene	<0.19	ug/L	0.19	SW846 8270C	7/8/2010	4:17 PM	BEH
Benzo(k)fluoranthene	<0.48	ug/L	0.48	SW846 8270C	7/8/2010	4:17 PM	BEH
Chrysene	<0.86	ug/L	0.86	SW846 8270C	7/8/2010	4:17 PM	BEH
Dibenzo(a,h)anthracene	<0.48	ug/L	0.48	SW846 8270C	7/8/2010	4:17 PM	BEH
Fluoranthene	<0.86	ug/L	0.86	SW846 8270C	7/8/2010	4:17 PM	BEH
Fluorene	<0.86	ug/L	0.86	SW846 8270C	7/8/2010	4:17 PM	BEH
Indeno(1,2,3-cd)pyrene	<0.48	ug/L	0.48	SW846 8270C	7/8/2010	4:17 PM	BEH

Laboratory Project ID: 1007023

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
1-Methylnaphthalene	<0.95	ug/L	0.95	SW846 8270C	7/8/2010	4:17 PM	BEH
2-Methylnaphthalene	<0.95	ug/L	0.95	SW846 8270C	7/8/2010	4:17 PM	BEH
Naphthalene	<0.86	ug/L	0.86	SW846 8270C	7/8/2010	4:17 PM	BEH
Phenanthrene	<0.86	ug/L	0.86	SW846 8270C	7/8/2010	4:17 PM	BEH
Pyrene	<0.86	ug/L	0.86	SW846 8270C	7/8/2010	4:17 PM	BEH

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	<0.005	mg/L	0.005	SW846 7421	7/8/2010	3:08 PM	TMS

- The sample was filtered and preserved at the laboratory for the dissolved Lead analysis.

Analytical Testing Parameters

Client Sample ID: **MW-3**
Lab Sample ID: **1007023-02**

Collection Date: **6/30/2010**
Collection Time: **11:18 AM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<50.0	ug/L	50.0	SW846 8260B	7/7/2010	5:52 PM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	5:52 PM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
Bromodichloromethane	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	5:52 PM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
2-Butanone (MEK)	<5.00	ug/L	5.00	SW846 8260B	7/7/2010	5:52 PM	JMS
n-Butylbenzene	<4.00	ug/L	4.00	SW846 8260B	7/7/2010	5:52 PM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	7/7/2010	5:52 PM	JMS
Carbon Tetrachloride	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	5:52 PM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
Chlorodibromomethane	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	5:52 PM	JMS
Chloroform	**5.12**	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
Chloromethane	<3.00	ug/L	3.00	SW846 8260B	7/7/2010	5:52 PM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
1,1-Dichloroethene	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	5:52 PM	JMS
cis-1,2-Dichloroethene	**6.47**	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
1,2-Dichloropropane	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	5:52 PM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
Hexachlorobutadiene	<3.00	ug/L	3.00	SW846 8260B	7/7/2010	5:52 PM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	7/7/2010	5:52 PM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
4-Isopropyltoluene	<10.0	ug/L	10.0	SW846 8260B	7/7/2010	5:52 PM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	7/7/2010	5:52 PM	JMS
Methylene Chloride	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
Naphthalene	<15.0	ug/L	15.0	SW846 8260B	7/7/2010	5:52 PM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
Styrene	<4.00	ug/L	4.00	SW846 8260B	7/7/2010	5:52 PM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
1,1,2,2-Tetrachloroethane	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	5:52 PM	JMS
Tetrachloroethene	**47.2**	ug/L	1.00	SW846 8260B	7/7/2010	5:52 PM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	7/7/2010	5:52 PM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	7/7/2010	5:52 PM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
Trichloroethene	**2.10**	ug/L	1.00	SW846 8260B	7/7/2010	5:52 PM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
Vinyl Chloride	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	5:52 PM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	7/7/2010	5:52 PM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	7/7/2010	5:52 PM	JMS

- The Bromomethane concentration was determined by a library search of the appropriate retention time and mass spectral ion pattern.

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.87	ug/L	0.87	SW846 8270C	7/8/2010	4:57 PM	BEH
Acenaphthylene	<0.87	ug/L	0.87	SW846 8270C	7/8/2010	4:57 PM	BEH
Anthracene	<0.87	ug/L	0.87	SW846 8270C	7/8/2010	4:57 PM	BEH
Benzo(a)anthracene	<0.48	ug/L	0.48	SW846 8270C	7/8/2010	4:57 PM	BEH
Benzo(a)pyrene	<0.19	ug/L	0.19	SW846 8270C	7/8/2010	4:57 PM	BEH
Benzo(b)fluoranthene	<0.48	ug/L	0.48	SW846 8270C	7/8/2010	4:57 PM	BEH
Benzo(g,h,i)perylene	<0.19	ug/L	0.19	SW846 8270C	7/8/2010	4:57 PM	BEH
Benzo(k)fluoranthene	<0.48	ug/L	0.48	SW846 8270C	7/8/2010	4:57 PM	BEH

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Chrysene	<0.87	ug/L	0.87	SW846 8270C	7/8/2010	4:57 PM	BEH
Dibenzo(a,h)anthracene	<0.48	ug/L	0.48	SW846 8270C	7/8/2010	4:57 PM	BEH
Fluoranthene	<0.87	ug/L	0.87	SW846 8270C	7/8/2010	4:57 PM	BEH
Fluorene	<0.87	ug/L	0.87	SW846 8270C	7/8/2010	4:57 PM	BEH
Indeno(1,2,3-cd)pyrene	<0.48	ug/L	0.48	SW846 8270C	7/8/2010	4:57 PM	BEH
1-Methylnaphthalene	<0.96	ug/L	0.96	SW846 8270C	7/8/2010	4:57 PM	BEH
2-Methylnaphthalene	<0.96	ug/L	0.96	SW846 8270C	7/8/2010	4:57 PM	BEH
Naphthalene	<0.87	ug/L	0.87	SW846 8270C	7/8/2010	4:57 PM	BEH
Phenanthrene	<0.87	ug/L	0.87	SW846 8270C	7/8/2010	4:57 PM	BEH
Pyrene	<0.87	ug/L	0.87	SW846 8270C	7/8/2010	4:57 PM	BEH

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	<0.005	mg/L	0.005	SW846 7421	7/8/2010	3:31 PM	TMS

- The sample was filtered and preserved at the laboratory for the dissolved Lead analysis.

Analytical Testing Parameters

Client Sample ID: **MW-4**
Lab Sample ID: **1007023-03**
Collection Date: **6/30/2010**
Collection Time: **11:48 AM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<50.0	ug/L	50.0	SW846 8260B	7/7/2010	6:20 PM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	6:20 PM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
Bromodichloromethane	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	6:20 PM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
2-Butanone (MEK)	<5.00	ug/L	5.00	SW846 8260B	7/7/2010	6:20 PM	JMS
n-Butylbenzene	<4.00	ug/L	4.00	SW846 8260B	7/7/2010	6:20 PM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	7/7/2010	6:20 PM	JMS
Carbon Tetrachloride	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	6:20 PM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
Chlorodibromomethane	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	6:20 PM	JMS
Chloroform	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
Chloromethane	<3.00	ug/L	3.00	SW846 8260B	7/7/2010	6:20 PM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS

Laboratory Project ID: 1007023

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
1,1-Dichloroethene	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	6:20 PM	JMS
cis-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
1,2-Dichloropropane	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	6:20 PM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
Hexachlorobutadiene	<3.00	ug/L	3.00	SW846 8260B	7/7/2010	6:20 PM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	7/7/2010	6:20 PM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
4-Isopropyltoluene	<10.0	ug/L	10.0	SW846 8260B	7/7/2010	6:20 PM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	7/7/2010	6:20 PM	JMS
Methylene Chloride	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
Naphthalene	<15.0	ug/L	15.0	SW846 8260B	7/7/2010	6:20 PM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
Styrene	<4.00	ug/L	4.00	SW846 8260B	7/7/2010	6:20 PM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
1,1,2,2-Tetrachloroethane	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	6:20 PM	JMS
Tetrachloroethene	**1.13**	ug/L	1.00	SW846 8260B	7/7/2010	6:20 PM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	7/7/2010	6:20 PM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	7/7/2010	6:20 PM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
Trichloroethene	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	6:20 PM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
Vinyl Chloride	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	6:20 PM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	7/7/2010	6:20 PM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	7/7/2010	6:20 PM	JMS

- The Bromomethane concentration was determined by a library search of the appropriate retention time and mass spectral ion pattern.

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.88	ug/L	0.88	SW846 8270C	7/8/2010	5:36 PM	BEH
Acenaphthylene	<0.88	ug/L	0.88	SW846 8270C	7/8/2010	5:36 PM	BEH
Anthracene	<0.88	ug/L	0.88	SW846 8270C	7/8/2010	5:36 PM	BEH
Benzo(a)anthracene	<0.49	ug/L	0.49	SW846 8270C	7/8/2010	5:36 PM	BEH
Benzo(a)pyrene	<0.20	ug/L	0.20	SW846 8270C	7/8/2010	5:36 PM	BEH
Benzo(b)fluoranthene	<0.49	ug/L	0.49	SW846 8270C	7/8/2010	5:36 PM	BEH
Benzo(g,h,i)perylene	<0.20	ug/L	0.20	SW846 8270C	7/8/2010	5:36 PM	BEH
Benzo(k)fluoranthene	<0.49	ug/L	0.49	SW846 8270C	7/8/2010	5:36 PM	BEH
Chrysene	<0.88	ug/L	0.88	SW846 8270C	7/8/2010	5:36 PM	BEH
Dibenzo(a,h)anthracene	<0.49	ug/L	0.49	SW846 8270C	7/8/2010	5:36 PM	BEH
Fluoranthene	<0.88	ug/L	0.88	SW846 8270C	7/8/2010	5:36 PM	BEH
Fluorene	<0.88	ug/L	0.88	SW846 8270C	7/8/2010	5:36 PM	BEH
Indeno(1,2,3-cd)pyrene	<0.49	ug/L	0.49	SW846 8270C	7/8/2010	5:36 PM	BEH
1-Methylnaphthalene	<0.98	ug/L	0.98	SW846 8270C	7/8/2010	5:36 PM	BEH
2-Methylnaphthalene	<0.98	ug/L	0.98	SW846 8270C	7/8/2010	5:36 PM	BEH
Naphthalene	<0.88	ug/L	0.88	SW846 8270C	7/8/2010	5:36 PM	BEH
Phenanthrene	<0.88	ug/L	0.88	SW846 8270C	7/8/2010	5:36 PM	BEH
Pyrene	<0.88	ug/L	0.88	SW846 8270C	7/8/2010	5:36 PM	BEH

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	**0.007**	mg/L	0.005	SW846 7421	7/8/2010	3:35 PM	TMS

- The sample was filtered and preserved at the laboratory for the dissolved Lead analysis.

Analytical Testing Parameters

Client Sample ID: **MW-1**
Lab Sample ID: **1007023-04**
Collection Date: **6/30/2010**
Collection Time: **12:50 PM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<50.0	ug/L	50.0	SW846 8260B	7/7/2010	6:49 PM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	6:49 PM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
Bromodichloromethane	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	6:49 PM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
2-Butanone (MEK)	<5.00	ug/L	5.00	SW846 8260B	7/7/2010	6:49 PM	JMS
n-Butylbenzene	<4.00	ug/L	4.00	SW846 8260B	7/7/2010	6:49 PM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	7/7/2010	6:49 PM	JMS
Carbon Tetrachloride	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	6:49 PM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
Chlorodibromomethane	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	6:49 PM	JMS
Chloroform	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
Chloromethane	<3.00	ug/L	3.00	SW846 8260B	7/7/2010	6:49 PM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
1,1-Dichloroethene	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	6:49 PM	JMS
cis-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
1,2-Dichloropropane	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	6:49 PM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
Hexachlorobutadiene	<3.00	ug/L	3.00	SW846 8260B	7/7/2010	6:49 PM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	7/7/2010	6:49 PM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
4-Isopropyltoluene	<10.0	ug/L	10.0	SW846 8260B	7/7/2010	6:49 PM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	7/7/2010	6:49 PM	JMS
Methylene Chloride	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
Naphthalene	<15.0	ug/L	15.0	SW846 8260B	7/7/2010	6:49 PM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
Styrene	<4.00	ug/L	4.00	SW846 8260B	7/7/2010	6:49 PM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
1,1,2,2-Tetrachloroethane	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	6:49 PM	JMS
Tetrachloroethene	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	6:49 PM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	7/7/2010	6:49 PM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	7/7/2010	6:49 PM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
Trichloroethene	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	6:49 PM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
Vinyl Chloride	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	6:49 PM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	7/7/2010	6:49 PM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS

Laboratory Project ID: 1007023

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	7/7/2010	6:49 PM	JMS

- The Bromomethane concentration was determined by a library search of the appropriate retention time and mass spectral ion pattern.

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<8.41	ug/L	8.41	SW846 8270C	7/8/2010	6:16 PM	BEH
Acenaphthylene	<8.41	ug/L	8.41	SW846 8270C	7/8/2010	6:16 PM	BEH
Anthracene	<8.41	ug/L	8.41	SW846 8270C	7/8/2010	6:16 PM	BEH
Benzo(a)anthracene	<4.67	ug/L	4.67	SW846 8270C	7/8/2010	6:16 PM	BEH
Benzo(a)pyrene	**4.52**	ug/L	1.87	SW846 8270C	7/8/2010	6:16 PM	BEH
Benzo(b)fluoranthene	**9.20**	ug/L	4.67	SW846 8270C	7/8/2010	6:16 PM	BEH
Benzo(g,h,i)perylene	**6.73**	ug/L	1.87	SW846 8270C	7/8/2010	6:16 PM	BEH
Benzo(k)fluoranthene	**11.8**	ug/L	4.67	SW846 8270C	7/8/2010	6:16 PM	BEH
Chrysene	<8.41	ug/L	8.41	SW846 8270C	7/8/2010	6:16 PM	BEH
Dibenzo(a,h)anthracene	<4.67	ug/L	4.67	SW846 8270C	7/8/2010	6:16 PM	BEH
Fluoranthene	<8.41	ug/L	8.41	SW846 8270C	7/8/2010	6:16 PM	BEH
Fluorene	<8.41	ug/L	8.41	SW846 8270C	7/8/2010	6:16 PM	BEH
Indeno(1,2,3-cd)pyrene	**5.67**	ug/L	4.67	SW846 8270C	7/8/2010	6:16 PM	BEH
1-Methylnaphthalene	<9.34	ug/L	9.34	SW846 8270C	7/8/2010	6:16 PM	BEH
2-Methylnaphthalene	<9.34	ug/L	9.34	SW846 8270C	7/8/2010	6:16 PM	BEH
Naphthalene	<8.41	ug/L	8.41	SW846 8270C	7/8/2010	6:16 PM	BEH
Phenanthrene	<8.41	ug/L	8.41	SW846 8270C	7/8/2010	6:16 PM	BEH
Pyrene	<8.41	ug/L	8.41	SW846 8270C	7/8/2010	6:16 PM	BEH

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	<0.005	mg/L	0.005	SW846 7421	7/8/2010	3:40 PM	TMS

- The sample was filtered and preserved at the laboratory for the dissolved Lead analysis.

Report Comments:

Note: Due to the extremely short holding time of 15 minutes, the following test procedures, if reported, were performed outside the recommended holding time: Total Residual Chlorine, Laboratory pH, Dissolved Oxygen, and Sulfite.

The **PQL** is the **Practical Quantitation Limit**, which is defined as the lowest quantitation level of an analyte that can be readily achieved within the specified limits of precision and accuracy of an analytical method during routine laboratory operating conditions. The value may be raised depending on the characteristics or behavior of the target analyte.

All samples were analyzed **"as received"** from the client. American Westech Inc. can only assume that all samples were collected and submitted by the CLIENT following the appropriate protocols set forth by the regulatory requirements. This document shall not be reproduced, except in full, without the written approval of American Westech Inc. If there are any questions pertaining to this laboratory report please contact a Client Services Coordinator or the Laboratory Director at (717) 651-9700.

Laboratory Certifications:

- NELAP accredited by the PADEP (22-00578) & NJDEP (PA019) for numerous solid and chemical materials and non-potable water parameters. Please refer to our certified parameter lists for each state for specific information on the approved methodologies.
- PADEP accredited for various drinking water parameters including: Volatile Organic Compounds, Metals, Inorganics, and Microbiology (22-00578). Please refer to our certified parameter list for specific information on the approved methodologies.

Reviewed and Approved By:

William W. Smith, Jr.
Laboratory Director

Date Reviewed and Approved:

7-13-10

AMERICAN WESTECH, INC. SAMPLE SUBMITTAL FORM

4359 Linglestown Road, Harrisburg, PA 17112 · Phone: (717) 651-9700 · Fax: (717) 657-0752
1015 Bridge Road, Suite D, Collegeville, PA 19426 · Phone: (610) 489-1234

NELAP accredited by PADEP & NJDEP

PA ID# 22-00578 · NJ ID# PA019

LABORATORY PROJECT NUMBER: **1007023**

SUBMIT LAB REPORT TO (Westech Client Information):			SUBMIT INVOICE TO:		
Company:	BL Companies		Company:	BL Companies	
Contact:	Scott Treherne		Contact:		
Address:	213 Market St.		Address:		
City:	Harrisburg	State: PA Zip: 17101	City:	State:	Zip:
Phone:	717-651-9850	Fax: 717-651-9858	Phone:	Fax:	
Report Delivery:	☐ Mail ☐ Fax ☑ Email (enter address below)		Invoice Delivery:	☑ Mail ☐ Email (enter address below)	
	STreherne@BLCompanies.com				

LABORATORY USE ONLY				
Samples received on ice? Temp: 1.2 °C	Y	N	NA	
Cooler temp. within acceptable limits?	Y	N	NA	
Correct bottles/enough volume for analysis?	Y	N	NA	
Sample bottles in good condition (unbroken)?	Y	N	NA	
Samples within required holding time?	Y	N	NA	
Zero headspace samples collected correctly?	Y	N	NA	
Samples preserved to pH <2 and/or pH >12?	Y	~~N~~	NA	Lab filtr.
Shipping Carrier? ☐ Drop Off ☑ WESTECH Pickup ☐ Outside Courier:				

CLIENT PROJECT INFORMATION (Required)		WESTECH Field Services Used? ☑ NO ☐ YES - *(See Field Services Log)*
Project Name:	Frankford + Darrah	Westech Quote/MSA No.:
Project/PO Number:	00L629-B	Data Deliverables: ☐ *Level I (Standard)* OR
Purpose:	☑ *Regulatory* ☐ *Informational* ☐ *PWSID:*	Additional Fee Deliverables: ☐ *Level II* ☐ *Level III* ☐ *Level IV*

Results TAT Requested * : ☒ **6-10 Day (Standard)** OR ☐ **RUSH** (INDICATE DUE DATE):**

NOTES: *Turnaround times begin at 5pm on the day the samples were received by WESTECH. Results will be considered due by 5pm on the due date.
**RUSH TATs will include surcharge unless otherwise agreed to in writing and must be pre-arranged to ensure the due date can be met.

SAMPLE DETAILS: SS = Solid or Sludge; GW = Groundwater; WW = Wastewater; DW = Drinking Water; SW = Storm or Surface Water; OL = Oil; A = Air; O = Other

ANALYSIS REQUESTED: VOCs (8260B); PAHs (8270C); Diss. Pb

LAB ID	SAMPLE IDENTIFICATION / LOCATION DESCRIPTION	SAMPLE DATE	SAMPLE TIME	SAMPLED BY	Total # of Containers	Sample Type:	Grab "G" or Composite "C"
01	MW-2A	6/30/10	10:15	MSA	5	GW	G
02	MW-3	↓	11:19	↓	↓	↓	↓
03	MW-4		11:48				
04	MW-1		12:50				
05							
06							
07							
08							
09							
10							

CUSTODY CHAIN	PRINT NAME	SIGNATURE	DATE	TIME
Relinquished by SAMPLER:	Matt Adukaitis	Matthew J Adukaitis	6/30/10	16:10
Accepted by:				
Relinquished by:				
Accepted by:	Leslie Hirschfeld	Leslie Hirschfeld	6/30/10	1615
Relinquished by:				
Accepted by:				
Relinquished by:	James Dunkelberger		7-1-10	15:00
Received at WESTECH Lab:	Shanna Drahovsky	Shanna Drahovsky	7/1/10	15:00

COMMENTS, NOTES, OR SPECIAL INSTRUCTIONS:
* Sample results must meet PA ACT 2 requirements.
* Lab to filter *

By relinquishing this form to WESTECH, I hereby agree to the terms & conditions printed on the reverse side.

WHITE - Original YELLOW - Laboratory Copy PINK - Client Copy

AMERICAN Westech INCORPORATED

Laboratory Result Summary

Laboratory Project ID: 1010219

BL Companies
John Thatcher
213 Market St.
6th Floor
Harrisburg, PA 17101

Contact: John Thatcher
Project Name: Frankford and Darrah
Project Number: 00L629-B
Purchase Order Number: N/A
Sampled By: Steve Vedder
Date Received: October 15, 2010
Time Received: 10:45 AM

Analytical Testing Parameters

Client Sample ID: **MW-1**
Lab Sample ID: **1010219-01**
Collection Date: **10/14/2010**
Collection Time: **12:55 PM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<50.0	ug/L	50.0	SW846 8260B	10/16/2010	6:37 AM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	6:37 AM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
Bromodichloromethane	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	6:37 AM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
2-Butanone (MEK)	<5.00	ug/L	5.00	SW846 8260B	10/16/2010	6:37 AM	JMS
n-Butylbenzene	<4.00	ug/L	4.00	SW846 8260B	10/16/2010	6:37 AM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	10/16/2010	6:37 AM	JMS
Carbon Tetrachloride	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	6:37 AM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
Chlorodibromomethane	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	6:37 AM	JMS
Chloroform	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
Chloromethane	<4.00	ug/L	4.00	SW846 8260B	10/16/2010	6:37 AM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
1,1-Dichloroethene	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	6:37 AM	JMS
cis-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
1,2-Dichloropropane	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	6:37 AM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
Hexachlorobutadiene	<3.00	ug/L	3.00	SW846 8260B	10/16/2010	6:37 AM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	10/16/2010	6:37 AM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
4-Isopropyltoluene	<10.0	ug/L	10.0	SW846 8260B	10/16/2010	6:37 AM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	10/16/2010	6:37 AM	JMS
Methylene Chloride	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
Naphthalene	<15.0	ug/L	15.0	SW846 8260B	10/16/2010	6:37 AM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
Styrene	<4.00	ug/L	4.00	SW846 8260B	10/16/2010	6:37 AM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
1,1,2,2-Tetrachloroethane	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	6:37 AM	JMS
Tetrachloroethene	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	6:37 AM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	10/16/2010	6:37 AM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	10/16/2010	6:37 AM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
Trichloroethene	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	6:37 AM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
Vinyl Chloride	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	6:37 AM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	10/16/2010	6:37 AM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	10/16/2010	6:37 AM	JMS

- The Bromomethane concentration was determined by a library search of the appropriate retention time and mass spectral ion pattern.

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	6:15 PM	BEH
Acenaphthylene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	6:15 PM	BEH
Anthracene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	6:15 PM	BEH
Benzo(a)anthracene	<0.48	ug/L	0.48	SW846 8270C	10/20/2010	6:15 PM	BEH
Benzo(a)pyrene	**0.55**	ug/L	0.19	SW846 8270C	10/20/2010	6:15 PM	BEH
Benzo(b)fluoranthene	**0.92**	ug/L	0.48	SW846 8270C	10/20/2010	6:15 PM	BEH
Benzo(g,h,i)perylene	**0.63**	ug/L	0.19	SW846 8270C	10/20/2010	6:15 PM	BEH
Benzo(k)fluoranthene	**0.64**	ug/L	0.48	SW846 8270C	10/20/2010	6:15 PM	BEH
Chrysene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	6:15 PM	BEH
Dibenzo(a,h)anthracene	<0.48	ug/L	0.48	SW846 8270C	10/20/2010	6:15 PM	BEH
Fluoranthene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	6:15 PM	BEH
Fluorene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	6:15 PM	BEH
Indeno(1,2,3-cd)pyrene	**0.52**	ug/L	0.48	SW846 8270C	10/20/2010	6:15 PM	BEH

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
1-Methylnaphthalene	<0.95	ug/L	0.95	SW846 8270C	10/20/2010	6:15 PM	BEH
2-Methylnaphthalene	<0.95	ug/L	0.95	SW846 8270C	10/20/2010	6:15 PM	BEH
Naphthalene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	6:15 PM	BEH
Phenanthrene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	6:15 PM	BEH
Pyrene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	6:15 PM	BEH

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	<0.005	mg/L	0.005	SW846 7421	10/20/2010	10:44 AM	WWS

Analytical Testing Parameters

Client Sample ID: **MW-2A** Collection Date: **10/14/2010**

Lab Sample ID: **1010219-02** Collection Time: **12:45 PM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<50.0	ug/L	50.0	SW846 8260B	10/16/2010	7:05 AM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	7:05 AM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
Bromodichloromethane	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	7:05 AM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
2-Butanone (MEK)	<5.00	ug/L	5.00	SW846 8260B	10/16/2010	7:05 AM	JMS
n-Butylbenzene	<4.00	ug/L	4.00	SW846 8260B	10/16/2010	7:05 AM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	10/16/2010	7:05 AM	JMS
Carbon Tetrachloride	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	7:05 AM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
Chlorodibromomethane	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	7:05 AM	JMS
Chloroform	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
Chloromethane	<4.00	ug/L	4.00	SW846 8260B	10/16/2010	7:05 AM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
1,1-Dichloroethene	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	7:05 AM	JMS
cis-1,2-Dichloroethene	**5.18**	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
1,2-Dichloropropane	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	7:05 AM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
Hexachlorobutadiene	<3.00	ug/L	3.00	SW846 8260B	10/16/2010	7:05 AM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	10/16/2010	7:05 AM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
4-Isopropyltoluene	<10.0	ug/L	10.0	SW846 8260B	10/16/2010	7:05 AM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	10/16/2010	7:05 AM	JMS
Methylene Chloride	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
Naphthalene	<15.0	ug/L	15.0	SW846 8260B	10/16/2010	7:05 AM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
Styrene	<4.00	ug/L	4.00	SW846 8260B	10/16/2010	7:05 AM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
1,1,2,2-Tetrachloroethane	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	7:05 AM	JMS
Tetrachloroethene	**28.3**	ug/L	1.00	SW846 8260B	10/16/2010	7:05 AM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	10/16/2010	7:05 AM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	10/16/2010	7:05 AM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
Trichloroethene	**3.82**	ug/L	1.00	SW846 8260B	10/16/2010	7:05 AM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
Vinyl Chloride	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	7:05 AM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	10/16/2010	7:05 AM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	10/16/2010	7:05 AM	JMS

- The Bromomethane concentration was determined by a library search of the appropriate retention time and mass spectral ion pattern.

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	6:55 PM	BEH
Acenaphthylene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	6:55 PM	BEH
Anthracene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	6:55 PM	BEH
Benzo(a)anthracene	<0.48	ug/L	0.48	SW846 8270C	10/20/2010	6:55 PM	BEH
Benzo(a)pyrene	<0.19	ug/L	0.19	SW846 8270C	10/20/2010	6:55 PM	BEH
Benzo(b)fluoranthene	<0.48	ug/L	0.48	SW846 8270C	10/20/2010	6:55 PM	BEH
Benzo(g,h,i)perylene	<0.19	ug/L	0.19	SW846 8270C	10/20/2010	6:55 PM	BEH
Benzo(k)fluoranthene	<0.48	ug/L	0.48	SW846 8270C	10/20/2010	6:55 PM	BEH
Chrysene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	6:55 PM	BEH
Dibenzo(a,h)anthracene	<0.48	ug/L	0.48	SW846 8270C	10/20/2010	6:55 PM	BEH

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Fluoranthene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	6:55 PM	BEH
Fluorene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	6:55 PM	BEH
Indeno(1,2,3-cd)pyrene	<0.48	ug/L	0.48	SW846 8270C	10/20/2010	6:55 PM	BEH
1-Methylnaphthalene	<0.95	ug/L	0.95	SW846 8270C	10/20/2010	6:55 PM	BEH
2-Methylnaphthalene	<0.95	ug/L	0.95	SW846 8270C	10/20/2010	6:55 PM	BEH
Naphthalene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	6:55 PM	BEH
Phenanthrene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	6:55 PM	BEH
Pyrene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	6:55 PM	BEH

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	<0.005	mg/L	0.005	SW846 7421	10/20/2010	10:49 AM	WWS

Analytical Testing Parameters

Client Sample ID: **MW-3** Collection Date: **10/14/2010**

Lab Sample ID: **1010219-03** Collection Time: **12:35 PM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<50.0	ug/L	50.0	SW846 8260B	10/16/2010	7:33 AM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	7:33 AM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
Bromodichloromethane	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	7:33 AM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
2-Butanone (MEK)	<5.00	ug/L	5.00	SW846 8260B	10/16/2010	7:33 AM	JMS
n-Butylbenzene	<4.00	ug/L	4.00	SW846 8260B	10/16/2010	7:33 AM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	10/16/2010	7:33 AM	JMS
Carbon Tetrachloride	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	7:33 AM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
Chlorodibromomethane	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	7:33 AM	JMS
Chloroform	**4.81**	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
Chloromethane	<4.00	ug/L	4.00	SW846 8260B	10/16/2010	7:33 AM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
1,1-Dichloroethene	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	7:33 AM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
cis-1,2-Dichloroethene	**8.51**	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
1,2-Dichloropropane	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	7:33 AM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
Hexachlorobutadiene	<3.00	ug/L	3.00	SW846 8260B	10/16/2010	7:33 AM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	10/16/2010	7:33 AM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
4-Isopropyltoluene	<10.0	ug/L	10.0	SW846 8260B	10/16/2010	7:33 AM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	10/16/2010	7:33 AM	JMS
Methylene Chloride	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
Naphthalene	<15.0	ug/L	15.0	SW846 8260B	10/16/2010	7:33 AM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
Styrene	<4.00	ug/L	4.00	SW846 8260B	10/16/2010	7:33 AM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
1,1,2,2-Tetrachloroethane	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	7:33 AM	JMS
Tetrachloroethene	**50.5**	ug/L	1.00	SW846 8260B	10/16/2010	7:33 AM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	10/16/2010	7:33 AM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	10/16/2010	7:33 AM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
Trichloroethene	**4.32**	ug/L	1.00	SW846 8260B	10/16/2010	7:33 AM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
Vinyl Chloride	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	7:33 AM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	10/16/2010	7:33 AM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	10/16/2010	7:33 AM	JMS

- The Bromomethane concentration was determined by a library search of the appropriate retention time and mass spectral ion pattern.

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	7:33 PM	BEH
Acenaphthylene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	7:33 PM	BEH
Anthracene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	7:33 PM	BEH
Benzo(a)anthracene	<0.48	ug/L	0.48	SW846 8270C	10/20/2010	7:33 PM	BEH
Benzo(a)pyrene	<0.19	ug/L	0.19	SW846 8270C	10/20/2010	7:33 PM	BEH
Benzo(b)fluoranthene	<0.48	ug/L	0.48	SW846 8270C	10/20/2010	7:33 PM	BEH
Benzo(g,h,i)perylene	<0.19	ug/L	0.19	SW846 8270C	10/20/2010	7:33 PM	BEH

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Benzo(k)fluoranthene	<0.48	ug/L	0.48	SW846 8270C	10/20/2010	7:33 PM	BEH
Chrysene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	7:33 PM	BEH
Dibenzo(a,h)anthracene	<0.48	ug/L	0.48	SW846 8270C	10/20/2010	7:33 PM	BEH
Fluoranthene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	7:33 PM	BEH
Fluorene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	7:33 PM	BEH
Indeno(1,2,3-cd)pyrene	<0.48	ug/L	0.48	SW846 8270C	10/20/2010	7:33 PM	BEH
1-Methylnaphthalene	<0.95	ug/L	0.95	SW846 8270C	10/20/2010	7:33 PM	BEH
2-Methylnaphthalene	<0.95	ug/L	0.95	SW846 8270C	10/20/2010	7:33 PM	BEH
Naphthalene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	7:33 PM	BEH
Phenanthrene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	7:33 PM	BEH
Pyrene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	7:33 PM	BEH

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	<0.005	mg/L	0.005	SW846 7421	10/20/2010	10:53 AM	WWS

Analytical Testing Parameters

Client Sample ID: **MW-4**
Lab Sample ID: **1010219-04**
Collection Date: **10/14/2010**
Collection Time: **1:03 PM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<50.0	ug/L	50.0	SW846 8260B	10/16/2010	8:01 AM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	8:01 AM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
Bromodichloromethane	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	8:01 AM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
2-Butanone (MEK)	<5.00	ug/L	5.00	SW846 8260B	10/16/2010	8:01 AM	JMS
n-Butylbenzene	<4.00	ug/L	4.00	SW846 8260B	10/16/2010	8:01 AM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	10/16/2010	8:01 AM	JMS
Carbon Tetrachloride	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	8:01 AM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
Chlorodibromomethane	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	8:01 AM	JMS
Chloroform	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
Chloromethane	<4.00	ug/L	4.00	SW846 8260B	10/16/2010	8:01 AM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
1,1-Dichloroethene	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	8:01 AM	JMS
cis-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
1,2-Dichloropropane	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	8:01 AM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
Hexachlorobutadiene	<3.00	ug/L	3.00	SW846 8260B	10/16/2010	8:01 AM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	10/16/2010	8:01 AM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
4-Isopropyltoluene	<10.0	ug/L	10.0	SW846 8260B	10/16/2010	8:01 AM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	10/16/2010	8:01 AM	JMS
Methylene Chloride	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
Naphthalene	<15.0	ug/L	15.0	SW846 8260B	10/16/2010	8:01 AM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
Styrene	<4.00	ug/L	4.00	SW846 8260B	10/16/2010	8:01 AM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
1,1,2,2-Tetrachloroethane	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	8:01 AM	JMS
Tetrachloroethene	**1.77**	ug/L	1.00	SW846 8260B	10/16/2010	8:01 AM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	10/16/2010	8:01 AM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	10/16/2010	8:01 AM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
Trichloroethene	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	8:01 AM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
Vinyl Chloride	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	8:01 AM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	10/16/2010	8:01 AM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	10/16/2010	8:01 AM	JMS

- The Bromomethane concentration was determined by a library search of the appropriate retention time and mass spectral ion pattern.

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	8:14 PM	BEH
Acenaphthylene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	8:14 PM	BEH
Anthracene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	8:14 PM	BEH
Benzo(a)anthracene	<0.48	ug/L	0.48	SW846 8270C	10/20/2010	8:14 PM	BEH

Laboratory Project ID: 1010219

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Benzo(a)pyrene	<0.19	ug/L	0.19	SW846 8270C	10/20/2010	8:14 PM	BEH
Benzo(b)fluoranthene	<0.48	ug/L	0.48	SW846 8270C	10/20/2010	8:14 PM	BEH
Benzo(g,h,i)perylene	<0.19	ug/L	0.19	SW846 8270C	10/20/2010	8:14 PM	BEH
Benzo(k)fluoranthene	<0.48	ug/L	0.48	SW846 8270C	10/20/2010	8:14 PM	BEH
Chrysene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	8:14 PM	BEH
Dibenzo(a,h)anthracene	<0.48	ug/L	0.48	SW846 8270C	10/20/2010	8:14 PM	BEH
Fluoranthene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	8:14 PM	BEH
Fluorene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	8:14 PM	BEH
Indeno(1,2,3-cd)pyrene	<0.48	ug/L	0.48	SW846 8270C	10/20/2010	8:14 PM	BEH
1-Methylnaphthalene	<0.95	ug/L	0.95	SW846 8270C	10/20/2010	8:14 PM	BEH
2-Methylnaphthalene	<0.95	ug/L	0.95	SW846 8270C	10/20/2010	8:14 PM	BEH
Naphthalene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	8:14 PM	BEH
Phenanthrene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	8:14 PM	BEH
Pyrene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	8:14 PM	BEH

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	**0.012**	mg/L	0.005	SW846 7421	10/20/2010	10:58 AM	WWS

Report Comments:

Note: Due to the extremely short holding time of 15 minutes, the following test procedures, if reported, were performed outside the recommended holding time: Total Residual Chlorine, laboratory pH, Dissolved Oxygen, Orthophosphate, and Sulfite.

The **PQL** is the **Practical Quantitation Limit**, which is defined as the lowest quantitation level of an analyte that can be readily achieved within the specified limits of precision and accuracy of an analytical method during routine laboratory operating conditions. The value may be raised depending on the characteristics or behavior of the target analyte.

All samples were analyzed **"as received"** from the client. American Westech Inc. can only assume that all samples were collected and submitted by the CLIENT following the appropriate protocols set forth by the regulatory requirements. This document shall not be reproduced, except in full, without the written approval of American Westech Inc. If there are any questions pertaining to this laboratory report please contact a Client Services Coordinator or the Laboratory Director at (717) 651-9700.

Laboratory Certifications:

- NELAP accredited by the PADEP (22-00578) & NJDEP (PA019) for numerous solid and chemical materials and non-potable water parameters. Please refer to our certified parameter lists for each state for specific information on the approved methodologies.
- PADEP accredited for various drinking water parameters including: Volatile Organic Compounds, Metals, Inorganics, and Microbiology (22-00578). Please refer to our certified parameter list for specific information on the approved methodologies.

Reviewed and Approved By:

David S. Wildasin
Assistant Laboratory Director

Date Reviewed and Approved:

10-22-10

AMERICAN WESTECH, INC. SAMPLE SUBMITTAL FORM

4359 Linglestown Road, Harrisburg, PA 17112 - Phone: (717) 651-9700 - Fax: (717) 657-0752
1015 Bridge Road, Suite D, Collegeville, PA 19426 - Phone: (610) 489-1234

NELAP accredited by PADEP & NJDEP

ACCREDITED IN ACCORDANCE WITH NELAP
PA ID# 22-00578 - NJ ID# PA019

LABORATORY PROJECT NUMBER: **1010219**

SUBMIT LAB REPORT TO (Westech Client Information):			SUBMIT INVOICE TO:		
Company: BL Companies			Company:		
Contact: John Thatcher			Contact:		
Address:			Address:		
City:	State:	Zip:	City:	State:	Zip:
Phone:	Fax:		Phone:	Fax:	
Report Delivery: ☐ Mail ☐ Fax ☐ Email (enter address below)			Invoice Delivery: ☐ Mail ☐ Email (enter address below)		

SAMPLE RECEIPT CONDITIONS	Y	N	NA	
Samples received on ice? Temp: 3.9 °C	Y	N	NA	
Cooler temp. within acceptable limits?	Y	N	NA	
Correct bottles/enough volume for analysis?	Y	N	NA	
Sample bottles in good condition (unbroken)?	Y	N	NA	
Samples within required holding time?	Y	N	NA	
Zero headspace samples collected correctly?	Y	N	NA	
Samples preserved (pH <2 and/or pH >12)?	Y	N	NA	FAI
Shipping Carrier? ☐ Drop Off ☐ WESTECH Pickup ☐ Outside Courier:				

CLIENT PROJECT INFORMATION (Required)	WESTECH Field Services Used? ☐ NO ☐ YES - (See Field Services Log)
Project Name: Brookfield Oil Parcels (LF+D)	Westech Quote/MSA No.:
Project/PO Number: 00L629-B	Data Deliverables: ☐ Level I (Standard) OR
Purpose: ☐ Regulatory ☐ Informational ☐ PWSID:	Additional Fee Deliverables: ☐ Level II ☐ Level III ☐ Level IV
Results TAT Requested *: ☒ 6-10 Day (Standard) OR ☐ RUSH** (INDICATE DUE DATE):	

NOTES: *Turnaround times begin at 5pm on the day the samples were received by WESTECH. Results will be considered due by 5pm on the due date.
**RUSH TATs will include surcharge unless otherwise agreed to in writing and must be pre-arranged to ensure the due date can be met.

SAMPLE DETAILS: SS = Solid or Sludge; GW = Groundwater; WW = Wastewater; DW = Drinking Water; SW = Storm or Surface Water; OL = Oil; A = Air; O = Other

ANALYSIS REQUESTED: VOCs (8260-C); Parameters (8270-C); Dissolved Lead

LAB ID	SAMPLE IDENTIFICATION / LOCATION DESCRIPTION	SAMPLE DATE	SAMPLE TIME	SAMPLED BY	Total # of Containers	Sample Type:	Grab "G" or Composite "C"	VOCs (8260-C)	Parameters (8270-C)	Dissolved Lead
01	MW-1	10/14/10	1255	SH/AZ	5	GW	G	X	X	X
02	MW-2A	"	1245	"	1	"	"	X	X	X
03	MW-3	"	1235	"	1	"	"	X	X	X
04	MW-4	"	1303	"	1	"	"	X	X	X
05										
06										
07										
08										
09										
10										

CUSTODY CHAIN	PRINT NAME	SIGNATURE	DATE	TIME
Relinquished by SAMPLER:	Steve Vedder	Steve Vedder	10/15/10	0805
Accepted by:				
Relinquished by:				
Accepted by:				
Relinquished by:				
Accepted by:				
Relinquished by:				
Received at WESTECH Lab:	Dave	[signature]	10/16/10	1045

COMMENTS, NOTES, OR SPECIAL INSTRUCTIONS

By relinquishing this form to WESTECH, I hereby agree to the terms & conditions printed on the reverse side.

WHITE - Original YELLOW - Laboratory Copy PINK - Client Copy

Microbac®

Laboratory Result Summary

Laboratory Project ID: 1101091

BL Companies
John Thatcher
4242 Carlisle Pike
Suite 260
Camp Hill, PA 17011

Contact: John Thatcher
Project Name: Frankfort & Darrah
Project Number: 00L629-B
Purchase Order Number: N/A
Sampled By: Andrew Kuder
Date Received: January 7, 2011
Time Received: 9:45 AM

Analytical Testing Parameters

Client Sample ID: **MW - 1**
Lab Sample ID: **1101091-01**
Collection Date: **1/5/2011**
Collection Time: **1:50 PM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<50.0	ug/L	50.0	SW846 8260B	1/10/2011	4:58 PM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	4:58 PM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
Bromodichloromethane	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	4:58 PM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
2-Butanone (MEK)	<5.00	ug/L	5.00	SW846 8260B	1/10/2011	4:58 PM	JMS
n-Butylbenzene	<4.00	ug/L	4.00	SW846 8260B	1/10/2011	4:58 PM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	1/10/2011	4:58 PM	JMS
Carbon Tetrachloride	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	4:58 PM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
Chlorodibromomethane	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	4:58 PM	JMS
Chloroform	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
Chloromethane	<4.00	ug/L	4.00	SW846 8260B	1/10/2011	4:58 PM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
1,1-Dichloroethene	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	4:58 PM	JMS
cis-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
1,2-Dichloropropane	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	4:58 PM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
Hexachlorobutadiene	<3.00	ug/L	3.00	SW846 8260B	1/10/2011	4:58 PM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	1/10/2011	4:58 PM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
4-Isopropyltoluene	<10.0	ug/L	10.0	SW846 8260B	1/10/2011	4:58 PM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	1/10/2011	4:58 PM	JMS
Methylene Chloride	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
Naphthalene	<15.0	ug/L	15.0	SW846 8260B	1/10/2011	4:58 PM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
Styrene	<4.00	ug/L	4.00	SW846 8260B	1/10/2011	4:58 PM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
1,1,2,2-Tetrachloroethane	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	4:58 PM	JMS
Tetrachloroethene	**1.96**	ug/L	1.00	SW846 8260B	1/10/2011	4:58 PM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	1/10/2011	4:58 PM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	1/10/2011	4:58 PM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
Trichloroethene	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	4:58 PM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
Vinyl Chloride	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	4:58 PM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	1/10/2011	4:58 PM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	1/10/2011	4:58 PM	JMS

- The Bromomethane concentration was determined by a library search of the appropriate retention time and mass spectral ion pattern.

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.95	ug/L	0.95	SW846 8270C	1/18/2011	6:54 PM	BEH
Acenaphthylene	<0.95	ug/L	0.95	SW846 8270C	1/18/2011	6:54 PM	BEH
Anthracene	<0.95	ug/L	0.95	SW846 8270C	1/18/2011	6:54 PM	BEH
Benzo(a)anthracene	**0.84**	ug/L	0.48	SW846 8270C	1/18/2011	6:54 PM	BEH
Benzo(a)pyrene	**1.09**	ug/L	0.19	SW846 8270C	1/18/2011	6:54 PM	BEH
Benzo(b)fluoranthene	**3.17**	ug/L	0.48	SW846 8270C	1/18/2011	6:54 PM	BEH
Benzo(g,h,i)perylene	**1.44**	ug/L	0.19	SW846 8270C	1/18/2011	6:54 PM	BEH
Benzo(k)fluoranthene	**1.75**	ug/L	0.48	SW846 8270C	1/18/2011	6:54 PM	BEH
Chrysene	**1.98**	ug/L	0.48	SW846 8270C	1/18/2011	6:54 PM	BEH
Dibenzo(a,h)anthracene	<0.48	ug/L	0.48	SW846 8270C	1/18/2011	6:54 PM	BEH
Fluoranthene	**1.89**	ug/L	0.95	SW846 8270C	1/18/2011	6:54 PM	BEH
Fluorene	<0.95	ug/L	0.95	SW846 8270C	1/18/2011	6:54 PM	BEH
Indeno(1,2,3-cd)pyrene	**1.35**	ug/L	0.48	SW846 8270C	1/18/2011	6:54 PM	BEH
1-Methylnaphthalene	<0.95	ug/L	0.95	SW846 8270C	1/18/2011	6:54 PM	BEH
2-Methylnaphthalene	<0.95	ug/L	0.95	SW846 8270C	1/18/2011	6:54 PM	BEH

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Naphthalene	<0.48	ug/L	0.48	SW846 8270C	1/18/2011	6:54 PM	BEH
Phenanthrene	<0.95	ug/L	0.95	SW846 8270C	1/18/2011	6:54 PM	BEH
Pyrene	**1.56**	ug/L	0.95	SW846 8270C	1/18/2011	6:54 PM	BEH

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	<0.005	mg/L	0.005	SW846 7421	1/10/2011	4:50 PM	WWS

Analytical Testing Parameters

Client Sample ID: **MW - 2A**
Collection Date: **1/5/2011**
Lab Sample ID: **1101091-02**
Collection Time: **1:30 PM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<50.0	ug/L	50.0	SW846 8260B	1/10/2011	5:27 PM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	5:27 PM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
Bromodichloromethane	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	5:27 PM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
2-Butanone (MEK)	<5.00	ug/L	5.00	SW846 8260B	1/10/2011	5:27 PM	JMS
n-Butylbenzene	<4.00	ug/L	4.00	SW846 8260B	1/10/2011	5:27 PM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	1/10/2011	5:27 PM	JMS
Carbon Tetrachloride	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	5:27 PM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
Chlorodibromomethane	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	5:27 PM	JMS
Chloroform	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
Chloromethane	<4.00	ug/L	4.00	SW846 8260B	1/10/2011	5:27 PM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
1,1-Dichloroethene	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	5:27 PM	JMS
cis-1,2-Dichloroethene	**6.76**	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
1,2-Dichloropropane	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	5:27 PM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
Hexachlorobutadiene	<3.00	ug/L	3.00	SW846 8260B	1/10/2011	5:27 PM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	1/10/2011	5:27 PM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
4-Isopropyltoluene	<10.0	ug/L	10.0	SW846 8260B	1/10/2011	5:27 PM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	1/10/2011	5:27 PM	JMS
Methylene Chloride	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
Naphthalene	<15.0	ug/L	15.0	SW846 8260B	1/10/2011	5:27 PM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
Styrene	<4.00	ug/L	4.00	SW846 8260B	1/10/2011	5:27 PM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
1,1,2,2-Tetrachloroethane	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	5:27 PM	JMS
Tetrachloroethene	**24.1**	ug/L	1.00	SW846 8260B	1/10/2011	5:27 PM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	1/10/2011	5:27 PM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	1/10/2011	5:27 PM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
Trichloroethene	**3.28**	ug/L	1.00	SW846 8260B	1/10/2011	5:27 PM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
Vinyl Chloride	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	5:27 PM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	1/10/2011	5:27 PM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	1/10/2011	5:27 PM	JMS

- The Bromomethane concentration was determined by a library search of the appropriate retention time and mass spectral ion pattern.

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.97	ug/L	0.97	SW846 8270C	1/18/2011	7:29 PM	BEH
Acenaphthylene	<0.97	ug/L	0.97	SW846 8270C	1/18/2011	7:29 PM	BEH
Anthracene	<0.97	ug/L	0.97	SW846 8270C	1/18/2011	7:29 PM	BEH
Benzo(a)anthracene	<0.49	ug/L	0.49	SW846 8270C	1/18/2011	7:29 PM	BEH
Benzo(a)pyrene	<0.19	ug/L	0.19	SW846 8270C	1/18/2011	7:29 PM	BEH
Benzo(b)fluoranthene	<0.49	ug/L	0.49	SW846 8270C	1/18/2011	7:29 PM	BEH
Benzo(g,h,i)perylene	<0.19	ug/L	0.19	SW846 8270C	1/18/2011	7:29 PM	BEH
Benzo(k)fluoranthene	<0.49	ug/L	0.49	SW846 8270C	1/18/2011	7:29 PM	BEH
Chrysene	<0.49	ug/L	0.49	SW846 8270C	1/18/2011	7:29 PM	BEH
Dibenzo(a,h)anthracene	<0.49	ug/L	0.49	SW846 8270C	1/18/2011	7:29 PM	BEH
Fluoranthene	<0.97	ug/L	0.97	SW846 8270C	1/18/2011	7:29 PM	BEH
Fluorene	<0.97	ug/L	0.97	SW846 8270C	1/18/2011	7:29 PM	BEH
Indeno(1,2,3-cd)pyrene	<0.49	ug/L	0.49	SW846 8270C	1/18/2011	7:29 PM	BEH
1-Methylnaphthalene	<0.97	ug/L	0.97	SW846 8270C	1/18/2011	7:29 PM	BEH

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
2-Methylnaphthalene	<0.97	ug/L	0.97	SW846 8270C	1/18/2011	7:29 PM	BEH
Naphthalene	<0.49	ug/L	0.49	SW846 8270C	1/18/2011	7:29 PM	BEH
Phenanthrene	<0.97	ug/L	0.97	SW846 8270C	1/18/2011	7:29 PM	BEH
Pyrene	<0.97	ug/L	0.97	SW846 8270C	1/18/2011	7:29 PM	BEH

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	<0.005	mg/L	0.005	SW846 7421	1/10/2011	4:54 PM	WWS

Analytical Testing Parameters

Client Sample ID: **MW - 3** Collection Date: **1/5/2011**

Lab Sample ID: **1101091-03** Collection Time: **1:07 PM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<50.0	ug/L	50.0	SW846 8260B	1/10/2011	5:55 PM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	5:55 PM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
Bromodichloromethane	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	5:55 PM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
2-Butanone (MEK)	<5.00	ug/L	5.00	SW846 8260B	1/10/2011	5:55 PM	JMS
n-Butylbenzene	<4.00	ug/L	4.00	SW846 8260B	1/10/2011	5:55 PM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	1/10/2011	5:55 PM	JMS
Carbon Tetrachloride	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	5:55 PM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
Chlorodibromomethane	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	5:55 PM	JMS
Chloroform	**5.51**	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
Chloromethane	<4.00	ug/L	4.00	SW846 8260B	1/10/2011	5:55 PM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
1,1-Dichloroethene	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	5:55 PM	JMS
cis-1,2-Dichloroethene	**6.07**	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
1,2-Dichloropropane	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	5:55 PM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
Hexachlorobutadiene	<3.00	ug/L	3.00	SW846 8260B	1/10/2011	5:55 PM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	1/10/2011	5:55 PM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
4-Isopropyltoluene	<10.0	ug/L	10.0	SW846 8260B	1/10/2011	5:55 PM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	1/10/2011	5:55 PM	JMS
Methylene Chloride	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
Naphthalene	<15.0	ug/L	15.0	SW846 8260B	1/10/2011	5:55 PM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
Styrene	<4.00	ug/L	4.00	SW846 8260B	1/10/2011	5:55 PM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
1,1,2,2-Tetrachloroethane	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	5:55 PM	JMS
Tetrachloroethene	**43.4**	ug/L	1.00	SW846 8260B	1/10/2011	5:55 PM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	1/10/2011	5:55 PM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	1/10/2011	5:55 PM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
Trichloroethene	**3.09**	ug/L	1.00	SW846 8260B	1/10/2011	5:55 PM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
Vinyl Chloride	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	5:55 PM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	1/10/2011	5:55 PM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	1/10/2011	5:55 PM	JMS

- The Bromomethane concentration was determined by a library search of the appropriate retention time and mass spectral ion pattern.

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.95	ug/L	0.95	SW846 8270C	1/18/2011	8:04 PM	BEH
Acenaphthylene	<0.95	ug/L	0.95	SW846 8270C	1/18/2011	8:04 PM	BEH
Anthracene	<0.95	ug/L	0.95	SW846 8270C	1/18/2011	8:04 PM	BEH
Benzo(a)anthracene	<0.48	ug/L	0.48	SW846 8270C	1/18/2011	8:04 PM	BEH
Benzo(a)pyrene	<0.19	ug/L	0.19	SW846 8270C	1/18/2011	8:04 PM	BEH
Benzo(b)fluoranthene	<0.48	ug/L	0.48	SW846 8270C	1/18/2011	8:04 PM	BEH
Benzo(g,h,i)perylene	<0.19	ug/L	0.19	SW846 8270C	1/18/2011	8:04 PM	BEH
Benzo(k)fluoranthene	<0.48	ug/L	0.48	SW846 8270C	1/18/2011	8:04 PM	BEH
Chrysene	<0.48	ug/L	0.48	SW846 8270C	1/18/2011	8:04 PM	BEH
Dibenzo(a,h)anthracene	<0.48	ug/L	0.48	SW846 8270C	1/18/2011	8:04 PM	BEH
Fluoranthene	<0.95	ug/L	0.95	SW846 8270C	1/18/2011	8:04 PM	BEH
Fluorene	<0.95	ug/L	0.95	SW846 8270C	1/18/2011	8:04 PM	BEH
Indeno(1,2,3-cd)pyrene	<0.48	ug/L	0.48	SW846 8270C	1/18/2011	8:04 PM	BEH

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
1-Methylnaphthalene	<0.95	ug/L	0.95	SW846 8270C	1/18/2011	8:04 PM	BEH
2-Methylnaphthalene	<0.95	ug/L	0.95	SW846 8270C	1/18/2011	8:04 PM	BEH
Naphthalene	<0.48	ug/L	0.48	SW846 8270C	1/18/2011	8:04 PM	BEH
Phenanthrene	<0.95	ug/L	0.95	SW846 8270C	1/18/2011	8:04 PM	BEH
Pyrene	<0.95	ug/L	0.95	SW846 8270C	1/18/2011	8:04 PM	BEH

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	<0.005	mg/L	0.005	SW846 7421	1/10/2011	4:59 PM	WWS

Analytical Testing Parameters

Client Sample ID: **MW - 4** Collection Date: **1/5/2011**

Lab Sample ID: **1101091-04** Collection Time: **2:15 PM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<50.0	ug/L	50.0	SW846 8260B	1/10/2011	6:23 PM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	6:23 PM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
Bromodichloromethane	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	6:23 PM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
2-Butanone (MEK)	<5.00	ug/L	5.00	SW846 8260B	1/10/2011	6:23 PM	JMS
n-Butylbenzene	<4.00	ug/L	4.00	SW846 8260B	1/10/2011	6:23 PM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	1/10/2011	6:23 PM	JMS
Carbon Tetrachloride	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	6:23 PM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
Chlorodibromomethane	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	6:23 PM	JMS
Chloroform	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
Chloromethane	<4.00	ug/L	4.00	SW846 8260B	1/10/2011	6:23 PM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
1,1-Dichloroethene	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	6:23 PM	JMS
cis-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
1,2-Dichloropropane	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	6:23 PM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
Hexachlorobutadiene	<3.00	ug/L	3.00	SW846 8260B	1/10/2011	6:23 PM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	1/10/2011	6:23 PM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
4-Isopropyltoluene	<10.0	ug/L	10.0	SW846 8260B	1/10/2011	6:23 PM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	1/10/2011	6:23 PM	JMS
Methylene Chloride	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
Naphthalene	<15.0	ug/L	15.0	SW846 8260B	1/10/2011	6:23 PM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
Styrene	<4.00	ug/L	4.00	SW846 8260B	1/10/2011	6:23 PM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
1,1,2,2-Tetrachloroethane	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	6:23 PM	JMS
Tetrachloroethene	**1.72**	ug/L	1.00	SW846 8260B	1/10/2011	6:23 PM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	1/10/2011	6:23 PM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	1/10/2011	6:23 PM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
Trichloroethene	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	6:23 PM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
Vinyl Chloride	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	6:23 PM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	1/10/2011	6:23 PM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	1/10/2011	6:23 PM	JMS

- The Bromomethane concentration was determined by a library search of the appropriate retention time and mass spectral ion pattern.

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.96	ug/L	0.96	SW846 8270C	1/18/2011	8:38 PM	BEH
Acenaphthylene	<0.96	ug/L	0.96	SW846 8270C	1/18/2011	8:38 PM	BEH
Anthracene	<0.96	ug/L	0.96	SW846 8270C	1/18/2011	8:38 PM	BEH
Benzo(a)anthracene	<0.48	ug/L	0.48	SW846 8270C	1/18/2011	8:38 PM	BEH
Benzo(a)pyrene	<0.19	ug/L	0.19	SW846 8270C	1/18/2011	8:38 PM	BEH
Benzo(b)fluoranthene	<0.48	ug/L	0.48	SW846 8270C	1/18/2011	8:38 PM	BEH
Benzo(g,h,i)perylene	<0.19	ug/L	0.19	SW846 8270C	1/18/2011	8:38 PM	BEH
Benzo(k)fluoranthene	<0.48	ug/L	0.48	SW846 8270C	1/18/2011	8:38 PM	BEH
Chrysene	<0.48	ug/L	0.48	SW846 8270C	1/18/2011	8:38 PM	BEH
Dibenzo(a,h)anthracene	<0.48	ug/L	0.48	SW846 8270C	1/18/2011	8:38 PM	BEH
Fluoranthene	<0.96	ug/L	0.96	SW846 8270C	1/18/2011	8:38 PM	BEH
Fluorene	<0.96	ug/L	0.96	SW846 8270C	1/18/2011	8:38 PM	BEH

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Indeno(1,2,3-cd)pyrene	<0.48	ug/L	0.48	SW846 8270C	1/18/2011	8:38 PM	BEH
1-Methylnaphthalene	<0.96	ug/L	0.96	SW846 8270C	1/18/2011	8:38 PM	BEH
2-Methylnaphthalene	<0.96	ug/L	0.96	SW846 8270C	1/18/2011	8:38 PM	BEH
Naphthalene	<0.48	ug/L	0.48	SW846 8270C	1/18/2011	8:38 PM	BEH
Phenanthrene	<0.96	ug/L	0.96	SW846 8270C	1/18/2011	8:38 PM	BEH
Pyrene	<0.96	ug/L	0.96	SW846 8270C	1/18/2011	8:38 PM	BEH

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	**0.022**	mg/L	0.005	SW846 7421	1/10/2011	5:03 PM	WWS

Report Comments:

Note: Due to the extremely short holding time of 15 minutes, the following test procedures, if reported, were performed outside the recommended holding time: Total Residual Chlorine, laboratory pH, Dissolved Oxygen, Orthophosphate, and Sulfite.

The **PQL** is the **Practical Quantitation Limit**, which is defined as the lowest quantitation level of an analyte that can be readily achieved within the specified limits of precision and accuracy of an analytical method during routine laboratory operating conditions. The value may be raised depending on the characteristics or behavior of the target analyte.

All samples were analyzed **"as received"** from the client. Microbac Laboratories, Inc.- Westech Division can only assume that all samples were collected and submitted by the CLIENT following the appropriate protocols set forth by the regulatory requirements. This document shall not be reproduced, except in full, without the written approval of Microbac Laboratories, Inc.- Westech Division. If there are any questions pertaining to this laboratory report please contact a Client Services Coordinator or the Laboratory Director at (717) 651-9700.

Laboratory Certifications:

- NELAP accredited by the PADEP (22-00578) & NJDEP (PA019) for numerous solid and chemical materials and non-potable water parameters. Please refer to our certified parameter lists for each state for specific information on the approved methodologies.
- PADEP accredited for various drinking water parameters including: Volatile Organic Compounds, Metals, Inorganics, and Microbiology (22-00578). Please refer to our certified parameter list for specific information on the approved methodologies.

Reviewed and Approved By:

David S. Wildasin
Assistant Laboratory Director

Date Reviewed and Approved:

AMERICAN WESTECH, INC. SAMPLE SUBMITTAL FORM

AMERICAN Westech INCORPORATED

4359 Linglestown Road, Harrisburg, PA 17112 · Phone: (717) 651-9700 · Fax: (717) 657-0752
1015 Bridge Road, Suite D, Collegeville, PA 19426 · Phone: (610) 489-1234

NELAP accredited by PADEP & NJDEP

ACCREDITED IN ACCORDANCE WITH nelac
PA ID# 22-00578 · NJ ID# PA019

LABORATORY PROJECT NUMBER: 1101091

SUBMIT LAB REPORT TO (Westech Client Information):			SUBMIT INVOICE TO:		
Company: BL Companies			Company:		
Contact: John Thatcher			Contact: SAME		
Address: 4242 Carlisle Pike			Address:		
City: Harrisburg	State: PA	Zip: 17011	City:	State:	Zip:
Phone: 717-651-9850	Fax: 717-651-9858		Phone:	Fax:	
Report Delivery: ☐ Mail ☐ Fax ☐ Email (enter address below)			Invoice Delivery: ☐ Mail ☐ Email (enter address below)		

LABORATORY USE ONLY:

Samples received on ice? Temp: 1.8 °C	Y	N	NA
Cooler temp. within acceptable limits?	Y	N	NA
Correct bottles/enough volume for analysis?	Y	N	NA
Sample bottles in good condition (unbroken)?	Y	N	NA
Samples within required holding time?	Y	N	NA
Zero headspace samples collected correctly?	Y	N	NA
Samples preserved to pH <2 and/or pH >12?	Y	N	NA

Shipping Carrier? ☐ Drop Off ☒ ~~WESTECH~~ Pickup ☐ Outside Courier: FNW

CLIENT PROJECT INFORMATION (Required)

Project Name: Frankfort + Darrah
Project/PO Number: 00L629-B
Purpose: ☐ *Regulatory* ☐ *Informational* ☐ *PWSID:*

WESTECH Field Services Used? ☐ NO ☐ YES - *(See Field Services Log)*
Westech Quote/MSA No.:
Data Deliverables: ☐ *Level I (Standard)* OR
Additional Fee Deliverables: ☐ *Level II* ☐ *Level III* ☐ *Level IV*

Results TAT Requested * : ☒ 6-10 Day (Standard) OR ☐ RUSH** (INDICATE DUE DATE):

NOTES: *Turnaround times begin at 5pm on the day the samples were received by WESTECH. Results will be considered due by 5pm on the due date.
**RUSH TATs will include surcharge unless otherwise agreed to in writing and must be pre-arranged to ensure the due date can be met.

SS = Solid or Sludge
GW = Groundwater
WW = Wastewater
DW = Drinking Water
SW = Storm or Surface Water
OL = Oil A = Air O = Other

LAB ID	SAMPLE IDENTIFICATION / LOCATION DESCRIPTION	SAMPLE DATE	SAMPLE TIME	SAMPLED BY	Total # of Containers	Sample Type:	Grab "G" or Composite "C"	ANALYSIS REQUESTED: VOCs (8260-B)	PAHs (8270-C)	Dissolved Lead
01	MW-1	1-5-11	13:50	ARK	5	GW	G	X	X	X
02	MW-2A	↓	13:30	↓	↓	↓	↓	X	X	X
03	MW-3	↓	13:07	↓	↓	↓	↓	X	X	X
04	MW-4	↓	14:15	↓	↓	↓	↓	X	X	X
05										
06										
07										
08										
09										
10										

CUSTODY CHAIN	PRINT NAME	SIGNATURE	DATE	TIME
Relinquished by SAMPLER:	Andrew Kyder		1-6-11	
Accepted by:	Matt Stewart		1-6-11	9:45a
Relinquished by:	Matt Stewart		1-7-11	9:45a
Accepted by:				
Relinquished by:				
Accepted by:				
Relinquished by:				
Received at WESTECH Lab:	Sherma Dranovsky	Sherma Dranovsky	1/7/11	09:45

COMMENTS, NOTES, OR SPECIAL INSTRUCTIONS

By relinquishing this form to WESTECH, I hereby agree to the terms & conditions printed on the reverse side.

WHITE - Original YELLOW - Laboratory Copy PINK - Client Copy

Microbac Laboratories, Inc.

Westech Division

Laboratory ID: 1106806

Certificate of Analysis

BL Companies, Inc.
John Thatcher
4242 Carlisle Pike, Suite 260
Camp Hill, PA 17011

Contact: John Thatcher
Project Name: Frankfort & Darrah
Project / PO Number: 00L629-B
Date Received: April 13, 2011
Time Received: 2:50 pm

Analytical Testing Parameters

Client Sample ID: **MW-1**
Lab Sample ID: **1106806-01**

Collection Date: **4/12/2011**
Collection Time: **2:27 pm**
Collected By: Andrew Kuder

METALS

Parameter	Result		Units	PQL	Method	Date	Time	Analyst
Lead, Dissolved	<0.0010		mg/L	0.0010	EPA 200.8	4/20/2011	7:11 pm	BCK

SEMIVOLATILE ORGANIC COMPOUNDS

Parameter	Result		Units	PQL	Method	Date	Time	Analyst
1-Methylnaphthalene	<0.943		ug/L	0.943	EPA 8270C	4/21/2011	1:59 pm	BEH
2-Methylnaphthalene	<0.943		ug/L	0.943	EPA 8270C	4/21/2011	1:59 pm	BEH
Acenaphthene	<0.943		ug/L	0.943	EPA 8270C	4/21/2011	1:59 pm	BEH
Acenaphthylene	<0.943		ug/L	0.943	EPA 8270C	4/21/2011	1:59 pm	BEH
Anthracene	<0.849		ug/L	0.849	EPA 8270C	4/21/2011	1:59 pm	BEH
Benzo (a) anthracene	<0.472		ug/L	0.472	EPA 8270C	4/21/2011	1:59 pm	BEH
Benzo (a) pyrene	**0.667**		ug/L	0.189	EPA 8270C	4/21/2011	1:59 pm	BEH
Benzo (b) fluoranthene	**1.08**		ug/L	0.472	EPA 8270C	4/21/2011	1:59 pm	BEH
Benzo (g,h,i) perylene	**0.337**		ug/L	0.255	EPA 8270C	4/21/2011	1:59 pm	BEH
Benzo (k) fluoranthene	**0.853**		ug/L	0.472	EPA 8270C	4/21/2011	1:59 pm	BEH
Chrysene	<0.849		ug/L	0.849	EPA 8270C	4/21/2011	1:59 pm	BEH
Dibenz (a,h) anthracene	<0.472		ug/L	0.472	EPA 8270C	4/21/2011	1:59 pm	BEH
Fluoranthene	<0.849		ug/L	0.849	EPA 8270C	4/21/2011	1:59 pm	BEH
Fluorene	<0.849		ug/L	0.849	EPA 8270C	4/21/2011	1:59 pm	BEH
Indeno (1,2,3-cd) pyrene	<0.472		ug/L	0.472	EPA 8270C	4/21/2011	1:59 pm	BEH
Naphthalene	<0.849		ug/L	0.849	EPA 8270C	4/21/2011	1:59 pm	BEH
Phenanthrene	<0.849		ug/L	0.849	EPA 8270C	4/21/2011	1:59 pm	BEH
Pyrene	<0.849		ug/L	0.849	EPA 8270C	4/21/2011	1:59 pm	BEH
Surrogate: 2-Fluorobiphenyl	38.4		% Rec	8-127	EPA 8270C	4/21/2011	1:59 pm	BEH
Surrogate: Nitrobenzene-d5	46.4		% Rec	12-141	EPA 8270C	4/21/2011	1:59 pm	BEH
Surrogate: p-Terphenyl-d14	41.0		% Rec	8-103	EPA 8270C	4/21/2011	1:59 pm	BEH

VOLATILE ORGANIC COMPOUNDS

Parameter	Result		Units	PQL	Method	Date	Time	Analyst
1,1,1,2-Tetrachloroethane	<2.00	**Lib-1**	ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
1,1,1-Trichloroethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
1,1,2,2-Tetrachloroethane	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	3:37 pm	JMS
1,1,2-Trichloroethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
1,1-Dichloroethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
1,1-Dichloroethene	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	3:37 pm	JMS

Certificate of Analysis

VOLATILE ORGANIC COMPOUNDS

Parameter	Result		Units	PQL	Method	Date	Time	Analyst
1,1-Dichloropropene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
1,2,3-Trichlorobenzene	<15.0		ug/L	15.0	EPA 8260B	4/15/2011	3:37 pm	JMS
1,2,3-Trichloropropane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
1,2,4-Trichlorobenzene	<15.0		ug/L	15.0	EPA 8260B	4/15/2011	3:37 pm	JMS
1,2,4-Trimethylbenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
1,2-Dibromo-3-chloropropane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
1,2-Dibromoethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
1,2-Dichlorobenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
1,2-Dichloroethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
1,2-Dichloropropane	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	3:37 pm	JMS
1,3,5-Trimethylbenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
1,3-Dichlorobenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
1,3-Dichloropropane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
1,4-Dichlorobenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
2-Butanone (MEK)	<5.00		ug/L	5.00	EPA 8260B	4/15/2011	3:37 pm	JMS
2-Chlorotoluene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
2-Hexanone	<4.00		ug/L	4.00	EPA 8260B	4/15/2011	3:37 pm	JMS
4-Chlorotoluene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
4-Isopropyltoluene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
4-Methyl-2-Pentanone (MIBK)	<3.00		ug/L	3.00	EPA 8260B	4/15/2011	3:37 pm	JMS
Acetone	<50.0		ug/L	50.0	EPA 8260B	4/15/2011	3:37 pm	JMS
Benzene	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	3:37 pm	JMS
Bromobenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
Bromochloromethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
Bromodichloromethane	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	3:37 pm	JMS
Bromoform	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
Bromomethane	<2.00	**Lib-1**	ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
Carbon disulfide	<4.00		ug/L	4.00	EPA 8260B	4/15/2011	3:37 pm	JMS
Carbon Tetrachloride	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	3:37 pm	JMS
Chlorobenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
Chlorodibromomethane	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	3:37 pm	JMS
Chloroethane	<4.00		ug/L	4.00	EPA 8260B	4/15/2011	3:37 pm	JMS
Chloroform	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
Chloromethane	<4.00		ug/L	4.00	EPA 8260B	4/15/2011	3:37 pm	JMS
cis-1,2-Dichloroethene	**6.00**		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
cis-1,3-Dichloropropene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
Dibromomethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
Dichlorodifluoromethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
Ethylbenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
Hexachlorobutadiene	<3.00		ug/L	3.00	EPA 8260B	4/15/2011	3:37 pm	JMS
Isopropylbenzene (Cumene)	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
m,p-Xylenes	<4.00		ug/L	4.00	EPA 8260B	4/15/2011	3:37 pm	JMS
Methylene Chloride	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
Methyl-tert-Butyl Ether	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
Naphthalene	<10.0		ug/L	10.0	EPA 8260B	4/15/2011	3:37 pm	JMS
n-Butyl Benzene	<4.00		ug/L	4.00	EPA 8260B	4/15/2011	3:37 pm	JMS

Certificate of Analysis

VOLATILE ORGANIC COMPOUNDS

Parameter	Result		Units	PQL	Method	Date	Time	Analyst
n-Propylbenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
o-Xylene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
sec-Butylbenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
Styrene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
tert-Butylbenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
Tetrachloroethene	**3.76**		ug/L	1.00	EPA 8260B	4/15/2011	3:37 pm	JMS
Toluene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
Total Xylenes	<6.00		ug/L	6.00	EPA 8260B	4/15/2011	3:37 pm	JMS
trans-1,2-Dichloroethene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
trans-1,3-Dichloropropene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
Trichloroethene	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	3:37 pm	JMS
Trichlorofluoromethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
Vinyl chloride	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	3:37 pm	JMS
Surrogate: 1,2-Dichloroethane-d4	101		% Rec	74.1-131.5	EPA 8260B	4/15/2011	3:37 pm	JMS
Surrogate: 4-Bromofluorobenzene	95.9		% Rec	70.4-128	EPA 8260B	4/15/2011	3:37 pm	JMS
Surrogate: Toluene-d8	94.5		% Rec	83.3-118.6	EPA 8260B	4/15/2011	3:37 pm	JMS

Analytical Testing Parameters

Client Sample ID: **MW-2A**
Lab Sample ID: **1106806-02**

Collection Date: **4/12/2011**
Collection Time: **2:10 pm**
Collected By: Andrew Kuder

METALS

Parameter	Result		Units	PQL	Method	Date	Time	Analyst
Lead, Dissolved	<0.0010		mg/L	0.0010	EPA 200.8	4/20/2011	7:20 pm	BCK

SEMIVOLATILE ORGANIC COMPOUNDS

Parameter	Result		Units	PQL	Method	Date	Time	Analyst
1-Methylnaphthalene	<0.935		ug/L	0.935	EPA 8270C	4/20/2011	2:28 pm	BEH
2-Methylnaphthalene	<0.935		ug/L	0.935	EPA 8270C	4/20/2011	2:28 pm	BEH
Acenaphthene	<0.935		ug/L	0.935	EPA 8270C	4/20/2011	2:28 pm	BEH
Acenaphthylene	<0.935		ug/L	0.935	EPA 8270C	4/20/2011	2:28 pm	BEH
Anthracene	<0.841		ug/L	0.841	EPA 8270C	4/20/2011	2:28 pm	BEH
Benzo (a) anthracene	<0.467		ug/L	0.467	EPA 8270C	4/20/2011	2:28 pm	BEH
Benzo (a) pyrene	**0.252**		ug/L	0.187	EPA 8270C	4/20/2011	2:28 pm	BEH
Benzo (b) fluoranthene	<0.467		ug/L	0.467	EPA 8270C	4/20/2011	2:28 pm	BEH
Benzo (g,h,i) perylene	<0.252	**A-18**	ug/L	0.252	EPA 8270C	4/20/2011	2:28 pm	BEH
Benzo (k) fluoranthene	<0.467	**A-18**	ug/L	0.467	EPA 8270C	4/20/2011	2:28 pm	BEH
Chrysene	<0.841		ug/L	0.841	EPA 8270C	4/20/2011	2:28 pm	BEH
Dibenz (a,h) anthracene	<0.467	**A-18**	ug/L	0.467	EPA 8270C	4/20/2011	2:28 pm	BEH
Fluoranthene	<0.841		ug/L	0.841	EPA 8270C	4/20/2011	2:28 pm	BEH
Fluorene	<0.841		ug/L	0.841	EPA 8270C	4/20/2011	2:28 pm	BEH
Indeno (1,2,3-cd) pyrene	<0.467	**A-18**	ug/L	0.467	EPA 8270C	4/20/2011	2:28 pm	BEH
Naphthalene	<0.841		ug/L	0.841	EPA 8270C	4/20/2011	2:28 pm	BEH
Phenanthrene	<0.841		ug/L	0.841	EPA 8270C	4/20/2011	2:28 pm	BEH
Pyrene	<0.841		ug/L	0.841	EPA 8270C	4/20/2011	2:28 pm	BEH

SEMIVOLATILE ORGANIC COMPOUNDS

Parameter	Result		Units	PQL	Method	Date	Time	Analyst
Surrogate: 2-Fluorobiphenyl	39.3		% Rec	8-127	EPA 8270C	4/20/2011	2:28 pm	BEH
Surrogate: Nitrobenzene-d5	47.8		% Rec	12-141	EPA 8270C	4/20/2011	2:28 pm	BEH
Surrogate: p-Terphenyl-d14	39.3		% Rec	8-103	EPA 8270C	4/20/2011	2:28 pm	BEH

VOLATILE ORGANIC COMPOUNDS

Parameter	Result		Units	PQL	Method	Date	Time	Analyst
1,1,1,2-Tetrachloroethane	<2.00	**Lib-1**	ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
1,1,1-Trichloroethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
1,1,2,2-Tetrachloroethane	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	4:08 pm	JMS
1,1,2-Trichloroethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
1,1-Dichloroethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
1,1-Dichloroethene	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	4:08 pm	JMS
1,1-Dichloropropene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
1,2,3-Trichlorobenzene	<15.0		ug/L	15.0	EPA 8260B	4/15/2011	4:08 pm	JMS
1,2,3-Trichloropropane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
1,2,4-Trichlorobenzene	<15.0		ug/L	15.0	EPA 8260B	4/15/2011	4:08 pm	JMS
1,2,4-Trimethylbenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
1,2-Dibromo-3-chloropropane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
1,2-Dibromoethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
1,2-Dichlorobenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
1,2-Dichloroethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
1,2-Dichloropropane	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	4:08 pm	JMS
1,3,5-Trimethylbenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
1,3-Dichlorobenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
1,3-Dichloropropane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
1,4-Dichlorobenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
2-Butanone (MEK)	<5.00		ug/L	5.00	EPA 8260B	4/15/2011	4:08 pm	JMS
2-Chlorotoluene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
2-Hexanone	<4.00		ug/L	4.00	EPA 8260B	4/15/2011	4:08 pm	JMS
4-Chlorotoluene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
4-Isopropyltoluene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
4-Methyl-2-Pentanone (MIBK)	<3.00		ug/L	3.00	EPA 8260B	4/15/2011	4:08 pm	JMS
Acetone	<50.0		ug/L	50.0	EPA 8260B	4/15/2011	4:08 pm	JMS
Benzene	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	4:08 pm	JMS
Bromobenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
Bromochloromethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
Bromodichloromethane	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	4:08 pm	JMS
Bromoform	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
Bromomethane	<2.00	**Lib-1**	ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
Carbon disulfide	<4.00		ug/L	4.00	EPA 8260B	4/15/2011	4:08 pm	JMS
Carbon Tetrachloride	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	4:08 pm	JMS
Chlorobenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
Chlorodibromomethane	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	4:08 pm	JMS
Chloroethane	<4.00		ug/L	4.00	EPA 8260B	4/15/2011	4:08 pm	JMS
Chloroform	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
Chloromethane	<4.00		ug/L	4.00	EPA 8260B	4/15/2011	4:08 pm	JMS
cis-1,2-Dichloroethene	**4.87**		ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS

Certificate of Analysis

VOLATILE ORGANIC COMPOUNDS

Parameter	Result	Units	PQL	Method	Date	Time	Analyst
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
Dibromomethane	<2.00	ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
Ethylbenzene	<2.00	ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
Hexachlorobutadiene	<3.00	ug/L	3.00	EPA 8260B	4/15/2011	4:08 pm	JMS
Isopropylbenzene (Cumene)	<2.00	ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
m,p-Xylenes	<4.00	ug/L	4.00	EPA 8260B	4/15/2011	4:08 pm	JMS
Methylene Chloride	<2.00	ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
Methyl-tert-Butyl Ether	<2.00	ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
Naphthalene	<10.0	ug/L	10.0	EPA 8260B	4/15/2011	4:08 pm	JMS
n-Butyl Benzene	<4.00	ug/L	4.00	EPA 8260B	4/15/2011	4:08 pm	JMS
n-Propylbenzene	<2.00	ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
o-Xylene	<2.00	ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
Styrene	<2.00	ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
Tetrachloroethene	**23.5**	ug/L	1.00	EPA 8260B	4/15/2011	4:08 pm	JMS
Toluene	<2.00	ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
Total Xylenes	<6.00	ug/L	6.00	EPA 8260B	4/15/2011	4:08 pm	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
Trichloroethene	**2.01**	ug/L	1.00	EPA 8260B	4/15/2011	4:08 pm	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
Vinyl chloride	<1.00	ug/L	1.00	EPA 8260B	4/15/2011	4:08 pm	JMS
Surrogate: 1,2-Dichloroethane-d4	97.4	% Rec	74.1-131.5	EPA 8260B	4/15/2011	4:08 pm	JMS
Surrogate: 4-Bromofluorobenzene	99.9	% Rec	70.4-128	EPA 8260B	4/15/2011	4:08 pm	JMS
Surrogate: Toluene-d8	97.3	% Rec	83.3-118.6	EPA 8260B	4/15/2011	4:08 pm	JMS

Analytical Testing Parameters

Client Sample ID: **MW-3**
Lab Sample ID: **1106806-03**

Collection Date: **4/12/2011**
Collection Time: **1:54 pm**
Collected By: Andrew Kuder

METALS

Parameter	Result	Units	PQL	Method	Date	Time	Analyst
Lead, Dissolved	<0.0010	mg/L	0.0010	EPA 200.8	4/20/2011	7:23 pm	BCK

SEMIVOLATILE ORGANIC COMPOUNDS

Parameter	Result	Units	PQL	Method	Date	Time	Analyst
1-Methylnaphthalene	<0.930	ug/L	0.930	EPA 8270C	4/20/2011	3:04 pm	BEH
2-Methylnaphthalene	<0.930	ug/L	0.930	EPA 8270C	4/20/2011	3:04 pm	BEH
Acenaphthene	<0.930	ug/L	0.930	EPA 8270C	4/20/2011	3:04 pm	BEH
Acenaphthylene	<0.930	ug/L	0.930	EPA 8270C	4/20/2011	3:04 pm	BEH
Anthracene	<0.837	ug/L	0.837	EPA 8270C	4/20/2011	3:04 pm	BEH
Benzo (a) anthracene	<0.465	ug/L	0.465	EPA 8270C	4/20/2011	3:04 pm	BEH
Benzo (a) pyrene	<0.186	ug/L	0.186	EPA 8270C	4/20/2011	3:04 pm	BEH

SEMIVOLATILE ORGANIC COMPOUNDS

Parameter	Result		Units	PQL	Method	Date	Time	Analyst
Benzo (b) fluoranthene	<0.465		ug/L	0.465	EPA 8270C	4/20/2011	3:04 pm	BEH
Benzo (g,h,i) perylene	<0.251	**A-18**	ug/L	0.251	EPA 8270C	4/20/2011	3:04 pm	BEH
Benzo (k) fluoranthene	<0.465	**A-18**	ug/L	0.465	EPA 8270C	4/20/2011	3:04 pm	BEH
Chrysene	<0.837		ug/L	0.837	EPA 8270C	4/20/2011	3:04 pm	BEH
Dibenz (a,h) anthracene	<0.465	**A-18**	ug/L	0.465	EPA 8270C	4/20/2011	3:04 pm	BEH
Fluoranthene	<0.837		ug/L	0.837	EPA 8270C	4/20/2011	3:04 pm	BEH
Fluorene	<0.837		ug/L	0.837	EPA 8270C	4/20/2011	3:04 pm	BEH
Indeno (1,2,3-cd) pyrene	<0.465	**A-18**	ug/L	0.465	EPA 8270C	4/20/2011	3:04 pm	BEH
Naphthalene	<0.837		ug/L	0.837	EPA 8270C	4/20/2011	3:04 pm	BEH
Phenanthrene	<0.837		ug/L	0.837	EPA 8270C	4/20/2011	3:04 pm	BEH
Pyrene	<0.837		ug/L	0.837	EPA 8270C	4/20/2011	3:04 pm	BEH
Surrogate: 2-Fluorobiphenyl	35.9		% Rec	8-127	EPA 8270C	4/20/2011	3:04 pm	BEH
Surrogate: Nitrobenzene-d5	46.1		% Rec	12-141	EPA 8270C	4/20/2011	3:04 pm	BEH
Surrogate: p-Terphenyl-d14	38.9		% Rec	8-103	EPA 8270C	4/20/2011	3:04 pm	BEH

VOLATILE ORGANIC COMPOUNDS

Parameter	Result		Units	PQL	Method	Date	Time	Analyst
1;1,1,2-Tetrachloroethane	<2.00	**Lib-1**	ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
1,1,1-Trichloroethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
1,1,2,2-Tetrachloroethane	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	4:39 pm	JMS
1,1,2-Trichloroethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
1,1-Dichloroethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
1,1-Dichloroethene	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	4:39 pm	JMS
1,1-Dichloropropene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
1,2,3-Trichlorobenzene	<15.0		ug/L	15.0	EPA 8260B	4/15/2011	4:39 pm	JMS
1,2,3-Trichloropropane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
1,2,4-Trichlorobenzene	<15.0		ug/L	15.0	EPA 8260B	4/15/2011	4:39 pm	JMS
1,2,4-Trimethylbenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
1,2-Dibromo-3-chloropropane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
1,2-Dibromoethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
1,2-Dichlorobenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
1,2-Dichloroethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
1,2-Dichloropropane	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	4:39 pm	JMS
1,3,5-Trimethylbenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
1,3-Dichlorobenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
1,3-Dichloropropane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
1,4-Dichlorobenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
2-Butanone (MEK)	<5.00		ug/L	5.00	EPA 8260B	4/15/2011	4:39 pm	JMS
2-Chlorotoluene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
2-Hexanone	<4.00		ug/L	4.00	EPA 8260B	4/15/2011	4:39 pm	JMS
4-Chlorotoluene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
4-Isopropyltoluene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
4-Methyl-2-Pentanone (MIBK)	<3.00		ug/L	3.00	EPA 8260B	4/15/2011	4:39 pm	JMS
Acetone	<50.0		ug/L	50.0	EPA 8260B	4/15/2011	4:39 pm	JMS
Benzene	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	4:39 pm	JMS
Bromobenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
Bromochloromethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS

VOLATILE ORGANIC COMPOUNDS

Parameter	Result		Units	PQL	Method	Date	Time	Analyst
Bromodichloromethane	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	4:39 pm	JMS
Bromoform	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
Bromomethane	<2.00	Lib-1	ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
Carbon disulfide	<4.00		ug/L	4.00	EPA 8260B	4/15/2011	4:39 pm	JMS
Carbon Tetrachloride	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	4:39 pm	JMS
Chlorobenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
Chlorodibromomethane	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	4:39 pm	JMS
Chloroethane	<4.00		ug/L	4.00	EPA 8260B	4/15/2011	4:39 pm	JMS
Chloroform	**3.87**		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
Chloromethane	<4.00		ug/L	4.00	EPA 8260B	4/15/2011	4:39 pm	JMS
cis-1,2-Dichloroethene	**5.71**		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
cis-1,3-Dichloropropene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
Dibromomethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
Dichlorodifluoromethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
Ethylbenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
Hexachlorobutadiene	<3.00		ug/L	3.00	EPA 8260B	4/15/2011	4:39 pm	JMS
Isopropylbenzene (Cumene)	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
m,p-Xylenes	<4.00		ug/L	4.00	EPA 8260B	4/15/2011	4:39 pm	JMS
Methylene Chloride	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
Methyl-tert-Butyl Ether	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
Naphthalene	<10.0		ug/L	10.0	EPA 8260B	4/15/2011	4:39 pm	JMS
n-Butyl Benzene	<4.00		ug/L	4.00	EPA 8260B	4/15/2011	4:39 pm	JMS
n-Propylbenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
o-Xylene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
sec-Butylbenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
Styrene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
tert-Butylbenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
Tetrachloroethene	**46.9**		ug/L	1.00	EPA 8260B	4/15/2011	4:39 pm	JMS
Toluene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
Total Xylenes	<6.00		ug/L	6.00	EPA 8260B	4/15/2011	4:39 pm	JMS
trans-1,2-Dichloroethene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
trans-1,3-Dichloropropene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
Trichloroethene	**2.33**		ug/L	1.00	EPA 8260B	4/15/2011	4:39 pm	JMS
Trichlorofluoromethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
Vinyl chloride	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	4:39 pm	JMS
Surrogate: 1,2-Dichloroethane-d4	95.8		% Rec	74.1-131.5	EPA 8260B	4/15/2011	4:39 pm	JMS
Surrogate: 4-Bromofluorobenzene	102		% Rec	70.4-128	EPA 8260B	4/15/2011	4:39 pm	JMS
Surrogate: Toluene-d8	100		% Rec	83.3-118.6	EPA 8260B	4/15/2011	4:39 pm	JMS

Analytical Testing Parameters

Client Sample ID: **MW-4**
Lab Sample ID: **1106806-04**

Collection Date: **4/12/2011**
Collection Time: **2:45 pm**
Collected By: Andrew Kuder

METALS

Parameter	Result	Units	PQL	Method	Date	Time	Analyst

METALS

Parameter	Result		Units	PQL	Method	Date	Time	Analyst
Lead, Dissolved	**0.0064**		mg/L	0.0010	EPA 200.8	4/20/2011	7:26 pm	BCK

SEMIVOLATILE ORGANIC COMPOUNDS

Parameter	Result		Units	PQL	Method	Date	Time	Analyst
1-Methylnaphthalene	<0.939		ug/L	0.939	EPA 8270C	4/20/2011	3:40 pm	BEH
2-Methylnaphthalene	<0.939		ug/L	0.939	EPA 8270C	4/20/2011	3:40 pm	BEH
Acenaphthene	<0.939		ug/L	0.939	EPA 8270C	4/20/2011	3:40 pm	BEH
Acenaphthylene	<0.939		ug/L	0.939	EPA 8270C	4/20/2011	3:40 pm	BEH
Anthracene	<0.845		ug/L	0.845	EPA 8270C	4/20/2011	3:40 pm	BEH
Benzo (a) anthracene	<0.469		ug/L	0.469	EPA 8270C	4/20/2011	3:40 pm	BEH
Benzo (a) pyrene	<0.188		ug/L	0.188	EPA 8270C	4/20/2011	3:40 pm	BEH
Benzo (b) fluoranthene	<0.469		ug/L	0.469	EPA 8270C	4/20/2011	3:40 pm	BEH
Benzo (g,h,i) perylene	<0.254	**A-18**	ug/L	0.254	EPA 8270C	4/20/2011	3:40 pm	BEH
Benzo (k) fluoranthene	<0.469	**A-18**	ug/L	0.469	EPA 8270C	4/20/2011	3:40 pm	BEH
Chrysene	<0.845		ug/L	0.845	EPA 8270C	4/20/2011	3:40 pm	BEH
Dibenz (a,h) anthracene	<0.469	**A-18**	ug/L	0.469	EPA 8270C	4/20/2011	3:40 pm	BEH
Fluoranthene	<0.845		ug/L	0.845	EPA 8270C	4/20/2011	3:40 pm	BEH
Fluorene	<0.845		ug/L	0.845	EPA 8270C	4/20/2011	3:40 pm	BEH
Indeno (1,2,3-cd) pyrene	<0.469	**A-18**	ug/L	0.469	EPA 8270C	4/20/2011	3:40 pm	BEH
Naphthalene	<0.845		ug/L	0.845	EPA 8270C	4/20/2011	3:40 pm	BEH
Phenanthrene	<0.845		ug/L	0.845	EPA 8270C	4/20/2011	3:40 pm	BEH
Pyrene	<0.845		ug/L	0.845	EPA 8270C	4/20/2011	3:40 pm	BEH
Surrogate: 2-Fluorobiphenyl	38.3		% Rec	8-127	EPA 8270C	4/20/2011	3:40 pm	BEH
Surrogate: Nitrobenzene-d5	47.8		% Rec	12-141	EPA 8270C	4/20/2011	3:40 pm	BEH
Surrogate: p-Terphenyl-d14	42.4		% Rec	8-103	EPA 8270C	4/20/2011	3:40 pm	BEH

VOLATILE ORGANIC COMPOUNDS

Parameter	Result		Units	PQL	Method	Date	Time	Analyst
1,1,1,2-Tetrachloroethane	<2.00	**Lib-1**	ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
1,1,1-Trichloroethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
1,1,2,2-Tetrachloroethane	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	5:10 pm	JMS
1,1,2-Trichloroethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
1,1-Dichloroethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
1,1-Dichloroethene	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	5:10 pm	JMS
1,1-Dichloropropene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
1,2,3-Trichlorobenzene	<15.0		ug/L	15.0	EPA 8260B	4/15/2011	5:10 pm	JMS
1,2,3-Trichloropropane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
1,2,4-Trichlorobenzene	<15.0		ug/L	15.0	EPA 8260B	4/15/2011	5:10 pm	JMS
1,2,4-Trimethylbenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
1,2-Dibromo-3-chloropropane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
1,2-Dibromoethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
1,2-Dichlorobenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
1,2-Dichloroethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
1,2-Dichloropropane	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	5:10 pm	JMS
1,3,5-Trimethylbenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
1,3-Dichlorobenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
1,3-Dichloropropane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS

VOLATILE ORGANIC COMPOUNDS

Parameter	Result		Units	PQL	Method	Date	Time	Analyst
1,4-Dichlorobenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
2-Butanone (MEK)	<5.00		ug/L	5.00	EPA 8260B	4/15/2011	5:10 pm	JMS
2-Chlorotoluene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
2-Hexanone	<4.00		ug/L	4.00	EPA 8260B	4/15/2011	5:10 pm	JMS
4-Chlorotoluene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
4-Isopropyltoluene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
4-Methyl-2-Pentanone (MIBK)	<3.00		ug/L	3.00	EPA 8260B	4/15/2011	5:10 pm	JMS
Acetone	<50.0		ug/L	50.0	EPA 8260B	4/15/2011	5:10 pm	JMS
Benzene	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	5:10 pm	JMS
Bromobenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
Bromochloromethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
Bromodichloromethane	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	5:10 pm	JMS
Bromoform	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
Bromomethane	<2.00	**Lib-1**	ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
Carbon disulfide	<4.00		ug/L	4.00	EPA 8260B	4/15/2011	5:10 pm	JMS
Carbon Tetrachloride	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	5:10 pm	JMS
Chlorobenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
Chlorodibromomethane	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	5:10 pm	JMS
Chloroethane	<4.00		ug/L	4.00	EPA 8260B	4/15/2011	5:10 pm	JMS
Chloroform	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
Chloromethane	<4.00		ug/L	4.00	EPA 8260B	4/15/2011	5:10 pm	JMS
cis-1,2-Dichloroethene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
cis-1,3-Dichloropropene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
Dibromomethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
Dichlorodifluoromethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
Ethylbenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
Hexachlorobutadiene	<3.00		ug/L	3.00	EPA 8260B	4/15/2011	5:10 pm	JMS
Isopropylbenzene (Cumene)	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
m,p-Xylenes	<4.00		ug/L	4.00	EPA 8260B	4/15/2011	5:10 pm	JMS
Methylene Chloride	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
Methyl-tert-Butyl Ether	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
Naphthalene	<10.0		ug/L	10.0	EPA 8260B	4/15/2011	5:10 pm	JMS
n-Butyl Benzene	<4.00		ug/L	4.00	EPA 8260B	4/15/2011	5:10 pm	JMS
n-Propylbenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
o-Xylene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
sec-Butylbenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
Styrene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
tert-Butylbenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
Tetrachloroethene	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	5:10 pm	JMS
Toluene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
Total Xylenes	<6.00		ug/L	6.00	EPA 8260B	4/15/2011	5:10 pm	JMS
trans-1,2-Dichloroethene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
trans-1,3-Dichloropropene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
Trichloroethene	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	5:10 pm	JMS
Trichlorofluoromethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
Vinyl chloride	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	5:10 pm	JMS

Certificate of Analysis

VOLATILE ORGANIC COMPOUNDS

Parameter	Result	Units	PQL	Method	Date	Time	Analyst
Surrogate: 1,2-Dichloroethane-d4	100	% Rec	74.1-131.5	EPA 8260B	4/15/2011	5:10 pm	JMS
Surrogate: 4-Bromofluorobenzene	92.6	% Rec	70.4-128	EPA 8260B	4/15/2011	5:10 pm	JMS
Surrogate: Toluene-d8	90.9	% Rec	83.3-118.6	EPA 8260B	4/15/2011	5:10 pm	JMS

- **Lib-1:** The concentration was determined by a library search of the appropriate retention time and mass spectral ion pattern.
- **A-18:** CCV recovery was above acceptance limits. The concentration was below the reporting limit.

Laboratory Certifications:

- NELAP accredited by the Pennsylvania DEP (22-00578) for numerous drinking water, non-potable water, and solid and chemical materials parameters. Please refer to the current scope of accreditation and certificate for specific information on the approved methodologies.
- NELAP accredited by the New Jersey DEP (PA019) for numerous non-potable water and solid and chemical materials parameters. Please refer to the current scope of accreditation and certificate for specific information on the approved methodologies.

Report Comments:

The **PQL** is the **Practical Quantitation Limit**, which is defined as the lowest quantitation level of an analyte that can be readily achieved within the specified limits of precision and accuracy of an analytical method during routine laboratory operating conditions. The value may be raised depending on the characteristics or behavior of the target analyte.

All samples were analyzed **"as received"** from the client. Microbac Laboratories, Inc.- Westech Division can only assume that all samples were collected and submitted by the CLIENT following the appropriate protocols set forth by the regulatory requirements. This document shall not be reproduced, except in full, without the written approval of Microbac Laboratories, Inc.- Westech Division. If there are any technical questions pertaining to this laboratory report please contact a Client Services Coordinator or the Laboratory Director at (717) 651-9700.

Reviewed and Approved By:



David S. Wildasin

Operations Manager

Date Reviewed and Approved:

4/25/2011

For any feedback concerning our services, please contact Cherie Gudz, the Division Manager at 717.651.9700. You may also contact both James Nokes, President at president@microbac.com and Sean Hyde, Chief Operating Officer at sean.hyde@microbac.com.

Client #	
W.O.	
Quote #	

CHAIN OF CUSTODY

Microbac®
Microbac Laboratories, Inc
Camp Hill Division
209 Senate Avenue Camp Hill, PA 17011
P: 717-763-0582 F: 717-214-1269

(1)Client/Company Name: BL Companies
Address: 4242 Carlisle Pike, Suite 260
City, State, Zip: Camp Hill, PA 17011
Contact: John Thatcher
Telephone: 717-651-9850
Project: Frankfort + Darrah
Location: Philadelphia, PA
Sampler: AKR
PO: 00L629-B
Send Report via [ ] Mail
[ ] Fax# [X] Email: jthatcher@blcompanies.com
Compliance Monitoring: [X] YES [ ] NO State: PA
[ ] Annual [X] Quarterly [ ] Monthly PWSID #
Comments: Samples were field filtered

[ ] Rush Due Date: _ _
[X] Routine
[X] Results Only
[ ] Custom:

Monitoring Period:
to

Receiving Initials: SKS
Cooler Temp: 2°C

						VOCs (8260-B)	PAHs (8270-C)	Dissolved Lead					
1	MW-1	GW	G	4-12-11	14:27	X	X	X					
2	MW-2A	↓	↓	↓	14:10	X	X	X					
3	MW-3	↓	↓	↓	13:54	X	X	X					
4	MW-4	↓	↓	↓	14:45	X	X	X					
5													
6													
7													

Circle One		
Samples received on ice?	(Y)	N
Samples in good condition?	(Y)	N
Containers match method?	(Y)	N
Correct sample volume?	(Y)	N
Headspace present?	Y	(N)
Complete paperwork?		
Samples within hold time?		
Container*		
Preservative**		
Comments:		
Client Notified?		
Date:		
Field Services:		
Pick-up:		
Composite Sampling:		
Labor - Hours:		
Other		

1106806

1	AKR	4-13-11	940	2		4/13/11	940	PYMT	
		4/13/11	1450	4	Tatiana Dearinsky	4/13/11	14:50		
				6					

Container Type: (AG) Amber Glass (CG) Clear Glass (PL) Plastic (O) Other
Matrix Types: (S) Solid/Soil/Sludge (O) Oil (DW) Drinking Water (GW) Ground Water (SW) Surface Water (WW) Waste Water **State Reporting Types:** (E) Entry (D) Distribution (C) Check (R) Raw (M) Max Residence
Preservative Types (1) HNO3 (2) H2SO4 (3) HCL (4) NaOH (5) Zinc Acetate (6) Methanol (7) Sodium Bisulfate (8) Sodium Thiosulfate (U) Other

Microbac Laboratories, Inc.

Central Pennsylvania Division

Laboratory ID: 1115477

Certificate of Analysis

BL Companies, Inc.
John Thatcher
4242 Carlisle Pike, Suite 260
Camp Hill, PA 17011

Contact: John Thatcher
Project Name: Frankfort & Darrah
Project / PO Number: 00L629-B
Date Received: July 12, 2011
Time Received: 8:35 am

Analytical Testing Parameters

Client Sample ID: **MW-1**
Lab Sample ID: **1115477-01**

Collection Date: **7/11/2011**
Collection Time: **3:02 pm**
Collected By: Leigh Campetti

METALS

Parameter	Result	Units	PQL	Method	Prepared	Analyzed	Analyst
Lead, Dissolved	<0.0010	mg/L	0.0010	EPA 200.8	7/20/2011 1543	7/20/2011 1635	BCK

SEMIVOLATILE ORGANIC COMPOUNDS

Parameter	Result	Units	PQL	Method	Prepared	Analyzed	Analyst
Acenaphthene	<0.990	ug/L	0.990	EPA 8270C	7/12/2011 1054	7/19/2011 1423	BEH
Acenaphthylene	<0.990	ug/L	0.990	EPA 8270C	7/12/2011 1054	7/19/2011 1423	BEH
Anthracene	<0.891	ug/L	0.891	EPA 8270C	7/12/2011 1054	7/19/2011 1423	BEH
Benzo (a) anthracene	<0.297	ug/L	0.297	EPA 8270C	7/12/2011 1054	7/19/2011 1423	BEH
Benzo (a) pyrene	**0.276**	ug/L	0.198	EPA 8270C	7/12/2011 1054	7/19/2011 1423	BEH
Benzo (b) fluoranthene	**0.400**	ug/L	0.297	EPA 8270C	7/12/2011 1054	7/19/2011 1423	BEH
Benzo (g,h,i) perylene	**0.466**	ug/L	0.267	EPA 8270C	7/12/2011 1054	7/19/2011 1423	BEH
Benzo (k) fluoranthene	<0.495	ug/L	0.495	EPA 8270C	7/12/2011 1054	7/19/2011 1423	BEH
Chrysene	<0.891	ug/L	0.891	EPA 8270C	7/12/2011 1054	7/19/2011 1423	BEH
Dibenz (a,h) anthracene	<0.495	ug/L	0.495	EPA 8270C	7/12/2011 1054	7/19/2011 1423	BEH
Fluoranthene	<0.891	ug/L	0.891	EPA 8270C	7/12/2011 1054	7/19/2011 1423	BEH
Fluorene	<0.891	ug/L	0.891	EPA 8270C	7/12/2011 1054	7/19/2011 1423	BEH
Indeno (1,2,3-cd) pyrene	**0.281**	ug/L	0.248	EPA 8270C	7/12/2011 1054	7/19/2011 1423	BEH
1-Methylnaphthalene	<0.990	ug/L	0.990	EPA 8270C	7/12/2011 1054	7/19/2011 1423	BEH
2-Methylnaphthalene	<0.990	ug/L	0.990	EPA 8270C	7/12/2011 1054	7/19/2011 1423	BEH
Naphthalene	<0.891	ug/L	0.891	EPA 8270C	7/12/2011 1054	7/19/2011 1423	BEH
Phenanthrene	<0.891	ug/L	0.891	EPA 8270C	7/12/2011 1054	7/19/2011 1423	BEH
Pyrene	<0.891	ug/L	0.891	EPA 8270C	7/12/2011 1054	7/19/2011 1423	BEH
Surr: 2-Fluorobiphenyl	44.6	% Rec	8-127	EPA 8270C	7/12/2011 1054	7/19/2011 1423	BEH
Surr: Nitrobenzene-d5	45.5	% Rec	12-141	EPA 8270C	7/12/2011 1054	7/19/2011 1423	BEH
Surr: p-Terphenyl-d14	74.0	% Rec	8-103	EPA 8270C	7/12/2011 1054	7/19/2011 1423	BEH

VOLATILE ORGANIC COMPOUNDS

Parameter	Result	Units	PQL	Method	Prepared	Analyzed	Analyst
Acetone	<50.0	ug/L	50.0	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
Benzene	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
Bromobenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS

VOLATILE ORGANIC COMPOUNDS

Parameter	Result	Units	PQL	Method	Prepared	Analyzed	Analyst
Bromochloromethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
Bromodichloromethane	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
Bromoform	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
Bromomethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
2-Butanone (MEK)	<5.00	ug/L	5.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
n-Butyl Benzene	<4.00	ug/L	4.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
Carbon disulfide	<4.00	ug/L	4.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
Carbon Tetrachloride	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
Chlorobenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
Chlorodibromomethane	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
Chloroethane	<4.00	ug/L	4.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
Chloroform	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
Chloromethane	<4.00	ug/L	4.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
Dibromomethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
1,1-Dichloroethene	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
cis-1,2-Dichloroethene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
1,2-Dichloropropane	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
Ethylbenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
Hexachlorobutadiene	<3.00	ug/L	3.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
2-Hexanone	<4.00	ug/L	4.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
Isopropylbenzene (Cumene)	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
4-Isopropyltoluene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
4-Methyl-2-Pentanone (MIBK)	<3.00	ug/L	3.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
Methylene Chloride	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
Methyl-tert-Butyl Ether	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS

VOLATILE ORGANIC COMPOUNDS

Parameter	Result	Units	PQL	Method	Prepared	Analyzed	Analyst
Naphthalene	<10.0	ug/L	10.0	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
n-Propylbenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
Styrene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
1,1,2,2-Tetrachloroethane	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
Tetrachloroethene	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
Toluene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
Trichloroethene	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
Vinyl chloride	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
m,p-Xylenes	<4.00	ug/L	4.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
o-Xylene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
Total Xylenes	<6.00	ug/L	6.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
Surr: 1,2-Dichloroethane-d4	93.4	% Rec	74.1-131.5	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
Surr: 4-Bromofluorobenzene	119	% Rec	70.4-128	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
Surr: Toluene-d8	94.2	% Rec	83.3-118.6	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS

Analytical Testing Parameters

Client Sample ID: **MW-2A**
Lab Sample ID: **1115477-02**

Collection Date: **7/11/2011**
Collection Time: **3:11 pm**
Collected By: Leigh Campetti

METALS

Parameter	Result	Units	PQL	Method	Prepared	Analyzed	Analyst
Lead, Dissolved	<0.0010	mg/L	0.0010	EPA 200.8	7/20/2011 1543	7/20/2011 1644	BCK

SEMIVOLATILE ORGANIC COMPOUNDS

Parameter	Result	Units	PQL	Method	Prepared	Analyzed	Analyst
Acenaphthene	<0.990	ug/L	0.990	EPA 8270C	7/12/2011 1054	7/19/2011 1459	BEH
Acenaphthylene	<0.990	ug/L	0.990	EPA 8270C	7/12/2011 1054	7/19/2011 1459	BEH
Anthracene	<0.891	ug/L	0.891	EPA 8270C	7/12/2011 1054	7/19/2011 1459	BEH
Benzo (a) anthracene	<0.297	ug/L	0.297	EPA 8270C	7/12/2011 1054	7/19/2011 1459	BEH
Benzo (a) pyrene	<0.198	ug/L	0.198	EPA 8270C	7/12/2011 1054	7/19/2011 1459	BEH
Benzo (b) fluoranthene	<0.297	ug/L	0.297	EPA 8270C	7/12/2011 1054	7/19/2011 1459	BEH
Benzo (g,h,i) perylene	<0.267	ug/L	0.267	EPA 8270C	7/12/2011 1054	7/19/2011 1459	BEH
Benzo (k) fluoranthene	<0.495	ug/L	0.495	EPA 8270C	7/12/2011 1054	7/19/2011 1459	BEH

SEMIVOLATILE ORGANIC COMPOUNDS

Parameter	Result	Units	PQL	Method	Prepared	Analyzed	Analyst
Chrysene	<0.891	ug/L	0.891	EPA 8270C	7/12/2011 1054	7/19/2011 1459	BEH
Dibenz (a,h) anthracene	<0.495	ug/L	0.495	EPA 8270C	7/12/2011 1054	7/19/2011 1459	BEH
Fluoranthene	<0.891	ug/L	0.891	EPA 8270C	7/12/2011 1054	7/19/2011 1459	BEH
Fluorene	<0.891	ug/L	0.891	EPA 8270C	7/12/2011 1054	7/19/2011 1459	BEH
Indeno (1,2,3-cd) pyrene	<0.248	ug/L	0.248	EPA 8270C	7/12/2011 1054	7/19/2011 1459	BEH
1-Methylnaphthalene	<0.990	ug/L	0.990	EPA 8270C	7/12/2011 1054	7/19/2011 1459	BEH
2-Methylnaphthalene	<0.990	ug/L	0.990	EPA 8270C	7/12/2011 1054	7/19/2011 1459	BEH
Naphthalene	<0.891	ug/L	0.891	EPA 8270C	7/12/2011 1054	7/19/2011 1459	BEH
Phenanthrene	<0.891	ug/L	0.891	EPA 8270C	7/12/2011 1054	7/19/2011 1459	BEH
Pyrene	<0.891	ug/L	0.891	EPA 8270C	7/12/2011 1054	7/19/2011 1459	BEH
Surr: 2-Fluorobiphenyl	51.8	% Rec	8-127	EPA 8270C	7/12/2011 1054	7/19/2011 1459	BEH
Surr: Nitrobenzene-d5	50.5	% Rec	12-141	EPA 8270C	7/12/2011 1054	7/19/2011 1459	BEH
Surr: p-Terphenyl-d14	65.7	% Rec	8-103	EPA 8270C	7/12/2011 1054	7/19/2011 1459	BEH

VOLATILE ORGANIC COMPOUNDS

Parameter	Result	Units	PQL	Method	Prepared	Analyzed	Analyst
Acetone	<50.0	ug/L	50.0	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Benzene	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Bromobenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Bromochloromethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Bromodichloromethane	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Bromoform	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Bromomethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
2-Butanone (MEK)	<5.00	ug/L	5.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
n-Butyl Benzene	<4.00	ug/L	4.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Carbon disulfide	<4.00	ug/L	4.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Carbon Tetrachloride	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Chlorobenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Chlorodibromomethane	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Chloroethane	<4.00	ug/L	4.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Chloroform	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Chloromethane	<4.00	ug/L	4.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Dibromomethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS

VOLATILE ORGANIC COMPOUNDS

Parameter	Result	Units	PQL	Method	Prepared	Analyzed	Analyst
1,1-Dichloroethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
1,1-Dichloroethene	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
cis-1,2-Dichloroethene	**7.40**	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
1,2-Dichloropropane	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Ethylbenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Hexachlorobutadiene	<3.00	ug/L	3.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
2-Hexanone	<4.00	ug/L	4.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Isopropylbenzene (Cumene)	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
4-Isopropyltoluene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
4-Methyl-2-Pentanone (MIBK)	<3.00	ug/L	3.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Methylene Chloride	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Methyl-tert-Butyl Ether	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Naphthalene	<10.0	ug/L	10.0	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
n-Propylbenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Styrene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
1,1,2,2-Tetrachloroethane	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Tetrachloroethene	**23.1**	ug/L	1.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Toluene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Trichloroethene	**2.88**	ug/L	1.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Vinyl chloride	**2.12**	ug/L	1.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
m,p-Xylenes	<4.00	ug/L	4.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
o-Xylene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Total Xylenes	<6.00	ug/L	6.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Surr: 1,2-Dichloroethane-d4	101	% Rec	74.1-131.5	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Surr: 4-Bromofluorobenzene	106	% Rec	70.4-128	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Surr: Toluene-d8	95.4	% Rec	83.3-118.6	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS

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Central Pennsylvania Division

Laboratory ID: 1115477

Certificate of Analysis

Analytical Testing Parameters

Client Sample ID: **MW-3**
Lab Sample ID: **1115477-03**

Collection Date: **7/11/2011**
Collection Time: **2:40 pm**
Collected By: Leigh Campetti

METALS

Parameter	Result	Units	PQL	Method	Prepared	Analyzed	Analyst
Lead, Dissolved	<0.0010	mg/L	0.0010	EPA 200.8	7/20/2011 1543	7/20/2011 1647	BCK

SEMIVOLATILE ORGANIC COMPOUNDS

Parameter	Result	Units	PQL	Method	Prepared	Analyzed	Analyst
Acenaphthene	<0.990	ug/L	0.990	EPA 8270C	7/12/2011 1054	7/19/2011 1535	BEH
Acenaphthylene	<0.990	ug/L	0.990	EPA 8270C	7/12/2011 1054	7/19/2011 1535	BEH
Anthracene	<0.891	ug/L	0.891	EPA 8270C	7/12/2011 1054	7/19/2011 1535	BEH
Benzo (a) anthracene	<0.297	ug/L	0.297	EPA 8270C	7/12/2011 1054	7/19/2011 1535	BEH
Benzo (a) pyrene	<0.198	ug/L	0.198	EPA 8270C	7/12/2011 1054	7/19/2011 1535	BEH
Benzo (b) fluoranthene	<0.297	ug/L	0.297	EPA 8270C	7/12/2011 1054	7/19/2011 1535	BEH
Benzo (g,h,i) perylene	<0.267	ug/L	0.267	EPA 8270C	7/12/2011 1054	7/19/2011 1535	BEH
Benzo (k) fluoranthene	<0.495	ug/L	0.495	EPA 8270C	7/12/2011 1054	7/19/2011 1535	BEH
Chrysene	<0.891	ug/L	0.891	EPA 8270C	7/12/2011 1054	7/19/2011 1535	BEH
Dibenz (a,h) anthracene	<0.495	ug/L	0.495	EPA 8270C	7/12/2011 1054	7/19/2011 1535	BEH
Fluoranthene	<0.891	ug/L	0.891	EPA 8270C	7/12/2011 1054	7/19/2011 1535	BEH
Fluorene	<0.891	ug/L	0.891	EPA 8270C	7/12/2011 1054	7/19/2011 1535	BEH
Indeno (1,2,3-cd) pyrene	<0.248	ug/L	0.248	EPA 8270C	7/12/2011 1054	7/19/2011 1535	BEH
1-Methylnaphthalene	<0.990	ug/L	0.990	EPA 8270C	7/12/2011 1054	7/19/2011 1535	BEH
2-Methylnaphthalene	<0.990	ug/L	0.990	EPA 8270C	7/12/2011 1054	7/19/2011 1535	BEH
Naphthalene	<0.891	ug/L	0.891	EPA 8270C	7/12/2011 1054	7/19/2011 1535	BEH
Phenanthrene	<0.891	ug/L	0.891	EPA 8270C	7/12/2011 1054	7/19/2011 1535	BEH
Pyrene	<0.891	ug/L	0.891	EPA 8270C	7/12/2011 1054	7/19/2011 1535	BEH
Surr: 2-Fluorobiphenyl	56.9	% Rec	8-127	EPA 8270C	7/12/2011 1054	7/19/2011 1535	BEH
Surr: Nitrobenzene-d5	60.4	% Rec	12-141	EPA 8270C	7/12/2011 1054	7/19/2011 1535	BEH
Surr: p-Terphenyl-d14	62.6	% Rec	8-103	EPA 8270C	7/12/2011 1054	7/19/2011 1535	BEH

VOLATILE ORGANIC COMPOUNDS

Parameter	Result	Units	PQL	Method	Prepared	Analyzed	Analyst
Acetone	<50.0	ug/L	50.0	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Benzene	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Bromobenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Bromochloromethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Bromodichloromethane	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Bromoform	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Bromomethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
2-Butanone (MEK)	<5.00	ug/L	5.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
n-Butyl Benzene	<4.00	ug/L	4.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS

VOLATILE ORGANIC COMPOUNDS

Parameter	Result	Units	PQL	Method	Prepared	Analyzed	Analyst
Carbon disulfide	<4.00	ug/L	4.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Carbon Tetrachloride	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Chlorobenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Chlorodibromomethane	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Chloroethane	<4.00	ug/L	4.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Chloroform	**4.29**	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Chloromethane	<4.00	ug/L	4.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Dibromomethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
1,1-Dichloroethene	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
cis-1,2-Dichloroethene	**6.40**	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
1,2-Dichloropropane	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Ethylbenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Hexachlorobutadiene	<3.00	ug/L	3.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
2-Hexanone	<4.00	ug/L	4.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Isopropylbenzene (Cumene)	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
4-Isopropyltoluene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
4-Methyl-2-Pentanone (MIBK)	<3.00	ug/L	3.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Methylene Chloride	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Methyl-tert-Butyl Ether	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Naphthalene	<10.0	ug/L	10.0	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
n-Propylbenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Styrene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
1,1,2,2-Tetrachloroethane	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Tetrachloroethene	**38.7**	ug/L	1.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Toluene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS

VOLATILE ORGANIC COMPOUNDS

Parameter	Result	Units	PQL	Method	Prepared	Analyzed	Analyst
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Trichloroethene	**3.00**	ug/L	1.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Vinyl chloride	**1.51**	ug/L	1.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
m,p-Xylenes	<4.00	ug/L	4.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
o-Xylene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Total Xylenes	<6.00	ug/L	6.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Surr: 1,2-Dichloroethane-d4	94.8	% Rec	74.1-131.5	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Surr: 4-Bromofluorobenzene	113	% Rec	70.4-128	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Surr: Toluene-d8	101	% Rec	83.3-118.6	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS

Analytical Testing Parameters

Client Sample ID: **MW-4**
Lab Sample ID: **1115477-04**

Collection Date: **7/11/2011**
Collection Time: **2:51 pm**
Collected By: Leigh Campetti

METALS

Parameter	Result	Units	PQL	Method	Prepared	Analyzed	Analyst
Lead, Dissolved	**0.0029**	mg/L	0.0010	EPA 200.8	7/20/2011 1543	7/20/2011 1650	BCK

SEMIVOLATILE ORGANIC COMPOUNDS

Parameter	Result	Units	PQL	Method	Prepared	Analyzed	Analyst
Acenaphthene	<0.990	ug/L	0.990	EPA 8270C	7/12/2011 1054	7/19/2011 1610	BEH
Acenaphthylene	<0.990	ug/L	0.990	EPA 8270C	7/12/2011 1054	7/19/2011 1610	BEH
Anthracene	<0.891	ug/L	0.891	EPA 8270C	7/12/2011 1054	7/19/2011 1610	BEH
Benzo (a) anthracene	<0.297	ug/L	0.297	EPA 8270C	7/12/2011 1054	7/19/2011 1610	BEH
Benzo (a) pyrene	<0.198	ug/L	0.198	EPA 8270C	7/12/2011 1054	7/19/2011 1610	BEH
Benzo (b) fluoranthene	<0.297	ug/L	0.297	EPA 8270C	7/12/2011 1054	7/19/2011 1610	BEH
Benzo (g,h,i) perylene	<0.267	ug/L	0.267	EPA 8270C	7/12/2011 1054	7/19/2011 1610	BEH
Benzo (k) fluoranthene	<0.495	ug/L	0.495	EPA 8270C	7/12/2011 1054	7/19/2011 1610	BEH
Chrysene	<0.891	ug/L	0.891	EPA 8270C	7/12/2011 1054	7/19/2011 1610	BEH
Dibenz (a,h) anthracene	<0.495	ug/L	0.495	EPA 8270C	7/12/2011 1054	7/19/2011 1610	BEH
Fluoranthene	<0.891	ug/L	0.891	EPA 8270C	7/12/2011 1054	7/19/2011 1610	BEH
Fluorene	<0.891	ug/L	0.891	EPA 8270C	7/12/2011 1054	7/19/2011 1610	BEH
Indeno (1,2,3-cd) pyrene	<0.248	ug/L	0.248	EPA 8270C	7/12/2011 1054	7/19/2011 1610	BEH
1-Methylnaphthalene	<0.990	ug/L	0.990	EPA 8270C	7/12/2011 1054	7/19/2011 1610	BEH
2-Methylnaphthalene	<0.990	ug/L	0.990	EPA 8270C	7/12/2011 1054	7/19/2011 1610	BEH
Naphthalene	<0.891	ug/L	0.891	EPA 8270C	7/12/2011 1054	7/19/2011 1610	BEH

SEMIVOLATILE ORGANIC COMPOUNDS

Parameter	Result	Units	PQL	Method	Prepared	Analyzed	Analyst
Phenanthrene	<0.891	ug/L	0.891	EPA 8270C	7/12/2011 1054	7/19/2011 1610	BEH
Pyrene	<0.891	ug/L	0.891	EPA 8270C	7/12/2011 1054	7/19/2011 1610	BEH
Surr: 2-Fluorobiphenyl	47.2	% Rec	8-127	EPA 8270C	7/12/2011 1054	7/19/2011 1610	BEH
Surr: Nitrobenzene-d5	50.7	% Rec	12-141	EPA 8270C	7/12/2011 1054	7/19/2011 1610	BEH
Surr: p-Terphenyl-d14	66.8	% Rec	8-103	EPA 8270C	7/12/2011 1054	7/19/2011 1610	BEH

VOLATILE ORGANIC COMPOUNDS

Parameter	Result	Units	PQL	Method	Prepared	Analyzed	Analyst
Acetone	<50.0	ug/L	50.0	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Benzene	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Bromobenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Bromochloromethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Bromodichloromethane	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Bromoform	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Bromomethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
2-Butanone (MEK)	<5.00	ug/L	5.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
n-Butyl Benzene	<4.00	ug/L	4.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Carbon disulfide	<4.00	ug/L	4.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Carbon Tetrachloride	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Chlorobenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Chlorodibromomethane	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Chloroethane	<4.00	ug/L	4.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Chloroform	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Chloromethane	<4.00	ug/L	4.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Dibromomethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
1,1-Dichloroethene	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
cis-1,2-Dichloroethene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
1,2-Dichloropropane	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS

VOLATILE ORGANIC COMPOUNDS

Parameter	Result	Units	PQL	Method	Prepared	Analyzed	Analyst
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Ethylbenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Hexachlorobutadiene	<3.00	ug/L	3.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
2-Hexanone	<4.00	ug/L	4.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Isopropylbenzene (Cumene)	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
4-Isopropyltoluene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
4-Methyl-2-Pentanone (MIBK)	<3.00	ug/L	3.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Methylene Chloride	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Methyl-tert-Butyl Ether	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Naphthalene	<10.0	ug/L	10.0	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
n-Propylbenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Styrene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
1,1,2,2-Tetrachloroethane	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Tetrachloroethene	**3.45**	ug/L	1.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Toluene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Trichloroethene	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Vinyl chloride	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
m,p-Xylenes	<4.00	ug/L	4.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
o-Xylene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Total Xylenes	<6.00	ug/L	6.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Surr: 1,2-Dichloroethane-d4	92.8	% Rec	74.1-131.5	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Surr: 4-Bromofluorobenzene	114	% Rec	70.4-128	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Surr: Toluene-d8	101	% Rec	83.3-118.6	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS

Microbac Laboratories, Inc

Central Pennsylvania Division

Laboratory ID: 1115477

Certificate of Analysis

Laboratory Certifications:

Below is a list of certifications maintained by Microbac Laboratories, Inc. All data included in this report has been reviewed for and meets all project specific and quality control requirements of the applicable accreditation, unless otherwise noted. A complete list of individual analytes pursuant to each certification below is available upon request.

Microbac Laboratories, Inc. Central Pennsylvania Division
4359 Linglestown Road • Harrisburg, PA 17112

- NELAP (PA): 22-00578
- NELAP (NJ): PA019

Microbac Laboratories, Inc. Camp Hill Division
209 Senate Ave • Camp Hill, PA 17011

- Delaware: 21-00133
- Florida: E871048
- Indiana: C-PA-09
- Kentucky: 90143
- Maryland (Drinking Water): 334
- Massachusetts: M-PA028
- New Jersey: PA069
- New York: 11650
- North Carolina: 42708
- Tennessee: TN02865
- Virginia (Drinking Water): 00433
- Puerto Rico: PA00028

Report Comments:

The **PQL** is the **Practical Quantitation Limit**, which is defined as the lowest quantitation level of an analyte that can be readily achieved within the specified limits of precision and accuracy of an analytical method during routine laboratory operating conditions. The value may be raised depending on the characteristics or behavior of the target analyte.
All samples were analyzed **"as received"** from the client. Microbac Laboratories, Inc.- Central Pennsylvania Division can only assume that all samples were collected and submitted by the CLIENT following the appropriate protocols set forth by the regulatory requirements. This document shall not be reproduced, except in full, without the written approval of Microbac Laboratories, Inc.- Central Pennsylvania Division. If there are any technical questions pertaining to this laboratory report please contact a Client Services Coordinator or the Laboratory Director at (717) 651-9700.

Reviewed and Approved By:

David S. Wildasin
Operations Manager

Date Reviewed and Approved:

7/26/2011

For any feedback concerning our services, please contact Cherie Gudz, the Division Manager at 717.651.9700. You may also contact both James Nokes, President at president@microbac.com and Sean Hyde, Chief Operating Officer at sean.hyde@microbac.com.

Please help us in meeting our Go Green initiative by selecting to have reports and invoices submitted via email only. Please contact Cherie.Gudz@microbac.com to set up email reporting and invoicing options.

Microbac Laboratories, Inc. - Central Pennsylvania Division
Chain of Custody Form

4359 Linglestown Road, Harrisburg, PA 17112 · Phone: (717) 651-9700 · Fax: (717) 657-0752

NELAP accredited by PADEP. See www.microbac.com or contact laboratory for other accreditations.

PA DEP ID #22-578

SUBMIT LAB REPORT TO:			SUBMIT INVOICE TO:		
Company: BL COMPANIES			Company:		
Contact: JOHN THATCHER			Contact:		
Address:			Address: SAME		
City:	State:	Zip:	City:	State:	Zip:
Phone:	Fax:		Phone:	Fax:	
Report Delivery: ☐ Mail ☐ Fax ☒ Email (enter address below) jthatcher@blcompanies.com			Invoice Delivery: ☐ Mail ☐ Email (enter address below)		

KEY

C = HCL (N) = HNO3
S = H2SO4 E = EDTA
O = NaOH M = MeOH
NA = None X = Other
B = Sodium Bisulfate
A = Ascorbic Acid
T = Sodium ThioSulfate
Z = ZnAcetate/NaOH

(P) = Plastic
(G) = Clear Glass
(AG) = Amber Glass
X = Other

SS = Solid/Sludge
(GW) = Groundwater
WW = Wastewater
DW = Drinking Water
SW = Storm/Surface
OL = Oil A = Air O = Other

LABORATORY USE ONLY

Samples received on ice? Temp: 5 °C	(Y)	N	NA
Cooler temp. within acceptable limits?	(Y)	N	NA
Correct bottles/enough volume for analysis?	(Y)	N	NA
Sample bottles in good condition (unbroken)?	(Y)	N	NA
Samples within required holding time?	(Y)	N	NA
Zero headspace samples collected correctly?	Y	N	(NA)
Samples preserved to pH <2 and/or pH >12?	(Y)	N	NA

Delivery Method: ☒ Drop Off ☐ Microbac Pickup ☐ Courier:

CLIENT PROJECT INFORMATION

Project Name: RIA FRANKFORD + DARRAH
Project/PO Number: OOL629-B
Project Location/State: ☐ PA ☐ Other:
Purpose: ☐ *Regulatory* ☐ *Informational* ☐ *PWSID:*

MICROBAC Field Services Used? ☐ NO ☐ YES *(See Field Log)*
MICROBAC Quote/MSA No:
Data Deliverables/Report Type: ☐ *Level I (Standard)* OR
Additional Fee Deliverables: ☐ *Level II* ☐ *Level III* ☐ *Level IV*
State Monitoring Period: ☐ *Monthly* ☐ *Quarterly* ☐ *Annual*

Results TAT Requested *: ☒ 6-10 Day (Standard) OR ☐ RUSH* (INDICATE DUE DATE):

NOTES: *RUSH TATs will include surcharge unless otherwise agreed to in writing and must be pre-arranged to ensure the due date can be met.

ANALYSIS REQUESTED

LAB ID	SAMPLE IDENTIFICATION / LOCATION DESCRIPTION	SAMPLE DATE	SAMPLE TIME	SAMPLED BY	Total # of Containers	Sample Type	Grab 'G' or Composite 'C'	VOCs (8260-B)	PAHs (8270-C)	Dissolved Lead *	BOTTLEWARE: SIZE / TYPE / PRESERVATIVE (SEE K
01	MW-1	7.11.11	1502	LCC	5	GW	G	G/C	AG/NA	P/NA	
02	MW-2A	↓	1511	↓	↓	↓	↓	↓	↓	↓	
03	MW-3		1440								
04	MW-4		1451								
05											
06											
07											
08											
09											
10											

1115477

CUSTODY CHAIN	PRINT NAME	SIGNATURE	DATE	TIME
Relinquished by: LCC	Leigh C. Campetti		7/12/11	0825
Accepted by:				
Relinquished by:				
Accepted by:				
Relinquished by:				
Accepted by:	Bob Harris		7/12/11	0825
Relinquished by:	Bob Harris		7/12/11	0830
Received at MICROBAC:	Shanna Drahovsky	Shanna Drahovsky	7/12/11	0835

COMMENTS, NOTES, OR SPECIAL INSTRUCTIONS

* = Field Filtered

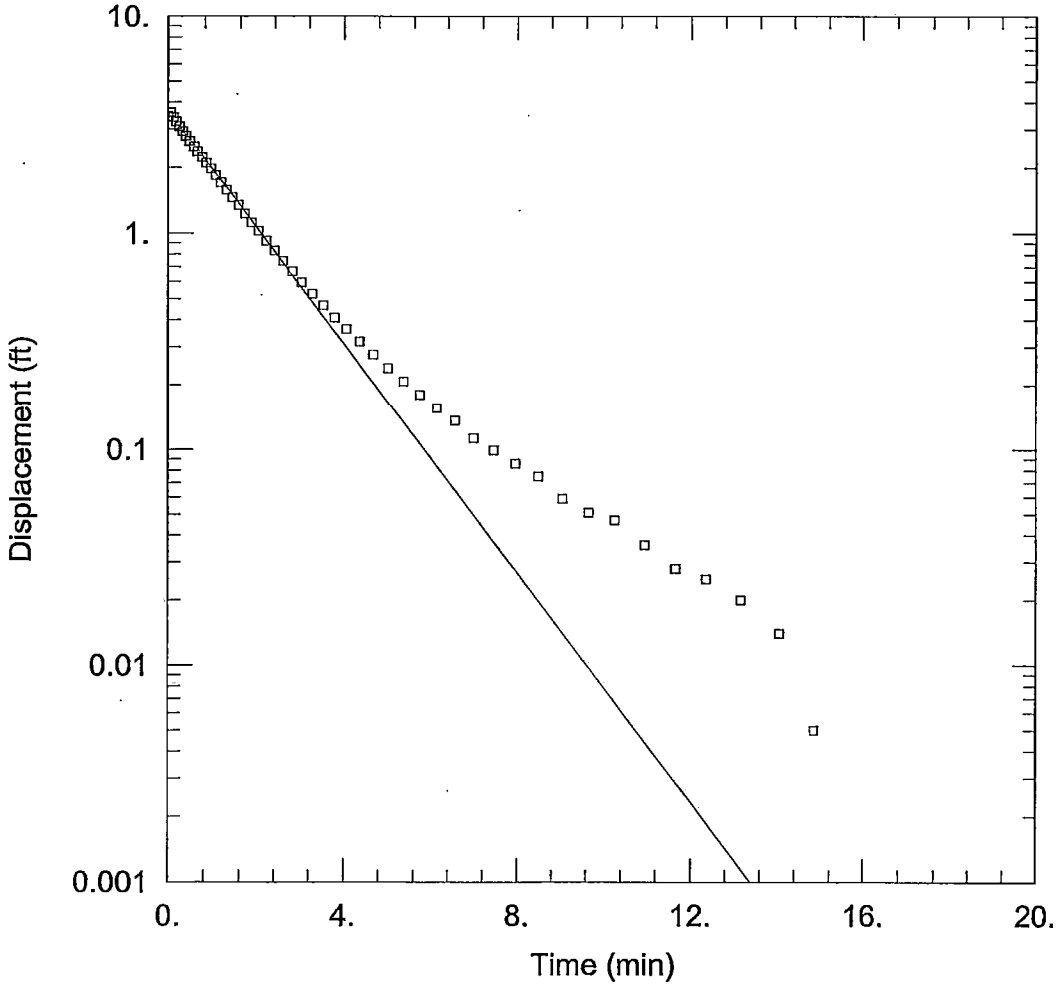
By relinquishing this form, I hereby agree to the terms & conditions printed on the reverse side.

WHITE - Original YELLOW - Laboratory Copy PINK - Client Copy

Page ____ of ____

APPENDIX C

Aquifer Testing Data and Hydraulic Conductivity Calculations



WELL TEST ANALYSIS

Data Set: G:\JOBS00\00L629-B\SLUGTE~1\AQUIFE~1\MW1.AQT
Date: 05/22/12 Time: 13:39:35

PROJECT INFORMATION

Company: BL Companies
Client: Rite Aid Corp.
Project: 00L629-B
Test Location: 5129-35 Frankford Avenue
Test Well: MW-1
Test Date: 05/18/2012

AQUIFER DATA

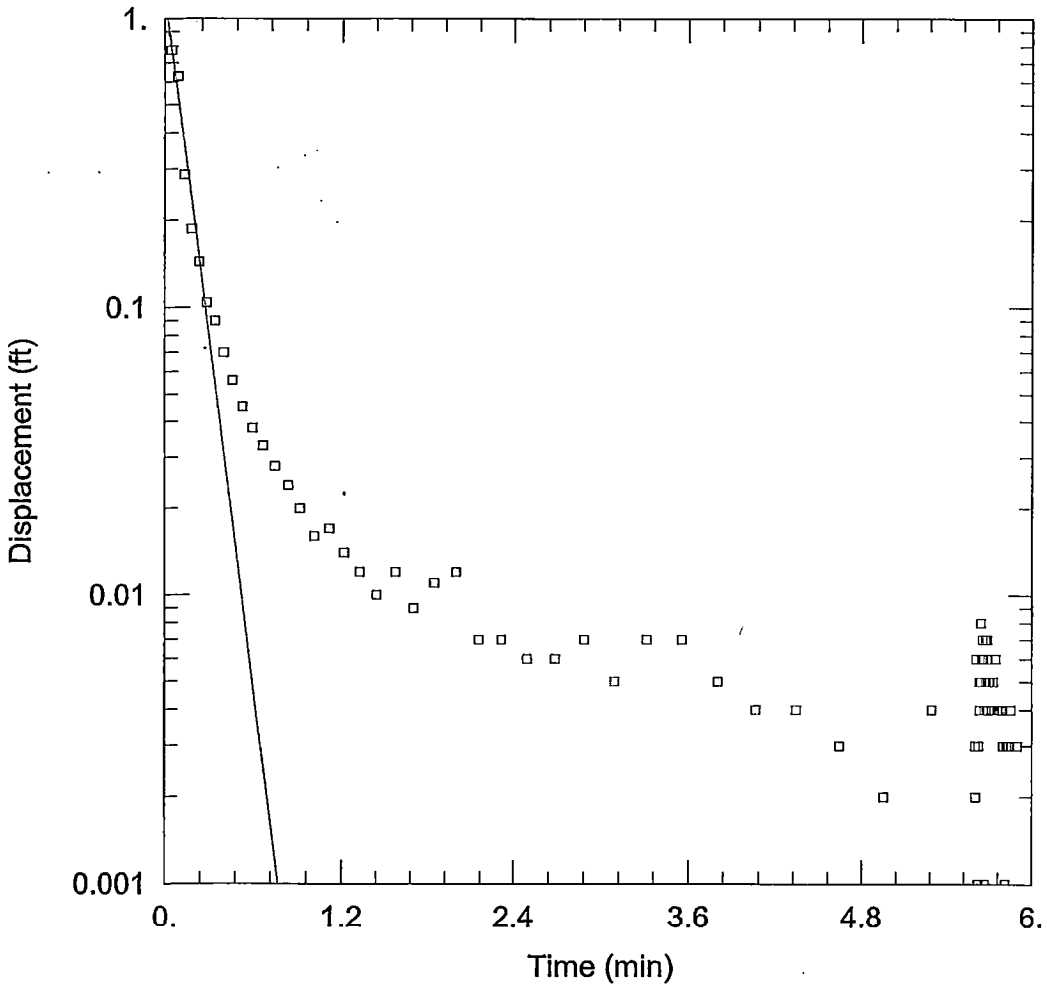
Saturated Thickness: 21. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Initial Displacement: 3.46 ft
Water Column Height: 21. ft
Casing Radius: 0.17 ft
Wellbore Radius: 0.25 ft
Screen Length: 20. ft

SOLUTION

Aquifer Model: Unconfined
K = 0.001502 ft/min
Solution Method: Bouwer-Rice
y0 = 3.572 ft



WELL TEST ANALYSIS

Data Set: G:\JOBS00\00L629-B\SLUGTE~1\AQUIFE~1\MW2A.AQT
Date: 05/22/12 Time: 13:48:49

PROJECT INFORMATION

Company: BL Companies
Client: Rite Aid Corp.
Project: 00L629-B
Test Location: 5129-35 Frankford Ave
Test Well: MW-2A
Test Date: 05/18/2012

AQUIFER DATA

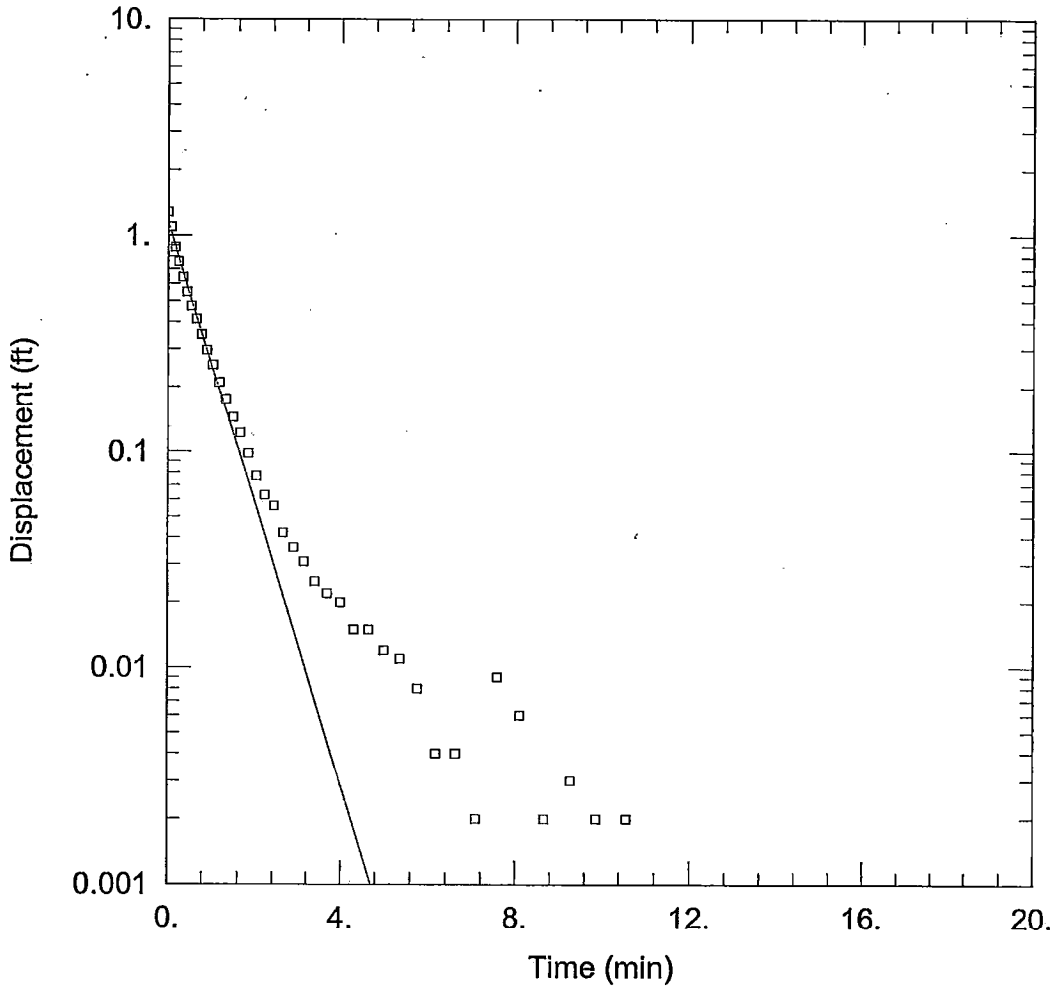
Saturated Thickness: 13. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Initial Displacement: 1.335 ft
Water Column Height: 13. ft
Casing Radius: 0.083 ft
Wellbore Radius: 0.25 ft
Screen Length: 20. ft

SOLUTION

Aquifer Model: Unconfined
K = 0.004868 ft/min
Solution Method: Bouwer-Rice
y0 = 1.146 ft



WELL TEST ANALYSIS

Data Set: G:\JOBS00\00L629-B\SLUGTE~1\AQUIFE~1\MW3.AQT
Date: 05/22/12 Time: 13:55:29

PROJECT INFORMATION

Company: BL Companies
Client: Rite Aid Corp.
Project: 00L629-B
Test Location: 5129-35 Frankford Ave
Test Well: MW-3
Test Date: 05/18/2012

AQUIFER DATA

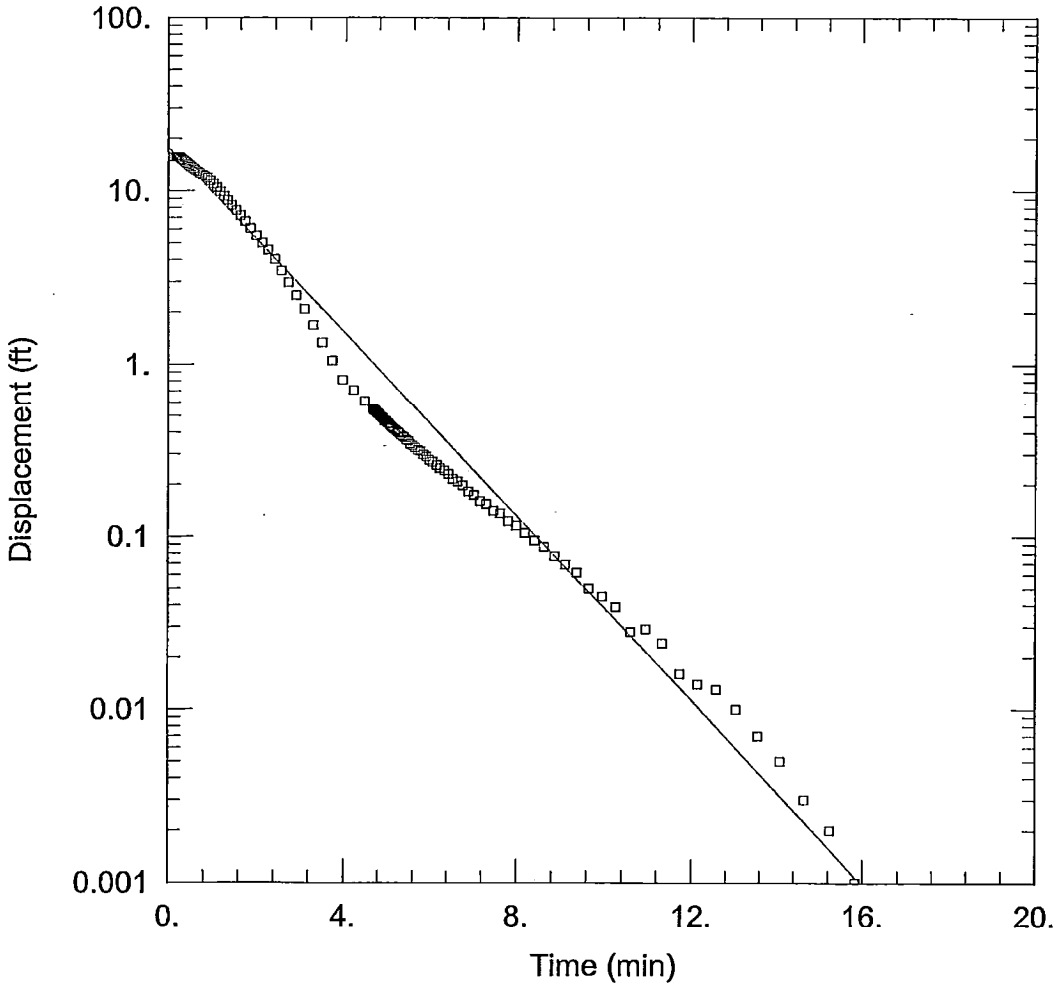
Saturated Thickness: 21. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Initial Displacement: 1.281 ft
Water Column Height: 21. ft
Casing Radius: 0.17 ft
Wellbore Radius: 0.25 ft
Screen Length: 20. ft

SOLUTION

Aquifer Model: Unconfined
K = 0.003685 ft/min
Solution Method: Bouwer-Rice
y0 = 1.148 ft



WELL TEST ANALYSIS

Data Set: G:\JOBS00\00L629-B\SLUGTE~1\AQUIFE~1\MW4.AQT
Date: 05/22/12 Time: 14:02:26

PROJECT INFORMATION

Company: BL Companies
Client: Rite Aid Corp.
Project: 00L629-B
Test Location: 5129-35 Frankford Ave
Test Well: MW-4
Test Date: 05/18/2012

AQUIFER DATA

Saturated Thickness: 20.1 ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Initial Displacement: 15.64 ft Water Column Height: 20.1 ft
Casing Radius: 0.083 ft Wellbore Radius: 0.25 ft
Screen Length: 25. ft

SOLUTION

Aquifer Model: Unconfined K = 0.0002873 ft/min
Solution Method: Bouwer-Rice y0 = 17.7 ft

APPENDIX D

Ground Water Fate and Transport Model Output

ADVECTIVE TRANSPORT WITH THREE DIMENSIONAL DISPERSION AND 1ST ORDER DECAY and RETARDATION

Project:	Frankford and Darrah Site						
Date:	4/2/2014	Prepared by:	John Thatcher				
		Contaminant:	Benzo(a)anthracene				
	X						
SOURCE CONC (MG/L)	DISTANCE TO LOCATION OF CONCERN (ft)	Ax (ft)	Ay (ft)	Az (ft) >=.001	LAMBDA day-1	SOURCE WIDTH (ft)	SOURCE THICKNESS (ft)
0.00112	1000	100	10	0.001	0.00052	20	20

Hydraulic Cond (ft/day)	Hydraulic Gradient (ft/ft)	Porosity (dec. frac.)	Soil Bulk Density (g/cm^3)	KOC	Frac. Org. Carb.	Retardation (R)	V (=K*i/n*R) (ft/day)
3.72E+00	0.0043	0.25	1.8	350000	5.00E-03	12601	5.0777E-06

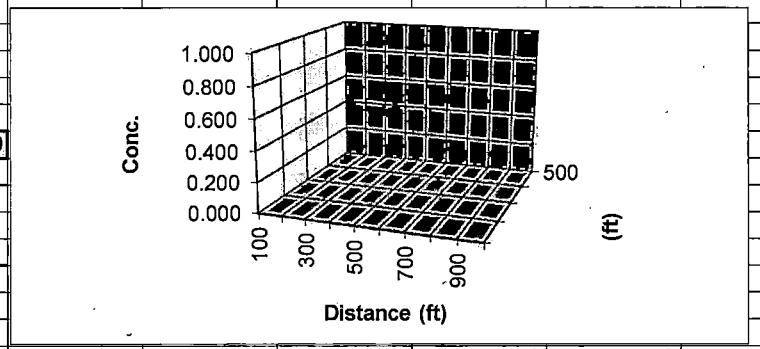
	y(ft)	z(ft)	Time (days)
1000	0	0	10950

Projected Conc. at	1000	0	0
at 10950 days			
0.000 mg/l			

AREAL MODEL	CALCULATION DOMAIN
Length (ft)	1000
Width (ft)	500

	100	200	300	400	500	600	700	800	900	1000
500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

PA DEPARTMENT
OF ENVIRONMENTAL PROTECTION
QUICK_DOMENICO.XLS
SPREADSHEET APPLICATION OF
"AN ANALYTICAL MODEL FOR
MULTIDIMENSIONAL TRANSPORT OF A
DECAYING CONTAMINANT SPECIES"
P.A. Domenico (1987)
Modified to Include Retardation



ADVECTIVE TRANSPORT WITH THREE DIMENSIONAL DISPERSION AND 1ST ORDER DECAY and RETARDATION

Project:	Frankford and Darrah Site						
Date:	4/2/2014	Prepared by:	John Thatcher				
		Contaminant:	Benzo(a)pyrene				
	X						
SOURCE CONC (MG/L)	DISTANCE TO LOCATION OF CONCERN (ft)	Ax (ft)	Ay (ft)	Az (ft) >=.001	LAMBDA day-1	SOURCE WIDTH (ft)	SOURCE THICKNESS (ft)
0.00452	1000	100	10	0.001	0.00066	20	20

Hydraulic Cond (ft/day)	Hydraulic Gradient (ft/ft)	Porosity (dec. frac.)	Soil Bulk Density (g/cm^3)	KOC	Frac. Org. Carb.	Retardation (R)	V (=K*i/n*R) (ft/day)
3.72E+00	0.0043	0.25	1.8	910000	5.00E-03	32761	1.9531E-06

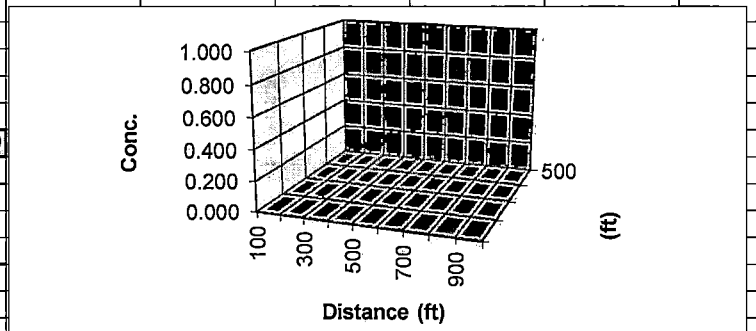
	y(ft)	z(ft)	Time (days)
	1000	0	0	10950

Projected Conc. at	1000	0	0
at 10950 days			
0.000 mg/l			

AREAL MODEL	CALCULATION DOMAIN
Length (ft)	1000
Width (ft)	500

	100	200	300	400	500	600	700	800	900	1000
500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

PA DEPARTMENT
OF ENVIRONMENTAL PROTECTION
QUICK_DOMENICO.XLS
SPREADSHEET APPLICATION OF
"AN ANALYTICAL MODEL FOR
MULTIDIMENSIONAL TRANSPORT OF A
DECAYING CONTAMINANT SPECIES"
P.A. Domenico (1987)
Modified to Include Retardation



ADVECTIVE TRANSPORT WITH THREE DIMENSIONAL DISPERSION AND 1ST ORDER DECAY and RETARDATION

Project:	Frankford and Darrah Site						
Date:	4/2/2014	Prepared by:	John Thatcher				
		Contaminant:	Benzo(b)fluoranthene				
	X						
SOURCE CONC (MG/L)	DISTANCE TO LOCATION OF CONCERN (ft)	Ax (ft)	Ay (ft)	Az (ft) >=.001	LAMBDA day-1	SOURCE WIDTH (ft)	SOURCE THICKNESS (ft)
0.0092	1000	100	10	0.001	0.00058	20	20

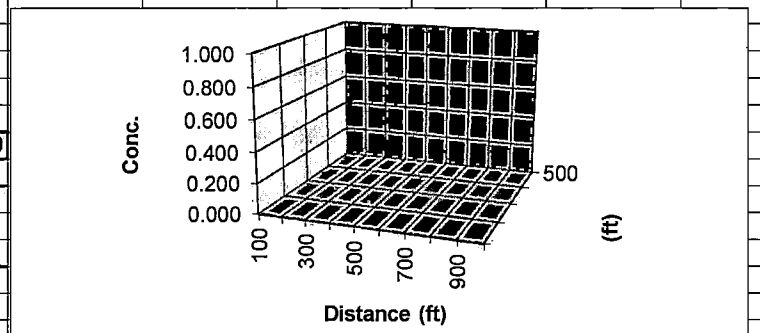
Hydraulic Cond (ft/day)	Hydraulic Gradient (ft/ft)	Porosity (dec. frac.)	Soil Bulk Density (g/cm^3)	KOC	Frac. Org. Carb.	Retardation (R)	V (=K*i/n*R) (ft/day)
3.72E+00	0.0043	0.25	1.8	550000	5.00E-03	19801	3.2314E-06

	y(ft)	z(ft)	Time (days)
	1000	0	0	10950

Projected Conc. at		1000	0	0
at	10950	days		
0.000	mg/l			

	AREAL MODEL	CALCULATION DOMAIN
	Length (ft)	1000
	Width (ft)	500

PA DEPARTMENT
OF ENVIRONMENTAL PROTECTION
QUICK_DOMENICO.XLS
SPREADSHEET APPLICATION OF
"AN ANALYTICAL MODEL FOR
MULTIDIMENSIONAL TRANSPORT OF A
DECAYING CONTAMINANT SPECIES"
P.A. Domenico (1987)
Modified to Include Retardation



	100	200	300	400	500	600	700	800	900	1000
500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

ADVECTIVE TRANSPORT WITH THREE DIMENSIONAL DISPERSION AND 1ST ORDER DECAY and RETARDATION

Project:	Frankford and Darrah Site						
Date:	4/2/2014	Prepared by:	John Thatcher				
		Contaminant:	Benzo(g,h,i)perylene				
	X						
SOURCE CONC (MG/L)	DISTANCE TO LOCATION OF CONCERN (ft)	Ax (ft)	Ay (ft)	Az (ft) >=.001	LAMBDA day-1	SOURCE WIDTH (ft)	SOURCE THICKNESS (ft)
0.00673	1000	100	10	0.001	0.00052	20	20

Hydraulic Cond (ft/day)	Hydraulic Gradient (ft/ft)	Porosity (dec. frac.)	Soil Bulk Density (g/cm^3)	KOC	Frac. Org. Carb.	Retardation (R)	V (=K*i/n*R) (ft/day)
3.72E+00	0.0043	0.25	1.8	2800000	5.00E-03	100801	6.3476E-07

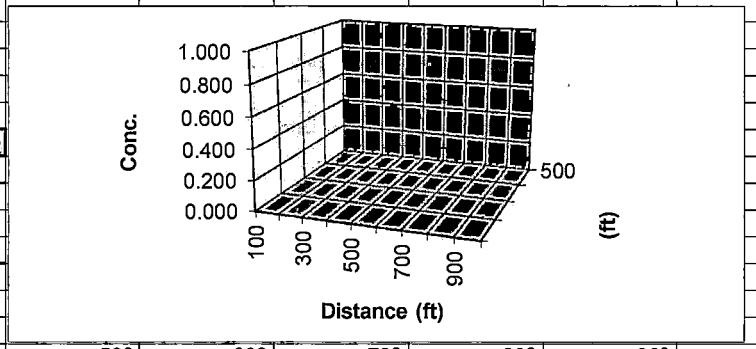
	y(ft)	z(ft)	Time (days)
1000	0	0	10950

Projected Conc. at	1000	0	0
at 10950 days			
0.000 mg/l			

AREAL MODEL	CALCULATION DOMAIN
Length (ft)	1000
Width (ft)	500

	100	200	300	400	500	600	700	800	900	1000
500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

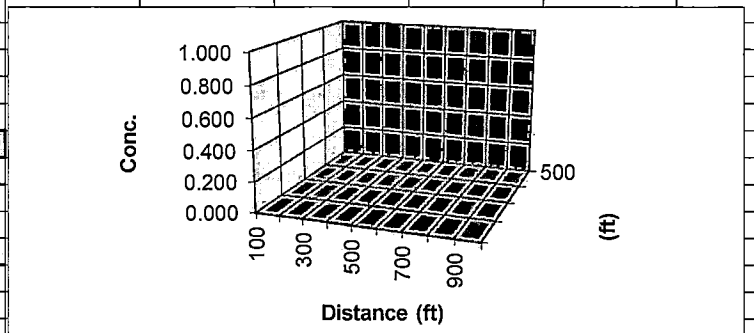
PA DEPARTMENT
OF ENVIRONMENTAL PROTECTION
QUICK_DOMENICO.XLS
SPREADSHEET APPLICATION OF
"AN ANALYTICAL MODEL FOR
MULTIDIMENSIONAL TRANSPORT OF A
DECAYING CONTAMINANT SPECIES"
P.A. Domenico (1987)
Modified to Include Retardation



ADVECTIVE TRANSPORT WITH THREE DIMENSIONAL DISPERSION AND 1ST ORDER DECAY and RETARDATION

Project:	Frankford and Darrah Site									
Date:	4/2/2014	Prepared by:	John Thatcher							
		Contaminant:	Benzo(k)fluoranthene							
	X									
SOURCE CONC (MG/L)	DISTANCE TO LOCATION OF CONCERN (ft)	Ax (ft)	Ay (ft)	Az (ft) >=.001	LAMBDA day-1	SOURCE WIDTH (ft)	SOURCE THICKNESS (ft)			
0.0118	1000	100	10	0.001	0.000016	20	20			
Hydraulic Cond (ft/day)	Hydraulic Gradient (ft/ft)	Porosity (dec. frac.)	Soil Bulk Density (g/cm^3)	KOC	Frac. Org. Carb.	Retard-ation (R)	V (=K*i/n*R) (ft/day)			
3.72E+00	0.0043	0.25	1.8	4400000	5.00E-03	158401	4.0394E-07			
	y(ft)	z(ft)	Time (days)							
1000	0	0	10950							
Projected Conc. at		1000	0	0						
at	10950	days								
0.000	mg/l									
	AREAL MODEL	CALCULATION DOMAIN								
	Length (ft)	1000								
	Width (ft)	500								
	100	200	300	400	500	600	700	800	900	1000
500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

PA DEPARTMENT
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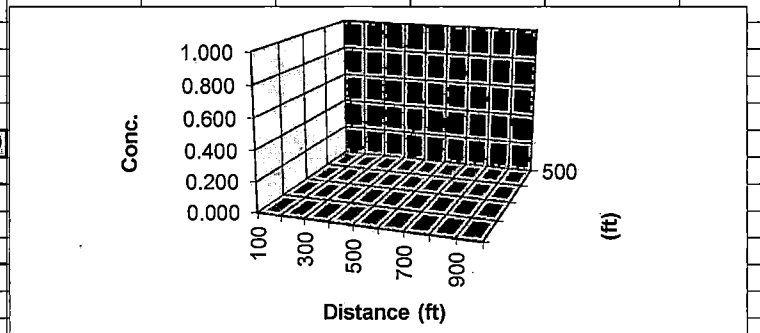


ADVECTIVE TRANSPORT WITH THREE DIMENSIONAL DISPERSION AND 1ST ORDER DECAY and RETARDATION

Project:	Frankford and Darrah Site							
Date:	4/2/2014	Prepared by:	John Thatcher					
		Contaminant:	Chrysene					
	X							
SOURCE CONC (MG/L)	DISTANCE TO LOCATION OF CONCERN (ft)	Ax (ft)	Ay (ft)	Az (ft) >=.001	LAMBDA day-1	SOURCE WIDTH (ft)	SOURCE THICKNESS (ft)	
0.00296	1000	100	10	0.001	0.000345	20	20	
Hydraulic Cond (ft/day)	Hydraulic Gradient (ft/ft)	Porosity (dec. frac.)	Soil Bulk Density (g/cm^3)	KOC	Frac. Org. Carb.	Retardation (R)	V (=K*i/n*R) (ft/day)	
3.72E+00	0.0043	0.25	1.8	490000	5.00E-03	17641	3.627E-06	
	y(ft)	z(ft)	Time (days)					
1000	0	0	10950					
Projected Conc. at		1000	0	0				
at	10950 days							
0.000 mg/l								
	AREAL MODEL	CALCULATION DOMAIN						
	Length (ft)	1000						
	Width (ft)	500						

	100	200	300	400	500	600	700	800	900	1000
500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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ADVECTIVE TRANSPORT WITH THREE DIMENSIONAL DISPERSION AND 1ST ORDER DECAY and RETARDATION

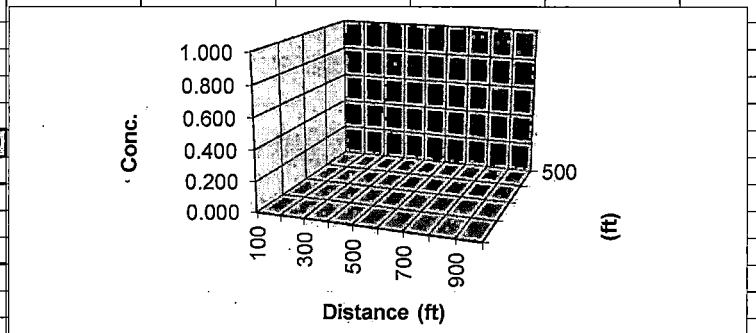
Project:	Frankford and Darrah Site						
Date:	4/2/2014	Prepared by:	John Thatcher				
		Contaminant:	Dibenzo(a,h)anthracene				
	X						
SOURCE CONC (MG/L)	DISTANCE TO LOCATION OF CONCERN (ft)	Ax (ft)	Ay (ft)	Az (ft) >=.001	LAMBDA day-1	SOURCE WIDTH (ft)	SOURCE THICKNESS (ft)
0.00119	1000	100	10	0.001	0.000356	20	20

Hydraulic Cond (ft/day)	Hydraulic Gradient (ft/ft)	Porosity (dec. frac.)	Soil Bulk Density (g/cm³)	KOC	Frac. Org. Carb.	Retardation (R)	V (=K*i/n*R) (ft/day)
3.72E+00	0.0043	0.25	1.8	1800000	5.00E-03	64801	9.8739E-07

	y(ft)	z(ft)	Time (days)
	1000	0	0	10950

Projected Conc. at	1000	0	0
at	10950	days	
0.000	mg/l		

AREAL MODEL CALCULATION DOMAIN	
Length (ft)	1000
Width (ft)	500



	100	200	300	400	500	600	700	800	900	1000
500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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ADVECTIVE TRANSPORT WITH THREE DIMENSIONAL DISPERSION AND 1ST ORDER DECAY and RETARDATION

Project:	Frankford and Darrah Site						
Date:	4/2/2014	Prepared by:	John Thatcher				
		Contaminant:	Indeno(1,2,3-cd)pyrene				
	X						
SOURCE CONC (MG/L)	DISTANCE TO LOCATION OF CONCERN (ft)	Ax (ft)	Ay (ft)	Az (ft) >=.001	LAMBDA day-1	SOURCE WIDTH (ft)	SOURCE THICKNESS (ft)
0.00567	1000	100	10	0.001	0.000465	20	20

Hydraulic Cond (ft/day)	Hydraulic Gradient (ft/ft)	Porosity (dec. frac.)	Soil Bulk Density (g/cm^3)	KOC	Frac. Org. Carb.	Retard-ation (R)	V (=K*i/n*R) (ft/day)
3.72E+00	0.0043	0.25	1.8	31000000	5.00E-03	1116001	5.7333E-08

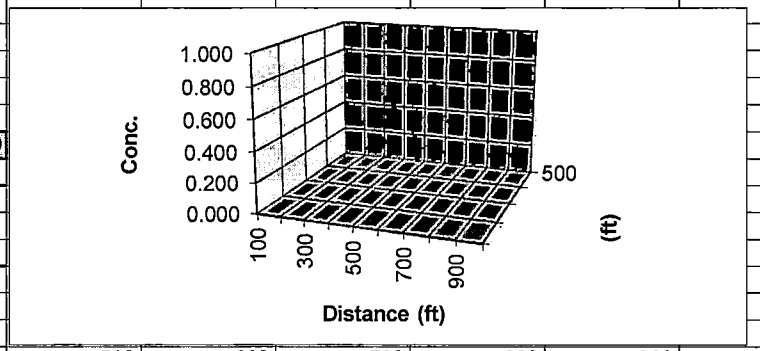
	y(ft)	z(ft)	Time (days)
1000	0	0	10950

Projected Conc. at	1000	0	0
at	10950	days	
0.000	mg/l		

	AREAL MODEL	CALCULATION DOMAIN
	Length (ft)	1000
	Width (ft)	500

	100	200	300	400	500	600	700	800	900	1000
500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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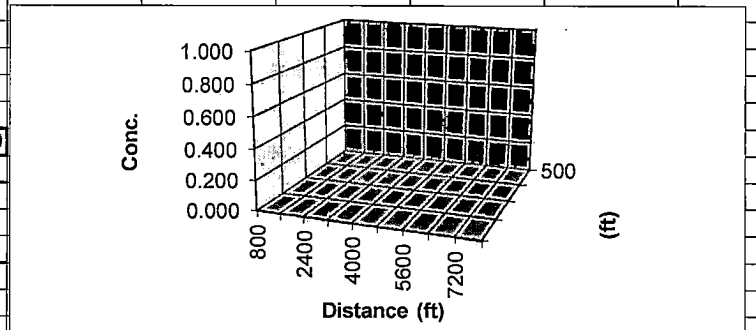


ADVECTIVE TRANSPORT WITH THREE DIMENSIONAL DISPERSION AND 1ST ORDER DECAY and RETARDATION

Project:	Frankford and Darrah Site							
Date:	4/2/2014	Prepared by:	John Thatcher					
		Contaminant:	Benzo(a)anthracene					
	X							
SOURCE CONC (MG/L)	DISTANCE TO LOCATION OF CONCERN (ft)	Ax (ft)	Ay (ft)	Az (ft) >=.001	LAMBDA day-1	SOURCE WIDTH (ft)	SOURCE THICKNESS (ft)	
0.00112	8000	800	80	0.001	0.00052	20	20	
Hydraulic Cond (ft/day)	Hydraulic Gradient (ft/ft)	Porosity (dec. frac.)	Soil Bulk Density (g/cm^3)	KOC	Frac. Org. Carb.	Retard-ation (R)	V (=K*i/n*R) (ft/day)	
3.72E+00	0.0043	0.25	1.8	350000	5.00E-03	12601	5.0777E-06	
	y(ft)	z(ft)	Time (days)					
8000	0	0	10950					
Projected Conc. at		8000	0	0				
at	10950	days						
0.000	mg/l							
	AREAL MODEL	CALCULATION DOMAIN						
	Length (ft)	8000						
	Width (ft)	500						

	800	1600	2400	3200	4000	4800	5600	6400	7200	8000
500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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P.A. Domenico (1987)
Modified to Include Retardation



ADVECTIVE TRANSPORT WITH THREE DIMENSIONAL DISPERSION AND 1ST ORDER DECAY and RETARDATION

Project:	Frankford and Darrah Site						
Date:	4/2/2014	Prepared by:	John Thatcher				
		Contaminant:	Benzo(a)pyrene				
	X						
SOURCE CONC (MG/L)	DISTANCE TO LOCATION OF CONCERN (ft)	Ax (ft)	Ay (ft)	Az (ft) >=.001	LAMBDA day-1	SOURCE WIDTH (ft)	SOURCE THICKNESS (ft)
0.00452	8000	800	80	0.001	0.00066	20	20

Hydraulic Cond (ft/day)	Hydraulic Gradient (ft/ft)	Porosity (dec. frac.)	Soil Bulk Density (g/cm^3)	KOC	Frac. Org. Carb.	Retard-ation (R)	V (=K*i/n*R) (ft/day)
3.72E+00	0.0043	0.25	1.8	910000	5.00E-03	32761	1.9531E-06

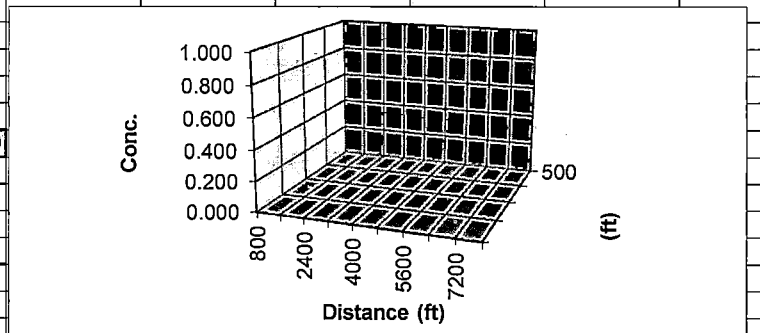
	y(ft)	z(ft)	Time (days)
8000	0	0	10950

Projected Conc. at	8000	0	0
at 10950 days			
0.000 mg/l			

AREAL MODEL CALCULATION DOMAIN	
Length (ft)	8000
Width (ft)	500

	800	1600	2400	3200	4000	4800	5600	6400	7200	8000
500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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ADVECTIVE TRANSPORT WITH THREE DIMENSIONAL DISPERSION AND 1ST ORDER DECAY and RETARDATION

Project:	Frankford and Darrah Site		
Date:	4/2/2014	Prepared by:	John Thatcher
		Contaminant:	Benzo(b)fluoranthene

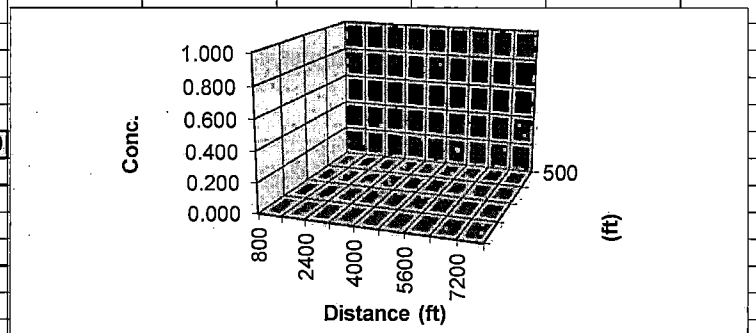
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	X						
SOURCE CONC (MG/L)	DISTANCE TO LOCATION OF CONCERN (ft)	Ax (ft)	Ay (ft)	Az (ft)	LAMBDA day-1	SOURCE WIDTH (ft)	SOURCE THICKNESS (ft)
0.0092	8000	800	80	0.001	0.00058	20	20

Hydraulic Cond (ft/day)	Hydraulic Gradient (ft/ft)	Porosity (dec. frac.)	Soil Bulk Density (g/cm^3)	KOC	Frac. Org. Carb.	Retardation (R)	V (=K*i/n*R) (ft/day)
3.72E+00	0.0043	0.25	1.8	550000	5.00E-03	19801	3.2314E-06

	y(ft)	z(ft)	Time (days)
	8000	0	0	10950

Projected Conc. at		8000	0	0
at	10950	days		
0.000	mg/l			



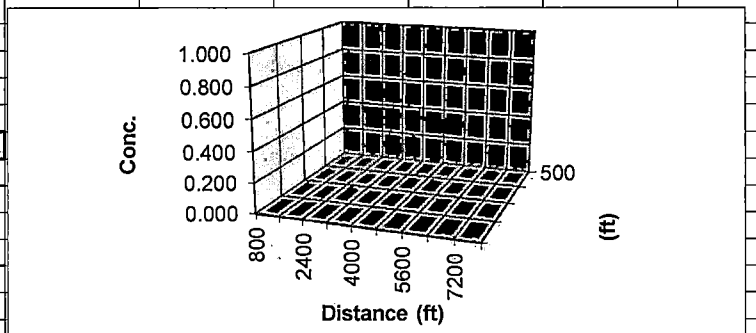
AREAL MODEL CALCULATION DOMAIN
Length (ft) 8000
Width (ft) 500

	800	1600	2400	3200	4000	4800	5600	6400	7200	8000
500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

ADVECTIVE TRANSPORT WITH THREE DIMENSIONAL DISPERSION AND 1ST ORDER DECAY and RETARDATION

Project:	Frankford and Darrah Site									
Date:	4/2/2014	Prepared by:	John Thatcher							
		Contaminant:	Benzo(g,h,i)perylene							
	X									
SOURCE CONC (MG/L)	DISTANCE TO LOCATION OF CONCERN (ft)	Ax (ft)	Ay (ft)	Az (ft) >=.001	LAMBDA day-1	SOURCE WIDTH (ft)	SOURCE THICKNESS (ft)			
0.00673	8000	800	80	0.001	0.00052	20	20			
Hydraulic Cond (ft/day)	Hydraulic Gradient (ft/ft)	Porosity (dec. frac.)	Soil Bulk Density (g/cm^3)	KOC	Frac. Org. Carb.	Retard-ation (R)	V (=K*i/n*R) (ft/day)			
3.72E+00	0.0043	0.25	1.8	2800000	5.00E-03	100801	6.3476E-07			
	y(ft)	z(ft)	Time (days)							
8000	0	0	10950							
Projected Conc. at		8000	0	0						
at	10950	days								
0.000	mg/l									
	AREAL MODEL	CALCULATION DOMAIN								
	Length (ft)	8000								
	Width (ft)	500								

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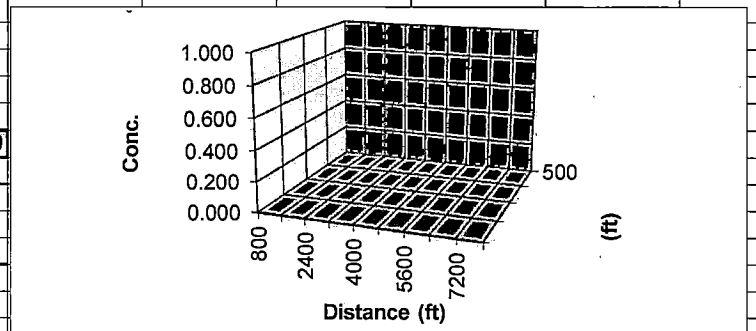


	800	1600	2400	3200	4000	4800	5600	6400	7200	8000
500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

ADVECTIVE TRANSPORT WITH THREE DIMENSIONAL DISPERSION AND 1ST ORDER DECAY and RETARDATION

Project:	Frankford and Darrah Site							
Date:	4/2/2014	Prepared by:	John Thatcher					
		Contaminant:	Benzo(k)fluoranthene					
	X							
SOURCE CONC (MG/L)	DISTANCE TO LOCATION OF CONCERN (ft)	Ax (ft)	Ay (ft)	Az (ft) >=.001	LAMBDA day-1	SOURCE WIDTH (ft)	SOURCE THICKNESS (ft)	
0.0118	8000	800	80	0.001	0.000016	20	20	
Hydraulic Cond (ft/day)	Hydraulic Gradient (ft/ft)	Porosity (dec. frac.)	Soil Bulk Density (g/cm^3)	KOC	Frac. Org. Carb.	Retard-ation (R)	V (=K*i/n*R) (ft/day)	
3.72E+00	0.0043	0.25	1.8	4400000	5.00E-03	158401	4.0394E-07	
	y(ft)	z(ft)	Time (days)					
8000	0	0	10950					
Projected Conc. at		8000	0	0				
at	10950	days						
0.000	mg/l							

PA DEPARTMENT
OF ENVIRONMENTAL PROTECTION
QUICK_DOMENICO.XLS
SPREADSHEET APPLICATION OF
"AN ANALYTICAL MODEL FOR
MULTIDIMENSIONAL TRANSPORT OF A
DECAYING CONTAMINANT SPECIES"
P.A. Domenico (1987)
Modified to Include Retardation

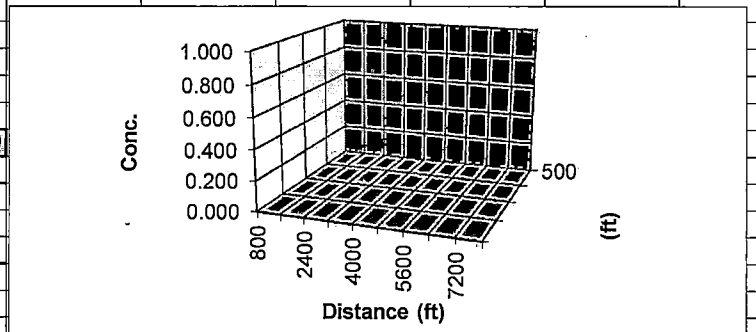


	AREAL MODEL	CALCULATION DOMAIN								
	Length (ft)	8000								
	Width (ft)	500								
	800	*1600*	*2400*	*3200*	*4000*	*4800*	*5600*	*6400*	*7200*	*8000*
500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

ADVECTIVE TRANSPORT WITH THREE DIMENSIONAL DISPERSION AND 1ST ORDER DECAY and RETARDATION

Project:	Frankford and Darrah Site							
Date:	4/2/2014	Prepared by:	John Thatcher					
		Contaminant:	Chrysene					
	X							
SOURCE CONC (MG/L)	DISTANCE TO LOCATION OF CONCERN (ft)	Ax (ft)	Ay (ft)	Az (ft) >=.001	LAMBDA day-1	SOURCE WIDTH (ft)	SOURCE THICKNESS (ft)	
0.00296	8000	800	80	0.001	0.000345	20	20	
Hydraulic Cond (ft/day)	Hydraulic Gradient (ft/ft)	Porosity (dec. frac.)	Soil Bulk Density (g/cm^3)	KOC	Frac. Org. Carb.	Retard-ation (R)	V (=K*i/n*R) (ft/day)	
3.72E+00	0.0043	0.25	1.8	490000	5.00E-03	17641	3.627E-06	
	y(ft)	z(ft)	Time (days)					
8000	0	0	10950					
Projected Conc. at		8000	0	0				
at	10950	days						
0.000	mg/l							

PA DEPARTMENT
OF ENVIRONMENTAL PROTECTION
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DECAYING CONTAMINANT SPECIES"
P.A. Domenico (1987)
Modified to Include Retardation

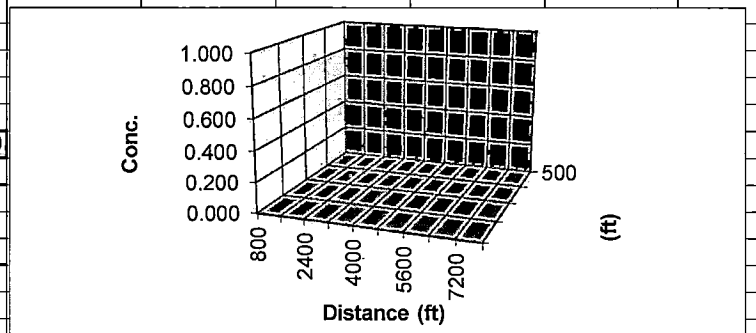


	AREAL MODEL	CALCULATION DOMAIN								
	Length (ft)	8000								
	Width (ft)	500								
	800	1600	2400	3200	4000	4800	5600	6400	7200	8000
500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

ADVECTIVE TRANSPORT WITH THREE DIMENSIONAL DISPERSION AND 1ST ORDER DECAY and RETARDATION

Project:	Frankford and Darrah Site									
Date:	4/2/2014	Prepared by:	John Thatcher							
		Contaminant:	Dibenzo(a,h)anthracene							
	X									
SOURCE CONC (MG/L)	DISTANCE TO LOCATION OF CONCERN (ft)	Ax (ft)	Ay (ft)	Az (ft) >=.001	LAMBDA day-1	SOURCE WIDTH (ft)	SOURCE THICKNESS (ft)			
0.00119	8000	800	80	0.001	0.000356	20	20			
Hydraulic Cond (ft/day)	Hydraulic Gradient (ft/ft)	Porosity (dec. frac.)	Soil Bulk Density (g/cm^3)	KOC	Frac. Org. Carb.	Retard-ation (R)	V (=K*i/n*R) (ft/day)			
3.72E+00	0.0043	0.25	1.8	1800000	5.00E-03	64801	9.8739E-07			
	y(ft)	z(ft)	Time (days)							
8000	0	0	10950							
Projected Conc. at		8000	0	0						
at	10950	days								
0.000	mg/l									
	AREAL MODEL	CALCULATION DOMAIN								
	Length (ft)	8000								
	Width (ft)	500								
	800	*1600*	*2400*	*3200*	*4000*	*4800*	*5600*	*6400*	*7200*	*8000*
500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

PA DEPARTMENT
OF ENVIRONMENTAL PROTECTION
QUICK_DOMENICO.XLS
SPREADSHEET APPLICATION OF
"AN ANALYTICAL MODEL FOR
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P.A. Domenico (1987)
Modified to Include Retardation



ADVECTIVE TRANSPORT WITH THREE DIMENSIONAL DISPERSION AND 1ST ORDER DECAY and RETARDATION

Project:	Frankford and Darrah Site						
Date:	4/2/2014	Prepared by:	John Thatcher				
		Contaminant:	Indeno(1,2,3-cd)pyrene				
	X						
SOURCE CONC (MG/L)	DISTANCE TO LOCATION OF CONCERN (ft)	Ax (ft)	Ay (ft)	Az (ft) >=.001	LAMBDA day-1	SOURCE WIDTH (ft)	SOURCE THICKNESS (ft)
0.00567	8000	800	80	0.001	0.000465	20	20

Hydraulic Cond (ft/day)	Hydraulic Gradient (ft/ft)	Porosity (dec. frac.)	Soil Bulk Density (g/cm^3)	KOC	Frac. Org. Carb.	Retardation (R)	V (=K*i/n*R) (ft/day)
3.72E+00	0.0043	0.25	1.8	31000000	5.00E-03	1116001	5.7333E-08

	y(ft)	z(ft)	Time (days)
8000	0	0	10950

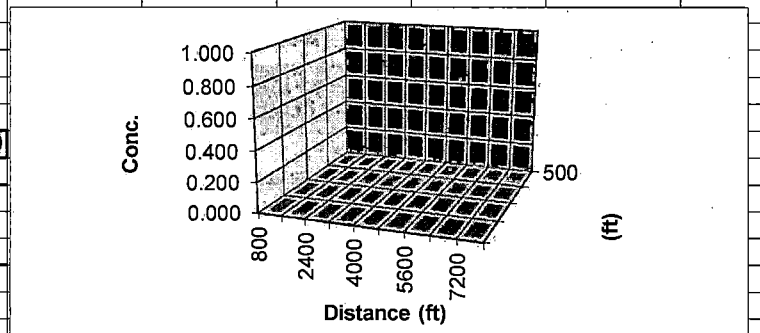
Projected Conc. at	8000	0	0
at 10950 days			
0.000 mg/l			

AREAL MODEL CALCULATION DOMAIN

Length (ft) 8000

Width (ft) 500

PA DEPARTMENT
OF ENVIRONMENTAL PROTECTION
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P.A. Domenico (1987)
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	800	1600	2400	3200	4000	4800	5600	6400	7200	8000
500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

BIOCHLOR Natural Attenuation Decision Support System

Version 2.2
Excel 2000

Frankford + Darrah
Philadelphia, PA
Run Name

Data Input Instructions:
115 → 1. Enter value directly....or
↑ or 2. Calculate by filling in gray
0.02 cells. Press Enter, then (C)
(To restore formulas, hit "Restore Formulas" button)
Variable* → Data used directly in model.

Test if Biotransformation is Occurring → Natural Attenuation

TYPE OF CHLORINATED SOLVENT: Ethenes ◉ Ethanes ○

1. ADVECTION

Seepage Velocity*	Vs	23.1	(ft/yr)
or		↑	
Hydraulic Conductivity	K	1.3E-03	(cm/sec)
Hydraulic Gradient	i	0.0043	(ft/ft)
Effective Porosity	n	0.25	(-)

2. DISPERSION

Alpha x*	800	(ft)
(Alpha y) / (Alpha x)*	0.1	(-)
(Alpha z) / (Alpha x)*	1.E-07	(-)

Calc.

3. ADSORPTION

Retardation Factor* → R
or

Soil Bulk Density, rho	1.7	(kg/L)		
FractionOrganicCarbon, foc	5.0E-3	(-)		
Partition Coefficient	Koc			
PCE	426	(L/kg)	15.48	(-)
TCE	130	(L/kg)	5.42	(-)
DCE	125	(L/kg)	5.25	(-)
VC	30	(L/kg)	2.01	(-)
ETH	302	(L/kg)	11.27	(-)
Common R (used in model)* =			**5.42**	

4. BIOTRANSFORMATION -1st Order Decay Coefficient*

Zone 1	λ (1/yr)	half-life (yrs)	Yield
PCE → TCE	0.070		0.79
TCE → DCE	0.050		0.74
DCE → VC	0.180		0.64
VC → ETH	0.120		0.45

Zone 2	λ (1/yr)	half-life (yrs)
PCE → TCE	0.070	
TCE → DCE	0.050	
DCE → VC	0.180	
VC → ETH	0.120	

λ HELP

5. GENERAL

Simulation Time*	30	(yr)	L →
Modeled Area Width*	500	(ft)	W ↓
Modeled Area Length*	700	(ft)	
Zone 1 Length*	700	(ft)	
Zone 2 Length*	0	(ft)	Zone 2= L - Zone 1

6. SOURCE DATA TYPE: Continuous Single Planar

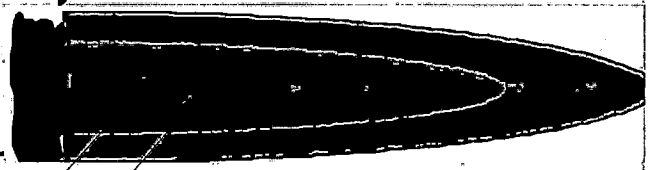
Source Options

Source Thickness in Sat. Zone* 20 (ft)

Width* (ft) Y1: 20

Conc. (mg/L)*	C1	k_s* (1/yr)
PCE	.064	0
TCE	.005	0
DCE	.018	0
VC	.003	0
ETH	0.001	0

Vertical Plane Source: Determine Source Well Location and Input Solvent Concentrations



View of Plume Looking Down

Observed Centerline Conc. at Monitoring Wells

7. FIELD DATA FOR COMPARISON

PCE Conc. (mg/L)	.064	.001									
TCE Conc. (mg/L)	.005	.001									
DCE Conc. (mg/L)	.018	.001									
VC Conc. (mg/L)	0.0	.001									
ETH Conc. (mg/L)	0.0	.001									
Distance from Source (ft)	0	110									
Date Data Collected	2008										

8. CHOOSE TYPE OF OUTPUT TO SEE:

RUN CENTERLINE | RUN ARRAY | *Help* | Restore | RESET | *SEE* | Paste

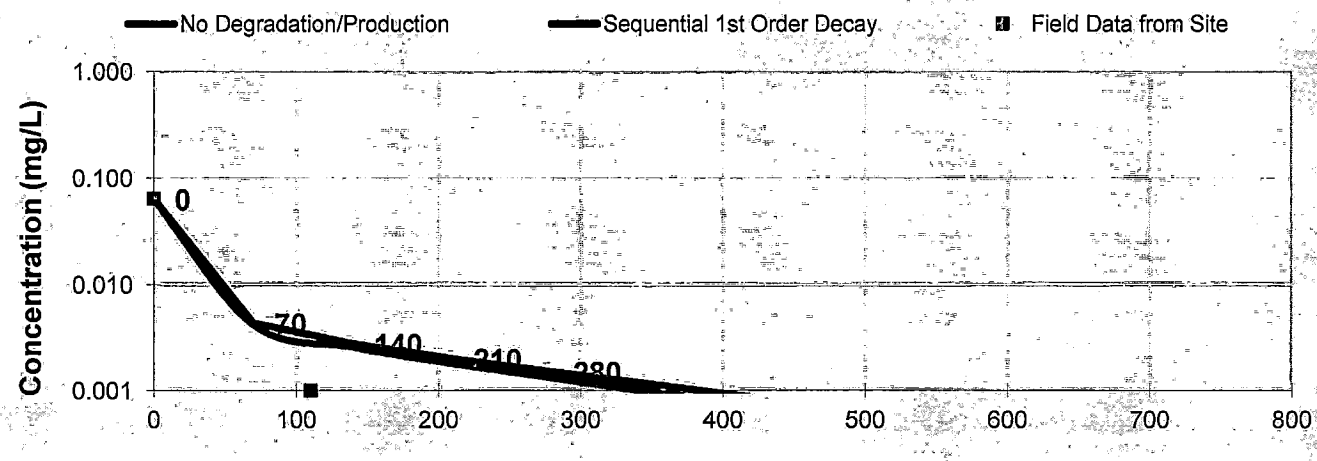
DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

Distance from Source (ft)

PCE	0	70	140	210	280	350	420	490	560	630	700
No Degradation	0.063	0.004	0.003	0.002	0.002	0.001	0.001	0.001	0.001	0.000	0.000
Biotransformation	0.0635	0.004	0.003	0.002	0.001	0.001	0.001	0.001	0.000	0.000	0.000

Monitoring Well Locations (ft)

	0	110									
Field Data from Site	0.064	0.001									



Distance From Source (ft.)

See PCE

See TCE

See DCE

See VC

See ETH

Prepare Animation

Time:

30.0 Years

Log ⟺ Linear

Return to Input

To All

To Array

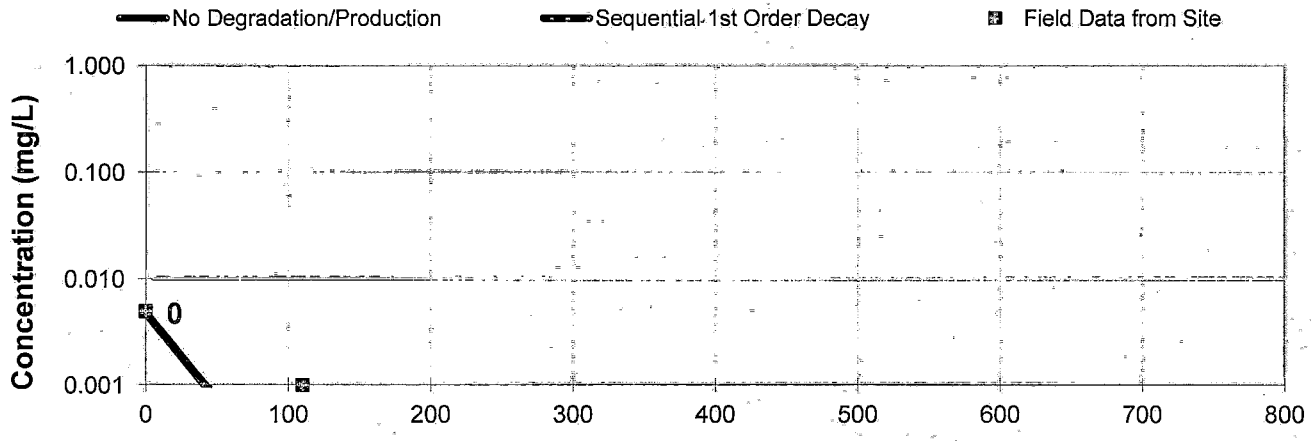
DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

Distance from Source (ft)

TCE	0	70	140	210	280	350	420	490	560	630	700
No Degradation	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Biotransformation	0.0049	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Monitoring Well Locations (ft)

	0	110									
Field Data from Site	0.005	0.001									



See PCE

See TCE

See DCE

See VC

See ETH

Prepare Animation

Time:

30.0 Years

Log ⟺ Linear

Return to Input

To All

To Array

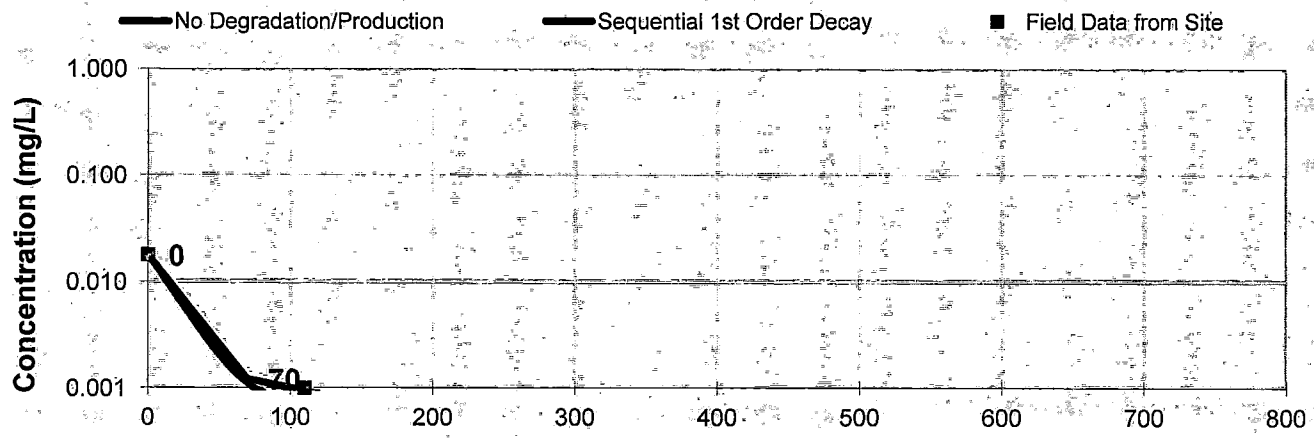
DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

Distance from Source (ft)

DCE	0	70	140	210	280	350	420	490	560	630	700
No Degradation	0.018	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Biotransformation	0.0178	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Monitoring Well Locations (ft)

	0	110									
Field Data from Site	0.018	0.001									



See PCE

See TCE

See DCE

See VC

See ETH

Prepare Animation

Time:

30.0 Years

Log ⟺ Linear

Return to Input

To All

To Array

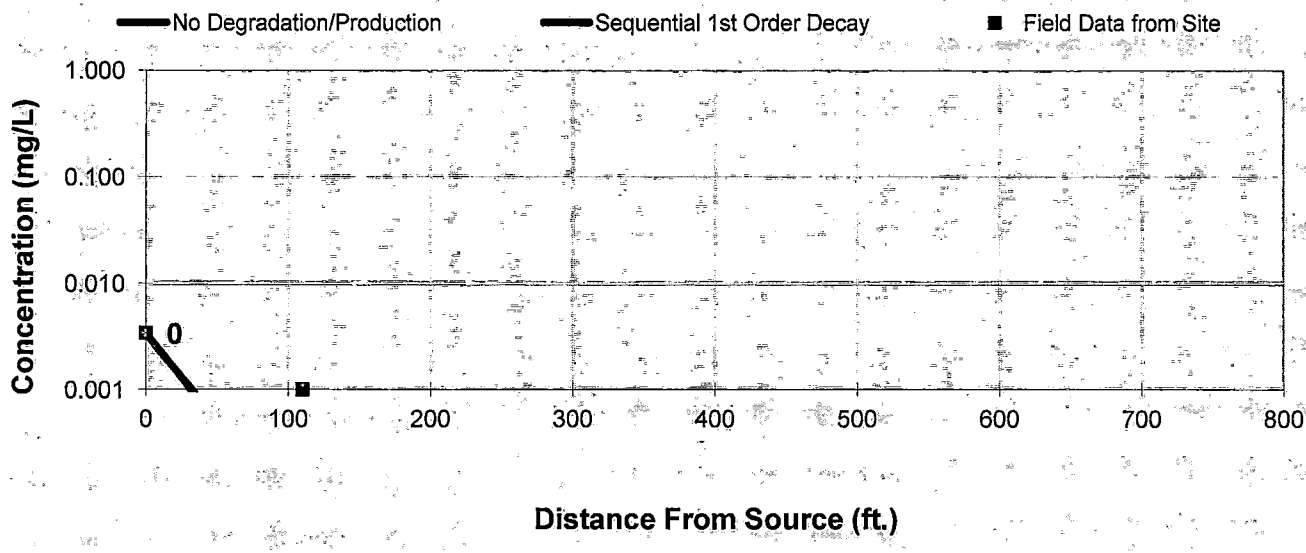
DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

Distance from Source (ft)

VC	0	70	140	210	280	350	420	490	560	630	700
No Degradation	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Biotransformation	0.0035	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Monitoring Well Locations (ft)

	0	110									
Field Data from Site	0.003	0.001									



See PCE

See TCE

See DCE

See VC

See ETH

Prepare Animation

Time:

30.0 Years

Log ⟺ Linear

Return to Input

To All

To Array

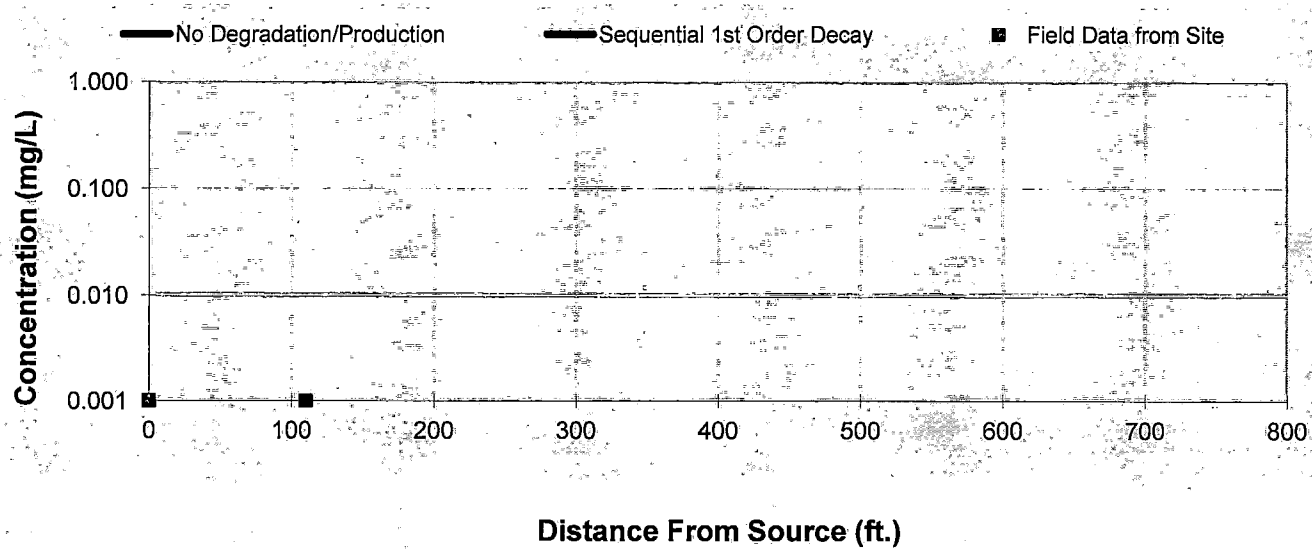
DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

Distance from Source (ft)

ETH	0	70	140	210	280	350	420	490	560	630	700
No Degradation	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Biotransformation	0.0010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Monitoring Well Locations (ft)

	0	110									
Field Data from Site	0.001	0.001									



See PCE

See TCE

See DCE

See VC

See ETH

Prepare Animation

Time:

30.0 Years

Log ⟺ Linear

Return to Input

To All

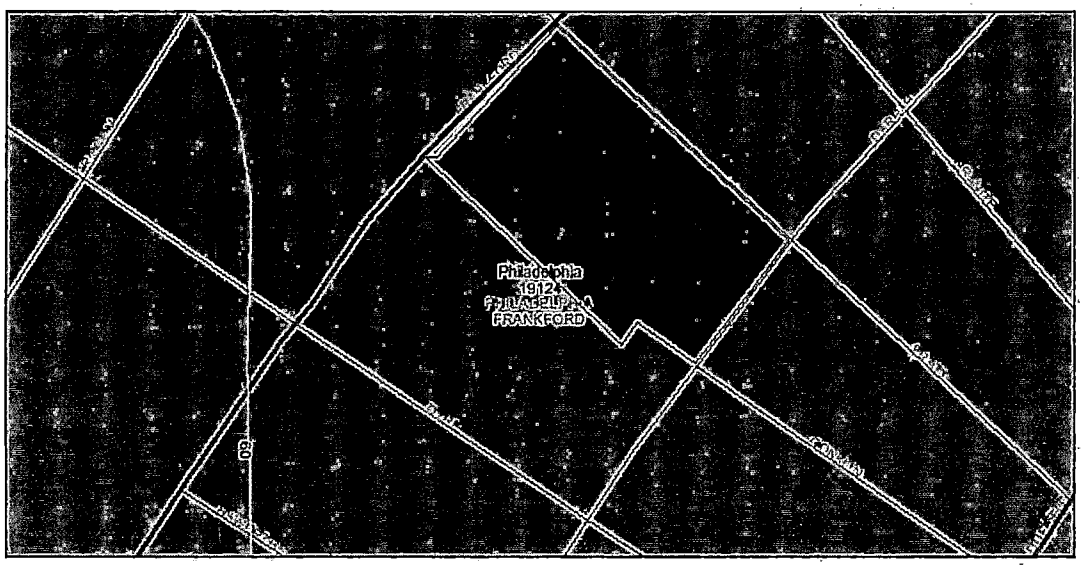
To Array

APPENDIX E

PNDI Receipt

PNDI Project Environmental Review Receipt
Project Search ID: 20090115174944
Project Name: 00L629-B
Date: 1/15/2009 4:33:27 PM

Project Location



Location Accuracy

Project locations are assumed to be both precise and accurate for the purposes of environmental review. The creator/owner of the Project Review Receipt is solely responsible for the project location and thus the correctness of the Project Review Receipt content.

0 Known Impacts

Under the Following Agencies' Jurisdiction:
None

Project Name: 00L629-B
On Behalf Of: Self
Project Search ID: 20090115174944
Date: 1/15/2009 4:33:13 PM
# of Potential Impacts: 0
Jurisdictional Agency:
Project Category: Development,Additions/maintenance to existing development facilities
Project Location
Decimal Degrees: 40.02194 N, -75.07876 W
Degrees Minutes Seconds: 40° 1' 19" N, 75° 4' 43.6" W
Lambert: 818276.95500109, 385928.69054428 ft
ZIP Code: 19124
County: Philadelphia
Township/Municipality: PHILADELPHIA
USGS 7.5 Minute Quadrangle ID: 283
Quadrangle Name: FRANKFORD
Project Area: 2.1 acres

 APPLICANT INITIALS: _____

PNDI Project Environmental Review Receipt

Project Search ID: 20090115174944
Project Name: 00L629-B
Date: 1/15/2009 4:33:27 PM

Pennsylvania Natural Diversity Inventory (PNDI) records do **NOT** indicate any known impacts on special concern species and resources within the project area. DEP requires a signed copy of this receipt with permit applications being submitted as indication that an environmental review has been conducted and completed. See DEP PNDI policy at www.naturalheritage.state.pa.us for more information.

Based on the information you provided, no further coordination is required by the Pennsylvania Game Commission, the Pennsylvania Fish and Boat Commission, or the Pennsylvania Department of Conservation and Natural Resources with regard to special concern species, natural communities, or outstanding geologic features. This response does not reflect potential agency concerns regarding impacts to other ecological resources, such as wetlands.

Based on the project-specific information you provided, no impacts to federally listed, proposed, or candidate species are anticipated. Therefore, no further consultation under the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.* is required with the U.S. Fish and Wildlife Service. Because no take of federally listed species is anticipated, none is authorized. For a list of species that could occur in your project area (but have not been documented in PNDI), please see the county lists of threatened, endangered, and candidate species. A field visit or survey may reveal previously undocumented populations of one or more threatened or endangered species with a project area. If it is determined that any federally listed species occur in your project area, the U.S. Fish and Wildlife Service requires that you initiate consultation to identify and resolve any conflicts. This response does not reflect potential Fish and Wildlife Service concerns under the Fish and Wildlife Coordination Act or other authorities.

These determinations were based on the project-specific information you provided, including the exact project location; the project type, description, and features; and any responses to questions that were generated during this search. If any of the information you provided does not accurately reflect this project, or if project plans change, DEP and the jurisdictional agencies require that another PNDI review be conducted.

This response represents the most up-to-date summary of the PNDI data files and is good for one(1) year from the date of this PNDI Project Environmental Review Receipt.

DISCLAIMER

The PNDI environmental review website is a preliminary environmental screening tool. It is not a substitute for information obtained from a field survey of the project area conducted by a biologist. Such surveys may reveal previously undocumented populations of species of special concern. In addition, the PNDI only contains information about species occurrences that have actually been reported to the Pennsylvania Natural Heritage Program.

TERMS OF USE

Upon signing into the PNDI environmental review website, and as a condition of using it, you agreed to certain terms of use. These are as follows:

The web site is intended solely for the purpose of screening projects for potential impacts on resources of special concern in accordance with the instructions provided on the web site. Use of the web site for any other purpose or in any other way is prohibited and subject to criminal prosecution under federal and state law, including but not limited to the following: Computer Fraud and Abuse Act of 1986, as amended, 18 U.S.C. Â§ 1030; Pennsylvania Crimes Code, Â§ 4911 (tampering with public records or information), Â§ 7611 (unlawful use of computer and other computer crimes), Â§ 7612 (disruption of service), Â§ 7613 (computer theft), Â§ 7614 (unlawful duplication), and Â§ 7615 (computer trespass).

 APPLICANT INITIALS: _____

PNDI Project Environmental Review Receipt

Project Search ID: 20090115174944
Project Name: 00L629-B
Date: 1/15/2009 4:33:27 PM

The PNHP reserves the right at any time and without notice to modify or suspend the web site and to terminate or restrict access to it.

The terms of use may be revised from time to time. By continuing to use the web site after changes to the terms have been posted, the user has agreed to accept such changes.

This review is based on the project information that was entered. The jurisdictional agencies and DEP require that the review be redone if the project area, location, or the type of project changes. If additional information on species of special concern becomes available, this review may be reconsidered by the jurisdictional agency.

PRIVACY and SECURITY

This web site operates on a Commonwealth of Pennsylvania computer system. It maintains a record of each environmental review search result as well as contact information for the project applicant. These records are maintained for internal tracking purposes. Information collected in this application will be made available only to the jurisdictional agencies and to the Department of Environmental Protection, except if required for law enforcement purposesâ€"see paragraph below.

This system is monitored to ensure proper operation, to verify the functioning of applicable security features, and for other like purposes. Anyone using this system consents to such monitoring and is advised that if such monitoring reveals evidence of possible criminal activity, system personnel may provide the evidence to law enforcement officials. See Terms of Use.
Print this Project Review Receipt using your Internet browser's print function and keep it as a record of your search.

Signature: _____

Date: _____

Project applicant on whose behalf this search was conducted:

APPLICANT

Contact Name: _____

Address: _____

City, State, Zip: _____

Phone: _____

Email: _____

PERSON CONDUCTING SEARCH (if not applicant)

Contact Name: _____

Address: _____

City, State, Zip: _____

Phone: _____

Email: _____

The following contact information is for the agencies involved in this Pennsylvania Natural Diversity Inventory environmental review process. Please read this entire receipt carefully as it contains instructions for how to contact these agencies for further review of this particular project.

APPLICANT INITIALS: _____

PNDI Project Environmental Review Receipt
Project Search ID: 20090115174944
Project Name: 00L629-B
Date: 1/15/2009 4:33:27 PM



 APPLICANT INITIALS: _____

APPENDIX F

Local Well Search Report

InfoMap

Technologies Incorporated

Environmental FirstSearch™ Report

Target Property:

5129 FRANKFORD AVE

PHILADELPHIA PA 19124

Job Number: 00L629-B

PREPARED FOR:

BL Companies

213 Market Street, 6th Fl.

Harrisburg, PA 17101

07-29-10

Tel: (610) 430-7530 *Fax: (610) 430-7535*

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Environmental FirstSearch
Search Summary Report

Target Site: 5129 FRANKFORD AVE
PHILADELPHIA PA 19124

FirstSearch Summary

Database	Sel	Updated	Radius	Site	1/8	1/4	1/2	1/2>	ZIP	TOTALS
State Wells	Y	06-01-09	1.00	0	1	0	2	14	44	61
Federal Wells	Y	02-21-08	1.00	0	1	0	2	10	0	13
- TOTALS -				0	2	0	4	24	44	74

Notice of Disclaimer

Due to the limitations, constraints, inaccuracies and incompleteness of government information and computer mapping data currently available to InfoMap Technologies, certain conventions have been utilized in preparing the locations of all federal, state and local agency sites residing in InfoMap Technologies's databases. All EPA sites are depicted by a rectangle approximating their location and size. The boundaries of the rectangles represent NPL and state landfill the eastern and western most longitudes; the northern and southern most latitudes. As such, the mapped areas may exceed the actual areas and do not represent the actual boundaries of these properties. All other sites are depicted by a point representing their approximate address location and make no attempt to represent the actual areas of the associated property. Actual boundaries and locations of individual properties can be found in the files residing at the agency responsible for such information.

Waiver of Liability

Although InfoMap Technologies uses its best efforts to research the actual location of each site, InfoMap Technologies does not and can not warrant the accuracy of these sites with regard to exact location and size. All authorized users of InfoMap Technologies's services proceeding are signifying an understanding of InfoMap Technologies's searching and mapping conventions, and agree to waive any and all liability claims associated with search and map results showing incomplete and or inaccurate site locations.

Environmental FirstSearch
Site Information Report

Request Date:	07-29-10	**Search Type:**	COORD
Requestor Name:	John Thatcher	**Job Number:**	00L629-B
Standard:	GIS		

Target Site: 5129 FRANKFORD AVE
PHILADELPHIA PA 19124

Demographics

Sites:	74	**Non-Geocoded:**	44	**Population:**	NA
Radon:	0.4 - 37.7 PCI/L				

Site Location

	Degrees (Decimal)	**Degrees (Min/Sec)**		**UTMs**
Longitude:	-75.078164	-75:4:41	**Easting:**	493329.935
Latitude:	40.022247	40:1:20	**Northing:**	4430019.267
			Zone:	18

Comment

Comment:

Additional Requests/Services

Adjacent ZIP Codes: 1 Mile(s)

ZIP Code	City Name	ST	Dist/Dir	Sel
19135	PHILADELPHIA	PA	0.33 NE	Y
19137	PHILADELPHIA	PA	0.89 SE	Y
19149	PHILADELPHIA	PA	0.33 NE	Y

Services:

	Requested?	Date
Sanborns	No	
Aerial Photographs	No	
Historical Topos	No	
City Directories	No	
Title Search/Env Liens	No	
Municipal Reports	No	
Online Topos	No	

Environmental FirstSearch
Sites Summary Report

Target Property: 5129 FRANKFORD AVE
PHILADELPHIA PA 19124

JOB: 00L629-B

TOTAL: 74 **GEOCODED:** 30 **NON GEOCODED:** 44 **SELECTED:** 0

Page No.	DB Type	Site Name/ID/Status	Address	Dist/Dir	Map ID
1	PWS	AQUARIUM BAR 30293/WELL	PHILADELPHIA PA	0.08 SE	2
2	FEDWELLS	PH 380 FW-PA-31569/USGS GROUNDWATER INV	PA	0.10 SE	29
3	FEDWELLS	PH 340 FW-PA-31583/USGS GROUNDWATER INV	PA	0.36 SW	23
4	PWS	QUAKER MAID DAIRIES 30542/WELL	PHILADELPHIA PA	0.38 SW	11
10	FEDWELLS	PH 339 FW-PA-31587/USGS GROUNDWATER INV	PA	0.40 SW	22
11	PWS	BALDWIN DAIRIES INC 30278/WELL	PHILADELPHIA PA	0.42 SW	3
12	FEDWELLS	PH 381 FW-PA-31590/USGS GROUNDWATER INV	PA	0.53 SW	30
13	PWS	AMERICAN ICE CO 30275/WELL	PHILADELPHIA PA	0.55 SW	1
14	PWS	WELL HEAD PROTECTION AREA NJ-WHPA-42925/COMMUNITY PWS	NJ	0.63 SE	14
15	FEDWELLS	PH 375 FW-PA-31544/USGS GROUNDWATER INV	PA	0.67 NW	26
16	PWS	REGAL THEATRE 30309/WELL	PHILADELPHIA PA	0.67 NW	12
17	PWS	WELL HEAD PROTECTION AREA NJ-WHPA-42939/COMMUNITY PWS	NJ	0.87 SE	17
18	FEDWELLS	PH 378 FW-PA-31616/USGS GROUNDWATER INV	PA	0.87 SW	27
19	FEDWELLS	PH 370 FW-PA-31619/USGS GROUNDWATER INV	PA	0.88 SE	25
20	PWS	GLOBE MFG CO 30249/WELL	PHILADELPHIA PA	0.88 SW	9
21	PWS	BLUE MAGIC INC 30246/WELL	PHILADELPHIA PA	0.89 SE	4
22	FEDWELLS	PH 336 FW-PA-31622/USGS GROUNDWATER INV	PA	0.93 SE	19
23	PWS	WELL HEAD PROTECTION AREA NJ-WHPA-42932/COMMUNITY PWS	NJ	0.93 SE	16
24	PWS	BLUMENTHAL BROS 30540/WELL	PHILADELPHIA PA	0.93 SE	6
26	FEDWELLS	PH 338 FW-PA-31626/USGS GROUNDWATER INV	PA	0.94 SE	21
27	FEDWELLS	PH 337 FW-PA-31625/USGS GROUNDWATER INV	PA	0.94 SE	20

Environmental FirstSearch
Sites Summary Report

Target Property: 5129 FRANKFORD AVE
PHILADELPHIA PA 19124

JOB: 00L629-B

TOTAL: 74 **GEOCODED:** 30 **NON GEOCODED:** 44 **SELECTED:** 0

Page No.	DB Type	Site Name/ID/Status	Address	Dist/Dir	Map ID
28	PWS	BLUMENTHAL BROS 30539/WELL	PHILADELPHIA PA	0.94 SE	5
30	FEDWELLS	PH 379 FW-PA-31621/USGS GROUNDWATER INV	PA	0.94 SW	28
31	PWS	BLUMENTHAL BROS 30538/WELL	PHILADELPHIA PA	0.95 SE	7
34	PWS	GREENWOOD CEMETERY 131966/WELL	PHILADELPHIA PA	0.95 SW	10
35	PWS	GLOBE DYE WORKS CO 30244/WELL	PHILADELPHIA PA	0.95 SW	8
36	FEDWELLS	PH 344 FW-PA-31628/USGS GROUNDWATER INV	PA	0.98 SW	24
37	PWS	WELL HEAD PROTECTION AREA NJ-WHPA-42931/COMMUNITY PWS	NJ	0.99 SE	15
38	PWS	WARD CHOCOLATE CO 30537/WELL	PHILADELPHIA PA	0.99 SW	13
47	FEDWELLS	PH 329 FW-PA-31629/USGS GROUNDWATER INV	PA	1.00 SE	18

Environmental FirstSearch
Sites Summary Report

Target Property: 5129 FRANKFORD AVE
PHILADELPHIA PA 19124

JOB: 00L629-B

TOTAL: 74 **GEOCODED:** 30 **NON GEOCODED:** 44 **SELECTED:** 0

Page No.	DB Type	Site Name/ID/Status	Address	Dist/Dir	Map ID
N/A	PWS	AMOCO 132062/WELL	PHILADELPHIA PA	NON GC	
N/A	PWS	AMOCO 132053/WELL	PHILADELPHIA PA	NON GC	
N/A	PWS	AMOCO 132054/WELL	PHILADELPHIA PA	NON GC	
N/A	PWS	AMOCO 132055/WELL	PHILADELPHIA PA	NON GC	
N/A	PWS	AMOCO 132056/WELL	PHILADELPHIA PA	NON GC	
N/A	PWS	AMOCO 132060/WELL	PHILADELPHIA PA	NON GC	
N/A	PWS	AMOCO 132064/WELL	PHILADELPHIA PA	NON GC	
N/A	PWS	US NAVAL BASE 132049/WELL	PHILADELPHIA PA	NON GC	
N/A	PWS	KURZ HASTINGS 132072/WELL	PHILADELPHIA PA	NON GC	
N/A	PWS	KURZ HASTINGS 132073/WELL	PHILADELPHIA PA	NON GC	
N/A	PWS	LAMB 132041/WELL	PHILADELPHIA PA	NON GC	
N/A	PWS	MEISSER F 132034/WELL	PHILADELPHIA PA	NON GC	
N/A	PWS	MERGENTINE CORP 132040/WELL	PHILADELPHIA PA	NON GC	
N/A	PWS	SUN OIL REFINING CO 132032/WELL	PHILADELPHIA PA	NON GC	
N/A	PWS	AMOCO 132074/WELL	PHILADELPHIA PA	NON GC	
N/A	PWS	US NAVAL BASE 132048/WELL	PHILADELPHIA PA	NON GC	
N/A	PWS	KEYSTONE CONCRETE 132045/WELL	PHILADELPHIA PA	NON GC	
N/A	PWS	US NAVAL BASE 132050/WELL	PHILADELPHIA PA	NON GC	
N/A	PWS	US NAVAL BASE 132051/WELL	PHILADELPHIA PA	NON GC	
N/A	PWS	US NAVAL BASE 132052/WELL	PHILADELPHIA PA	NON GC	

Environmental FirstSearch
Sites Summary Report

Target Property: 5129 FRANKFORD AVE
PHILADELPHIA PA 19124

JOB: 00L629-B

TOTAL: 74 **GEOCODED:** 30 **NON GEOCODED:** 44 **SELECTED:** 0

Page No.	DB Type	Site Name/ID/Status	Address	Dist/Dir	Map ID
N/A	PWS	US POST OFFICE 132036/WELL	PHILADELPHIA PA	NON GC	
N/A	PWS	US POST OFFICE 132037/WELL	PHILADELPHIA PA	NON GC	
N/A	PWS	US POST OFFICE 132038/WELL	PHILADELPHIA PA	NON GC	
N/A	PWS	US POST OFFICE 132039/WELL	PHILADELPHIA PA	NON GC	
N/A	PWS	TORRESDALE CNTRY CLB 132042/WELL	PHILADELPHIA PA	NON GC	
N/A	PWS	AMOCO 132058/WELL	PHILADELPHIA PA	NON GC	
N/A	PWS	AMOCO 132066/WELL	PHILADELPHIA PA	NON GC	
N/A	PWS	AMOCO 132069/WELL	PHILADELPHIA PA	NON GC	
N/A	PWS	AMOCO 132068/WELL	PHILADELPHIA PA	NON GC	
N/A	PWS	AMOCO 132067/WELL	PHILADELPHIA PA	NON GC	
N/A	PWS	AMOCO 132065/WELL	PHILADELPHIA PA	NON GC	
N/A	PWS	AMOCO 132063/WELL	PHILADELPHIA PA	NON GC	
N/A	PWS	AMOCO 132075/WELL	PHILADELPHIA PA	NON GC	
N/A	PWS	KURZ HASTINGS 132071/WELL	PHILADELPHIA PA	NON GC	
N/A	PWS	AMOCO 132059/WELL	PHILADELPHIA PA	NON GC	
N/A	PWS	KURZ HASTINGS 132070/WELL	PHILADELPHIA PA	NON GC	
N/A	PWS	AMOCO 132057/WELL	PHILADELPHIA PA	NON GC	
N/A	PWS	CALEDONIAN DYE WORKS 132043/WELL	PHILADELPHIA PA	NON GC	
N/A	PWS	ELLMER G 132033/WELL	PHILADELPHIA PA	NON GC	
N/A	PWS	GUARINO C 132046/WELL	PHILADELPHIA PA	NON GC	

Environmental FirstSearch
Sites Summary Report

Target Property: 5129 FRANKFORD AVE
PHILADELPHIA PA 19124

JOB: 00L629-B

TOTAL: 74 **GEOCODED:** 30 **NON GEOCODED:** 44 **SELECTED:** 0

Page No.	DB Type	Site Name/ID/Status	Address	Dist/Dir	Map ID
N/A	PWS	GUARINO C 132047/WELL	PHILADELPHIA PA	NON GC	
N/A	PWS	GULF GAS STATION 132035/WELL	PHILADELPHIA PA	NON GC	
N/A	PWS	WESTMORELAND CONDUIT 132044/WELL	PHILADELPHIA PA	NON GC	
N/A	PWS	AMOCO 132061/WELL	PHILADELPHIA PA	NON GC	

Environmental FirstSearch
Site Detail Report

Target Property: 5129 FRANKFORD AVE
PHILADELPHIA PA 19124

JOB: 00L629-B

STATE WELLS SITE

SEARCH ID: 2 **DIST/DIR:** 0.08 SE **MAP ID:** 2

NAME: AQUARIUM BAR
ADDRESS:
PHILADELPHIA PA
CONTACT:

REV: 6/1/09
ID1: 30293
ID2: PH 380
STATUS: WELL
PHONE:

WELL INFORMATION

SOURCE OF RECORD:	USGS - GWSI
QUAD NAME:	FRANKFORD
FORMATION NAME:	HORNBLENDE GNEISS
DRILLER:	PHILADELPHIA DRILLING CO.
DATE DRILLED:	1/25/1949
USE OF SITE:	UNUSED
WELL DEPTH:	80
DISCHARGE:	
STATIC LEVEL:	
TOP OF CASING:	0
BOTTOM OF CASING:	60
DIAMETER:	6
WATER USE:	UNUSED
REMARK:	

Environmental FirstSearch
Site Detail Report

Target Property: 5129 FRANKFORD AVE
PHILADELPHIA PA 19124

JOB: 00L629-B

FEDERAL WELLS SITE

SEARCH ID: 29 **DIST/DIR:** 0.10 SE **MAP ID:** 29

NAME: PH 380
ADDRESS:
PA
PHILADELPHIA PA
CONTACT:

REV: 2/21/08
ID1: FW-PA-31569
ID2: 400119075043601
STATUS: USGS GROUNDWATER INV
PHONE:

SITE INFORMATION

AGENCY:	US GEOLOGICAL SURVEY
SITE ID:	400119075043601
SITE NAME:	PH 380
SITE TYPE :	GROUND-WATER OTHER THAN SPRING
COUNTY :	PHILADELPHIA
COUNTRY :	US
LAND NET LOCATION DESC:	
LOCATION MAP:	FRANKFORD
LOCATION MAP SCALE:	24000
GAGE/LAND SURFACE ALTITUDE:	55.00
METHOD ALTITUDE DETERMINED:	M
ALTITUDE ACCURACY:	10
ALTITUDE DATUM:	NGVD29
HYDROLOGIC UNIT :	LOWER DELAWARE
TOPOGRAPHIC SETTING :	HILLSIDE (SLOPE)
DATE OF FIRST CONSTRUCTION:	01/25/1949
DATE SITE ESTABLISHED:	//
MEAN GREENWICH TIME OFFSET:	EST
LOCAL STANDARD TIME FLAG:	Y
TYPE OF GROUNDWATER SITE:	W
PRIMARY AQUIFER :	000HBLD
AQUIFER TYPE :	
WELL_DEPTH VA:	80.0
HOLE DEPTH:	
DEPTH DATA SOURCE:	
PROJECT NUMBER:	

Environmental FirstSearch
Site Detail Report

Target Property: 5129 FRANKFORD AVE
PHILADELPHIA PA 19124

JOB: 00L629-B

FEDERAL WELLS SITE

SEARCH ID: 23 **DIST/DIR:** 0.36 SW **MAP ID:** 23

NAME: PH 340
ADDRESS:
PA
PHILADELPHIA PA
CONTACT:

REV: 2/21/08
ID1: FW-PA-31583
ID2: 400101075044701
STATUS: USGS GROUNDWATER INV
PHONE:

SITE INFORMATION

AGENCY:	US GEOLOGICAL SURVEY
SITE ID:	400101075044701
SITE NAME:	PH 340
SITE TYPE :	GROUND-WATER OTHER THAN SPRING
COUNTY :	PHILADELPHIA
COUNTRY :	US
LAND NET LOCATION DESC:	
LOCATION MAP:	FRANKFORD
LOCATION MAP SCALE:	24000
GAGE/LAND SURFACE ALTITUDE:	60.00
METHOD ALTITUDE DETERMINED:	M
ALTITUDE ACCURACY:	5
ALTITUDE DATUM:	NGVD29
HYDROLOGIC UNIT :	LOWER DELAWARE
TOPOGRAPHIC SETTING :	HILLSIDE (SLOPE)
DATE OF FIRST CONSTRUCTION:	05/01/1928
DATE SITE ESTABLISHED:	//
MEAN GREENWICH TIME OFFSET:	EST
LOCAL STANDARD TIME FLAG:	Y
TYPE OF GROUNDWATER SITE:	W
PRIMARY AQUIFER :	000HBLD
AQUIFER TYPE :	
WELL_DEPTH VA:	77.0
HOLE DEPTH:	
DEPTH DATA SOURCE:	
PROJECT NUMBER:	

Environmental FirstSearch
Site Detail Report

Target Property: 5129 FRANKFORD AVE
PHILADELPHIA PA 19124

JOB: 00L629-B

STATE WELLS SITE

SEARCH ID: 11 **DIST/DIR:** 0.38 SW **MAP ID:** 11

NAME: QUAKER MAID DAIRIES
ADDRESS:
PHILADELPHIA PA
CONTACT:

REV: 6/1/09
ID1: 30542
ID2: PH 340
STATUS: WELL
PHONE:

WELL INFORMATION

SOURCE OF RECORD:	USGS - GWSI
QUAD NAME:	FRANKFORD
FORMATION NAME:	HORNBLENDE GNEISS
DRILLER:	JOHN RULON
DATE DRILLED:	5/1/1928
USE OF SITE:	DESTROYED
WELL DEPTH:	77
DISCHARGE:	
STATIC LEVEL:	
TOP OF CASING:	0
BOTTOM OF CASING:	
DIAMETER:	8
WATER USE:	UNUSED
REMARK:	

WATER QUALITY INFORMATION

DATE: 10/19/1953 **REMARK:** 28 CARBON DIOXIDE DISSOLVED (MG/L AS CO2)

DATE: 9/28/1953 **REMARK:** 77 DEPTH OF WELL, TOTAL (FEET)

DATE: 9/28/1953 **REMARK:** 26 DEPTH TO TOP OF SAMPLE INTERVAL (FEET BELOW LSD)

DATE: 9/28/1953 **REMARK:** 77 DEPTH TO BOTTOM OF SAMPLE INTERVAL (FEET BELOW LSD)

DATE: 10/19/1953 **REMARK:** 17 WATER TEMPERATURE, DEGREES CELSIUS

DATE: 10/19/1953 **REMARK:** 1028 AGENCY ANALYZING SAMPLE (CODE NUMBER)

DATE: 10/19/1953 **REMARK:** 30 FLOW RATE, YIELD OF WELL, (GALLONS/MINUTE)

DATE: 10/19/1953 **REMARK:** 30 FLOW RATE INSTANTANEOUS (GALLONS/MINUTE)

DATE: 10/19/1953 **REMARK:** 6.2 PH, WATER, WHOLE, FIELD, STANDARD UNITS

DATE: 9/28/1953 **REMARK:** 60 ELEVATION OF LAND SURFACE DATUM (LSD) (FEET NGVD)

DATE: 9/28/1953 **REMARK:** 21 ALKALINITY, WATER, WHOLE, TOTAL, FIXED ENDPOINT TITRATION, FIELD, MG/L AS CACO3

DATE: 10/19/1953 **REMARK:** 510 SPECIFIC CONDUCTANCE, US/CM 25 DEGREES CENTIGRADE

DATE: 9/28/1953 **REMARK:** 108 NITROGEN, NITRATE, DISSOLVED (MG/L AS NO3)

DATE: 9/28/1953 **REMARK:** 59 SULFATE DISSOLVED (MG/L AS SO4)

DATE: 9/28/1953 **REMARK:** 52 CHLORIDE DISSOLVED (MG/L AS CL)

DATE: 9/28/1953 **REMARK:** 31 SODIUM PLUS POTASSIUM DISSOLVED (MG/L AS NA)

- Continued on next page -

Target Property: 5129 FRANKFORD AVE
PHILADELPHIA PA 19124

JOB: 00L629-B

STATE WELLS SITE

SEARCH ID: 11 **DIST/DIR:** 0.38 SW **MAP ID:** 11

NAME: QUAKER MAID DAIRIES
ADDRESS:
PHILADELPHIA PA
CONTACT:

REV: 6/1/09
ID1: 30542
ID2: PH 340
STATUS: WELL
PHONE:

DATE: 9/28/1953 **REMARK:** 160 NONCARBONATE HARDNESS WATER WHOLE TOTAL, FIELD, (MG/L AS CA CO3)

DATE: 9/28/1953 **REMARK:** 176 HARDNESS TOTAL (MG/L AS CA03)

DATE: 9/28/1953 **REMARK:** 24.4 NITROGEN NITRATE DISSOLVED (MG/L AS N)

DATE: 10/19/1953 **REMARK:** 23 ALKALINITY, WATER, WHOLE, TOTAL, FIXED ENDPOINT TITRATION, FIELD, MG/L AS CACO3

DATE: 9/28/1953 **REMARK:** 25 BICARBONATE, WATER, WHOLE, FIXED ENDPOINT TITRATION, FIELD, MG/L AS HCO3

DATE: 10/19/1953 **REMARK:** 34 NITROGEN, NITRATE, DISSOLVED (MG/L AS NO3)

DATE: 9/28/1953 **REMARK:** 80 CARBON DIOXIDE DISSOLVED (MG/L AS CO2)

DATE: 9/28/1953 **REMARK:** 5.7 PH, WATER, WHOLE, FIELD, STANDARD UNITS

DATE: 9/28/1953 **REMARK:** 0 CARBONATE, WATER, WHOLE, FIXED ENDPOINT TITRATION, FIELD, MG/L AS CO3

DATE: 10/19/1953 **REMARK:** 77 DEPTH OF WELL, TOTAL (FEET)

DATE: 12/29/1953 **REMARK:** 162 HARDNESS TOTAL (MG/L AS CA03)

DATE: 12/29/1953 **REMARK:** 7.5 NITROGEN NITRATE DISSOLVED (MG/L AS N)

DATE: 12/29/1953 **REMARK:** 0 CARBONATE, WATER, WHOLE, FIXED ENDPOINT TITRATION, FIELD, MG/L AS CO3

DATE: 12/29/1953 **REMARK:** 24 BICARBONATE, WATER, WHOLE, FIXED ENDPOINT TITRATION, FIELD, MG/L AS HCO3

DATE: 12/29/1953 **REMARK:** 20 ALKALINITY, WATER, WHOLE, TOTAL, FIXED ENDPOINT TITRATION, FIELD, MG/L AS CACO3

DATE: 12/29/1953 **REMARK:** 1.9 CARBON DIOXIDE DISSOLVED (MG/L AS CO2)

DATE: 12/29/1953 **REMARK:** 7.3 PH, WATER, WHOLE, FIELD, STANDARD UNITS

DATE: 12/29/1953 **REMARK:** 505 SPECIFIC CONDUCTANCE, US/CM 25 DEGREES CENTIGRADE

DATE: 12/29/1953 **REMARK:** 30 FLOW RATE, YIELD OF WELL, (GALLONS/MINUTE)

DATE: 12/29/1953 **REMARK:** 16 WATER TEMPERATURE, DEGREES CELSIUS

DATE: 10/19/1953 **REMARK:** 55 SULFATE DISSOLVED (MG/L AS SO4)

DATE: 10/19/1953 **REMARK:** 26 DEPTH TO TOP OF SAMPLE INTERVAL (FEET BELOW LSD)

DATE: 10/19/1953 **REMARK:** 28 BICARBONATE, WATER, WHOLE, FIXED ENDPOINT TITRATION, FIELD, MG/L AS HCO3

DATE: 10/19/1953 **REMARK:** 60 ELEVATION OF LAND SURFACE DATUM (LSD) (FEET NGVD)

DATE: 8/31/1953 **REMARK:** 40 IRON DISSOLVED (UG/L AS FE)

DATE: 10/19/1953 **REMARK:** 150 IRON DISSOLVED (UG/L AS FE)

DATE: 9/28/1953 **REMARK:** 506 SPECIFIC CONDUCTANCE, US/CM 25 DEGREES CENTIGRADE

- Continued on next page -

Environmental FirstSearch
Site Detail Report

Target Property: 5129 FRANKFORD AVE
PHILADELPHIA PA 19124

JOB: 00L629-B

STATE WELLS SITE

SEARCH ID: 11 **DIST/DIR:** 0.38 SW **MAP ID:** 11

NAME: QUAKER MAID DAIRIES
ADDRESS:
PHILADELPHIA PA
CONTACT:

REV: 6/1/09
ID1: 30542
ID2: PH 340
STATUS: WELL
PHONE:

DATE: 10/19/1953 **REMARK:** 51 CHLORIDE DISSOLVED (MG/L AS CL)

DATE: 10/19/1953 **REMARK:** 7.1 SODIUM PLUS POTASSIUM DISSOLVED (MG/L AS NA)

DATE: 10/19/1953 **REMARK:** 140 NONCARBONATE HARDNESS WATER WHOLE TOTAL, FIELD, (MG/L AS CA CO3)

DATE: 10/19/1953 **REMARK:** 164 HARDNESS TOTAL (MG/L AS CA03)

DATE: 10/19/1953 **REMARK:** 7.7 NITROGEN NITRATE DISSOLVED (MG/L AS N)

DATE: 10/19/1953 **REMARK:** 0 CARBONATE, WATER, WHOLE, FIXED ENDPOINT TITRATION, FIELD, MG/L AS CO3

DATE: 10/19/1953 **REMARK:** 77 DEPTH TO BOTTOM OF SAMPLE INTERVAL (FEET BELOW LSD)

DATE: 7/28/1953 **REMARK:** 184 HARDNESS TOTAL (MG/L AS CA03)

DATE: 8/31/1953 **REMARK:** 60 ELEVATION OF LAND SURFACE DATUM (LSD) (FEET NGVD)

DATE: 7/28/1953 **REMARK:** 26 DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)

DATE: 7/28/1953 **REMARK:** 77 DEPTH TO BOTTOM OF SAMPLE INTERVAL (FEET BELOW LSD)

DATE: 7/28/1953 **REMARK:** 26 DEPTH TO TOP OF SAMPLE INTERVAL (FEET BELOW LSD)

DATE: 7/28/1953 **REMARK:** 77 DEPTH OF WELL, TOTAL (FEET)

DATE: 7/28/1953 **REMARK:** 60 ELEVATION OF LAND SURFACE DATUM (LSD) (FEET NGVD)

DATE: 7/28/1953 **REMARK:** 93 NITROGEN, NITRATE, DISSOLVED (MG/L AS NO3)

DATE: 7/28/1953 **REMARK:** 23 SILICA DISSOLVED (MG/L AS SIO2)

DATE: 7/28/1953 **REMARK:** 59 SULFATE DISSOLVED (MG/L AS SO4)

DATE: 7/28/1953 **REMARK:** 48 CHLORIDE DISSOLVED (MG/L AS CL)

DATE: 8/31/1953 **REMARK:** 1028 AGENCY ANALYZING SAMPLE (CODE NUMBER)

DATE: 7/28/1953 **REMARK:** 160 NONCARBONATE HARDNESS WATER WHOLE TOTAL, FIELD, (MG/L AS CA CO3)

DATE: 8/31/1953 **REMARK:** 30 FLOW RATE, YIELD OF WELL, (GALLONS/MINUTE)

DATE: 7/28/1953 **REMARK:** 21 NITROGEN NITRATE DISSOLVED (MG/L AS N)

DATE: 7/28/1953 **REMARK:** 0 CARBONATE, WATER, WHOLE, FIXED ENDPOINT TITRATION, FIELD, MG/L AS CO3

DATE: 7/28/1953 **REMARK:** 26 BICARBONATE, WATER, WHOLE, FIXED ENDPOINT TITRATION, FIELD, MG/L AS HCO3

DATE: 7/28/1953 **REMARK:** 21 ALKALINITY, WATER, WHOLE, TOTAL, FIXED ENDPOINT TITRATION, FIELD, MG/L AS CACO3

DATE: 7/28/1953 **REMARK:** 83 CARBON DIOXIDE DISSOLVED (MG/L AS CO2)

- Continued on next page -

Target Property: 5129 FRANKFORD AVE
PHILADELPHIA PA 19124

JOB: 00L629-B

STATE WELLS SITE

SEARCH ID: 11 **DIST/DIR:** 0.38 SW **MAP ID:** 11

NAME: QUAKER MAID DAIRIES
ADDRESS:
PHILADELPHIA PA
CONTACT:

REV: 6/1/09
ID1: 30542
ID2: PH 340
STATUS: WELL
PHONE:

DATE: 7/28/1953 **REMARK:** 5.7 PH, WATER, WHOLE, FIELD, STANDARD UNITS

DATE: 7/28/1953 **REMARK:** 508 SPECIFIC CONDUCTANCE, US/CM 25 DEGREES CENTIGRADE

DATE: 7/28/1953 **REMARK:** 30 FLOW RATE INSTANTANEOUS (GALLONS/MINUTE)

DATE: 7/28/1953 **REMARK:** 30 FLOW RATE, YIELD OF WELL, (GALLONS/MINUTE)

DATE: 7/28/1953 **REMARK:** 1028 AGENCY ANALYZING SAMPLE (CODE NUMBER)

DATE: 7/28/1953 **REMARK:** 16 WATER TEMPERATURE, DEGREES CELSIUS

DATE: 7/28/1953 **REMARK:** 18 SODIUM PLUS POTASSIUM DISSOLVED (MG/L AS NA)

DATE: 8/31/1953 **REMARK:** 0.3 SODIUM PLUS POTASSIUM DISSOLVED (MG/L AS NA)

DATE: 9/28/1953 **REMARK:** 30 FLOW RATE, YIELD OF WELL, (GALLONS/MINUTE)

DATE: 9/28/1953 **REMARK:** 1028 AGENCY ANALYZING SAMPLE (CODE NUMBER)

DATE: 9/28/1953 **REMARK:** 17 WATER TEMPERATURE, DEGREES CELSIUS

DATE: 8/31/1953 **REMARK:** 77 DEPTH TO BOTTOM OF SAMPLE INTERVAL (FEET BELOW LSD)

DATE: 8/31/1953 **REMARK:** 26 DEPTH TO TOP OF SAMPLE INTERVAL (FEET BELOW LSD)

DATE: 8/31/1953 **REMARK:** 77 DEPTH OF WELL, TOTAL (FEET)

DATE: 12/29/1953 **REMARK:** 140 NONCARBONATE HARDNESS WATER WHOLE TOTAL, FIELD, (MG/L AS CA CO3)

DATE: 8/31/1953 **REMARK:** 19 NITROGEN, NITRATE, DISSOLVED (MG/L AS NO3)

DATE: 12/29/1953 **REMARK:** 30 FLOW RATE INSTANTANEOUS (GALLONS/MINUTE)

DATE: 8/31/1953 **REMARK:** 24 SILICA DISSOLVED (MG/L AS SIO2)

DATE: 8/31/1953 **REMARK:** 14 WATER TEMPERATURE, DEGREES CELSIUS

DATE: 8/31/1953 **REMARK:** 49 CHLORIDE DISSOLVED (MG/L AS CL)

DATE: 9/28/1953 **REMARK:** 30 FLOW RATE INSTANTANEOUS (GALLONS/MINUTE)

DATE: 8/31/1953 **REMARK:** 140 NONCARBONATE HARDNESS WATER WHOLE TOTAL, FIELD, (MG/L AS CA CO3)

DATE: 8/31/1953 **REMARK:** 170 HARDNESS TOTAL (MG/L AS CA03)

DATE: 8/31/1953 **REMARK:** 4.3 NITROGEN NITRATE DISSOLVED (MG/L AS N)

DATE: 8/31/1953 **REMARK:** 0 CARBONATE, WATER, WHOLE, FIXED ENDPOINT TITRATION, FIELD, MG/L AS CO3

DATE: 8/31/1953 **REMARK:** 34 BICARBONATE, WATER, WHOLE, FIXED ENDPOINT TITRATION, FIELD, MG/L AS HCO3

DATE: 8/31/1953 **REMARK:** 28 ALKALINITY, WATER, WHOLE, TOTAL, FIXED ENDPOINT TITRATION, FIELD, MG/L AS CACO3

- Continued on next page -

Target Property: 5129 FRANKFORD AVE
PHILADELPHIA PA 19124

JOB: 00L629-B

STATE WELLS SITE

SEARCH ID: 11 **DIST/DIR:** 0.38 SW **MAP ID:** 11

NAME: QUAKER MAID DAIRIES
ADDRESS:
PHILADELPHIA PA
CONTACT:

REV: 6/1/09
ID1: 30542
ID2: PH 340
STATUS: WELL
PHONE:

DATE: 8/31/1953 **REMARK:** 86 CARBON DIOXIDE DISSOLVED (MG/L AS CO2)

DATE: 8/31/1953 **REMARK:** 5.8 PH, WATER, WHOLE, FIELD, STANDARD UNITS

DATE: 8/31/1953 **REMARK:** 501 SPECIFIC CONDUCTANCE, US/CM 25 DEGREES CENTIGRADE

DATE: 8/31/1953 **REMARK:** 2 COLOR (PLATINUM-COBALT)

DATE: 8/31/1953 **REMARK:** 30 FLOW RATE INSTANTANEOUS (GALLONS/MINUTE)

DATE: 8/31/1953 **REMARK:** 56 SULFATE DISSOLVED (MG/L AS SO4)

DATE: 12/29/1953 **REMARK:** 77 DEPTH TO BOTTOM OF SAMPLE INTERVAL (FEET BELOW LSD)

DATE: 12/29/1953 **REMARK:** 8.1 SODIUM PLUS POTASSIUM DISSOLVED (MG/L AS NA)

DATE: 12/29/1953 **REMARK:** 26 DEPTH TO TOP OF SAMPLE INTERVAL (FEET BELOW LSD)

DATE: 12/29/1953 **REMARK:** 77 DEPTH OF WELL, TOTAL (FEET)

DATE: 12/29/1953 **REMARK:** 60 ELEVATION OF LAND SURFACE DATUM (LSD) (FEET NGVD)

DATE: 12/29/1953 **REMARK:** 33 NITROGEN, NITRATE, DISSOLVED (MG/L AS NO3)

DATE: 12/29/1953 **REMARK:** 110 IRON DISSOLVED (UG/L AS FE)

DATE: 12/29/1953 **REMARK:** 55 SULFATE DISSOLVED (MG/L AS SO4)

DATE: 12/29/1953 **REMARK:** 54 CHLORIDE DISSOLVED (MG/L AS CL)

DATE: 12/29/1953 **REMARK:** 1028 AGENCY ANALYZING SAMPLE (CODE NUMBER)

DATE: 2/3/1954 **REMARK:** 26 DEPTH TO TOP OF SAMPLE INTERVAL (FEET BELOW LSD)

DATE: 2/3/1954 **REMARK:** 2200 IRON DISSOLVED (UG/L AS FE)

DATE: 2/3/1954 **REMARK:** 0.7 SODIUM ADSORPTION RATIO

DATE: 2/3/1954 **REMARK:** 21 SODIUM, PERCENT

DATE: 2/3/1954 **REMARK:** 25 SODIUM PLUS POTASSIUM DISSOLVED (MG/L AS NA)

DATE: 2/3/1954 **REMARK:** 2.8 POTASSIUM DISSOLVED (MG/L AS K)

DATE: 2/3/1954 **REMARK:** 52 CHLORIDE DISSOLVED (MG/L AS CL)

DATE: 2/3/1954 **REMARK:** 0.1 FLUORIDE DISSOLVED (MG/L AS F)

DATE: 2/3/1954 **REMARK:** 349 SOLIDS, RESIDUE ON EVAPORATION AT 180 DEG C, DISSOLVED (MG/L)

DATE: 2/3/1954 **REMARK:** 343 SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)

- Continued on next page -

Environmental FirstSearch
Site Detail Report

Target Property: 5129 FRANKFORD AVE
PHILADELPHIA PA 19124

JOB: 00L629-B

STATE WELLS SITE

SEARCH ID: 11 **DIST/DIR:** 0.38 SW **MAP ID:** 11

NAME: QUAKER MAID DAIRIES
ADDRESS:
PHILADELPHIA PA
CONTACT:

REV: 6/1/09
ID1: 30542
ID2: PH 340
STATUS: WELL
PHONE:

DATE: 2/3/1954 **REMARK:** 120 NITROGEN, NITRATE, DISSOLVED (MG/L AS NO3)

DATE: 2/3/1954 **REMARK:** 22 SODIUM DISSOLVED (MG/L AS NA)

DATE: 2/3/1954 **REMARK:** 77 DEPTH OF WELL, TOTAL (FEET)

DATE: 2/3/1954 **REMARK:** 48 SULFATE DISSOLVED (MG/L AS SO4)

DATE: 2/3/1954 **REMARK:** 77 DEPTH TO BOTTOM OF SAMPLE INTERVAL (FEET BELOW LSD)

DATE: 2/3/1954 **REMARK:** 60 ELEVATION OF LAND SURFACE DATUM (LSD) (FEET NGVD)

DATE: 2/3/1954 **REMARK:** 526 SPECIFIC CONDUCTANCE, US/CM 25 DEGREES CENTIGRADE

DATE: 2/3/1954 **REMARK:** 24 SILICA DISSOLVED (MG/L AS SIO2)

DATE: 2/3/1954 **REMARK:** 21 MAGNESIUM DISSOLVED (MG/L AS MG)

DATE: 2/3/1954 **REMARK:** 1028 AGENCY ANALYZING SAMPLE (CODE NUMBER)

DATE: 2/3/1954 **REMARK:** 16 WATER TEMPERATURE, DEGREES CELSIUS

DATE: 2/3/1954 **REMARK:** 30 FLOW RATE, YIELD OF WELL, (GALLONS/MINUTE)

DATE: 2/3/1954 **REMARK:** 3 COLOR (PLATINUM-COBALT)

DATE: 2/3/1954 **REMARK:** 6.9 PH, WATER, WHOLE, FIELD, STANDARD UNITS

DATE: 2/3/1954 **REMARK:** 5.6 CARBON DIOXIDE DISSOLVED (MG/L AS CO2)

DATE: 2/3/1954 **REMARK:** 180 HARDNESS TOTAL (MG/L AS CA03)

DATE: 2/3/1954 **REMARK:** 37 CALCIUM DISSOLVED (MG/L AS CA)

DATE: 2/3/1954 **REMARK:** 30 FLOW RATE INSTANTANEOUS (GALLONS/MINUTE)

DATE: 2/3/1954 **REMARK:** 160 NONCARBONATE HARDNESS WATER WHOLE TOTAL, FIELD, (MG/L AS CA CO3)

DATE: 2/3/1954 **REMARK:** 23 ALKALINITY, WATER, WHOLE, TOTAL, FIXED ENDPOINT TITRATION, FIELD, MG/L AS CACO3

DATE: 2/3/1954 **REMARK:** 27.11 NITROGEN NITRATE DISSOLVED (MG/L AS N)

DATE: 2/3/1954 **REMARK:** 0 CARBONATE, WATER, WHOLE, FIXED ENDPOINT TITRATION, FIELD, MG/L AS CO3

DATE: 2/3/1954 **REMARK:** 28 BICARBONATE, WATER, WHOLE, FIXED ENDPOINT TITRATION, FIELD, MG/L AS HCO3

Environmental FirstSearch
Site Detail Report

Target Property: 5129 FRANKFORD AVE
PHILADELPHIA PA 19124

JOB: 00L629-B

FEDERAL WELLS SITE

SEARCH ID: 22 **DIST/DIR:** 0.40 SW **MAP ID:** 22

NAME: PH 339
ADDRESS:
PA
PHILADELPHIA PA
CONTACT:

REV: 2/21/08
ID1: FW-PA-31587
ID2: 400059075044801
STATUS: USGS GROUNDWATER INV
PHONE:

SITE INFORMATION

AGENCY:	US GEOLOGICAL SURVEY
SITE ID:	400059075044801
SITE NAME:	PH 339
SITE TYPE :	GROUND-WATER OTHER THAN SPRING
COUNTY :	PHILADELPHIA
COUNTRY :	US
LAND NET LOCATION DESC:	
LOCATION MAP:	FRANKFORD
LOCATION MAP SCALE:	24000
GAGE/LAND SURFACE ALTITUDE:	60.00
METHOD ALTITUDE DETERMINED:	M
ALTITUDE ACCURACY:	10
ALTITUDE DATUM:	NGVD29
HYDROLOGIC UNIT :	LOWER DELAWARE
TOPOGRAPHIC SETTING :	HILLSIDE (SLOPE)
DATE OF FIRST CONSTRUCTION:	04/01/1919
DATE SITE ESTABLISHED:	//
MEAN GREENWICH TIME OFFSET:	EST
LOCAL STANDARD TIME FLAG:	Y
TYPE OF GROUNDWATER SITE:	W
PRIMARY AQUIFER :	000HBLD
AQUIFER TYPE :	
WELL_DEPTH VA:	916
HOLE DEPTH:	
DEPTH DATA SOURCE:	
PROJECT NUMBER:	

Environmental FirstSearch
Site Detail Report

Target Property: 5129 FRANKFORD AVE
PHILADELPHIA PA 19124

JOB: 00L629-B

STATE WELLS SITE

SEARCH ID: 3 **DIST/DIR:** 0.42 SW **MAP ID:** 3

NAME: BALDWIN DAIRIES INC
ADDRESS:
PHILADELPHIA PA
CONTACT:

REV: 6/1/09
ID1: 30278
ID2: PH 339
STATUS: WELL
PHONE:

WELL INFORMATION

SOURCE OF RECORD:	USGS - GWSI
QUAD NAME:	FRANKFORD
FORMATION NAME:	HORNBLENDE GNEISS
DRILLER:	JOHN RULON
DATE DRILLED:	4/1/1919
USE OF SITE:	DESTROYED
WELL DEPTH:	916
DISCHARGE:	
STATIC LEVEL:	
TOP OF CASING:	0
BOTTOM OF CASING:	47
DIAMETER:	8
WATER USE:	UNUSED
REMARK:	

Environmental FirstSearch
Site Detail Report

Target Property: 5129 FRANKFORD AVE
PHILADELPHIA PA 19124

JOB: 00L629-B

FEDERAL WELLS SITE

SEARCH ID: 30 **DIST/DIR:** 0.53 SW **MAP ID:** 30

NAME: PH 381
ADDRESS:
PA
PHILADELPHIA PA
CONTACT:

REV: 2/21/08
ID1: FW-PA-31590
ID2: 400057075050301
STATUS: USGS GROUNDWATER INV
PHONE:

SITE INFORMATION

AGENCY:	US GEOLOGICAL SURVEY
SITE ID:	400057075050301
SITE NAME:	PH 381
SITE TYPE :	GROUND-WATER OTHER THAN SPRING
COUNTY :	PHILADELPHIA
COUNTRY :	US
LAND NET LOCATION DESC:	
LOCATION MAP:	FRANKFORD
LOCATION MAP SCALE:	24000
GAGE/LAND SURFACE ALTITUDE:	60.00
METHOD ALTITUDE DETERMINED:	M
ALTITUDE ACCURACY:	5
ALTITUDE DATUM:	NGVD29
HYDROLOGIC UNIT :	LOWER DELAWARE
TOPOGRAPHIC SETTING :	HILLSIDE (SLOPE)
DATE OF FIRST CONSTRUCTION:	01/01/1904
DATE SITE ESTABLISHED:	//
MEAN GREENWICH TIME OFFSET:	EST
LOCAL STANDARD TIME FLAG:	Y
TYPE OF GROUNDWATER SITE:	W
PRIMARY AQUIFER :	000HBLD
AQUIFER TYPE :	
WELL_DEPTH VA:	127
HOLE DEPTH:	
DEPTH DATA SOURCE:	
PROJECT NUMBER:	

Environmental FirstSearch
Site Detail Report

Target Property: 5129 FRANKFORD AVE
PHILADELPHIA PA 19124

JOB: 00L629-B

STATE WELLS SITE

SEARCH ID: 1 **DIST/DIR:** 0.55 SW **MAP ID:** 1

NAME: AMERICAN ICE CO
ADDRESS:
PHILADELPHIA PA
CONTACT:

REV: 6/1/09
ID1: 30275
ID2: PH 381
STATUS: WELL
PHONE:

WELL INFORMATION

SOURCE OF RECORD:	USGS - GWSI
QUAD NAME:	FRANKFORD
FORMATION NAME:	HORNBLENDE GNEISS
DRILLER:	HARPER, THOMAS
DATE DRILLED:	1/1/1904
USE OF SITE:	DESTROYED
WELL DEPTH:	127
DISCHARGE:	
STATIC LEVEL:	
TOP OF CASING:	0
BOTTOM OF CASING:	53
DIAMETER:	8
WATER USE:	UNUSED
REMARK:	

Environmental FirstSearch
Site Detail Report

Target Property: 5129 FRANKFORD AVE
PHILADELPHIA PA 19124

JOB: 00L629-B

STATE WELLS SITE

SEARCH ID: 14 **DIST/DIR:** 0.63 SE **MAP ID:** 14

NAME: WELL HEAD PROTECTION AREA
ADDRESS:
NJ
CONTACT:

REV: 3/24/04
ID1: NJ-WHPA-42925
ID2:
STATUS: COMMUNITY PWS
PHONE:

SITE INFORMATION

AREA (SQ. FEET): 151659
PERIMETER (SQ. FEET): 2237.52
TIER: 2 - FIVE YEAR TIME OF TRAVEL TO THE WELL

Environmental FirstSearch
Site Detail Report

Target Property: 5129 FRANKFORD AVE
PHILADELPHIA PA 19124

JOB: 00L629-B

FEDERAL WELLS SITE

SEARCH ID: 26 **DIST/DIR:** 0.67 NW **MAP ID:** 26

NAME: PH 375
ADDRESS:
PA
PHILADELPHIA PA
CONTACT:

REV: 2/21/08
ID1: FW-PA-31544
ID2: 400150075050501
STATUS: USGS GROUNDWATER INV
PHONE:

SITE INFORMATION

AGENCY:	US GEOLOGICAL SURVEY
SITE ID:	400150075050501
SITE NAME:	PH 375
SITE TYPE :	GROUND-WATER OTHER THAN SPRING
COUNTY :	PHILADELPHIA
COUNTRY :	US
LAND NET LOCATION DESC:	
LOCATION MAP:	FRANKFORD
LOCATION MAP SCALE:	24000
GAGE/LAND SURFACE ALTITUDE:	90
METHOD ALTITUDE DETERMINED:	M
ALTITUDE ACCURACY:	10
ALTITUDE DATUM:	NGVD29
HYDROLOGIC UNIT :	LOWER DELAWARE
TOPOGRAPHIC SETTING :	HILLTOP
DATE OF FIRST CONSTRUCTION:	06/10/1936
DATE SITE ESTABLISHED:	//
MEAN GREENWICH TIME OFFSET:	EST
LOCAL STANDARD TIME FLAG:	Y
TYPE OF GROUNDWATER SITE:	W
PRIMARY AQUIFER :	300WSCKO
AQUIFER TYPE :	
WELL_DEPTH VA:	400
HOLE DEPTH:	
DEPTH DATA SOURCE:	
PROJECT NUMBER:	

Environmental FirstSearch
Site Detail Report

Target Property: 5129 FRANKFORD AVE
PHILADELPHIA PA 19124

JOB: 00L629-B

STATE WELLS SITE

SEARCH ID: 12 **DIST/DIR:** 0.67 NW **MAP ID:** 12

NAME: REGAL THEATRE
ADDRESS:
PHILADELPHIA PA
CONTACT:

REV: 6/1/09
ID1: 30309
ID2: PH 375
STATUS: WELL
PHONE:

WELL INFORMATION

SOURCE OF RECORD:	USGS - GWSI
QUAD NAME:	FRANKFORD
FORMATION NAME:	WISSAHICKON FORMATION
DRILLER:	RIDPATH AND POTTER COMPANY
DATE DRILLED:	6/10/1936
USE OF SITE:	UNUSED
WELL DEPTH:	400
DISCHARGE:	
STATIC LEVEL:	
TOP OF CASING:	4.3
BOTTOM OF CASING:	16
DIAMETER:	8
WATER USE:	UNUSED
REMARK:	

Environmental FirstSearch
Site Detail Report

Target Property: 5129 FRANKFORD AVE
PHILADELPHIA PA 19124

JOB: 00L629-B

STATE WELLS SITE

SEARCH ID: 17 **DIST/DIR:** 0.87 SE **MAP ID:** 17

NAME: WELL HEAD PROTECTION AREA
ADDRESS:
NJ
CONTACT:

REV: 3/24/04
ID1: NJ-WHPA-42939
ID2:
STATUS: COMMUNITY PWS
PHONE:

SITE INFORMATION

AREA (SQ. FEET): 259897
PERIMETER (SQ. FEET): 3127.33
TIER: 2 - FIVE YEAR TIME OF TRAVEL TO THE WELL

Environmental FirstSearch
Site Detail Report

Target Property: 5129 FRANKFORD AVE
PHILADELPHIA PA 19124

JOB: 00L629-B

FEDERAL WELLS SITE

SEARCH ID: 27 **DIST/DIR:** 0.87 SW **MAP ID:** 27

NAME: PH 378
ADDRESS:
PA
PHILADELPHIA PA
CONTACT:

REV: 2/21/08
ID1: FW-PA-31616
ID2: 400036075045901
STATUS: USGS GROUNDWATER INV
PHONE:

SITE INFORMATION

AGENCY:	US GEOLOGICAL SURVEY
SITE ID:	400036075045901
SITE NAME:	PH 378
SITE TYPE :	GROUND-WATER OTHER THAN SPRING
COUNTY :	PHILADELPHIA
COUNTRY :	US
LAND NET LOCATION DESC:	
LOCATION MAP:	FRANKFORD
LOCATION MAP SCALE:	24000
GAGE/LAND SURFACE ALTITUDE:	29.00
METHOD ALTITUDE DETERMINED:	M
ALTITUDE ACCURACY:	5
ALTITUDE DATUM:	NGVD29
HYDROLOGIC UNIT :	LOWER DELAWARE
TOPOGRAPHIC SETTING :	VALLEY FLAT (VALLEYS OF ALL SIZES)
DATE OF FIRST CONSTRUCTION:	01/01/1905
DATE SITE ESTABLISHED:	//
MEAN GREENWICH TIME OFFSET:	EST
LOCAL STANDARD TIME FLAG:	Y
TYPE OF GROUNDWATER SITE:	W
PRIMARY AQUIFER :	300WSCKO
AQUIFER TYPE :	
WELL_DEPTH VA:	100
HOLE DEPTH:	
DEPTH DATA SOURCE:	
PROJECT NUMBER:	

Target Property: 5129 FRANKFORD AVE
PHILADELPHIA PA 19124

JOB: 00L629-B

FEDERAL WELLS SITE

SEARCH ID: 25 **DIST/DIR:** 0.88 SE **MAP ID:** 25

NAME: PH 370
ADDRESS:
PA
PHILADELPHIA PA
CONTACT:

REV: 2/21/08
ID1: FW-PA-31619
ID2: 400034075043601
STATUS: USGS GROUNDWATER INV
PHONE:

SITE INFORMATION

AGENCY:	US GEOLOGICAL SURVEY
SITE ID:	400034075043601
SITE NAME:	PH 370
SITE TYPE :	GROUND-WATER OTHER THAN SPRING
COUNTY :	PHILADELPHIA
COUNTRY :	US
LAND NET LOCATION DESC:	
LOCATION MAP:	FRANKFORD
LOCATION MAP SCALE:	24000
GAGE/LAND SURFACE ALTITUDE:	31.00
METHOD ALTITUDE DETERMINED:	M
ALTITUDE ACCURACY:	10
ALTITUDE DATUM:	NGVD29
HYDROLOGIC UNIT :	LOWER DELAWARE
TOPOGRAPHIC SETTING :	VALLEY FLAT (VALLEYS OF ALL SIZES)
DATE OF FIRST CONSTRUCTION:	06/02/1950
DATE SITE ESTABLISHED:	//
MEAN GREENWICH TIME OFFSET:	EST
LOCAL STANDARD TIME FLAG:	Y
TYPE OF GROUNDWATER SITE:	W
PRIMARY AQUIFER :	300WSCKO
AQUIFER TYPE :	
WELL_DEPTH VA:	575
HOLE DEPTH:	
DEPTH DATA SOURCE:	
PROJECT NUMBER:	

Environmental FirstSearch
Site Detail Report

Target Property: 5129 FRANKFORD AVE
PHILADELPHIA PA 19124

JOB: 00L629-B

STATE WELLS SITE

SEARCH ID: 9 **DIST/DIR:** 0.88 SW **MAP ID:** 9

NAME: GLOBE MFG CO
ADDRESS:
PHILADELPHIA PA
CONTACT:

REV: 6/1/09
ID1: 30249
ID2: PH 378
STATUS: WELL
PHONE:

WELL INFORMATION

SOURCE OF RECORD:	USGS - GWSI
QUAD NAME:	FRANKFORD
FORMATION NAME:	WISSAHICKON FORMATION
DRILLER:	HARPER, THOMAS
DATE DRILLED:	1/1/1905
USE OF SITE:	DESTROYED
WELL DEPTH:	100
DISCHARGE:	
STATIC LEVEL:	
TOP OF CASING:	0
BOTTOM OF CASING:	
DIAMETER:	6
WATER USE:	UNUSED
REMARK:	

Environmental FirstSearch
Site Detail Report

Target Property: 5129 FRANKFORD AVE
PHILADELPHIA PA 19124

JOB: 00L629-B

STATE WELLS SITE

SEARCH ID: 4 **DIST/DIR:** 0.89 SE **MAP ID:** 4

NAME: BLUE MAGIC INC
ADDRESS:
PHILADELPHIA PA
CONTACT:

REV: 6/1/09
ID1: 30246
ID2: PH 370
STATUS: WELL
PHONE:

WELL INFORMATION

SOURCE OF RECORD:	USGS - GWSI
QUAD NAME:	FRANKFORD
FORMATION NAME:	WISSAHICKON FORMATION
DRILLER:	RIDPATH AND POTTER COMPANY
DATE DRILLED:	6/2/1950
USE OF SITE:	DESTROYED
WELL DEPTH:	575
DISCHARGE:	
STATIC LEVEL:	
TOP OF CASING:	0
BOTTOM OF CASING:	132
DIAMETER:	6
WATER USE:	UNUSED
REMARK:	

Environmental FirstSearch
Site Detail Report

Target Property: 5129 FRANKFORD AVE
PHILADELPHIA PA 19124

JOB: 00L629-B

FEDERAL WELLS SITE

SEARCH ID: 19 **DIST/DIR:** 0.93 SE **MAP ID:** 19

NAME: PH 336
ADDRESS:
PA
PHILADELPHIA PA
CONTACT:

REV: 2/21/08
ID1: FW-PA-31622
ID2: 400032075043201
STATUS: USGS GROUNDWATER INV
PHONE:

SITE INFORMATION

AGENCY:	US GEOLOGICAL SURVEY
SITE ID:	400032075043201
SITE NAME:	PH 336
SITE TYPE :	GROUND-WATER OTHER THAN SPRING
COUNTY :	PHILADELPHIA
COUNTRY :	US
LAND NET LOCATION DESC:	
LOCATION MAP:	FRANKFORD
LOCATION MAP SCALE:	24000
GAGE/LAND SURFACE ALTITUDE:	25.00
METHOD ALTITUDE DETERMINED:	M
ALTITUDE ACCURACY:	10
ALTITUDE DATUM:	NGVD29
HYDROLOGIC UNIT :	LOWER DELAWARE
TOPOGRAPHIC SETTING :	VALLEY FLAT (VALLEYS OF ALL SIZES)
DATE OF FIRST CONSTRUCTION:	01/01/1916
DATE SITE ESTABLISHED:	//
MEAN GREENWICH TIME OFFSET:	EST
LOCAL STANDARD TIME FLAG:	Y
TYPE OF GROUNDWATER SITE:	W
PRIMARY AQUIFER :	300WSCKO
AQUIFER TYPE :	
WELL_DEPTH VA:	511
HOLE DEPTH:	
DEPTH DATA SOURCE:	
PROJECT NUMBER:	

Environmental FirstSearch
Site Detail Report

Target Property: 5129 FRANKFORD AVE
PHILADELPHIA PA 19124

JOB: 00L629-B

STATE WELLS SITE

SEARCH ID: 16 **DIST/DIR:** 0.93 SE **MAP ID:** 16

NAME: WELL HEAD PROTECTION AREA
ADDRESS:
NJ
CONTACT:

REV: 3/24/04
ID1: NJ-WHPA-42932
ID2:
STATUS: COMMUNITY PWS
PHONE:

SITE INFORMATION

AREA (SQ. FEET): 13839.9
PERIMETER (SQ. FEET): 785.806
TIER: 2 - FIVE YEAR TIME OF TRAVEL TO THE WELL

Target Property: 5129 FRANKFORD AVE
PHILADELPHIA PA 19124

JOB: 00L629-B

STATE WELLS SITE

SEARCH ID: 6 **DIST/DIR:** 0.93 SE **MAP ID:** 6

NAME: BLUMENTHAL BROS
ADDRESS:
PHILADELPHIA PA
CONTACT:

REV: 6/1/09
ID1: 30540
ID2: PH 336
STATUS: WELL
PHONE:

WELL INFORMATION

SOURCE OF RECORD:	USGS - GWSI
QUAD NAME:	FRANKFORD
FORMATION NAME:	WISSAHICKON FORMATION
DRILLER:	ARTESIAN WELL DRLG CO
DATE DRILLED:	1/1/1916
USE OF SITE:	DESTROYED
WELL DEPTH:	511
DISCHARGE:	
STATIC LEVEL:	
TOP OF CASING:	0
BOTTOM OF CASING:	14
DIAMETER:	6
WATER USE:	UNUSED
REMARK:	

WATER QUALITY INFORMATION

DATE: 7/28/1953 **REMARK:** 16 WATER TEMPERATURE, DEGREES CELSIUS

DATE: 7/28/1953 **REMARK:** 511 DEPTH OF WELL, TOTAL (FEET)

DATE: 7/28/1953 **REMARK:** 17 DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)

DATE: 7/28/1953 **REMARK:** 511 DEPTH TO BOTTOM OF SAMPLE INTERVAL (FEET BELOW LSD)

DATE: 7/28/1953 **REMARK:** 14 DEPTH TO TOP OF SAMPLE INTERVAL (FEET BELOW LSD)

DATE: 7/28/1953 **REMARK:** 663 SPECIFIC CONDUCTANCE, US/CM 25 DEGREES CENTIGRADE

DATE: 7/28/1953 **REMARK:** 25 ELEVATION OF LAND SURFACE DATUM (LSD) (FEET NGVD)

DATE: 7/28/1953 **REMARK:** 1028 AGENCY ANALYZING SAMPLE (CODE NUMBER)

DATE: 7/28/1953 **REMARK:** 42 FLOW RATE INSTANTANEOUS (GALLONS/MINUTE)

DATE: 7/28/1953 **REMARK:** 6.7 PH, WATER, WHOLE, FIELD, STANDARD UNITS

DATE: 7/28/1953 **REMARK:** 20 CARBON DIOXIDE DISSOLVED (MG/L AS CO2)

DATE: 7/28/1953 **REMARK:** 51 ALKALINITY, WATER, WHOLE, TOTAL, FIXED ENDPOINT TITRATION, FIELD, MG/L AS CACO3

DATE: 7/28/1953 **REMARK:** 62 BICARBONATE, WATER, WHOLE, FIXED ENDPOINT TITRATION, FIELD, MG/L AS HCO3

DATE: 7/28/1953 **REMARK:** 0 CARBONATE, WATER, WHOLE, FIXED ENDPOINT TITRATION, FIELD, MG/L AS CO3

DATE: 7/28/1953 **REMARK:** 254 HARDNESS TOTAL (MG/L AS CA03)

DATE: 7/28/1953 **REMARK:** 200 NONCARBONATE HARDNESS WATER WHOLE TOTAL, FIELD, (MG/L AS CA CO3)

- Continued on next page -

Environmental FirstSearch
Site Detail Report

Target Property: 5129 FRANKFORD AVE
PHILADELPHIA PA 19124

JOB: 00L629-B

STATE WELLS SITE

SEARCH ID: 6 **DIST/DIR:** 0.93 SE **MAP ID:** 6

NAME: BLUMENTHAL BROS
ADDRESS:
PHILADELPHIA PA
CONTACT:

REV: 6/1/09
ID1: 30540
ID2: PH 336
STATUS: WELL
PHONE:

DATE: 7/28/1953 **REMARK:** 35 SODIUM PLUS POTASSIUM DISSOLVED (MG/L AS NA)

DATE: 7/28/1953 **REMARK:** 55 CHLORIDE DISSOLVED (MG/L AS CL)

DATE: 7/28/1953 **REMARK:** 179 SULFATE DISSOLVED (MG/L AS SO4)

DATE: 7/28/1953 **REMARK:** 26 SILICA DISSOLVED (MG/L AS SIO2)

DATE: 7/28/1953 **REMARK:** 4.3 NITROGEN NITRATE DISSOLVED (MG/L AS N)

DATE: 7/28/1953 **REMARK:** 19 NITROGEN, NITRATE, DISSOLVED (MG/L AS NO3)

DATE: 7/28/1953 **REMARK:** 42 FLOW RATE, YIELD OF WELL, (GALLONS/MINUTE)

Environmental FirstSearch
Site Detail Report

Target Property: 5129 FRANKFORD AVE
PHILADELPHIA PA 19124

JOB: 00L629-B

FEDERAL WELLS SITE

SEARCH ID: 21 **DIST/DIR:** 0.94 SE **MAP ID:** 21

NAME: PH 338
ADDRESS:
PA
PHILADELPHIA PA
CONTACT:

REV: 2/21/08
ID1: FW-PA-31626
ID2: 400031075043301
STATUS: USGS GROUNDWATER INV
PHONE:

SITE INFORMATION

AGENCY:	US GEOLOGICAL SURVEY
SITE ID:	400031075043301
SITE NAME:	PH 338
SITE TYPE :	GROUND-WATER OTHER THAN SPRING
COUNTY :	PHILADELPHIA
COUNTRY :	US
LAND NET LOCATION DESC:	
LOCATION MAP:	FRANKFORD
LOCATION MAP SCALE:	24000
GAGE/LAND SURFACE ALTITUDE:	25.00
METHOD ALTITUDE DETERMINED:	M
ALTITUDE ACCURACY:	10
ALTITUDE DATUM:	NGVD29
HYDROLOGIC UNIT :	LOWER DELAWARE
TOPOGRAPHIC SETTING :	VALLEY FLAT (VALLEYS OF ALL SIZES)
DATE OF FIRST CONSTRUCTION:	12/09/1935
DATE SITE ESTABLISHED:	//
MEAN GREENWICH TIME OFFSET:	EST
LOCAL STANDARD TIME FLAG:	Y
TYPE OF GROUNDWATER SITE:	W
PRIMARY AQUIFER :	300WSCKO
AQUIFER TYPE :	
WELL_DEPTH VA:	342
HOLE DEPTH:	
DEPTH DATA SOURCE:	
PROJECT NUMBER:	

Environmental FirstSearch
Site Detail Report

Target Property: 5129 FRANKFORD AVE
PHILADELPHIA PA 19124

JOB: 00L629-B

FEDERAL WELLS SITE

SEARCH ID: 20 **DIST/DIR:** 0.94 SE **MAP ID:** 20

NAME: PH 337
ADDRESS:
PA
PHILADELPHIA PA
CONTACT:

REV: 2/21/08
ID1: FW-PA-31625
ID2: 400031075043601
STATUS: USGS GROUNDWATER INV
PHONE:

SITE INFORMATION

AGENCY:	US GEOLOGICAL SURVEY
SITE ID:	400031075043601
SITE NAME:	PH 337
SITE TYPE :	GROUND-WATER OTHER THAN SPRING
COUNTY :	PHILADELPHIA
COUNTRY :	US
LAND NET LOCATION DESC:	
LOCATION MAP:	FRANKFORD
LOCATION MAP SCALE:	24000
GAGE/LAND SURFACE ALTITUDE:	30.00
METHOD ALTITUDE DETERMINED:	M
ALTITUDE ACCURACY:	10
ALTITUDE DATUM:	NGVD29
HYDROLOGIC UNIT :	LOWER DELAWARE
TOPOGRAPHIC SETTING :	VALLEY FLAT (VALLEYS OF ALL SIZES)
DATE OF FIRST CONSTRUCTION:	01/01/1918
DATE SITE ESTABLISHED:	//
MEAN GREENWICH TIME OFFSET:	EST
LOCAL STANDARD TIME FLAG:	Y
TYPE OF GROUNDWATER SITE:	W
PRIMARY AQUIFER :	300WSCKO
AQUIFER TYPE :	
WELL_DEPTH VA:	244
HOLE DEPTH:	
DEPTH DATA SOURCE:	
PROJECT NUMBER:	

Environmental FirstSearch
Site Detail Report

Target Property: 5129 FRANKFORD AVE
PHILADELPHIA PA 19124

JOB: 00L629-B

STATE WELLS SITE

SEARCH ID: 5 **DIST/DIR:** 0.94 SE **MAP ID:** 5

NAME: BLUMENTHAL BROS
ADDRESS:
PHILADELPHIA PA
CONTACT:

REV: 6/1/09
ID1: 30539
ID2: PH 337
STATUS: WELL
PHONE:

WELL INFORMATION

SOURCE OF RECORD: USGS - GWSI
QUAD NAME: FRANKFORD
FORMATION NAME: WISSAHICKON FORMATION
DRILLER: UNKNOWN
DATE DRILLED: 1/1/1918
USE OF SITE: DESTROYED
WELL DEPTH: 244
DISCHARGE:
STATIC LEVEL:
TOP OF CASING: 0
BOTTOM OF CASING: 19
DIAMETER: 8
WATER USE: UNUSED
REMARK:

WATER QUALITY INFORMATION

DATE: 7/28/1953 **REMARK:** 0 CARBONATE, WATER, WHOLE, FIXED ENDPOINT TITRATION, FIELD, MG/L AS CO3

DATE: 7/28/1953 **REMARK:** 138 BICARBONATE, WATER, WHOLE, FIXED ENDPOINT TITRATION, FIELD, MG/L AS HCO3

DATE: 7/28/1953 **REMARK:** 113 ALKALINITY, WATER, WHOLE, TOTAL, FIXED ENDPOINT TITRATION, FIELD, MG/L AS CACO3

DATE: 7/28/1953 **REMARK:** 8.8 CARBON DIOXIDE DISSOLVED (MG/L AS CO2)

DATE: 7/28/1953 **REMARK:** 1028 AGENCY ANALYZING SAMPLE (CODE NUMBER)

DATE: 7/28/1953 **REMARK:** 709 SPECIFIC CONDUCTANCE, US/CM 25 DEGREES CENTIGRADE

DATE: 7/28/1953 **REMARK:** 0.11 NITROGEN NITRATE DISSOLVED (MG/L AS N)

DATE: 7/28/1953 **REMARK:** 244 DEPTH TO BOTTOM OF SAMPLE INTERVAL (FEET BELOW LSD)

DATE: 7/28/1953 **REMARK:** 7.4 PH, WATER, WHOLE, FIELD, STANDARD UNITS

DATE: 7/28/1953 **REMARK:** 42 SODIUM PLUS POTASSIUM DISSOLVED (MG/L AS NA)

DATE: 7/28/1953 **REMARK:** 45 CHLORIDE DISSOLVED (MG/L AS CL)

DATE: 7/28/1953 **REMARK:** 166 SULFATE DISSOLVED (MG/L AS SO4)

DATE: 7/28/1953 **REMARK:** 28 SILICA DISSOLVED (MG/L AS SIO2)

DATE: 7/28/1953 **REMARK:** 0.5 NITROGEN, NITRATE, DISSOLVED (MG/L AS NO3)

DATE: 7/28/1953 **REMARK:** 30 ELEVATION OF LAND SURFACE DATUM (LSD) (FEET NGVD)

DATE: 7/28/1953 **REMARK:** 19 DEPTH TO TOP OF SAMPLE INTERVAL (FEET BELOW LSD)

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Environmental FirstSearch
Site Detail Report

Target Property: 5129 FRANKFORD AVE
PHILADELPHIA PA 19124

JOB: 00L629-B

STATE WELLS SITE

SEARCH ID: 5 **DIST/DIR:** 0.94 SE **MAP ID:** 5

NAME: BLUMENTHAL BROS
ADDRESS:
PHILADELPHIA PA
CONTACT:

REV: 6/1/09
ID1: 30539
ID2: PH 337
STATUS: WELL
PHONE:

DATE: 7/28/1953 **REMARK:** 22 DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)

DATE: 7/28/1953 **REMARK:** 244 DEPTH OF WELL, TOTAL (FEET)

Environmental FirstSearch
Site Detail Report

Target Property: 5129 FRANKFORD AVE
PHILADELPHIA PA 19124

JOB: 00L629-B

FEDERAL WELLS SITE

SEARCH ID: 28 **DIST/DIR:** 0.94 SW **MAP ID:** 28

NAME: PH 379
ADDRESS:
PA
PHILADELPHIA PA
CONTACT:

REV: 2/21/08
ID1: FW-PA-31621
ID2: 400032075045601
STATUS: USGS GROUNDWATER INV
PHONE:

SITE INFORMATION

AGENCY:	US GEOLOGICAL SURVEY
SITE ID:	400032075045601
SITE NAME:	PH 379
SITE TYPE :	GROUND-WATER OTHER THAN SPRING
COUNTY :	PHILADELPHIA
COUNTRY :	US
LAND NET LOCATION DESC:	
LOCATION MAP:	FRANKFORD
LOCATION MAP SCALE:	24000
GAGE/LAND SURFACE ALTITUDE:	28.00
METHOD ALTITUDE DETERMINED:	M
ALTITUDE ACCURACY:	5
ALTITUDE DATUM:	NGVD29
HYDROLOGIC UNIT :	LOWER DELAWARE
TOPOGRAPHIC SETTING :	VALLEY FLAT (VALLEYS OF ALL SIZES)
DATE OF FIRST CONSTRUCTION:	01/01/1895
DATE SITE ESTABLISHED:	//
MEAN GREENWICH TIME OFFSET:	EST
LOCAL STANDARD TIME FLAG:	Y
TYPE OF GROUNDWATER SITE:	W
PRIMARY AQUIFER :	300WSCKO
AQUIFER TYPE :	
WELL_DEPTH VA:	335
HOLE DEPTH:	
DEPTH DATA SOURCE:	
PROJECT NUMBER:	

Target Property: 5129 FRANKFORD AVE
PHILADELPHIA PA 19124

JOB: 00L629-B

STATE WELLS SITE

SEARCH ID: 7 **DIST/DIR:** 0.95 SE **MAP ID:** 7

NAME: BLUMENTHAL BROS
ADDRESS:
PHILADELPHIA PA
CONTACT:

REV: 6/1/09
ID1: 30538
ID2: PH 338
STATUS: WELL
PHONE:

WELL INFORMATION

SOURCE OF RECORD:	USGS - GWSI
QUAD NAME:	FRANKFORD
FORMATION NAME:	WISSAHICKON FORMATION
DRILLER:	RIDPATH AND POTTER COMPANY
DATE DRILLED:	12/9/1935
USE OF SITE:	DESTROYED
WELL DEPTH:	342
DISCHARGE:	
STATIC LEVEL:	
TOP OF CASING:	0
BOTTOM OF CASING:	28
DIAMETER:	8
WATER USE:	UNUSED
REMARK:	

WATER QUALITY INFORMATION

DATE: 7/28/1953 **REMARK:** 0.61 NITROGEN NITRATE DISSOLVED (MG/L AS N)

DATE: 10/19/1953 **REMARK:** 290 HARDNESS TOTAL (MG/L AS CA03)

DATE: 10/19/1953 **REMARK:** 25 ELEVATION OF LAND SURFACE DATUM (LSD) (FEET NGVD)

DATE: 10/19/1953 **REMARK:** 160 NONCARBONATE HARDNESS WATER WHOLE TOTAL, FIELD, (MG/L AS CA CO3)

DATE: 10/19/1953 **REMARK:** 36 SODIUM PLUS POTASSIUM DISSOLVED (MG/L AS NA)

DATE: 10/19/1953 **REMARK:** 52 CHLORIDE DISSOLVED (MG/L AS CL)

DATE: 10/19/1953 **REMARK:** 157 SULFATE DISSOLVED (MG/L AS SO4)

DATE: 10/19/1953 **REMARK:** 200 IRON DISSOLVED (UG/L AS FE)

DATE: 10/19/1953 **REMARK:** 0.43 NITROGEN NITRATE DISSOLVED (MG/L AS N)

DATE: 7/28/1953 **REMARK:** 328 HARDNESS TOTAL (MG/L AS CA03)

DATE: 7/28/1953 **REMARK:** 139 ALKALINITY, WATER, WHOLE, TOTAL, FIXED ENDPOINT TITRATION, FIELD, MG/L AS CACO3

DATE: 10/19/1953 **REMARK:** 1.9 NITROGEN, NITRATE, DISSOLVED (MG/L AS NO3)

DATE: 7/28/1953 **REMARK:** 22 CARBON DIOXIDE DISSOLVED (MG/L AS CO2)

DATE: 7/28/1953 **REMARK:** 7.1 PH, WATER, WHOLE, FIELD, STANDARD UNITS

DATE: 7/28/1953 **REMARK:** 816 SPECIFIC CONDUCTANCE, US/CM 25 DEGREES CENTIGRADE

DATE: 7/28/1953 **REMARK:** 45 FLOW RATE INSTANTANEOUS (GALLONS/MINUTE)

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Target Property: 5129 FRANKFORD AVE
PHILADELPHIA PA 19124

JOB: 00L629-B

STATE WELLS SITE

SEARCH ID: 7 **DIST/DIR:** 0.95 SE **MAP ID:** 7

NAME: BLUMENTHAL BROS
ADDRESS:
PHILADELPHIA PA
CONTACT:

REV: 6/1/09
ID1: 30538
ID2: PH 338
STATUS: WELL
PHONE:

DATE: 7/28/1953 **REMARK:** 45 FLOW RATE, YIELD OF WELL, (GALLONS/MINUTE)

DATE: 7/28/1953 **REMARK:** 1028 AGENCY ANALYZING SAMPLE (CODE NUMBER)

DATE: 7/28/1953 **REMARK:** 14 WATER TEMPERATURE, DEGREES CELSIUS

DATE: 7/28/1953 **REMARK:** 0 CARBONATE, WATER, WHOLE, FIXED ENDPOINT TITRATION, FIELD, MG/L AS CO3

DATE: 10/19/1953 **REMARK:** 28 DEPTH TO TOP OF SAMPLE INTERVAL (FEET BELOW LSD)

DATE: 10/19/1953 **REMARK:** 342 DEPTH OF WELL, TOTAL (FEET)

DATE: 10/19/1953 **REMARK:** 342 DEPTH TO BOTTOM OF SAMPLE INTERVAL (FEET BELOW LSD)

DATE: 10/19/1953 **REMARK:** 45 FLOW RATE INSTANTANEOUS (GALLONS/MINUTE)

DATE: 10/19/1953 **REMARK:** 159 BICARBONATE, WATER, WHOLE, FIXED ENDPOINT TITRATION, FIELD, MG/L AS HCO3

DATE: 10/19/1953 **REMARK:** 0 CARBONATE, WATER, WHOLE, FIXED ENDPOINT TITRATION, FIELD, MG/L AS CO3

DATE: 7/28/1953 **REMARK:** 170 BICARBONATE, WATER, WHOLE, FIXED ENDPOINT TITRATION, FIELD, MG/L AS HCO3

DATE: 7/28/1953 **REMARK:** 190 NONCARBONATE HARDNESS WATER WHOLE TOTAL, FIELD, (MG/L AS CA CO3)

DATE: 10/19/1953 **REMARK:** 130 ALKALINITY, WATER, WHOLE, TOTAL, FIXED ENDPOINT TITRATION, FIELD, MG/L AS CACO3

DATE: 10/19/1953 **REMARK:** 16 CARBON DIOXIDE DISSOLVED (MG/L AS CO2)

DATE: 10/19/1953 **REMARK:** 7.2 PH, WATER, WHOLE, FIELD, STANDARD UNITS

DATE: 10/19/1953 **REMARK:** 2 COLOR (PLATINUM-COBALT)

DATE: 10/19/1953 **REMARK:** 45 FLOW RATE, YIELD OF WELL, (GALLONS/MINUTE)

DATE: 10/19/1953 **REMARK:** 1028 AGENCY ANALYZING SAMPLE (CODE NUMBER)

DATE: 10/19/1953 **REMARK:** 14 WATER TEMPERATURE, DEGREES CELSIUS

DATE: 7/28/1953 **REMARK:** 173 SULFATE DISSOLVED (MG/L AS SO4)

DATE: 7/28/1953 **REMARK:** 342 DEPTH TO BOTTOM OF SAMPLE INTERVAL (FEET BELOW LSD)

DATE: 7/28/1953 **REMARK:** 28 DEPTH TO TOP OF SAMPLE INTERVAL (FEET BELOW LSD)

DATE: 7/28/1953 **REMARK:** 342 DEPTH OF WELL, TOTAL (FEET)

DATE: 7/28/1953 **REMARK:** 33 SODIUM PLUS POTASSIUM DISSOLVED (MG/L AS NA)

DATE: 7/28/1953 **REMARK:** 25 ELEVATION OF LAND SURFACE DATUM (LSD) (FEET NGVD)

DATE: 7/28/1953 **REMARK:** 2.7 NITROGEN, NITRATE, DISSOLVED (MG/L AS NO3)

DATE: 7/28/1953 **REMARK:** 32 SILICA DISSOLVED (MG/L AS SIO2)

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Environmental FirstSearch
Site Detail Report

Target Property: 5129 FRANKFORD AVE
PHILADELPHIA PA 19124

JOB: 00L629-B

STATE WELLS SITE

SEARCH ID: 7 **DIST/DIR:** 0.95 SE **MAP ID:** 7

NAME: BLUMENTHAL BROS
ADDRESS:
PHILADELPHIA PA
CONTACT:

REV: 6/1/09
ID1: 30538
ID2: PH 338
STATUS: WELL
PHONE:

DATE: 7/28/1953 **REMARK:** 40 DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)

DATE: 10/19/1953 **REMARK:** 775 SPECIFIC CONDUCTANCE, US/CM 25 DEGREES CENTIGRADE

DATE: 7/28/1953 **REMARK:** 55 CHLORIDE DISSOLVED (MG/L AS CL)

Environmental FirstSearch
Site Detail Report

Target Property: 5129 FRANKFORD AVE
PHILADELPHIA PA 19124

JOB: 00L629-B

STATE WELLS SITE

SEARCH ID: 10 **DIST/DIR:** 0.95 SW **MAP ID:** 10

NAME: GREENWOOD CEMETERY
ADDRESS:
PHILADELPHIA PA
CONTACT:

REV: 6/1/09
ID1: 131966
ID2: 0006N
STATUS: WELL
PHONE:

WELL INFORMATION

SOURCE OF RECORD:	PAGS WWI PAPER
QUAD NAME:	FRANKFORD
FORMATION NAME:	PENSAUKEN FORMATION
DRILLER:	BUCKS CO ARTESIAN WELL DRIL
DATE DRILLED:	3/1/1983
USE OF SITE:	WITHDRAWAL
WELL DEPTH:	125
DISCHARGE:	
STATIC LEVEL:	
TOP OF CASING:	0
BOTTOM OF CASING:	65
DIAMETER:	6
WATER USE:	DOMESTIC

REMARK: ROCK TYPE=MICA

Target Property: 5129 FRANKFORD AVE
PHILADELPHIA PA 19124

JOB: 00L629-B

STATE WELLS SITE

SEARCH ID: 8 **DIST/DIR:** 0.95 SW **MAP ID:** 8

NAME: GLOBE DYE WORKS CO
ADDRESS:
PHILADELPHIA PA
CONTACT:

REV: 6/1/09
ID1: 30244
ID2: PH 379
STATUS: WELL
PHONE:

WELL INFORMATION

SOURCE OF RECORD:	USGS - GWSI
QUAD NAME:	FRANKFORD
FORMATION NAME:	WISSAHICKON FORMATION
DRILLER:	HARPER, THOMAS
DATE DRILLED:	1/1/1895
USE OF SITE:	DESTROYED
WELL DEPTH:	335
DISCHARGE:	
STATIC LEVEL:	
TOP OF CASING:	0
BOTTOM OF CASING:	
DIAMETER:	6
WATER USE:	UNUSED
REMARK:	

Environmental FirstSearch
Site Detail Report

Target Property: 5129 FRANKFORD AVE
PHILADELPHIA PA 19124

JOB: 00L629-B

FEDERAL WELLS SITE

SEARCH ID: 24 **DIST/DIR:** 0.98 SW **MAP ID:** 24

NAME: PH 344
ADDRESS:
PA
PHILADELPHIA PA
CONTACT:

REV: 2/21/08
ID1: FW-PA-31628
ID2: 400029075044901
STATUS: USGS GROUNDWATER INV
PHONE:

SITE INFORMATION

AGENCY:	US GEOLOGICAL SURVEY
SITE ID:	400029075044901
SITE NAME:	PH 344
SITE TYPE :	GROUND-WATER OTHER THAN SPRING
COUNTY :	PHILADELPHIA
COUNTRY :	US
LAND NET LOCATION DESC:	
LOCATION MAP:	FRANKFORD
LOCATION MAP SCALE:	24000
GAGE/LAND SURFACE ALTITUDE:	30.00
METHOD ALTITUDE DETERMINED:	M
ALTITUDE ACCURACY:	10
ALTITUDE DATUM:	NGVD29
HYDROLOGIC UNIT :	LOWER DELAWARE
TOPOGRAPHIC SETTING :	VALLEY FLAT (VALLEYS OF ALL SIZES)
DATE OF FIRST CONSTRUCTION:	01/01/1950
DATE SITE ESTABLISHED:	//
MEAN GREENWICH TIME OFFSET:	EST
LOCAL STANDARD TIME FLAG:	Y
TYPE OF GROUNDWATER SITE:	W
PRIMARY AQUIFER :	300WSCKO
AQUIFER TYPE :	
WELL_DEPTH VA:	250
HOLE DEPTH:	
DEPTH DATA SOURCE:	
PROJECT NUMBER:	

Environmental FirstSearch
Site Detail Report

Target Property: 5129 FRANKFORD AVE
PHILADELPHIA PA 19124

JOB: 00L629-B

STATE WELLS SITE

SEARCH ID: 15 **DIST/DIR:** 0.99 SE **MAP ID:** 15

NAME: WELL HEAD PROTECTION AREA
ADDRESS:
NJ
CONTACT:

REV: 3/24/04
ID1: NJ-WHPA-42931
ID2:
STATUS: COMMUNITY PWS
PHONE:

SITE INFORMATION

AREA (SQ. FEET): 1782.86
PERIMETER (SQ. FEET): 626.655
TIER: 2 - FIVE YEAR TIME OF TRAVEL TO THE WELL

Target Property: 5129 FRANKFORD AVE
PHILADELPHIA PA 19124

JOB: 00L629-B

STATE WELLS SITE

SEARCH ID: 13 **DIST/DIR:** 0.99 SW **MAP ID:** 13

NAME: WARD CHOCOLATE CO
ADDRESS:
PHILADELPHIA PA
CONTACT:

REV: 6/1/09
ID1: 30537
ID2: PH 344
STATUS: WELL
PHONE:

WELL INFORMATION

SOURCE OF RECORD:	USGS - GWSI
QUAD NAME:	FRANKFORD
FORMATION NAME:	WISSAHICKON FORMATION
DRILLER:	RIDPATH AND POTTER COMPANY
DATE DRILLED:	1/1/1950
USE OF SITE:	WITHDRAWAL
WELL DEPTH:	250
DISCHARGE:	
STATIC LEVEL:	
TOP OF CASING:	0
BOTTOM OF CASING:	44
DIAMETER:	8
WATER USE:	INDUSTRIAL
REMARK:	

WATER QUALITY INFORMATION

DATE: 10/19/1953 **REMARK:** 1800 IRON DISSOLVED (UG/L AS FE)

DATE: 10/19/1953 **REMARK:** 250 DEPTH TO BOTTOM OF SAMPLE INTERVAL (FEET BELOW LSD)

DATE: 10/19/1953 **REMARK:** 44 DEPTH TO TOP OF SAMPLE INTERVAL (FEET BELOW LSD)

DATE: 10/19/1953 **REMARK:** 250 DEPTH OF WELL, TOTAL (FEET)

DATE: 10/19/1953 **REMARK:** 30 ELEVATION OF LAND SURFACE DATUM (LSD) (FEET NGVD)

DATE: 10/19/1953 **REMARK:** 1 NITROGEN, NITRATE, DISSOLVED (MG/L AS NO3)

DATE: 12/29/1953 **REMARK:** 13 WATER TEMPERATURE, DEGREES CELSIUS

DATE: 10/19/1953 **REMARK:** 112 SULFATE DISSOLVED (MG/L AS SO4)

DATE: 10/19/1953 **REMARK:** 47 CHLORIDE DISSOLVED (MG/L AS CL)

DATE: 10/19/1953 **REMARK:** 20 SODIUM PLUS POTASSIUM DISSOLVED (MG/L AS NA)

DATE: 10/19/1953 **REMARK:** 140 NONCARBONATE HARDNESS WATER WHOLE TOTAL, FIELD, (MG/L AS CA CO3)

DATE: 10/19/1953 **REMARK:** 235 HARDNESS TOTAL (MG/L AS CA03)

DATE: 10/19/1953 **REMARK:** 0.23 NITROGEN NITRATE DISSOLVED (MG/L AS N)

DATE: 10/19/1953 **REMARK:** 116 BICARBONATE, WATER, WHOLE, FIXED ENDPOINT TITRATION, FIELD, MG/L AS HCO3

DATE: 12/29/1953 **REMARK:** 642 SPECIFIC CONDUCTANCE, US/CM 25 DEGREES CENTIGRADE

DATE: 10/19/1953 **REMARK:** 0 CARBONATE, WATER, WHOLE, FIXED ENDPOINT TITRATION, FIELD, MG/L AS CO3

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Target Property: 5129 FRANKFORD AVE
PHILADELPHIA PA 19124

JOB: 00L629-B

STATE WELLS SITE

SEARCH ID: 13 **DIST/DIR:** 0.99 SW **MAP ID:** 13

NAME: WARD CHOCOLATE CO
ADDRESS:
PHILADELPHIA PA
CONTACT:

REV: 6/1/09
ID1: 30537
ID2: PH 344
STATUS: WELL
PHONE:

DATE: 12/29/1953 **REMARK:** 22 SODIUM PLUS POTASSIUM DISSOLVED (MG/L AS NA)

DATE: 12/29/1953 **REMARK:** 1028 AGENCY ANALYZING SAMPLE (CODE NUMBER)

DATE: 12/29/1953 **REMARK:** 44 DEPTH TO TOP OF SAMPLE INTERVAL (FEET BELOW LSD)

DATE: 12/29/1953 **REMARK:** 250 DEPTH OF WELL, TOTAL (FEET)

DATE: 12/29/1953 **REMARK:** 30 ELEVATION OF LAND SURFACE DATUM (LSD) (FEET NGVD)

DATE: 12/29/1953 **REMARK:** 0.5 NITROGEN, NITRATE, DISSOLVED (MG/L AS NO3)

DATE: 12/29/1953 **REMARK:** 2000 IRON DISSOLVED (UG/L AS FE)

DATE: 12/29/1953 **REMARK:** 250 DEPTH TO BOTTOM OF SAMPLE INTERVAL (FEET BELOW LSD)

DATE: 12/29/1953 **REMARK:** 56 CHLORIDE DISSOLVED (MG/L AS CL)

DATE: 10/19/1953 **REMARK:** 95 ALKALINITY, WATER, WHOLE, TOTAL, FIXED ENDPOINT TITRATION, FIELD, MG/L AS CACO3

DATE: 12/29/1953 **REMARK:** 150 NONCARBONATE HARDNESS WATER WHOLE TOTAL, FIELD, (MG/L AS CA CO3)

DATE: 12/29/1953 **REMARK:** 250 HARDNESS TOTAL (MG/L AS CA03)

DATE: 12/29/1953 **REMARK:** 0.11 NITROGEN NITRATE DISSOLVED (MG/L AS N)

DATE: 12/29/1953 **REMARK:** 0 CARBONATE, WATER, WHOLE, FIXED ENDPOINT TITRATION, FIELD, MG/L AS CO3

DATE: 12/29/1953 **REMARK:** 118 BICARBONATE, WATER, WHOLE, FIXED ENDPOINT TITRATION, FIELD, MG/L AS HCO3

DATE: 12/29/1953 **REMARK:** 97 ALKALINITY, WATER, WHOLE, TOTAL, FIXED ENDPOINT TITRATION, FIELD, MG/L AS CACO3

DATE: 12/29/1953 **REMARK:** 30 CARBON DIOXIDE DISSOLVED (MG/L AS CO2)

DATE: 12/29/1953 **REMARK:** 118 SULFATE DISSOLVED (MG/L AS SO4)

DATE: 8/5/1953 **REMARK:** 16 SODIUM, PERCENT

DATE: 8/5/1953 **REMARK:** 72 ALKALINITY, WATER, WHOLE, TOTAL, FIXED ENDPOINT TITRATION, FIELD, MG/L AS CACO3

DATE: 8/5/1953 **REMARK:** 331 SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)

DATE: 8/5/1953 **REMARK:** 357 SOLIDS, RESIDUE ON EVAPORATION AT 180 DEG C, DISSOLVED (MG/L)

DATE: 8/5/1953 **REMARK:** 27 SILICA DISSOLVED (MG/L AS SIO2)

DATE: 8/5/1953 **REMARK:** 0.1 FLUORIDE DISSOLVED (MG/L AS F)

DATE: 8/5/1953 **REMARK:** 111 SULFATE DISSOLVED (MG/L AS SO4)

DATE: 8/5/1953 **REMARK:** 47 CHLORIDE DISSOLVED (MG/L AS CL)

DATE: 8/5/1953 **REMARK:** 30 ELEVATION OF LAND SURFACE DATUM (LSD) (FEET NGVD)

- Continued on next page -

Target Property: 5129 FRANKFORD AVE
PHILADELPHIA PA 19124

JOB: 00L629-B

STATE WELLS SITE

SEARCH ID: 13 **DIST/DIR:** 0.99 SW **MAP ID:** 13

NAME: WARD CHOCOLATE CO
ADDRESS:
PHILADELPHIA PA
CONTACT:

REV: 6/1/09
ID1: 30537
ID2: PH 344
STATUS: WELL
PHONE:

DATE: 8/5/1953 **REMARK:** 27 SODIUM PLUS POTASSIUM DISSOLVED (MG/L AS NA)

DATE: 8/5/1953 **REMARK:** 250 DEPTH OF WELL, TOTAL (FEET)

DATE: 8/5/1953 **REMARK:** 0.6 SODIUM ADSORPTION RATIO

DATE: 8/5/1953 **REMARK:** 20 SODIUM DISSOLVED (MG/L AS NA)

DATE: 8/5/1953 **REMARK:** 14 MAGNESIUM DISSOLVED (MG/L AS MG)

DATE: 8/5/1953 **REMARK:** 62 CALCIUM DISSOLVED (MG/L AS CA)

DATE: 8/5/1953 **REMARK:** 140 NONCARBONATE HARDNESS WATER WHOLE TOTAL, FIELD, (MG/L AS CA CO3)

DATE: 8/5/1953 **REMARK:** 210 HARDNESS TOTAL (MG/L AS CA03)

DATE: 8/5/1953 **REMARK:** 0.43 NITROGEN NITRATE DISSOLVED (MG/L AS N)

DATE: 8/5/1953 **REMARK:** 2 CARBONATE, WATER, WHOLE, FIXED ENDPOINT TITRATION, FIELD, MG/L AS CO3

DATE: 8/5/1953 **REMARK:** 6.8 POTASSIUM DISSOLVED (MG/L AS K)

DATE: 8/26/1953 **REMARK:** 59 CARBON DIOXIDE DISSOLVED (MG/L AS CO2)

DATE: 10/19/1953 **REMARK:** 37 CARBON DIOXIDE DISSOLVED (MG/L AS CO2)

DATE: 12/29/1953 **REMARK:** 6.8 PH, WATER, WHOLE, FIELD, STANDARD UNITS

DATE: 8/26/1953 **REMARK:** 20 SODIUM PLUS POTASSIUM DISSOLVED (MG/L AS NA)

DATE: 8/26/1953 **REMARK:** 140 NONCARBONATE HARDNESS WATER WHOLE TOTAL, FIELD, (MG/L AS CA CO3)

DATE: 8/26/1953 **REMARK:** 238 HARDNESS TOTAL (MG/L AS CA03)

DATE: 8/26/1953 **REMARK:** 0.45 NITROGEN NITRATE DISSOLVED (MG/L AS N)

DATE: 8/26/1953 **REMARK:** 0 CARBONATE, WATER, WHOLE, FIXED ENDPOINT TITRATION, FIELD, MG/L AS CO3

DATE: 8/5/1953 **REMARK:** 1.9 NITROGEN, NITRATE, DISSOLVED (MG/L AS NO3)

DATE: 8/26/1953 **REMARK:** 95 ALKALINITY, WATER, WHOLE, TOTAL, FIXED ENDPOINT TITRATION, FIELD, MG/L AS CACO3

DATE: 8/5/1953 **REMARK:** 1.1 CARBON DIOXIDE DISSOLVED (MG/L AS CO2)

DATE: 8/26/1953 **REMARK:** 6.5 PH, WATER, WHOLE, FIELD, STANDARD UNITS

DATE: 8/26/1953 **REMARK:** 599 SPECIFIC CONDUCTANCE, US/CM 25 DEGREES CENTIGRADE

DATE: 8/26/1953 **REMARK:** 2 COLOR (PLATINUM-COBALT)

DATE: 8/26/1953 **REMARK:** 1028 AGENCY ANALYZING SAMPLE (CODE NUMBER)

- Continued on next page -

Target Property: 5129 FRANKFORD AVE
PHILADELPHIA PA 19124

JOB: 00L629-B

STATE WELLS SITE

SEARCH ID: 13 **DIST/DIR:** 0.99 SW **MAP ID:** 13

NAME: WARD CHOCOLATE CO
ADDRESS:
PHILADELPHIA PA
CONTACT:

REV: 6/1/09
ID1: 30537
ID2: PH 344
STATUS: WELL
PHONE:

DATE: 8/26/1953 **REMARK:** 13 WATER TEMPERATURE, DEGREES CELSIUS

DATE: 8/5/1953 **REMARK:** 13 DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)

DATE: 8/5/1953 **REMARK:** 250 DEPTH TO BOTTOM OF SAMPLE INTERVAL (FEET BELOW LSD)

DATE: 8/5/1953 **REMARK:** 44 DEPTH TO TOP OF SAMPLE INTERVAL (FEET BELOW LSD)

DATE: 8/26/1953 **REMARK:** 116 BICARBONATE, WATER, WHOLE, FIXED ENDPOINT TITRATION, FIELD, MG/L AS HCO3

DATE: 9/28/1953 **REMARK:** 1.7 NITROGEN, NITRATE, DISSOLVED (MG/L AS NO3)

DATE: 8/5/1953 **REMARK:** 84 BICARBONATE, WATER, WHOLE, FIXED ENDPOINT TITRATION, FIELD, MG/L AS HCO3

DATE: 9/28/1953 **REMARK:** 0 CARBONATE, WATER, WHOLE, FIXED ENDPOINT TITRATION, FIELD, MG/L AS CO3

DATE: 9/28/1953 **REMARK:** 0.38 NITROGEN NITRATE DISSOLVED (MG/L AS N)

DATE: 9/28/1953 **REMARK:** 252 HARDNESS TOTAL (MG/L AS CA03)

DATE: 9/28/1953 **REMARK:** 150 NONCARBONATE HARDNESS WATER WHOLE TOTAL, FIELD, (MG/L AS CA CO3)

DATE: 9/28/1953 **REMARK:** 15 SODIUM PLUS POTASSIUM DISSOLVED (MG/L AS NA)

DATE: 9/28/1953 **REMARK:** 50 CHLORIDE DISSOLVED (MG/L AS CL)

DATE: 9/28/1953 **REMARK:** 110 SULFATE DISSOLVED (MG/L AS SO4)

DATE: 9/28/1953 **REMARK:** 98 ALKALINITY, WATER, WHOLE, TOTAL, FIXED ENDPOINT TITRATION, FIELD, MG/L AS CACO3

DATE: 9/28/1953 **REMARK:** 1700 IRON DISSOLVED (UG/L AS FE)

DATE: 9/28/1953 **REMARK:** 76 CARBON DIOXIDE DISSOLVED (MG/L AS CO2)

DATE: 9/28/1953 **REMARK:** 30 ELEVATION OF LAND SURFACE DATUM (LSD) (FEET NGVD)

DATE: 9/28/1953 **REMARK:** 250 DEPTH OF WELL, TOTAL (FEET)

DATE: 9/28/1953 **REMARK:** 44 DEPTH TO TOP OF SAMPLE INTERVAL (FEET BELOW LSD)

DATE: 9/28/1953 **REMARK:** 250 DEPTH TO BOTTOM OF SAMPLE INTERVAL (FEET BELOW LSD)

DATE: 10/19/1953 **REMARK:** 13 WATER TEMPERATURE, DEGREES CELSIUS

DATE: 10/19/1953 **REMARK:** 1028 AGENCY ANALYZING SAMPLE (CODE NUMBER)

DATE: 10/19/1953 **REMARK:** 596 SPECIFIC CONDUCTANCE, US/CM 25 DEGREES CENTIGRADE

DATE: 10/19/1953 **REMARK:** 6.7 PH, WATER, WHOLE, FIELD, STANDARD UNITS

DATE: 9/28/1953 **REMARK:** 23 SILICA DISSOLVED (MG/L AS SIO2)

DATE: 8/26/1953 **REMARK:** 2 NITROGEN, NITRATE, DISSOLVED (MG/L AS NO3)

- Continued on next page -

Target Property: 5129 FRANKFORD AVE
PHILADELPHIA PA 19124

JOB: 00L629-B

STATE WELLS SITE

SEARCH ID: 13 **DIST/DIR:** 0.99 SW **MAP ID:** 13

NAME: WARD CHOCOLATE CO
ADDRESS:
PHILADELPHIA PA
CONTACT:

REV: 6/1/09
ID1: 30537
ID2: PH 344
STATUS: WELL
PHONE:

DATE: 8/5/1953 **REMARK:** 8.1 PH, WATER, WHOLE, FIELD, STANDARD UNITS

DATE: 8/5/1953 **REMARK:** 536 SPECIFIC CONDUCTANCE, US/CM 25 DEGREES CENTIGRADE

DATE: 8/5/1953 **REMARK:** 4 COLOR (PLATINUM-COBALT)

DATE: 8/5/1953 **REMARK:** 1028 AGENCY ANALYZING SAMPLE (CODE NUMBER)

DATE: 8/5/1953 **REMARK:** 13 WATER TEMPERATURE, DEGREES CELSIUS

DATE: 8/26/1953 **REMARK:** 44 CHLORIDE DISSOLVED (MG/L AS CL)

DATE: 8/26/1953 **REMARK:** 118 SULFATE DISSOLVED (MG/L AS SO4)

DATE: 9/28/1953 **REMARK:** 120 BICARBONATE, WATER, WHOLE, FIXED ENDPOINT TITRATION, FIELD, MG/L AS HCO3

DATE: 8/26/1953 **REMARK:** 400 IRON DISSOLVED (UG/L AS FE)

DATE: 8/26/1953 **REMARK:** 30 ELEVATION OF LAND SURFACE DATUM (LSD) (FEET NGVD)

DATE: 8/26/1953 **REMARK:** 250 DEPTH OF WELL, TOTAL (FEET)

DATE: 8/26/1953 **REMARK:** 44 DEPTH TO TOP OF SAMPLE INTERVAL (FEET BELOW LSD)

DATE: 8/26/1953 **REMARK:** 250 DEPTH TO BOTTOM OF SAMPLE INTERVAL (FEET BELOW LSD)

DATE: 9/28/1953 **REMARK:** 13 WATER TEMPERATURE, DEGREES CELSIUS

DATE: 9/28/1953 **REMARK:** 1028 AGENCY ANALYZING SAMPLE (CODE NUMBER)

DATE: 9/28/1953 **REMARK:** 594 SPECIFIC CONDUCTANCE, US/CM 25 DEGREES CENTIGRADE

DATE: 9/28/1953 **REMARK:** 6.4 PH, WATER, WHOLE, FIELD, STANDARD UNITS

DATE: 8/26/1953 **REMARK:** 20 SILICA DISSOLVED (MG/L AS SIO2)

DATE: 9/22/1954 **REMARK:** 250 DEPTH OF WELL, TOTAL (FEET)

DATE: 9/22/1954 **REMARK:** 44 DEPTH TO TOP OF SAMPLE INTERVAL (FEET BELOW LSD)

DATE: 2/3/1954 **REMARK:** 30 ELEVATION OF LAND SURFACE DATUM (LSD) (FEET NGVD)

DATE: 2/3/1954 **REMARK:** 51 CHLORIDE DISSOLVED (MG/L AS CL)

DATE: 2/3/1954 **REMARK:** 110 SULFATE DISSOLVED (MG/L AS SO4)

DATE: 2/3/1954 **REMARK:** 0.1 FLUORIDE DISSOLVED (MG/L AS F)

DATE: 2/3/1954 **REMARK:** 25 SILICA DISSOLVED (MG/L AS SIO2)

DATE: 2/3/1954 **REMARK:** 2800 IRON DISSOLVED (UG/L AS FE)

- Continued on next page -

Target Property: 5129 FRANKFORD AVE
PHILADELPHIA PA 19124

JOB: 00L629-B

STATE WELLS SITE

SEARCH ID: 13 **DIST/DIR:** 0.99 SW **MAP ID:** 13

NAME: WARD CHOCOLATE CO
ADDRESS:
PHILADELPHIA PA
CONTACT:

REV: 6/1/09
ID1: 30537
ID2: PH 344
STATUS: WELL
PHONE:

DATE: 2/3/1954 **REMARK:** 396 SOLIDS, RESIDUE ON EVAPORATION AT 180 DEG C, DISSOLVED (MG/L)

DATE: 9/22/1954 **REMARK:** 48 CARBON DIOXIDE DISSOLVED (MG/L AS CO2)

DATE: 2/3/1954 **REMARK:** 1.3 NITROGEN, NITRATE, DISSOLVED (MG/L AS NO3)

DATE: 2/3/1954 **REMARK:** 16 SODIUM, PERCENT

DATE: 2/3/1954 **REMARK:** 250 DEPTH OF WELL, TOTAL (FEET)

DATE: 9/22/1954 **REMARK:** 250 DEPTH TO BOTTOM OF SAMPLE INTERVAL (FEET BELOW LSD)

DATE: 2/3/1954 **REMARK:** 250 DEPTH TO BOTTOM OF SAMPLE INTERVAL (FEET BELOW LSD)

DATE: 9/22/1954 **REMARK:** 30 ELEVATION OF LAND SURFACE DATUM (LSD) (FEET NGVD)

DATE: 9/22/1954 **REMARK:** 1028 AGENCY ANALYZING SAMPLE (CODE NUMBER)

DATE: 9/22/1954 **REMARK:** 641 SPECIFIC CONDUCTANCE, US/CM 25 DEGREES CENTIGRADE

DATE: 9/22/1954 **REMARK:** 6.6 PH, WATER, WHOLE, FIELD, STANDARD UNITS

DATE: 2/3/1954 **REMARK:** 369 SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)

DATE: 2/3/1954 **REMARK:** 0.29 NITROGEN NITRATE DISSOLVED (MG/L AS N)

DATE: 2/3/1954 **REMARK:** 13 WATER TEMPERATURE, DEGREES CELSIUS

DATE: 2/3/1954 **REMARK:** 1028 AGENCY ANALYZING SAMPLE (CODE NUMBER)

DATE: 2/3/1954 **REMARK:** 3 COLOR (PLATINUM-COBALT)

DATE: 2/3/1954 **REMARK:** 639 SPECIFIC CONDUCTANCE, US/CM 25 DEGREES CENTIGRADE

DATE: 2/3/1954 **REMARK:** 7.5 PH, WATER, WHOLE, FIELD, STANDARD UNITS

DATE: 2/3/1954 **REMARK:** 6.1 CARBON DIOXIDE DISSOLVED (MG/L AS CO2)

DATE: 2/3/1954 **REMARK:** 98 ALKALINITY, WATER, WHOLE, TOTAL, FIXED ENDPOINT TITRATION, FIELD, MG/L AS CACO3

DATE: 2/3/1954 **REMARK:** 6.5 POTASSIUM DISSOLVED (MG/L AS K)

DATE: 2/3/1954 **REMARK:** 0 CARBONATE, WATER, WHOLE, FIXED ENDPOINT TITRATION, FIELD, MG/L AS CO3

DATE: 2/3/1954 **REMARK:** 30 SODIUM PLUS POTASSIUM DISSOLVED (MG/L AS NA)

DATE: 2/3/1954 **REMARK:** 255 HARDNESS TOTAL (MG/L AS CA03)

DATE: 2/3/1954 **REMARK:** 160 NONCARBONATE HARDNESS WATER WHOLE TOTAL, FIELD, (MG/L AS CA CO3)

DATE: 2/3/1954 **REMARK:** 71 CALCIUM DISSOLVED (MG/L AS CA)

DATE: 2/3/1954 **REMARK:** 19 MAGNESIUM DISSOLVED (MG/L AS MG)

- Continued on next page -

Target Property: 5129 FRANKFORD AVE
PHILADELPHIA PA 19124

JOB: 00L629-B

STATE WELLS SITE

SEARCH ID: 13 **DIST/DIR:** 0.99 SW **MAP ID:** 13

NAME: WARD CHOCOLATE CO
ADDRESS:
PHILADELPHIA PA
CONTACT:

REV: 6/1/09
ID1: 30537
ID2: PH 344
STATUS: WELL
PHONE:

DATE: 2/3/1954 **REMARK:** 23 SODIUM DISSOLVED (MG/L AS NA)

DATE: 2/3/1954 **REMARK:** 0.6 SODIUM ADSORPTION RATIO

DATE: 9/22/1954 **REMARK:** 13 WATER TEMPERATURE, DEGREES CELSIUS

DATE: 2/3/1954 **REMARK:** 120 BICARBONATE, WATER, WHOLE, FIXED ENDPOINT TITRATION, FIELD, MG/L AS HCO3

DATE: 9/22/1954 **REMARK:** 58 CHLORIDE DISSOLVED (MG/L AS CL)

DATE: 9/22/1954 **REMARK:** 98 ALKALINITY, WATER, WHOLE, TOTAL, FIXED ENDPOINT TITRATION, FIELD, MG/L AS CACO3

DATE: 2/3/1954 **REMARK:** 44 DEPTH TO TOP OF SAMPLE INTERVAL (FEET BELOW LSD)

DATE: 9/22/1954 **REMARK:** 94 SULFATE DISSOLVED (MG/L AS SO4)

DATE: 9/22/1954 **REMARK:** 1 NITROGEN, NITRATE, DISSOLVED (MG/L AS NO3)

DATE: 9/22/1954 **REMARK:** 13 SODIUM PLUS POTASSIUM DISSOLVED (MG/L AS NA)

DATE: 9/22/1954 **REMARK:** 150 NONCARBONATE HARDNESS WATER WHOLE TOTAL, FIELD, (MG/L AS CA CO3)

DATE: 9/22/1954 **REMARK:** 250 HARDNESS TOTAL (MG/L AS CA03)

DATE: 9/22/1954 **REMARK:** 0.23 NITROGEN NITRATE DISSOLVED (MG/L AS N)

DATE: 9/22/1954 **REMARK:** 0 CARBONATE, WATER, WHOLE, FIXED ENDPOINT TITRATION, FIELD, MG/L AS CO3

DATE: 9/22/1954 **REMARK:** 120 BICARBONATE, WATER, WHOLE, FIXED ENDPOINT TITRATION, FIELD, MG/L AS HCO3

DATE: 9/22/1954 **REMARK:** 2600 IRON DISSOLVED (UG/L AS FE)

DATE: 2/10/1956 **REMARK:** 0 CARBONATE, WATER, WHOLE, FIXED ENDPOINT TITRATION, FIELD, MG/L AS CO3

DATE: 2/10/1956 **REMARK:** 67 CALCIUM DISSOLVED (MG/L AS CA)

DATE: 2/10/1956 **REMARK:** 230 HARDNESS TOTAL (MG/L AS CA03)

DATE: 2/10/1956 **REMARK:** 0.16 NITROGEN NITRATE DISSOLVED (MG/L AS N)

DATE: 2/10/1956 **REMARK:** 132 BICARBONATE, WATER, WHOLE, FIXED ENDPOINT TITRATION, FIELD, MG/L AS HCO3

DATE: 2/10/1956 **REMARK:** 108 ALKALINITY, WATER, WHOLE, TOTAL, FIXED ENDPOINT TITRATION, FIELD, MG/L AS CACO3

DATE: 2/10/1956 **REMARK:** 8.2 PH, WATER, WHOLE, FIELD, STANDARD UNITS

DATE: 2/10/1956 **REMARK:** 1028 AGENCY ANALYZING SAMPLE (CODE NUMBER)

DATE: 2/10/1956 **REMARK:** 15 MAGNESIUM DISSOLVED (MG/L AS MG)

DATE: 2/10/1956 **REMARK:** 595 SPECIFIC CONDUCTANCE, US/CM 25 DEGREES CENTIGRADE

- Continued on next page -

Target Property: 5129 FRANKFORD AVE
PHILADELPHIA PA 19124

JOB: 00L629-B

STATE WELLS SITE

SEARCH ID: 13 **DIST/DIR:** 0.99 SW **MAP ID:** 13

NAME: WARD CHOCOLATE CO
ADDRESS:
PHILADELPHIA PA
CONTACT:

REV: 6/1/09
ID1: 30537
ID2: PH 344
STATUS: WELL
PHONE:

DATE: 2/10/1956 **REMARK:** 30 ELEVATION OF LAND SURFACE DATUM (LSD) (FEET NGVD)

DATE: 2/10/1956 **REMARK:** 120 NONCARBONATE HARDNESS WATER WHOLE TOTAL, FIELD, (MG/L AS CA CO3)

DATE: 2/10/1956 **REMARK:** 29 SODIUM PLUS POTASSIUM DISSOLVED (MG/L AS NA)

DATE: 2/10/1956 **REMARK:** 250 DEPTH OF WELL, TOTAL (FEET)

DATE: 2/10/1956 **REMARK:** 250 DEPTH TO BOTTOM OF SAMPLE INTERVAL (FEET BELOW LSD)

DATE: 2/10/1956 **REMARK:** 0.7 NITROGEN, NITRATE, DISSOLVED (MG/L AS NO3)

DATE: 2/10/1956 **REMARK:** 385 SOLIDS, RESIDUE ON EVAPORATION AT 180 DEG C, DISSOLVED (MG/L)

DATE: 2/10/1956 **REMARK:** 0 MANGANESE DISSOLVED (UG/L AS MN)

DATE: 2/10/1956 **REMARK:** 1700 IRON DISSOLVED (UG/L AS FE)

DATE: 2/10/1956 **REMARK:** 27 SILICA DISSOLVED (MG/L AS SIO2)

DATE: 2/10/1956 **REMARK:** 0.2 FLUORIDE DISSOLVED (MG/L AS F)

DATE: 2/10/1956 **REMARK:** 108 SULFATE DISSOLVED (MG/L AS SO4)

DATE: 2/10/1956 **REMARK:** 50 CHLORIDE DISSOLVED (MG/L AS CL)

DATE: 2/10/1956 **REMARK:** 44 DEPTH TO TOP OF SAMPLE INTERVAL (FEET BELOW LSD)

DATE: 7/1/1980 **REMARK:** 0.2 NITROGEN, NITRATE, DISSOLVED (MG/L AS NO3)

DATE: 7/1/1980 **REMARK:** 1.1 1,2-DICHLOROPROPANE TOTAL (UG/L)

DATE: 7/1/1980 **REMARK:** 32 TRICHLOROETHYLENE TOTAL (UG/L)

DATE: 7/1/1980 **REMARK:** 550 SOLIDS, RESIDUE ON EVAPORATION AT 180 DEG C, DISSOLVED (MG/L)

DATE: 7/1/1980 **REMARK:** 500 SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)

DATE: 7/1/1980 **REMARK:** 0.09 NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)

DATE: 7/1/1980 **REMARK:** 0.03 NITROGEN, NITRITE, DISSOLVED (MG/L AS NO2)

DATE: 7/1/1980 **REMARK:** 1.2 BROMIDE, DISSOLVED (MG/L AS BR)

DATE: 7/1/1980 **REMARK:** 0 PHOSPHORUS TOTAL (MG/L AS PO4)

DATE: 7/1/1980 **REMARK:** 0.5 MERCURY, DISSOLVED (UG/L AS HG)

DATE: 7/1/1980 **REMARK:** 25 PUMP OR FLOW PERIOD PRIOR TO SAMPLING (MIN)

DATE: 7/1/1980 **REMARK:** 17 1,1,1-TRICHLOROETHANE TOTAL (UG/L)

DATE: 7/1/1980 **REMARK:** < 10 CHROMIUM DISSOLVED (UG/L AS CR)

- Continued on next page -

Environmental FirstSearch
Site Detail Report

Target Property: 5129 FRANKFORD AVE
PHILADELPHIA PA 19124

JOB: 00L629-B

STATE WELLS SITE

SEARCH ID: 13 **DIST/DIR:** 0.99 SW **MAP ID:** 13

NAME: WARD CHOCOLATE CO
ADDRESS:
PHILADELPHIA PA
CONTACT:

REV: 6/1/09
ID1: 30537
ID2: PH 344
STATUS: WELL
PHONE:

DATE: 7/1/1980 **REMARK:** < 200 BARIUM DISSOLVED (UG/L AS BA)

DATE: 7/1/1980 **REMARK:** 22 MAGNESIUM DISSOLVED (MG/L AS MG)

DATE: 7/1/1980 **REMARK:** 53 SODIUM DISSOLVED (MG/L AS NA)

DATE: 7/1/1980 **REMARK:** 1.3 SODIUM ADSORPTION RATIO

DATE: 7/1/1980 **REMARK:** 26 SODIUM, PERCENT

DATE: 7/1/1980 **REMARK:** 9.3 POTASSIUM DISSOLVED (MG/L AS K)

DATE: 7/1/1980 **REMARK:** 90 CHLORIDE DISSOLVED (MG/L AS CL)

DATE: 7/1/1980 **REMARK:** 130 SULFATE DISSOLVED (MG/L AS SO4)

DATE: 7/1/1980 **REMARK:** 20 COPPER DISSOLVED (UG/L AS CU)

DATE: 7/1/1980 **REMARK:** < 200 ALUMINUM DISSOLVED (UG/L AS AL)

DATE: 7/1/1980 **REMARK:** 230 TETRACHLOROETHYLENE TOTAL (UG/L)

DATE: 7/1/1980 **REMARK:** 320 HARDNESS TOTAL (MG/L AS CA03)

DATE: 7/1/1980 **REMARK:** 190 BORON DISSOLVED (UG/L AS B)

DATE: 7/1/1980 **REMARK:** < 10 CADMIUM DISSOLVED (UG/L AS CD)

DATE: 7/1/1980 **REMARK:** < 20 COBALT DISSOLVED (UG/L AS CO)

DATE: 7/1/1980 **REMARK:** 1400 IRON DISSOLVED (UG/L AS FE)

DATE: 7/1/1980 **REMARK:** 2 LEAD DISSOLVED (UG/L AS PB)

DATE: 7/1/1980 **REMARK:** 1200 MANGANESE DISSOLVED (UG/L AS MN)

DATE: 7/1/1980 **REMARK:** 30 NICKEL DISSOLVED (UG/L AS NI)

DATE: 7/1/1980 **REMARK:** 1200 STRONTIUM DISSOLVED (UG/L AS SR)

DATE: 7/1/1980 **REMARK:** 40 ZINC DISSOLVED (UG/L AS ZN)

DATE: 7/1/1980 **REMARK:** 22 SILICA DISSOLVED (MG/L AS SIO2)

DATE: 7/1/1980 **REMARK:** 0.07 NITROGEN AMMONIA DISSOLVED (MG/L AS N)

DATE: 7/1/1980 **REMARK:** 14.5 WATER TEMPERATURE, DEGREES CELSIUS

DATE: 7/1/1980 **REMARK:** 1028 AGENCY COLLECTING SAMPLE (CODE NUMBER)

DATE: 7/1/1980 **REMARK:** 84240 AGENCY ANALYZING SAMPLE (CODE NUMBER)

- More Details Exist For This Site; Max Page Limit Reached -

Environmental FirstSearch
Site Detail Report

Target Property: 5129 FRANKFORD AVE
PHILADELPHIA PA 19124

JOB: 00L629-B

FEDERAL WELLS SITE

SEARCH ID: 18 **DIST/DIR:** 1.00 SE **MAP ID:** 18

NAME: PH 329
ADDRESS:
PA
PHILADELPHIA PA
CONTACT:

REV: 2/21/08
ID1: FW-PA-31629
ID2: 400029075042601
STATUS: USGS GROUNDWATER INV
PHONE:

SITE INFORMATION

AGENCY:	US GEOLOGICAL SURVEY
SITE ID:	400029075042601
SITE NAME:	PH 329
SITE TYPE :	GROUND-WATER OTHER THAN SPRING
COUNTY :	PHILADELPHIA
COUNTRY :	US
LAND NET LOCATION DESC:	
LOCATION MAP:	FRANKFORD
LOCATION MAP SCALE:	24000
GAGE/LAND SURFACE ALTITUDE:	20.00
METHOD ALTITUDE DETERMINED:	M
ALTITUDE ACCURACY:	10
ALTITUDE DATUM:	NGVD29
HYDROLOGIC UNIT :	LOWER DELAWARE
TOPOGRAPHIC SETTING :	VALLEY FLAT (VALLEYS OF ALL SIZES)
DATE OF FIRST CONSTRUCTION:	07/19/1935
DATE SITE ESTABLISHED:	//
MEAN GREENWICH TIME OFFSET:	EST
LOCAL STANDARD TIME FLAG:	Y
TYPE OF GROUNDWATER SITE:	W
PRIMARY AQUIFER :	300WSCKO
AQUIFER TYPE :	
WELL_DEPTH VA:	156
HOLE DEPTH:	
DEPTH DATA SOURCE:	
PROJECT NUMBER:	

Environmental FirstSearch Descriptions

State Wells: ***PaGWIS*** THE PENNSLYVANIA GROUND WATER INFORMATION SYSTEM - The data provided for Pennsylvania wells consists of The Pennsylvania Ground Water Information System (PaGWIS). This database is maintained by The Pennsylvania Topographic and Geological Survey(PaGS). This database consists of the following:Water Well Inventory (WWI) This database contains information regarding 165,827 wells, 123,351 of which have latitude and longitude values. This database was created by the Pennsylvania Geological Survey to manage data supplied to them by water well drillers. Data submission began in 1966 using paper forms. Latitude and longitude was determined in the office by interpreting both handwritten directions and a hand-drawn map supplied by the driller. Most of the location and data entry work has been done by temporary employees of the agency, so it is of varying reliability. Typically one county was worked on at a time. No data entry has been done since August of 1994, when York county was updated. Records submitted since the last update are filed by county and township in the Harrisburg offices of the Pa Geological Survey and can be examined by visiting that office. Although since 1966 drillers have been obligated by law to submit a completion report for every water well constructed in the state, it is estimated that many thousands go unreported each year. Ground Water Site Inventory (GWSI) GWSI is part of the United States Geological Survey's WATSTORE system, a national database to manage water data. PaGWIS contains information on 44,411 wells and 1,538 springs from this database and is current through July, 1998. Locations for all GWSI sites have been determined through a field visit. Most of the data in GWSI resulted from water resource studies conducted by either the Pennsylvania or United States Geological Surveys. Much of this same data and the resulting interpretation, can be found in the published reports from these studies. Since 1966 the WWI data, discussed above, has provided the starting point for many of the sites in GWSI, so it is likely that there is some duplication in the two datasets. GWSI contains a wealth of historical data, some dating to the early 1900's. Quality of Water (QWData) This is the water quality portion of the United States Geological Survey's WATSTORE system. PaGWIS contains the results of more than 479,515 individual parameters conducted on 18,217 samples collected at 7,265 wells and 524 springs across Pennsylvania. The database uses standardized codes to identify the 10,419 different parameters the database is designed to store. Public Water Supply Wells Data on selected public water supply wells was provided by the Bureau of Water Supply Management in Pennsylvania's Department of Environmental Protection (DEP). PaGWIS contains information regarding 9,067 public water supply wells which were not present in either WWI or GWSI. Many of these wells were constructed prior to the Water Well Inventory. A higher percentage of public water supply wells go unreported to the WWI because drillers mistakenly believe the consultant overseeing the construction will submit the completion report. Pesticide Survey Data for 172 wells was supplied by The Pennsylvania Department of Agriculture as a result of a two-year study of pesticides in ground water. Generally the WWI provided base information for the field verification and sampling of these sites.

Federal Wells: ***USGS*** UNITED STATES GROUND-WATER SITES INVENTORY - Database of more than 850,000 records of wells, springs, test holes, tunnels, drains, and excavations in the United States.

RADON: ***NTIS*** NATIONAL RADON DATABASE - EPA radon data from 1990-1991 national radon project collected for a variety of zip codes across the United States.

Environmental FirstSearch Database Sources

State Wells: ***PaGWIS*** The Pennsylvania Topographic and Geological Survey(PaGS)

Updated NO LONGER UPDATED

Federal Wells: ***USGS*** United States Geographical Survey.

Updated annually

RADON: ***NTIS*** Environmental Protection Agency, National Technical Information Services

Updated periodically

Environmental FirstSearch
Street Name Report for Streets within .25 Mile(s) of Target Property

Target Property: 5129 FRANKFORD AVE
PHILADELPHIA PA 19124

JOB: 00L629-B

Street Name	Dist/Dir	Street Name	Dist/Dir
Allengrove St	0.22 SW		
Bridge St	0.10 NE		
Brill St	0.18 NE		
Bustleton Ave	0.12 NE		
Conklin St	0.08 SE		
Darrah St	0.07 SE		
Duffield St	0.16 SE		
Dyre St	0.09 SW		
Frankford Ave	0.01 NE		
Granite St	0.05 NE		
Griscom St	0.08 NW		
Haworth St	0.13 SW		
Hawthorne St	0.21 SE		
Hedge St	0.15 SE		
Kennedy St	0.25 NW		
Leiper St	0.17 NW		
Lesher St	0.13 SE		
Marlowe St	0.24 SE		
Penn St	0.13 NW		
Pratt St	0.01 NE		
Saul St	0.22 NW		
Scattergood St	0.20 SE		
Wakeling St	0.18 SW		

Environmental FirstSearch

1 Mile Radius

State Wells Sites

5129 FRANKFORD AVE, PHILADELPHIA PA 19124



ource: 2002 U.S. Census TIGER Files

Target Site (Latitude: 40.022247 Longitude: -75.078164) .....

dentified Site, Multiple Sites, Receptor .....

NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste

Triballand.....

Railroads .....

Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius

Public Water Supply, Zone II, Zone A, Interim Wellhead Protection Areas

Environmental FirstSearch

1 Mile Radius

Federal Wells Sites

5129 FRANKFORD AVE, PHILADELPHIA PA 19124



ource: 2002 U.S. Census TIGER Files

Target Site (Latitude: 40.022247 Longitude: -75.078164) .....

dentified Site, Multiple Sites, Receptor .....

NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste Triballand.....

Railroads .....

Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius

Federal Wells .....

APPENDIX G

Philadelphia Department of Health Correspondence

CITY OF PHILADELPHIA

DEPARTMENT OF PUBLIC HEALTH
Donald F. Schwarz, MD, MPH
Deputy Mayor for Health & Opportunity
Health Commissioner

Nan Feyler, JD, MPH
Chief of Staff

Environmental Health Services
Palak Raval-Nelson, PhD, MPH
Director

Director's Office
321 University Avenue, 2nd Floor
Philadelphia, PA 19104

Telephone (215) 685-7489
Fax (215) 685-7409

October 4, 2011

BL Companies
4242 Carlisle Pike, Suite 260
Camp Hill, PA 17011

Dear Ms. Zielinski:

The Environmental Engineering Section of the Philadelphia Department of Public Health (PDPH) is in receipt of your inquiry concerning the use of ground water for potable purposes within 1,000 feet of **5129-35 Frankford Avenue, Philadelphia, Pennsylvania, 19124.**

The Philadelphia Plumbing Code requires that the location, design, installation and monitoring of potable drinking water wells be reported and approved by the PDPH prior to use. I have reviewed the records of the Department and these do not indicate the presence of any potable drinking water wells in Philadelphia within the prescribed area. Further, these areas are served by the municipal water system.

Please be advised that our records only relate to the location, design, installation and operation of potable water wells and the designation of the site as an unused aquifer can only be issued by the PA DEP. In addition, we do not have any records relating to water utilized for agricultural or monitoring purposes.

If further information is required, please do not hesitate to contact me.

Sincerely yours,

Lauren Glazer

Lauren Glazer
Sanitarian Specialist

APPENDIX H

Vapor Intrusion Model Output

DATA ENTRY SHEET

GW-SCREEN Version 3.1; 02/04

Reset to Defaults

CALCULATE RISK-BASED GROUNDWATER CONCENTRATION (enter "X" in "YES" box)

YES [ ]

OR

CALCULATE INCREMENTAL RISKS FROM ACTUAL GROUNDWATER CONCENTRATION (enter "X" in "YES" box and initial groundwater conc. below)

YES [X]

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Initial groundwater conc., C_W (µg/L)	Chemical
156592	1.78E+01	cis-1,2-Dichloroethylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (cm)	ENTER Depth below grade to water table, L_{WT} (cm)	ENTER SCS soil type directly above water table	ENTER Average soil/ groundwater temperature, T_S (°C)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
200	320	SL	12.7	

MORE ↓

ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vandose zone soil vapor permeability, k_v (cm^2)	ENTER Vadose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^V (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)
SL			SL	1.62	0.387	0.103

MORE ↓

ENTER Target risk for carcinogens, TR (unitless)	ENTER Target hazard quotient for noncarcinogens, THQ (unitless)	ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
1.0E-06	1	70	25	25	250

Used to calculate risk-based groundwater concentration.

END

DATA ENTRY SHEET

RISK-BASED GROUNDWATER CONCENTRATION CALCULATIONS:

Indoor exposure groundwater conc., carcinogen (µg/L)	Indoor exposure groundwater conc., noncarcinogen (µg/L)	Risk-based indoor exposure groundwater conc., (µg/L)	Pure component water solubility, S (µg/L)	Final indoor exposure groundwater conc., (µg/L)
NA	NA	NA	3.50E+06	NA

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	3.0E-03

MESSAGE SUMMARY BELOW:

MESSAGE: Risk/HQ or risk-based groundwater concentration is based on a route-to-route extrapolation.

DATA ENTRY SHEET

GW-SCREEN
Version 3.1; 02/04

Reset to Defaults

CALCULATE RISK-BASED GROUNDWATER CONCENTRATION (enter "X" in "YES" box)

YES [ ]

OR

CALCULATE INCREMENTAL RISKS FROM ACTUAL GROUNDWATER CONCENTRATION
(enter "X" in "YES" box and initial groundwater conc. below)

YES [X]

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Initial groundwater conc., C_W (µg/L)	Chemical
127184	6.35E+01	Tetrachloroethylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (cm)	ENTER Depth below grade to water table, L_{WT} (cm)	ENTER SCS soil type directly above water table	ENTER Average soil/ groundwater temperature, T_S (°C)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
200	320	SL	12.7	

MORE ↓

ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vandose zone soil vapor permeability, k_v (cm^2)	ENTER Vadose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^V (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)
SL			SL	1.62	0.387	0.103

MORE ↓

ENTER Target risk for carcinogens, TR (unitless)	ENTER Target hazard quotient for noncarcinogens, THQ (unitless)	ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
1.0E-06	1	70	25	25	250

Used to calculate risk-based groundwater concentration.

END

DATA ENTRY SHEET

RISK-BASED GROUNDWATER CONCENTRATION CALCULATIONS:

Indoor exposure groundwater conc., carcinogen (µg/L)	Indoor exposure groundwater conc., noncarcinogen (µg/L)	Risk-based indoor exposure groundwater conc., (µg/L)	Pure component water solubility, S (µg/L)	Final indoor exposure groundwater conc., (µg/L)
NA	NA	NA	2.00E+05	NA

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
2.8E-06	2.2E-03

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

GW-SCREEN
Version 3.1; 02/04

Reset to Defaults

CALCULATE RISK-BASED GROUNDWATER CONCENTRATION (enter "X" in "YES" box)

YES [ ]

OR

CALCULATE INCREMENTAL RISKS FROM ACTUAL GROUNDWATER CONCENTRATION
(enter "X" in "YES" box and initial groundwater conc. below)

YES [X]

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Initial groundwater conc., C_W (µg/L)	Chemical
79016	4.86E+00	Trichloroethylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (cm)	ENTER Depth below grade to water table, L_{WT} (cm)	ENTER SCS soil type directly above water table	ENTER Average soil/ groundwater temperature, T_S (°C)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
200	320	SL	12.7	

MORE ↓

ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vandose zone soil vapor permeability, k_v (cm^2)	ENTER Vadose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^V (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)
SL			SL	1.62	0.387	0.103

MORE ↓

ENTER Target risk for carcinogens, TR (unitless)	ENTER Target hazard quotient for noncarcinogens, THQ (unitless)	ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
1.0E-06	1	70	25	25	250

Used to calculate risk-based groundwater concentration.

DATA ENTRY SHEET

RISK-BASED GROUNDWATER CONCENTRATION CALCULATIONS:

Indoor exposure groundwater conc., carcinogen (µg/L)	Indoor exposure groundwater conc., noncarcinogen (µg/L)	Risk-based indoor exposure groundwater conc., (µg/L)	Pure component water solubility, S (µg/L)	Final indoor exposure groundwater conc., (µg/L)
NA	NA	NA	1.47E+06	NA

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
4.0E-08	1.3E-04

MESSAGE SUMMARY BELOW:

MESSAGE: Risk/HQ or risk-based groundwater concentration is based on a route-to-route extrapolation.

END

DATA ENTRY SHEET

GW-SCREEN
Version 3.1; 02/04

Reset to Defaults

CALCULATE RISK-BASED GROUNDWATER CONCENTRATION (enter "X" in "YES" box)

YES [ ]

OR

CALCULATE INCREMENTAL RISKS FROM ACTUAL GROUNDWATER CONCENTRATION
(enter "X" in "YES" box and initial groundwater conc. below)

YES [X]

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Initial groundwater conc., C_W (µg/L)	Chemical
156605	2.67E+00	trans-1,2-Dichloroethylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (cm)	ENTER Depth below grade to water table, L_{WT} (cm)	ENTER SCS soil type directly above water table	ENTER Average soil/ groundwater temperature, T_S (°C)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
200	320	SL	12.7	

MORE ↓

ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vandose zone soil vapor permeability, k_v (cm^2)	ENTER Vadose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^V (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)
SL			SL	1.62	0.387	0.103

MORE ↓

ENTER Target risk for carcinogens, TR (unitless)	ENTER Target hazard quotient for noncarcinogens, THQ (unitless)	ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
1.0E-06	1	70	25	25	250

Used to calculate risk-based groundwater concentration.

DATA ENTRY SHEET

RISK-BASED GROUNDWATER CONCENTRATION CALCULATIONS:

Indoor exposure groundwater conc., carcinogen (µg/L)	Indoor exposure groundwater conc., noncarcinogen (µg/L)	Risk-based indoor exposure groundwater conc., (µg/L)	Pure component water solubility, S (µg/L)	Final indoor exposure groundwater conc., (µg/L)
NA	NA	NA	6.30E+06	NA

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	5.0E-04

MESSAGE SUMMARY BELOW:

MESSAGE: Risk/HQ or risk-based groundwater concentration is based on a route-to-route extrapolation.

END

DATA ENTRY SHEET

GW-SCREEN Version 3.1; 02/04

Reset to Defaults

CALCULATE RISK-BASED GROUNDWATER CONCENTRATION (enter "X" in "YES" box)

YES [ ]

OR

CALCULATE INCREMENTAL RISKS FROM ACTUAL GROUNDWATER CONCENTRATION (enter "X" in "YES" box and initial groundwater conc. below)

YES [X]

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Initial groundwater conc., C_W (µg/L)	Chemical
75014	3.45E+00	Vinyl chloride (chloroethene)

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (cm)	ENTER Depth below grade to water table, L_{WT} (cm)	ENTER SCS soil type directly above water table	ENTER Average soil/ groundwater temperature, T_S (°C)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
200	320	SL	12.7	

MORE ↓

ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vandose zone soil vapor permeability, k_v (cm^2)	ENTER Vadose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^V (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)
SL			SL	1.62	0.387	0.103

MORE ↓

ENTER Target risk for carcinogens, TR (unitless)	ENTER Target hazard quotient for noncarcinogens, THQ (unitless)	ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
1.0E-06	1	70	25	25	250

Used to calculate risk-based groundwater concentration.

DATA ENTRY SHEET

RISK-BASED GROUNDWATER CONCENTRATION CALCULATIONS:

Indoor exposure groundwater conc., carcinogen (µg/L)	Indoor exposure groundwater conc., noncarcinogen (µg/L)	Risk-based indoor exposure groundwater conc., (µg/L)	Pure component water solubility, S (µg/L)	Final indoor exposure groundwater conc., (µg/L)
NA	NA	NA	8.80E+06	NA

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
5.5E-07	1.6E-03

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SL-SCREEN
Version 3.1; 02/04

Reset to Defaults

CALCULATE RISK-BASED SOIL CONCENTRATION (enter "X" in "YES" box)

YES [ ]

OR

CALCULATE INCREMENTAL RISKS FROM ACTUAL SOIL CONCENTRATION (enter "X" in "YES" box and initial soil conc. below)

YES [X]

ENTER Chemical CAS No. (numbers only, no dashes)	**ENTER** Initial soil conc., C_R (µg/kg)	Chemical
98828	7.75E+02	Cumene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	**ENTER** Depth below grade to top of contamination, L_t (cm)	**ENTER** Average soil temperature, T_S (°C)	**ENTER** Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	**ENTER** User-defined vadose zone soil vapor permeability, k_v (cm^2)
200	274	12.7	SL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	**ENTER** Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	**ENTER** Vadose zone soil total porosity, n^V (unitless)	**ENTER** Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	**ENTER** Vadose zone soil organic carbon fraction, f_{oc}^V (unitless)	**ENTER** Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SL	1.62	0.387	0.103	0.002	

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	**ENTER** Averaging time for noncarcinogens, AT_{NC} (yrs)	**ENTER** Exposure duration, ED (yrs)	**ENTER** Exposure frequency, EF (days/yr)	**ENTER** Target risk for carcinogens, TR (unitless)	**ENTER** Target hazard quotient for noncarcinogens, THQ (unitless)
70	25	25	250	1.0E-06	1
				Used to calculate risk-based soil concentration.	

END

DATA ENTRY SHEET

RISK-BASED SOIL CONCENTRATION CALCULATIONS:

Indoor exposure soil conc., carcinogen (µg/kg)	Indoor exposure soil conc., noncarcinogen (µg/kg)	Risk-based indoor exposure soil conc., (µg/kg)	Soil saturation conc., C_{sat} (µg/kg)	Final indoor exposure soil conc., (µg/kg)
NA	NA	NA	6.65E+04	NA

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	4.4E-02

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SL-SCREEN
Version 3.1; 02/04

Reset to Defaults

CALCULATE RISK-BASED SOIL CONCENTRATION (enter "X" in "YES" box)

YES

OR

CALCULATE INCREMENTAL RISKS FROM ACTUAL SOIL CONCENTRATION (enter "X" in "YES" box and initial soil conc. below)

YES X

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Initial soil conc., C_R (µg/kg)	Chemical
100414	8.10E+01	Ethylbenzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Depth below grade to top of contamination, L_t (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
200	274	12.7	SL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Vadose zone soil organic carbon fraction, f_{oc}^V (unitless)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SL	1.62	0.387	0.103	0.002	

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)	ENTER Target risk for carcinogens, TR (unitless)	ENTER Target hazard quotient for noncarcinogens, THQ (unitless)
70	25	25	250	1.0E-06	1

Used to calculate risk-based soil concentration.

END

DATA ENTRY SHEET

RISK-BASED SOIL CONCENTRATION CALCULATIONS:

Indoor exposure soil conc., carcinogen (µg/kg)	Indoor exposure soil conc., noncarcinogen (µg/kg)	Risk-based indoor exposure soil conc., (µg/kg)	Soil saturation conc., C_{sat} (µg/kg)	Final indoor exposure soil conc., (µg/kg)
NA	NA	NA	1.38E+05	NA

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
6.1E-07	1.6E-03

MESSAGE SUMMARY BELOW:

END

SL-SCREEN
Version 3.1; 02/04

Reset to Defaults

CALCULATE RISK-BASED SOIL CONCENTRATION (enter "X" in "YES" box)

YES [ ]

OR

CALCULATE INCREMENTAL RISKS FROM ACTUAL SOIL CONCENTRATION (enter "X" in "YES" box and initial soil conc. below)

YES [X]

ENTER Chemical CAS No. (numbers only, no dashes)	**ENTER** Initial soil conc., C_R (µg/kg)	Chemical
108883	3.30E+02	Toluene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	**ENTER** Depth below grade to top of contamination, L_t (cm)	**ENTER** Average soil temperature, T_S (°C)	**ENTER** Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	**ENTER** User-defined vadose zone soil vapor permeability, k_v (cm^2)
200	274	12.7	SL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	**ENTER** Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	**ENTER** Vadose zone soil total porosity, n^V (unitless)	**ENTER** Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	**ENTER** Vadose zone soil organic carbon fraction, f_{oc}^V (unitless)	**ENTER** Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SL	1.62	0.387	0.103	0.002	

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	**ENTER** Averaging time for noncarcinogens, AT_{NC} (yrs)	**ENTER** Exposure duration, ED (yrs)	**ENTER** Exposure frequency, EF (days/yr)	**ENTER** Target risk for carcinogens, TR (unitless)	**ENTER** Target hazard quotient for noncarcinogens, THQ (unitless)
70	25	25	250	1.0E-06	1
				Used to calculate risk-based soil concentration.	

END

DATA ENTRY SHEET

RISK-BASED SOIL CONCENTRATION CALCULATIONS:

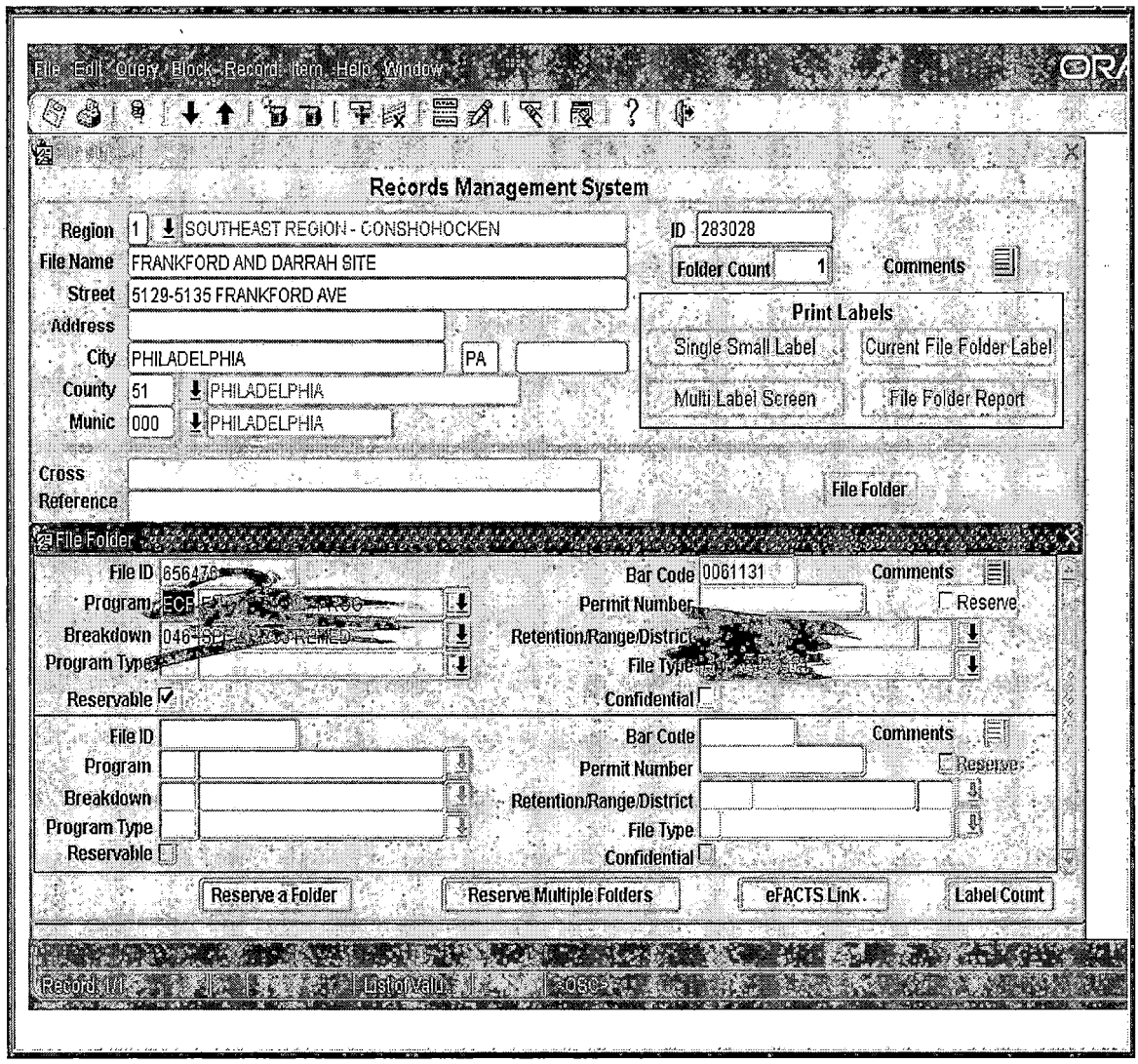
Indoor exposure soil conc., carcinogen (µg/kg)	Indoor exposure soil conc., noncarcinogen (µg/kg)	Risk-based indoor exposure soil conc., (µg/kg)	Soil saturation conc., C_{sat} (µg/kg)	Final indoor exposure soil conc., (µg/kg)
NA	NA	NA	2.38E+05	NA

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	2.6E-02

MESSAGE SUMMARY BELOW:

END


File Edit Query Block Record Item Help Window
Records Management System
Region 1 SOUTHEAST REGION - CONSHOHOCKEN
File Name FRANKFORD AND DARRAH SITE
Street 5129-5135 FRANKFORD AVE
Address
City PHILADELPHIA PA
County 51 PHILADELPHIA
Munic 000 PHILADELPHIA
ID 283028
Folder Count 1
Comments
Print Labels
Single Small Label
Current File Folder Label
Multi Label Screen
File Folder Report
Cross Reference
File Folder
File Folder
File ID
Program
Breakdown
Program Type
Reservable
Bar Code 0061131
Permit Number
Retention/Range/District
File Type
Confidential
Comments
Reserve
File ID
Program
Breakdown
Program Type
Reservable
Bar Code
Permit Number
Retention/Range/District
File Type
Confidential
Comments
Reserve
Reserve a Folder
Reserve Multiple Folders
eFACTS Link
Label Count
Record 1/1
List of Valu

Pennsylvania Department of Environmental Protection

2 East Main Street
Norristown, PA 19401
June 1, 2009

Southeast Regional Office

Phone: 484-250-5960
Fax: 484-250-5961

Mr. Robert Lerner
Rite Aid Corporation
30 Hunter Lane
Camp Hill, PA 17011

Re: ECP - Special Projects - Act 2
Frankford and Darrah Site
eFACTS No. 716772
5129-5135 Frankford Avenue
City of Philadelphia
Philadelphia County

Dear Mr. Lerner:

The Department of Environmental Protection (Department) has received and reviewed the March 18, 2009, document titled "Remedial Investigation Report," for the property located at 5129-5135 Frankford Avenue in the City of Philadelphia. The report was prepared by BL Companies, Inc., and submitted to the Department in accordance with the Land Recycling and Environmental Remediation Standards Act (Act 2) and constitutes a Remedial Investigation Report as defined in Chapter 3, Section 304 of the Act.

The Department hereby approves the Remedial Investigation Report in accordance with the provisions of Act 2. It is understood that attainment groundwater monitoring is ongoing.

Please note the Uniform Environmental Covenants Act (Act 68 of 2007), Title 27, Pa.C.S. Chapter 65 (UECA), became effective on February 19, 2008. This law provides a standardized process for creating, documenting, and assuring the enforceability of activity and use limitations on contaminated sites involving most engineering and institutional controls used to achieve Act 2 standards. For Act 2 cases meeting these conditions, the Department cannot approve a Final Report (FR) that does not include the appropriate environmental covenant(s) for the affected properties. The Department must approve the language in these covenants and strongly recommends that the draft covenant(s) be submitted for review prior to the submittal of the FR. Further information about UECA may be found on the Department's website at http://www.depweb.state.pa.us (under the keyword "Land Recycling").

Thank you for your cooperation in working with the Department in the remediation of this site. We look forward to receipt of your Final Report submittal. If you have any questions or need further information regarding this matter, please contact the Environmental Cleanup Program.

Sincerely,

Thomas D. Buterbaugh
Geologic Specialist
Environmental Cleanup

Walter J. Payne, P.G.
Professional Geologist Manager
Environmental Cleanup

cc: Mr. Buterbaugh
Mr. Sinding
Mr. Payne
Ms. Bass
Mr. Gallagher
Mr. Molina
Mr. Gelman - Rite Aid Corporation
Mr. Wolf - BL Companies
Philadelphia Health Department
Regional File
30 Cycle 09 152-11

RECORDS MANAGEMENT REQUEST FORM

Action Needed: ☑ New File ☐ Change File ☐ Add to File
☐ Kill File ☐ Other:

Program: ☐ ADM ☐ AQ ☐ CERCLA ☐ HSCA ☐ NPL ☐ RP ☑ SP
☐ SWW ☐ UST ☐ WM ☐ WQM ☐ WShed ☐ WSM ☐

CHECK BOX FOR "CONFIDENTIAL" FILE ☐

SECTION A: OLD INFORMATION: fill in for CHANGE/KILL/OTHER

Facility Name:
Site Address:
City: **State:** PA **ZIP:**
Municipality: **County:**
SBJ ID No.: **Program Type:**
File ID No.: **Range:**
Permit No.: **File Type:**

SECTION B: NEW INFORMATION: fill in for NEW/CHANGE

Facility Name: FRANKFORD AND DARRAH SITE
Site Address: 5129 - 5135 FRANKFORD AVE.
City: PHILADELPHIA **State:** PA **ZIP:**
Municipality: PHILADELPHIA **County:**
SBJ ID No.: **Program Type:** ECP - ACT 2
File ID No.: eFACTS # 716772 **Range:** SPECIAL PROJECTS
Permit No.: **File Type:**

SECTION C: CROSS REFERENCE(S)

SECTION D: REASON FOR REQUEST

NEW

SECTION E: AUTHORIZED SIGNATURE: ROSALIND WARREN

DATE: 6/3/09

PADEP SERO RM 08/02/2004

File # 656476

Pennsylvania Department of Environmental Protection

2 East Main Street
Norristown, PA 19401
June 1, 2009

Southeast Regional Office

Phone: 484-250-5960
Fax: 484-250-5961

Mr. Robert Lerner
Rite Aid Corporation
30 Hunter Lane
Camp Hill, PA 17011

Re: ECP - Special Projects - Act 2
Frankford and Darrah Site
eFACTS No. 716772
5129-5135 Frankford Avenue
City of Philadelphia
Philadelphia County

Dear Mr. Lerner:

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The Department hereby approves the Remedial Investigation Report in accordance with the provisions of Act 2. It is understood that attainment groundwater monitoring is ongoing.

Please note the Uniform Environmental Covenants Act (Act 68 of 2007), Title 27, Pa.C.S. Chapter 65 (UECA), became effective on February 19, 2008. This law provides a standardized process for creating, documenting, and assuring the enforceability of activity and use limitations on contaminated sites involving most engineering and institutional controls used to achieve Act 2 standards. For Act 2 cases meeting these conditions, the Department cannot approve a Final Report (FR) that does not include the appropriate environmental covenant(s) for the affected properties. The Department must approve the language in these covenants and strongly recommends that the draft covenant(s) be submitted for review prior to the submittal of the FR. Further information about UECA may be found on the Department's website at http://www.depweb.state.pa.us (under the keyword "Land Recycling").

Thank you for your cooperation in working with the Department in the remediation of this site. We look forward to receipt of your Final Report submittal. If you have any questions or need further information regarding this matter, please contact the Environmental Cleanup Program.

Sincerely,

Thomas D. Buterbaugh
Geologic Specialist
Environmental Cleanup

Walter J. Payne, P.G.
Professional Geologist Manager
Environmental Cleanup

cc: Mr. Buterbaugh
Mr. Sinding
Mr. Payne
Ms. Bass
Mr. Gallagher
Mr. Molina
Mr. Gelman - Rite Aid Corporation
Mr. Wolf - BL Companies
Philadelphia Health Department
Regional File
30 (joh09)152-11

Pennsylvania Department of Environmental Protection

2 East Main Street
Norristown, PA 19401
March 25, 2009

Southeast Regional Office

Phone: 484-250-5960
Fax: 484-250-5961

Mr. Bradley S. Wolf
BL Companies, Inc.
213 Market Street, 6th Floor
Harrisburg, PA 17101

Re: ECP - Special Projects - Act 2
Receipt of Report/Plan/SSS
Frankford and Darrah Site
EFACTS No. 716772
5129-5135 Frankford Avenue
City of Philadelphia
Philadelphia County

Dear Mr. Wolf:

This letter acknowledges receipt of your administratively complete Remedial Investigation Report on March 23, 2009, pertaining to the subject site and submitted in accordance with the provisions of the Land Recycling and Environmental Remediation Standards Act (Act 2).

The Department of Environmental Protection (Department) has 90 days from receipt to review the Remedial Investigation Report. If we do not respond with deficiencies within the 90-day time frame, the Remedial Investigation Report shall be deemed approved. You will receive a letter advising you of the Department's action.

The procedures set forth in Act 2 must be followed in order for your site to qualify for liability protection provided by the Act. Approval of your submission and the liability protection provided by Act 2 are, in part, contingent upon compliance with applicable public and municipal notifications.

If you have any questions or need further clarifications of our procedures, please contact me at the above number.

Sincerely,

Thomas D. Buterbaugh
Geologic Specialist
Environmental Cleanup

cc: Mr. Gelman (Rite Aid of Pennsylvania, Inc.)
Mr. Lerner (Rite Aid Corporation)
Mr. Delaney (Philadelphia County Health Department)
Mr. Payne
Mr. Gallagher
Ms. Bass
Re 30 (CB09ECP) 84

LAND RECYCLING PROGRAM ROUTE SHEET

Rev: 03/21/2006

SITE DESCRIPTION:
LRP db No: 116772
Site Name: Frankford and Darragh St.
Site Address: 5129-5135 Frankford Ave
Municipality: City of Phila
County: Phila

ROUTE	Initial	Date
Special Projects Chief		
Lead Worker		
Project Officer Assigned:	Tom B.	
Database Entry		
Administrative Assistant	CB	3/25
Project Officer		

Attached:

	Date Received	Fee /Ck #/Date
☐ Notice of Intent to Remediate		
☐ Standard: SWHS ____ BKGND ____ SSS ____ SIA ____		
☐ Media: Soil ____ Groundwater ____ Contaminant: ____		
☐ Transmittal Sheet for Plan/Report Submission		
☐ Background Standard Final Report		☐ $250.00/____/__
☐ Statewide Health Standard Final Report		☐ $250.00/____/____
☑ Site-Specific Standard:		
☑ Remedial Investigation Report (if req'd)	3/23	☑ $250.00/3/19/3698
☐ Risk Assessment Report (if req'd)		☐ $250.00/____/____
☐ Cleanup Plan (if req'd)		☐ $250.00/____/____
☐ Final Report		☐ $500.00/____/____
☐ Special Industrial Area:		
☐ Work Plan for RI		No fee
☐ Baseline Environ. Report (BER)		No fee
☐ Other: ____		
☐ Proof of Publication of NIR/Report		
☐ Proof of NIR/Report Submission to Municip.		
☐ 90 – Day Cleanup Report		
☐ Non-Use Aquifer Determination Request		

Guidance
- ☐ Check List
- ☐ Summary Report
- ☐ Transmittal Sheet
- ☐ Low Risk Documentation

Records Management Checklist
- ___Act 2 Site Documentation Checklist
- ___RPG/PE Seals and Signatures
- ___Technical Memorandum
- ___Final Letter
- ___LRP Updated
- ___File Organized
- ___Reports/Plans Attached

Land Recycling Program Submission Requirements

Submission Requirements	NIR	Fee	Public Notice	Municipal Notice	Pa. Bul. Rprt Rcv'd	Pa. Bul. Rprt App/Dis	Defic. Resub.	Denial Resub.
Background Standard	Y	NA	Y____	Y____	Y____			
Final Report		$250	Y____	Y____	Y____	Y____		
Statewide Health Std.	Y	NA	Y____	Y____	Y____			
Final Report		$250	Y____	Y____	Y____	Y____		
Site-Specific Std.	Y	NA	Y____	Y____	Y____			
Remedial Invest. Rprt		$250	Y____	Y____	Y____	Y____		
Risk Assessment Rprt		$250	Y____	Y____	Y____	Y____		
Cleanup Plan		$250	Y____	Y____	Y____	Y____		
Final Report		$500	Y____	Y____	Y____	Y____		
Special Industrial Area								
Work Plan for RI		NO	NO	NO	NO			
NIR	Y	NA	Y____	Y____	Y____			
Baseline Envir. Report(BER)		NO	NO	NO	Y____	Y____		
90 Day Submission of Report		$250	NO	NO	Y____	Y____		
Low Risk Site	Y	$250						

BL Companies

Transmittal

RECEIVED
DEP-SERO
ECP/WASTE MGMT.
2009 MAR 23 PM 2:19

DATE: March 19, 2009

ATTENTION: Mr. Thomas D. Buterbaugh, Geologic Specialist

COMPANY: PADEP, Environmental Cleanup

ADDRESS: 2 East Main St.., Norristown, PA 19401

DISTRIBUTION:

FROM: John Thatcher

PROJECT NAME: Rite Aid- Frankford & Darrah Site PROJECT NUMBER: 00L629-B

SUBJECT: Remedial Investigation Report

WE ARE SENDING YOU:

☒ Attached ☐ Under separate cover via the following items:

☐ Shop Drawings ☐ Prints ☐ Plans ☐ Samples ☐ Specifications

☐ Copy of letter ☐ Change order ☐ Other:

COPIES	DATE	NO.	DESCRIPTION
1	3/18/09		Remedial Investigation Report
1	n/a		PADEP Transmittal Sheet for Plan/Report Submission
1	3/19/09	3698	Check for $250- Site Specific Standard submission fee

THESE ARE TRANSMITTED as checked below:

☒ For approval ☐ No exceptions taken ☐ Resubmit ☐ For approval

☐ For your use ☐ Furnish as corrected ☐ Submit ☐ For distribution

☐ As requested ☐ Revise and resubmit ☐ Return ☐ Corrected prints

☐ For review & comment ☐ Rejected ☐ Prints returned after loan to us

☐ For bids due , 200 ☐ Resubmit for record ☐

REMARKS:

Signature

ARCHITECTURE
ENGINEERING
PLANNING
LANDSCAPE ARCHITECTURE
LAND SURVEYING
ENVIRONMENTAL SCIENCES

One South Market Sq.
213 Market Street; 6th Fl.
Harrisburg, Pennsylvania
17101

717.651.9850 T
800.577.3267 T
717.651.9858 F

blcompanies.com

2530-FM-BWM0023 Rev. 1/2004

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

RECEIVED
DEP - SERO
ECP/WASTE MGMT.
2009 MAR 23 PM 2:19

Land Recycling Program
Transmittal Sheet for Plan/Report Submission

Instructions: Please provide all requested information in each of the four sections. This transmittal sheet shall accompany any plan/report submitted to the Department under the Land Recycling Program. Proper completion of the Transmittal Sheet will assist Department review and may avoid a finding of plan/report deficiency. The Facility ID number can be obtained from the Department's Environmental Cleanup Program in the region where the site is located.

Section 1 - Site Identification

eFACTS Facility ID 595532

Site Name Frankford and Darrah Site

Site Address 5129-5135 Frankford Avenue

Municipality and County City of Philadelphia, Philadelphia County

Section 2 - Remediation Standard . . Plan/Report . . Fees

Identify the remediation standard being pursued and the type of plan/report being submitted. Please note required Department fees follow each type of plan/report.

Check the relevant standard and the type of plan/report being submitted.

- ☐ Background Standard
  Final Report ($250 fee)
- ☒ Site-Specific Standard
  - ☒ Remedial Investigation Report ($250 fee)
  - ☐ Risk Assessment Report ($250 fee)
  - ☐ Cleanup Plan ($250 fee)
  - ☐ Final Report ($500 fee)
- ☐ Statewide Health Standard
  Final Report ($250 fee)
- ☐ Special Industrial Area
  - ☐ Work Plan (no fee)
  - ☐ Baseline Environmental Report (no fee)

Ensure your check covers all required fees and is made payable to the **Commonwealth of Pennsylvania**.

MANKO | GOLD | KATCHER | FOX LLP

AN ENVIRONMENTAL AND ENERGY LAW PRACTICE

401 CITY AVENUE, SUITE 901
BALA CYNWYD, PA 19004
TEL: 484-430-5700
FAX: 484-430-5711
WWW.MANKOGOLD.COM

PHILADELPHIA, PA
*CHERRY HILL, NJ
WILLIAMSPORT, PA
by appointment only

Matthew C. Sullivan
484-430-2305 -
msullivan@mankogold.com

Admitted in PA and NJ

Partner responsible - Bruce S. Katcher

August 5, 2016

Via Overnight Mail
Mr. Stephen Sinding
Environmental Cleanup Program Manager
Pennsylvania Department of Environmental Protection
Southeast Regional Office
2 East Main Street
Norristown, PA 19401

RECEIVED
DEP-SERO
ECP/WASTE MGMT.
16 AUG -8 PM 3:24

Re: 5129-5135 Frankford Avenue, Philadelphia, Pennsylvania

Dear Steve:

The Environmental Covenant for the above-referenced property located in the City of Philadelphia has been recorded with the Philadelphia Department of Records. In accordance with the terms of the Environmental Covenant, enclosed with this letter is a time-stamped copy of the recorded document. A copy of the Environmental Covenant has also been sent to the City of Philadelphia. Please do not hesitate to contact me if you have any questions.

Very truly yours,

Matthew C. Sullivan
For MANKO, GOLD, KATCHER & FOX, LLP

MCS/10680/00018
Enclosure

1617494

When recorded return to:
Mr. Cory Goodman
Rite Aid Corporation
30 Hunter Lane
Camp Hill, PA 17011

The Philadelphia Office of Property Assessment Account # of the Property is: 882096000

GRANTOR: Rite Aid of Pennsylvania, Inc.

PROPERTY ADDRESS: 5129-5135 Frankford Avenue, Philadelphia, PA 19124

ENVIRONMENTAL COVENANT

This Environmental Covenant is executed pursuant to the Pennsylvania Uniform Environmental Covenants Act, Act No. 68 of 2007, 27 Pa. C.S. §§ 6501 – 6517 (UECA). This Environmental Covenant subjects the Property identified in Paragraph 1 to the activity and/or use limitations in this document. As indicated later in this document, this Environmental Covenant has been approved by the Pennsylvania Department of Environmental Protection ("PADEP" or the "Department").

1. **Property affected**. The property affected by this Environmental Covenant is located in the City and County of Philadelphia and is referred to herein as the "Property."

The postal street address of the Property is: 5129-5135 Frankford Avenue, Philadelphia, Pennsylvania 19124.

The latitude and longitude of the center of the Property affected by this Environmental Covenant is: N 040° 01' 18.7"; W 075° 04' 43.4".

The Philadelphia Office of Property Assessment Account # of the Property is: 882096000.

The Property has been known by the following name(s): Holiday Thriftway Supermarket Building.

The Department's Primary Facility ID No. is: 716772.

A legal description of the Property is attached to this Environmental Covenant as Exhibit A. A map of the Property is attached to this Environmental Covenant as Exhibit B. A map depicting the predicted area of impacted ground water is attached to this Environmental Covenant as Exhibit C.

2. **Property Owner / GRANTOR / GRANTEE**. Rite Aid of Pennsylvania, Inc. ("Rite Aid") is the owner of the Property and the GRANTOR and GRANTEE of this Environmental Covenant.

This Document Recorded Doc Id: 53076572 Doc Code: DM
06/28/2016 08:35 AM Receipt #:16-61886
Rec Fee: $252.00
Records Department, City of Philadelphia MB

3. The mailing address of Rite Aid is: 30 Hunter Lane, Camp Hill, PA 17011, Attention: Mr. Cory Goodman.

4. **Description of Contamination & Remedy**. The Property was historically used by prior owners as a gasoline filling and service station and also contained an underground storage tank that was used to store heating oil. Accordingly, investigations of soil and ground water have previously been conducted at the Property on behalf of the Grantor. A detailed summary of environmental investigatory activities that have been performed at the Property, and the results of such investigatory activities, are contained in the Act 2 Final Report prepared by BL Companies and dated April 21, 2014, and the Final Report Addenda prepared by BL Companies dated April 8, 2015 (collectively referred to herein as the "Final Report"). These investigations identified the presence of benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and dibenzo(a,h)anthracene in soils at concentrations exceeding the Pennsylvania Land Recycling and Environmental Remediation Standards Act, 35 P.S. §6026.101 et seq. ("Act 2") residential Statewide Health Standards ("SHSs") in the locations identified as B-2, B-5, B-6 and B-7 on Exhibit B. Notwithstanding the presence of these substances in soil, Grantor has demonstrated attainment with non-residential SHSs for these substances.

Investigations also identified the presence of benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(g,h,i)perylene, indeno(1,2,3-cd)pyrene and dissolved lead in ground water beneath the Property at concentrations exceeding Act 2 residential SHSs. Grantor has demonstrated attainment with a SSS for ground water taking into account the fact that groundwater beneath the Property is not being used and that there are no water supply wells present in the hatched area shown on Exhibit C depicting the predicted area of potential ground water impact above SHSs.

The Final Report demonstrating attainment of the above-referenced Act 2 standards was approved by the Department on August 10, 2015, and is on file with and may be reviewed at the Department's Southeast Regional Office, 2 East Main Street, Norristown, Pennsylvania 19401.

5. **Activity & Use Limitations**. The Property is subject to the following activity and use limitations, which the Owner and each subsequent owner of the Property shall abide by:

a. Residential Use. Until such time as a party demonstrates attainment of one or a combination of unrestricted standards under Act 2 for the above-described regulated substances in soil at the Property exceeding residential SHSs, as evidenced by PADEP's written approval of a final report, the Property shall only be used as a nonresidential property as defined under Act 2.

b. Ground Water Use. Until such time as a party demonstrates attainment of one or a combination of unrestricted standards under Act 2 for the above-described regulated substances in ground water at the Property exceeding residential SHSs, as evidenced by PADEP's written approval of a final report, ground water at and under the Property shall not be used for any purpose; provided, however, that nothing herein shall prohibit the collection of groundwater samples or the installation and use of groundwater monitoring, recovery or extraction wells or similar devices used for or related to the performance of groundwater assessment or remediation activities. At least once every two years, the then

current owner of the Property shall confirm that no well permits were issued for any property located within the hatched area shown on Exhibit C.

6. **Notice of Limitations in Future Conveyances**. Unless and until this Environmental Covenant terminates, each "instrument," as that term is defined in 25 Pa. Code § 253.1, hereafter conveying any interest in the Property subject to this Environmental Covenant shall contain a notice of the activity and use limitations set forth in this Environmental Covenant and shall provide the recorded location of this Environmental Covenant.

7. **Compliance Reporting**. After written request by the Department, the then current owner of the Property shall submit, to the Department, written documentation stating whether or not the activity and use limitations in this Environmental Covenant are being abided by. In addition, within 1 month after any of the following events, the then current owner of the Property shall submit, to the Department and the Grantee, written notification of: (i) becoming aware of noncompliance with the activity and use limitations in this Environmental Covenant, (ii) the transfer of title of the Property; or (iii) the filing of an application for a permit for any building or site work at the Property if the building or site work will affect the contamination on the Property subject to this Environmental Covenant.

8. **Access by the Department**. In addition to any rights already possessed by the Department, this Environmental Covenant grants to the Department a right of access of the Property in connection with implementation or enforcement of this Environmental Covenant.

9. **Recordation & Proof & Notification**. Within 90 days after the date of PADEP's approval and execution of this Environmental Covenant, the Owner shall file this Environmental Covenant with the Recorder of Deeds for Philadelphia County and send a file-stamped copy of this Environmental Covenant to PADEP. Within that time period, the Owner also shall send a file-stamped copy of this Environmental Covenant to the City and County of Philadelphia; each person holding a recorded interest in the Property; and each person in possession of the Property.

10. **Termination or Modification**.

(a) Except as otherwise provided herein, this Environmental Covenant may only be terminated or modified in accordance with Section 9 or 10 of UECA, 27 Pa. C.S. §§ 6509 or 6510, or in accordance with this Paragraph 10.

(b) This Environmental Covenant may be amended or terminated as to any portion of the Property that is acquired for use as state highway right-of-way by the Commonwealth of Pennsylvania provided that: (1) PADEP waives the requirements for an environmental covenant and for conversion pursuant to 27 Pa. C.S. § 6517 to the same extent that this Environmental Covenant is amended or terminated; (2) PADEP determines that termination or modification of this Environmental Covenant will not adversely affect human health or the environment; and (3) PADEP provides 30-days advance written notice to the current property owner, each holder, and, as practicable, each person that originally signed the Environmental Covenant or successors in interest to such persons.

(c) This Environmental Covenant shall terminate upon attainment, in accordance with Act 2, of one or a combination of unrestricted use remediation standards for the regulated substances in soil and groundwater at the Property addressed in the Final Report, as evidenced by PADEP's written approval of a final report demonstrating attainment of such standard(s) under Act 2.

11. **Department's address**. Communications with the Department regarding this Environmental Covenant shall be sent to:

Environmental Cleanup Program Manager
Pennsylvania Department of Environmental Protection
Southeast Region
2 East Main Street
Norristown, PA 19401

12. **Severability**. The Paragraphs of this Environmental Covenant shall be severable and should any part hereof be declared invalid or unenforceable, the remainder shall continue in full force and effect between the parties.

[SIGNATURE PAGE FOLLOWS]

ACKNOWLEDGMENTS by Owner(s) and any Holder(s), in the following form:

Rite Aid of Pennsylvania, Inc.

Date: By: _____

Name: Joseph J. Notariani

Title: Vice President

APPROVED, by Commonwealth of Pennsylvania,
Department of Environmental Protection

Date: 6/8/16 By: _____

Name: Stephen Sinding

Title: ECB Mgr.

COMMONWEALTH OF PENNSYLVANIA :
: **SS.**
COUNTY OF CUMBERLAND :

On this, the 4th day of May, 2016, before me, the undersigned officer, personally appeared Joseph J. Notarianni, who acknowledged himself to be the Vice President and an authorized signatory for Rite Aid of Pennsylvania, Inc., whose name is subscribed to this Environmental Covenant, and acknowledged that he executed same for the purposes therein contained.

IN WITNESS WHEREOF I have hereunto set my hand and notarial seal.

Linda J. Brown
NOTARY PUBLIC

COMMONWEALTH OF PENNSYLVANIA
NOTARIAL SEAL
LINDA L BROWN, NOTARY PUBLIC
CAMP HILL, CUMBERLAND CO.
MY COMMISSION EXPIRES JUNE 18, 2016

MY COMMISSION EXPIRES:

COMMONWEALTH OF PENNSYLVANIA :
: **SS.**
COUNTY OF _____ :

On this _____ day of _____, 20____, before me, the undersigned officer, personally appeared _____, who acknowledged himself/herself to be the _____ [Title] of the Commonwealth of Pennsylvania, Department of Environmental Protection, _____ [insert name of regional office], whose name is subscribed to this Environmental Covenant, and acknowledged that s/he executed same for the purposes therein contained.

IN WITNESS WHEREOF I have hereunto set my hand and notarial seal.

_____
NOTARY PUBLIC

MY COMMISSION EXPIRES:

Grantor: Rite Aid of Pennsylvania, Inc.

Property Address: 5129-5135 Frankford Avenue

City of Philadelphia

Philadelphia County

APPROVED, by Commonwealth of Pennsylvania,

Department of Environmental Protection

Date: 6/8/16

By: _____

Name: Stephan Sinding

Title: Environmental Cleanup & Brownfields Program Manager

PA DEP - Southeast Regional Office

COMMONWEALTH OF PENNSYLVANIA

COUNTY OF MONTGOMERY

On this 8th day of June, 2016 before me, the undersigned officer, personally appeared Stephan Sinding, Environmental Cleanup and Brownfields Program Manager of the Commonwealth of Pennsylvania, Department of Environmental Protection, Southeast regional office, who acknowledged himself to be the person whose name is subscribed to this Environmental Covenant, and acknowledged that he executed same for the purposes therein contained.

In witness whereof, I hereunto set my hand and official seal.

_____

Notary Public

COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Judy Lashley, Notary Public
Norristown Boro, Montgomery County
My Commission Expires July 28, 2016
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

EXHIBIT A

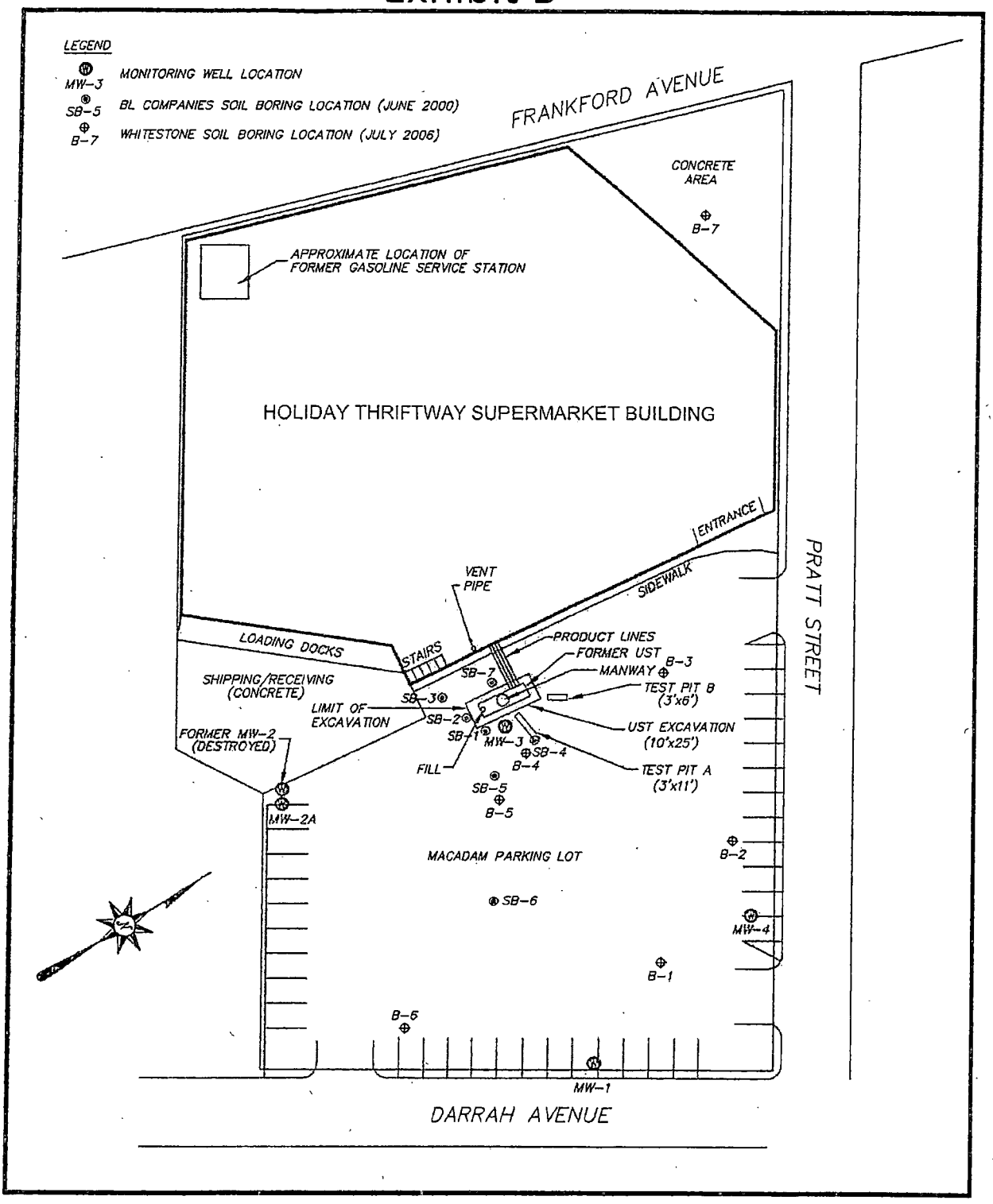
ALL THAT CERTAIN lot or piece of ground, situate in the 62nd (formerly part of the 23rd) Ward of the City of Philadelphia and described in accordance with a Survey and Plan thereof made by Amos B. Engle, Surveyor and Regulator of the Eighth District on 5/16/1947, as follows to wit:

SITUATE on the Southeast side of Frankford Avenue (65 feet wide) and the Southwest side of Pratt Street (50 feet wide); thence extending along the said side of Pratt Street, South 44 degrees 10 minutes 8 seconds East, 347 feet 7/8 of an inch to the Northwest side of Darrah Street (50 feet wide); thence extending along the said side of Darrah Street, South 45 degrees 6 minutes 12 seconds West 143 feet 1/8 of an inch to a point, a bend in said Darrah Street; and thence extending along the said side of Darrah Street, South 37 degrees 8 minutes 11 seconds West, 32 feet 6-1/4 inches to a point; which point is 205 feet Northeast from the Northeast side of Dyre Street (50 feet wide); thence extending North 52 degrees 51 minutes 49 seconds West, partly through the center of a party wall 87 feet 3/8 of an inch to a point; thence extending South 41 degrees 56 minutes 56 seconds West, 34 feet 7-7/8 inches to a point; thence extending North 39 degrees 28 minutes 4 seconds West, 287 feet 5-3/4 inches to a point on the Southeast side of said Frankford Avenue (65 feet wide); thence extending along the same, North 50 degrees 31 minutes 56 seconds East, 200 feet to the first mentioned point and place of beginning.

BEING known as 5129-5135 Frankford Avenue.

BEING BRT No. 88-2-0960-00.

Exhibit B



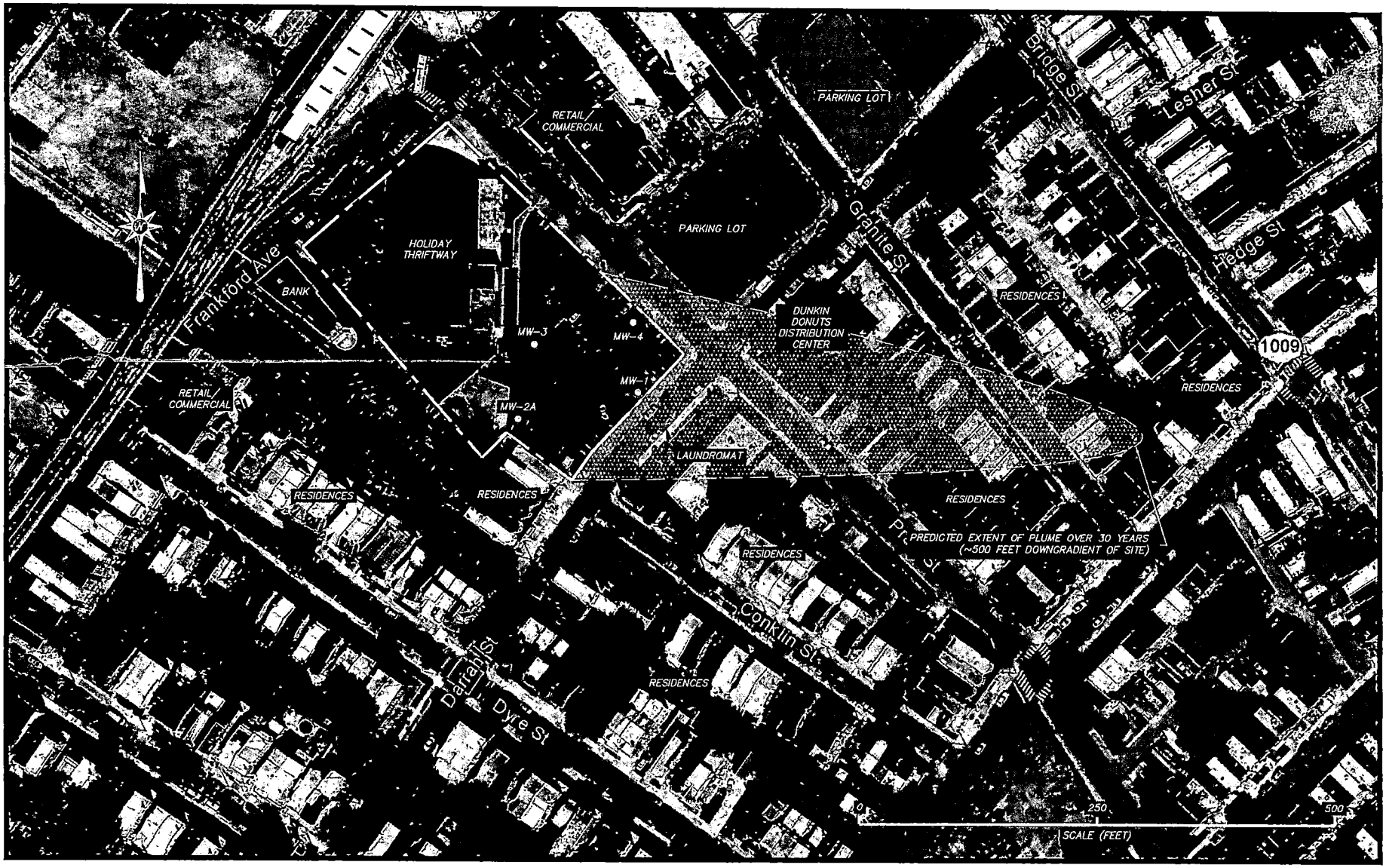
BL Companies

SITE PLAN

5129-5135 FRANKFORD AVENUE SITE
CITY OF PHILADELPHIA
PHILADELPHIA COUNTY, PENNSYLVANIA

Designed	
Drawn	J.R.T.
Checked	B.S.W.
Approved	
Scale	NOT TO SCALE
Project No.	00L629-B
Date	08/27/08
CAD File	EV00L629B01

FIG 2



BL Companies

4242 Carlisle Pike
Suite 260
Camp Hill, PA 17011
(717) 651-9850
(717) 651-9858 Fax

MAP SHOWING PREDICTED EXTENT OF PLUME MIGRATION

FRANKFORD & DARRAH SITE
5129–5135 FRANKFORD AVENUE
PHILADELPHIA, PENNSYLVANIA

Designed	
Drawn	J.R.T.
Checked	K.M.Y.
Approved	
Scale	SEE ABOVE
Project No.	00L629–B
Date	09/17/2015
CAD File	EV00L629B–UECA Exhibit C

EXHIBIT C

Image Source: GoogleEarth, 2011.

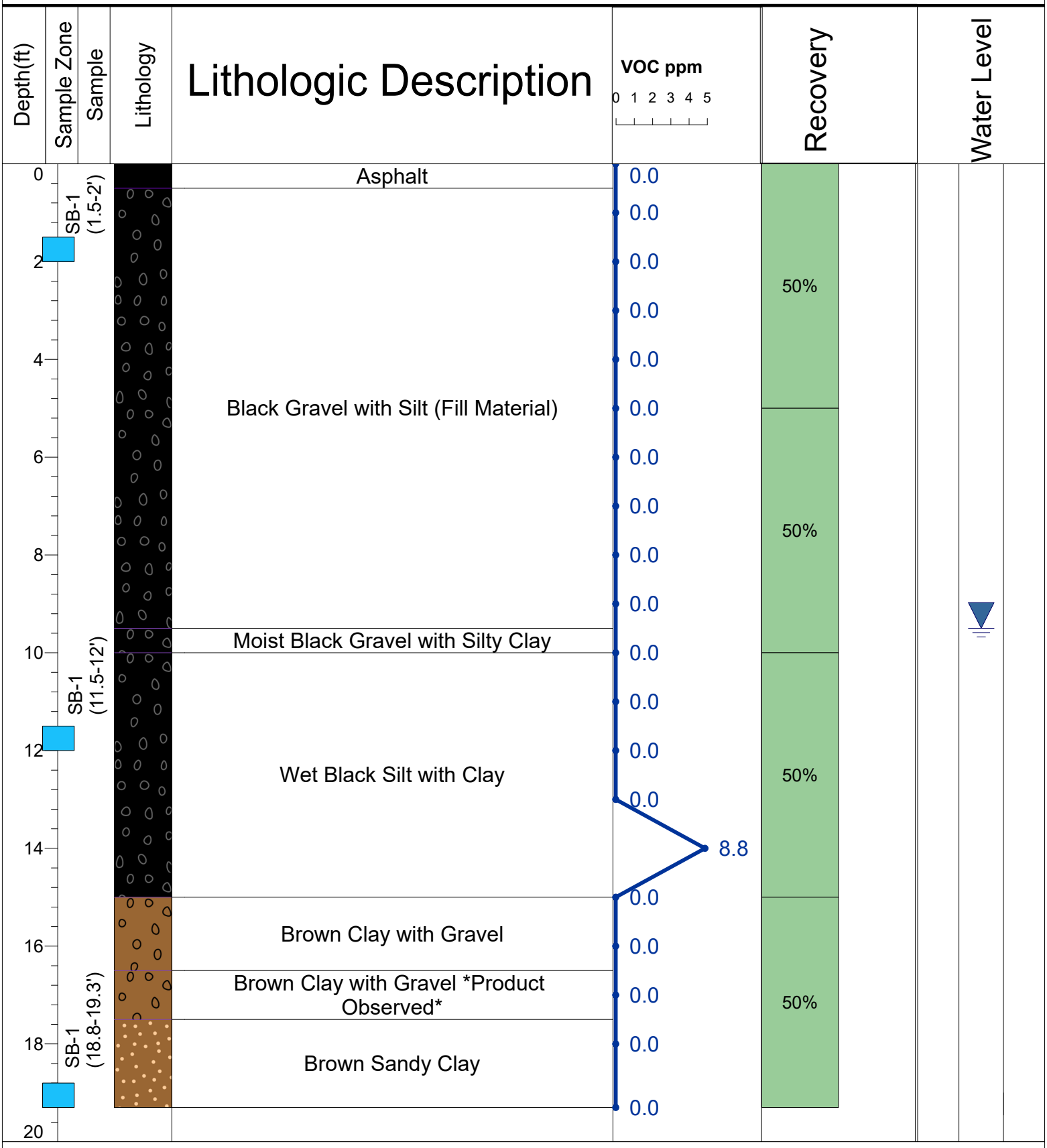
Appendix B
Soil Boring Logs

RT Environmental Services, Inc.

Hole ID: SB-1

Latitude: 40.02177
Longitude: -75.07844

Drill Method: Direct-Push Geoprobe
Driller: Ferris Company
Sampler: KNC



Water Level

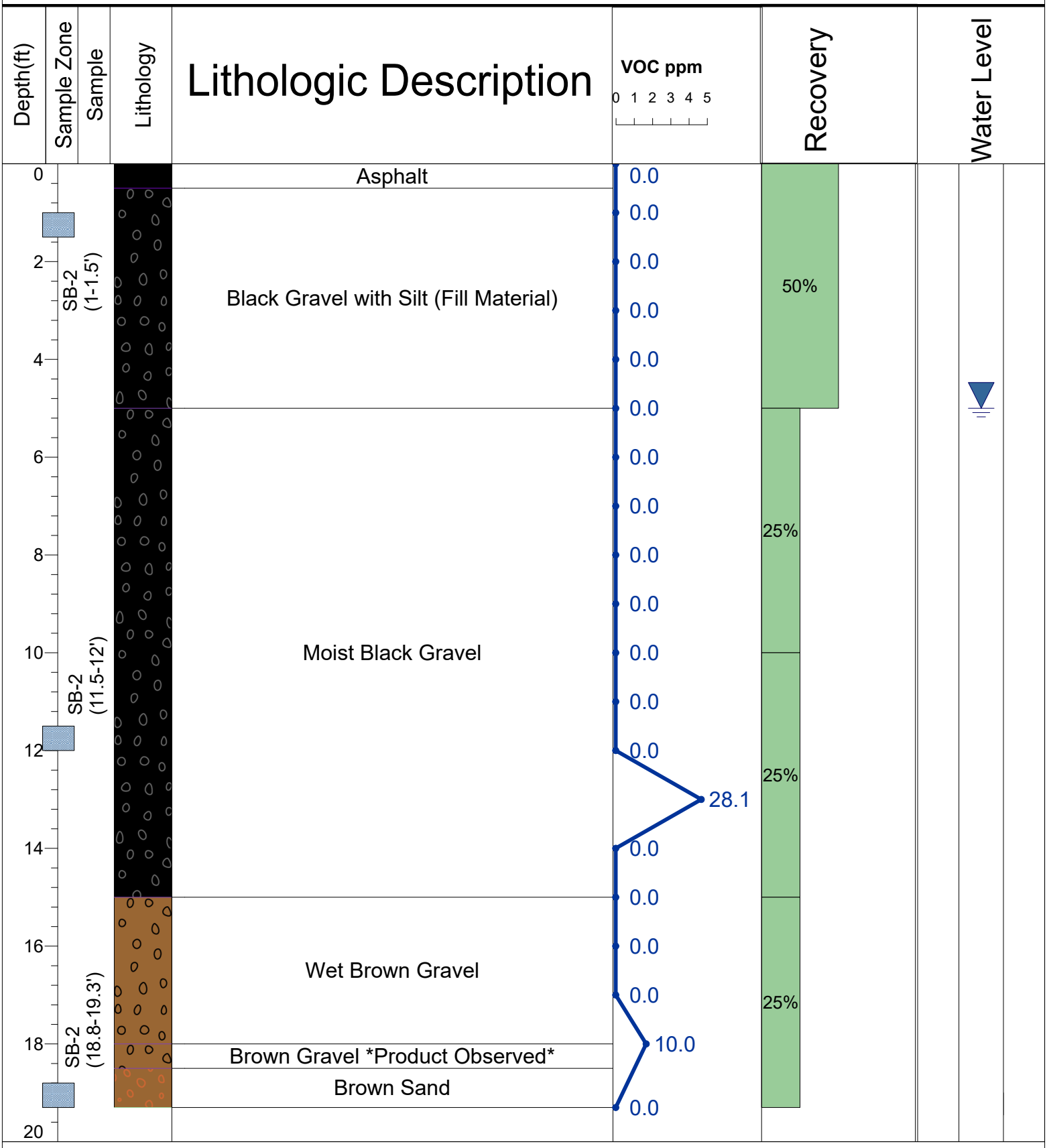
Site Name: Frankford Dev- 5129 Frankford Ave- Phase II
Address: 5129 Frankford Ave, Philadelphia PA
Project Manager: Walter H. Hungarter, III, P.E.
Client: Frankford Community Development Corporation

RT Environmental Services, Inc.

Hole ID: SB-2

Latitude: 40.02177
Longitude: -75.07844

Drill Method: Direct-Push Geoprobe
Driller: Ferris Company
Sampler: KNC



Water Level

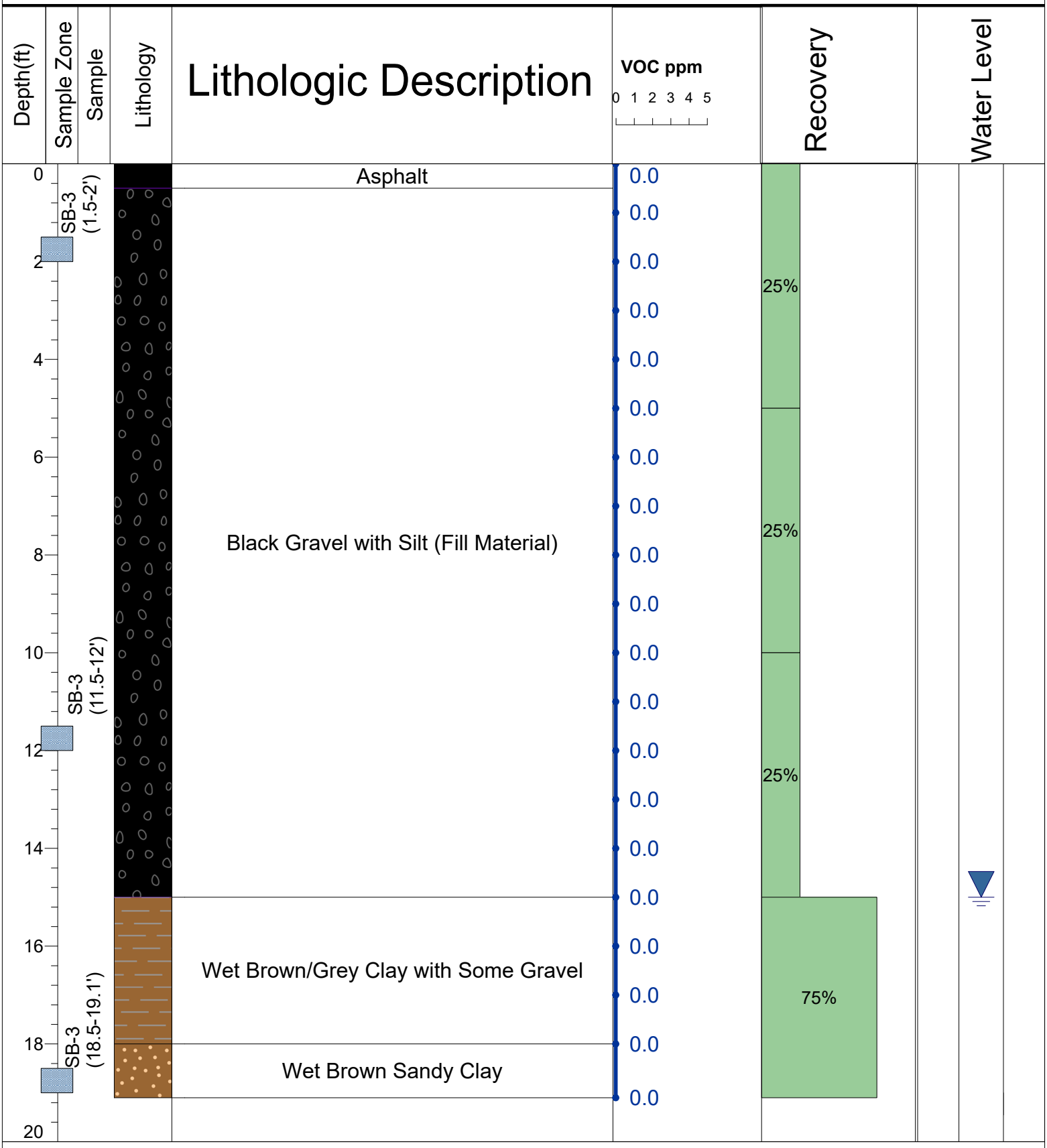
Site Name: Frankford Dev- 5129 Frankford Ave- Phase II
Address: 5129 Frankford Ave, Philadelphia PA
Project Manager: Walter H. Hungarter, III, P.E.
Client: Frankford Community Development Corporation

RT Environmental Services, Inc.

Hole ID: SB-3

Latitude: 40.02177
Longitude: -75.07844

Drill Method: Direct-Push Geoprobe
Driller: Ferris Company
Sampler: KNC



Water Level

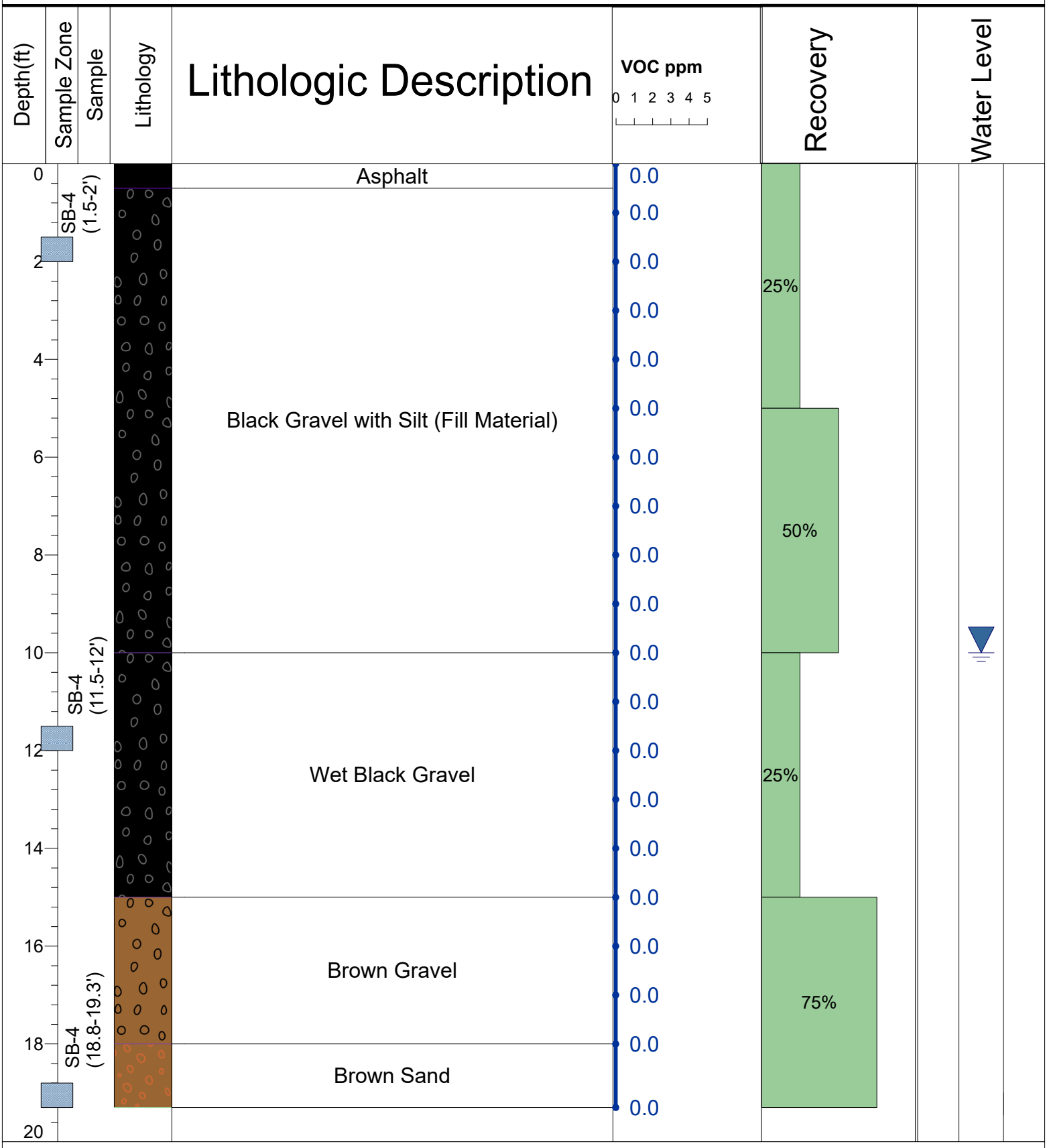
Site Name: Frankford Dev- 5129 Frankford Ave- Phase II
Address: 5129 Frankford Ave, Philadelphia PA
Project Manager: Walter H. Hungarter, III, P.E.
Client: Frankford Community Development Corporation

RT Environmental Services, Inc.

Hole ID: SB-4

Latitude: 40.02177
Longitude: -75.07844

Drill Method: Direct-Push Geoprobe
Driller: Ferris Company
Sampler: KNC



Water Level

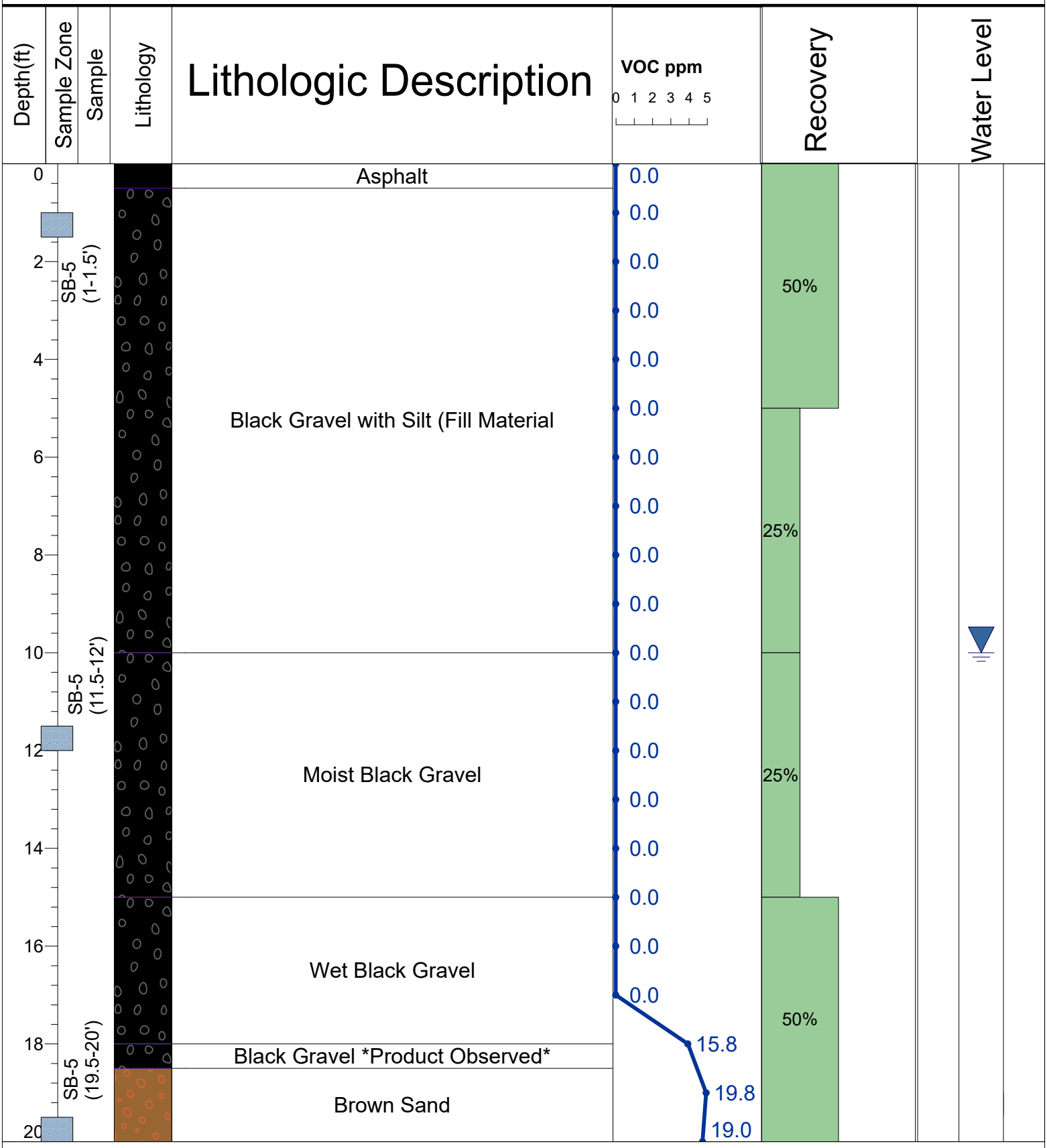
Site Name: Frankford Dev- 5129 Frankford Ave- Phase II
Address: 5129 Frankford Ave, Philadelphia PA
Project Manager: Walter H. Hungarter, III, P.E.
Client: Frankford Community Development Corporation

RT Environmental Services, Inc.

Hole ID: SB-5

Latitude: 40.02177
Longitude: -75.07844

Drill Method: Direct-Push Geoprobe
Driller: Ferris Company
Sampler: KNC



Water Level

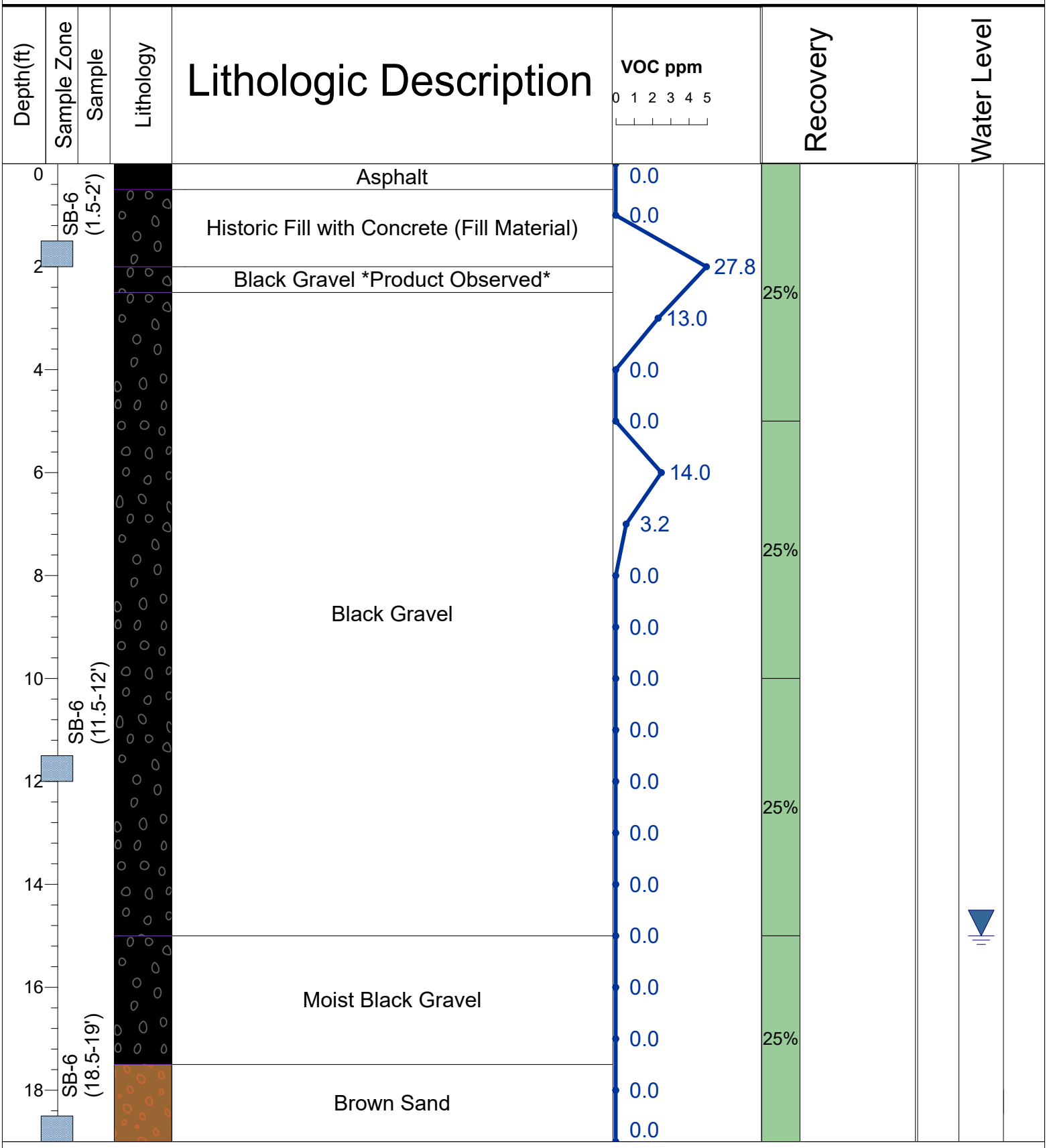
Site Name: Frankford Dev- 5129 Frankford Ave- Phase II
Address: 5129 Frankford Ave, Philadelphia PA
Project Manager: Walter H. Hungarter, III, P.E.
Client: Frankford Community Development Corporation

RT Environmental Services, Inc.

Hole ID: SB-6

Latitude: 40.02177
Longitude: -75.07844

Drill Method: Direct-Push Geoprobe
Driller: Ferris Company
Sampler: KNC



Water Level

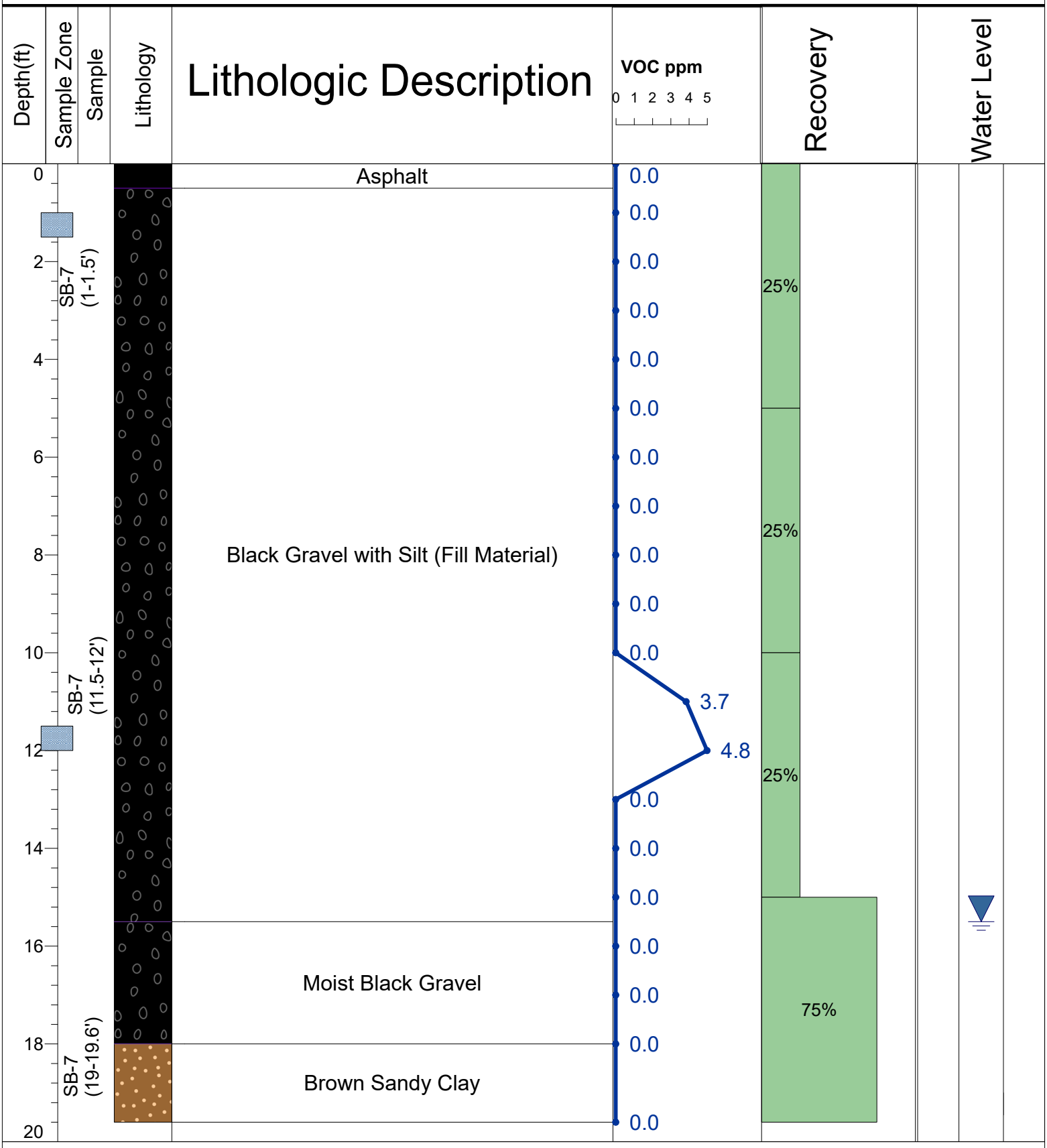
Site Name: Frankford Dev- 5129 Frankford Ave- Phase II
Address: 5129 Frankford Ave, Philadelphia PA
Project Manager: Walter H. Hungarter, III, P.E.
Client: Frankford Community Development Corporation

RT Environmental Services, Inc.

Hole ID: SB-7

Latitude: 40.02177
Longitude: -75.07844

Drill Method: Direct-Push Geoprobe
Driller: Ferris Company
Sampler: KNC



Water Level

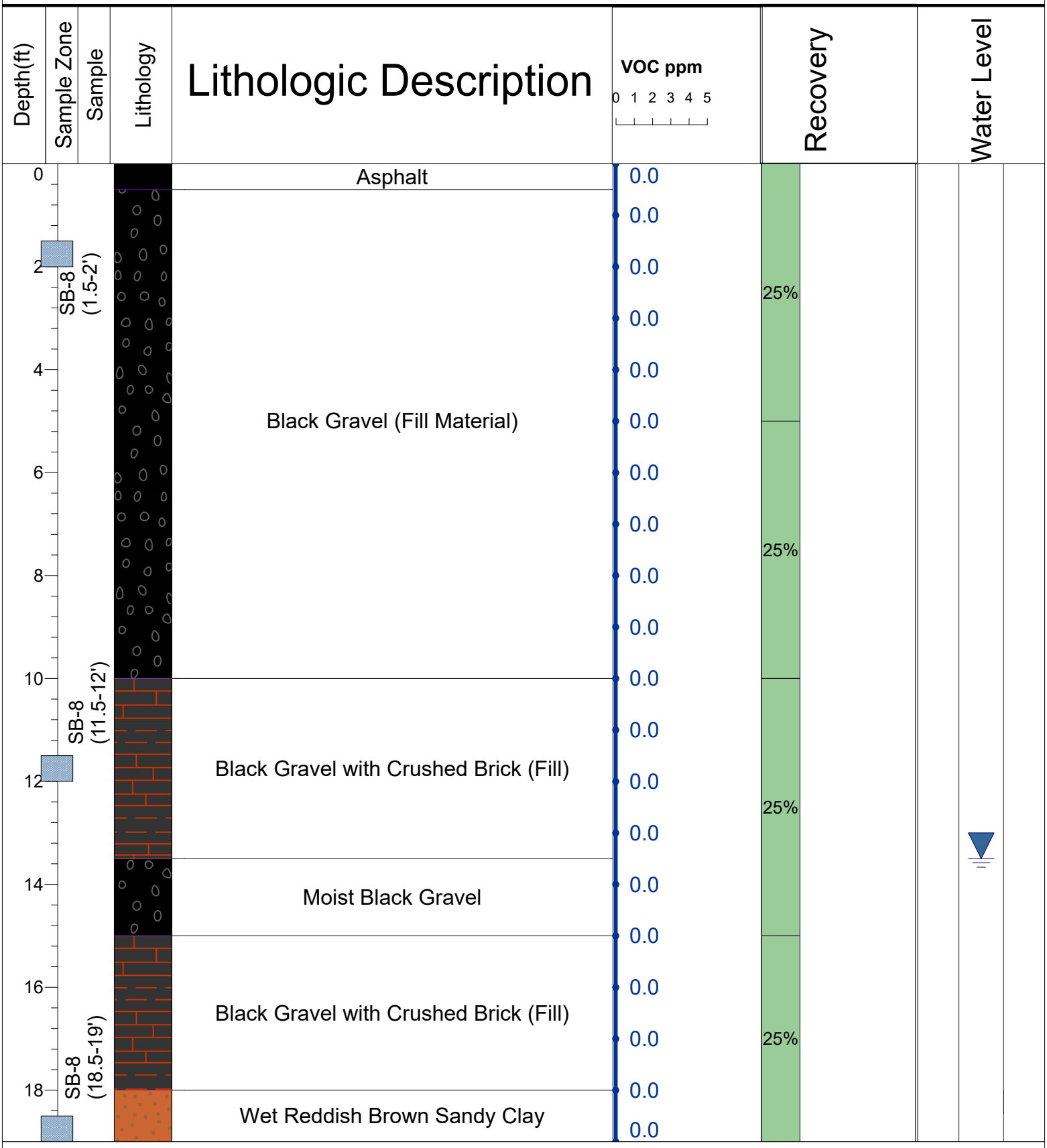
Site Name: Frankford Dev- 5129 Frankford Ave- Phase II
Address: 5129 Frankford Ave, Philadelphia PA
Project Manager: Walter H. Hungarter, III, P.E.
Client: Frankford Community Development Corporation

RT Environmental Services, Inc.

Hole ID: SB-8

Latitude: 40.02177
Longitude: -75.07844

Drill Method: Direct-Push Geoprobe
Driller: Ferris Company
Sampler: KNC



Water Level

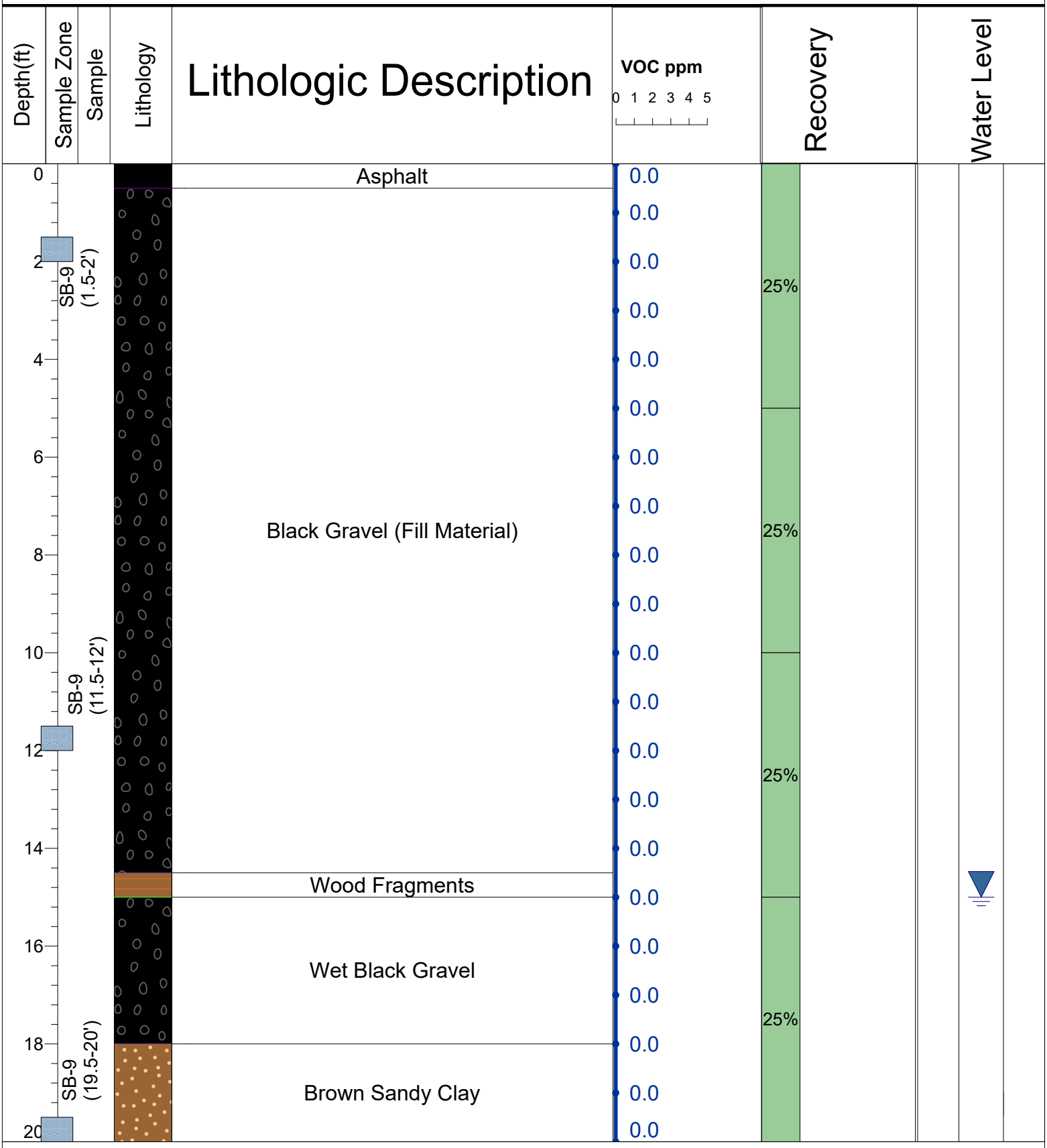
Site Name: Frankford Dev- 5129 Frankford Ave- Phase II
Address: 5129 Frankford Ave, Philadelphia PA
Project Manager: Walter H. Hungarter, III, P.E.
Client: Frankford Community Development Corporation

RT Environmental Services, Inc.

Hole ID: SB-9

Latitude: 40.02177
Longitude: -75.07844

Drill Method: Direct-Push Geoprobe
Driller: Ferris Company
Sampler: KNC



Water Level

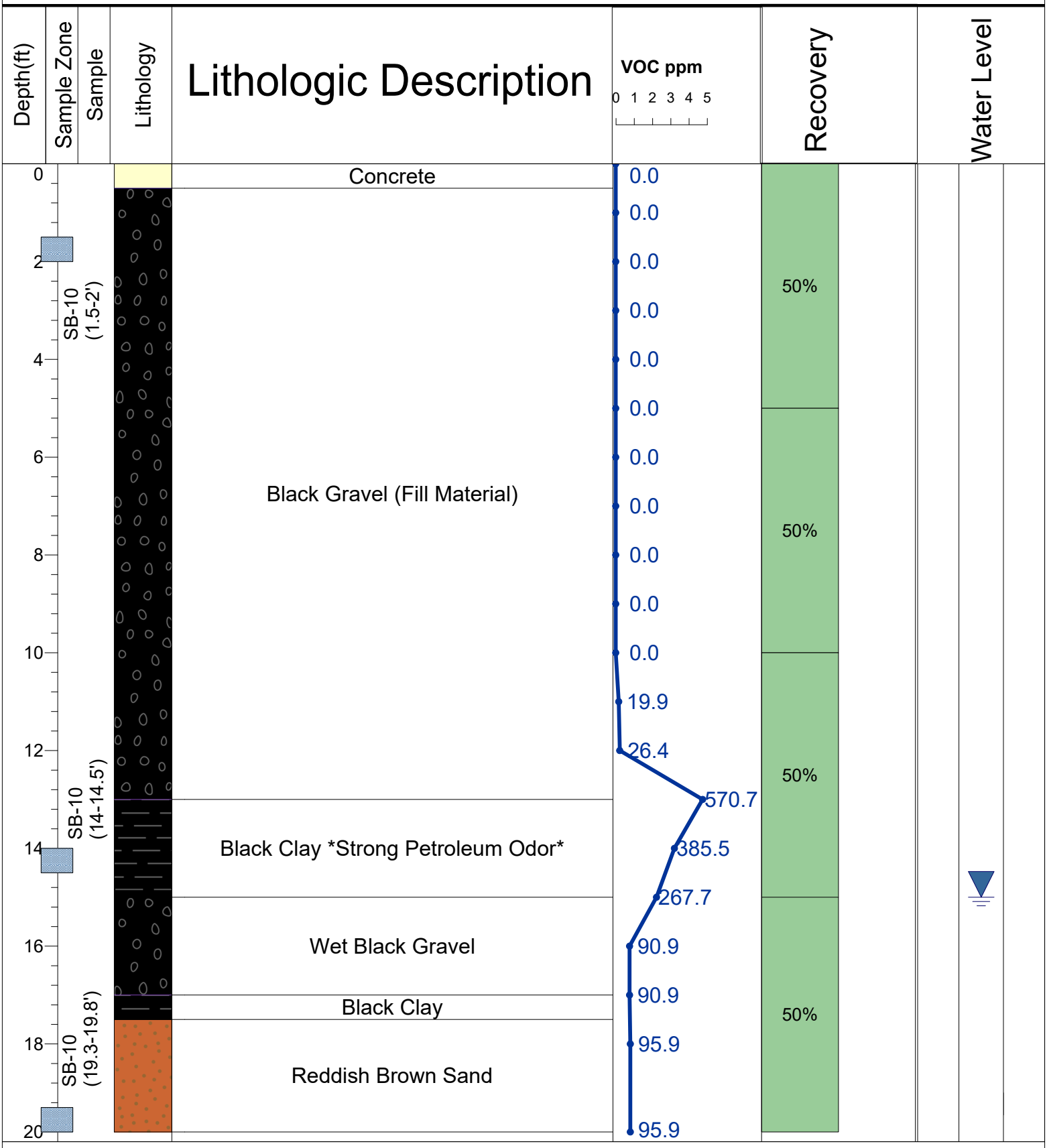
Site Name: Frankford Dev- 5129 Frankford Ave- Phase II
Address: 5129 Frankford Ave, Philadelphia PA
Project Manager: Walter H. Hungarter, III, P.E.
Client: Frankford Community Development Corporation

RT Environmental Services, Inc.

Hole ID: SB-10

Latitude: 40.02177
Longitude: -75.07844

Drill Method: Direct-Push Geoprobe
Driller: Ferris Company
Sampler: KNC



Water Level

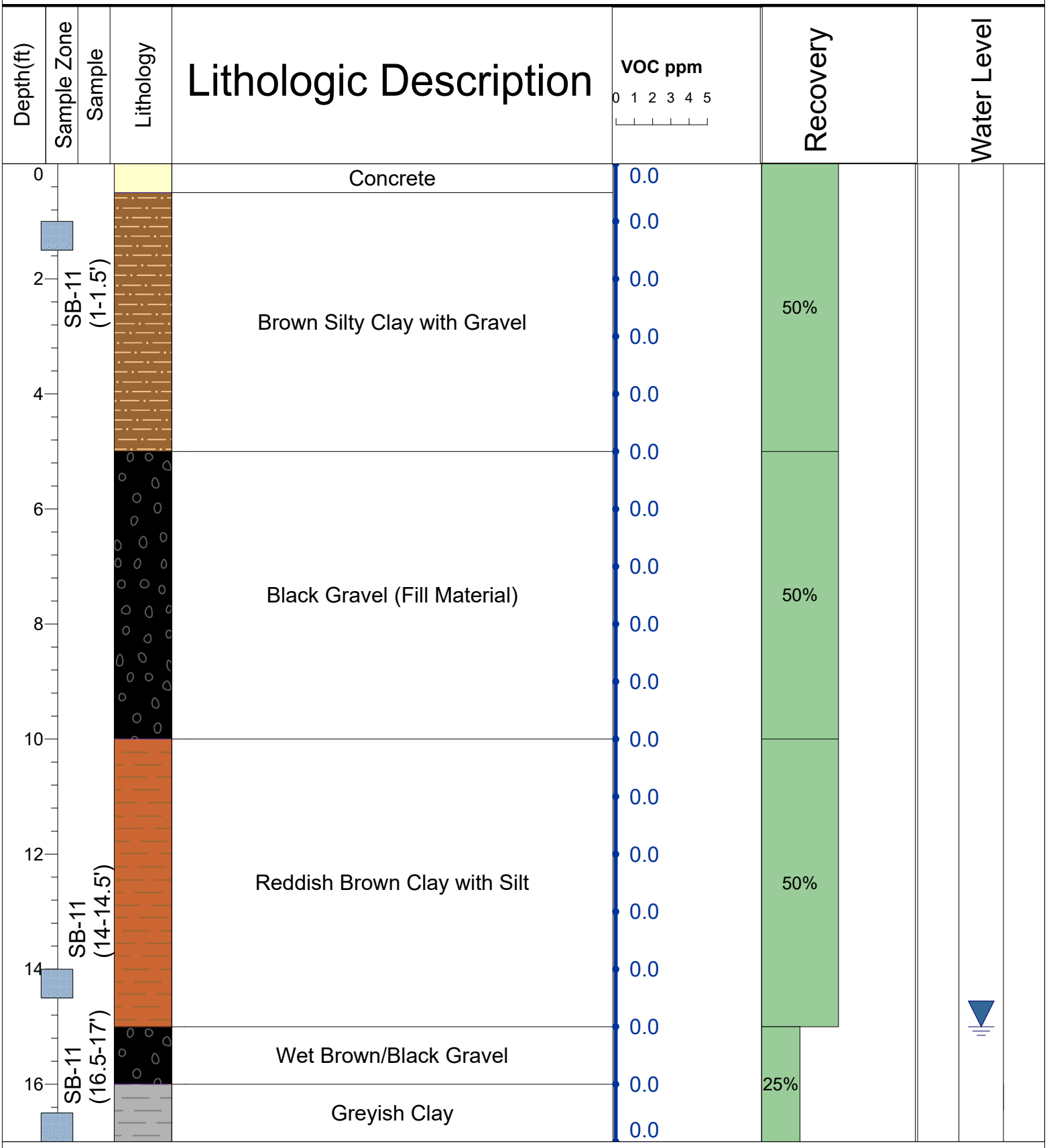
Site Name: Frankford Dev- 5129 Frankford Ave- Phase II
Address: 5129 Frankford Ave, Philadelphia PA
Project Manager: Walter H. Hungarter, III, P.E.
Client: Frankford Community Development Corporation

RT Environmental Services, Inc.

Hole ID: SB-11

Latitude: 40.02177
Longitude: -75.07844

Drill Method: Direct-Push Geoprobe
Driller: Ferris Company
Sampler: KNC



Water Level

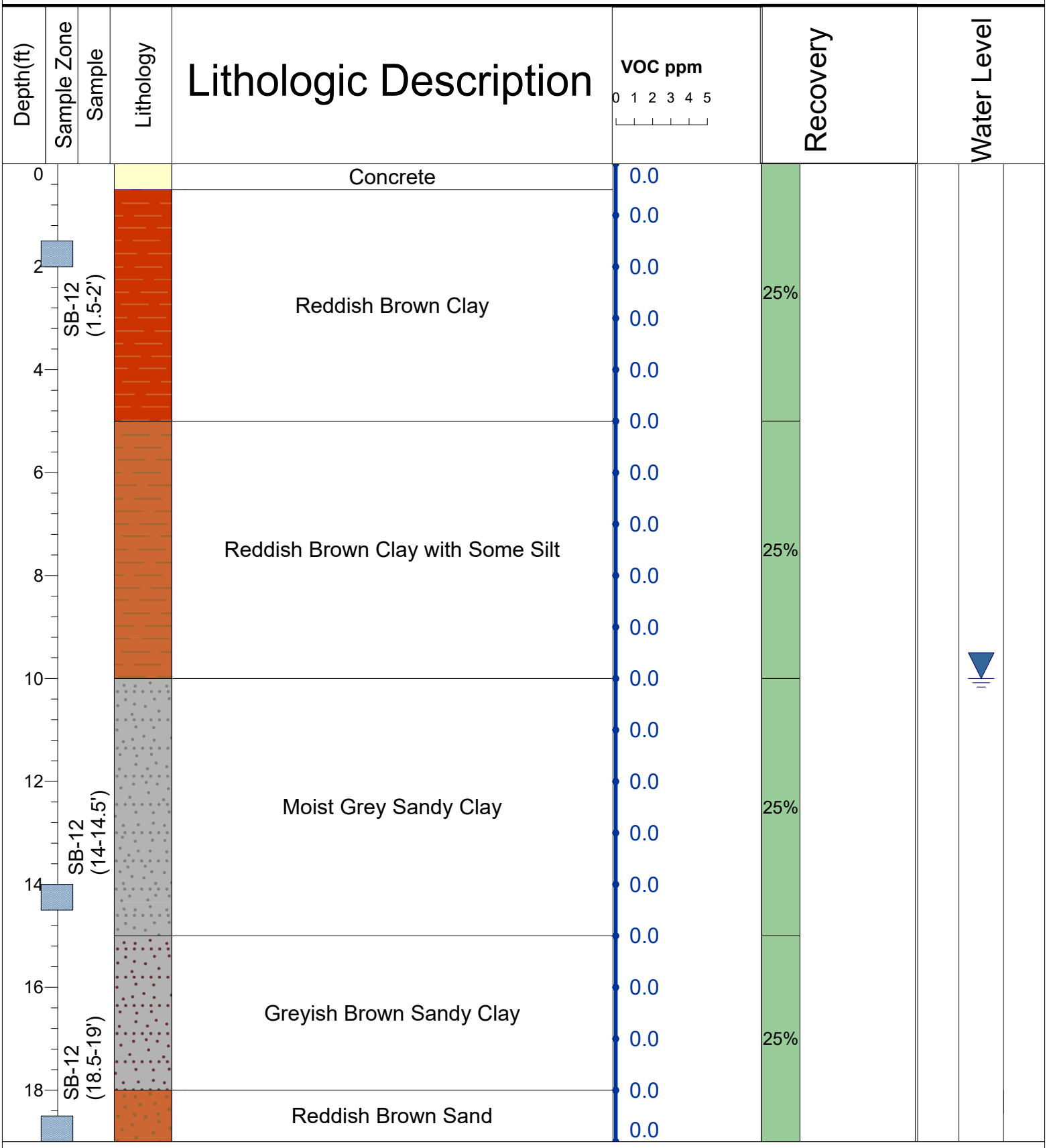
Site Name: Frankford Dev- 5129 Frankford Ave- Phase II
Address: 5129 Frankford Ave, Philadelphia PA
Project Manager: Walter H. Hungarter, III, P.E.
Client: Frankford Community Development Corporation

RT Environmental Services, Inc.

Hole ID: SB-12

Latitude: 40.02177
Longitude: -75.07844

Drill Method: Direct-Push Geoprobe
Driller: Ferris Company
Sampler: KNC



Water Level

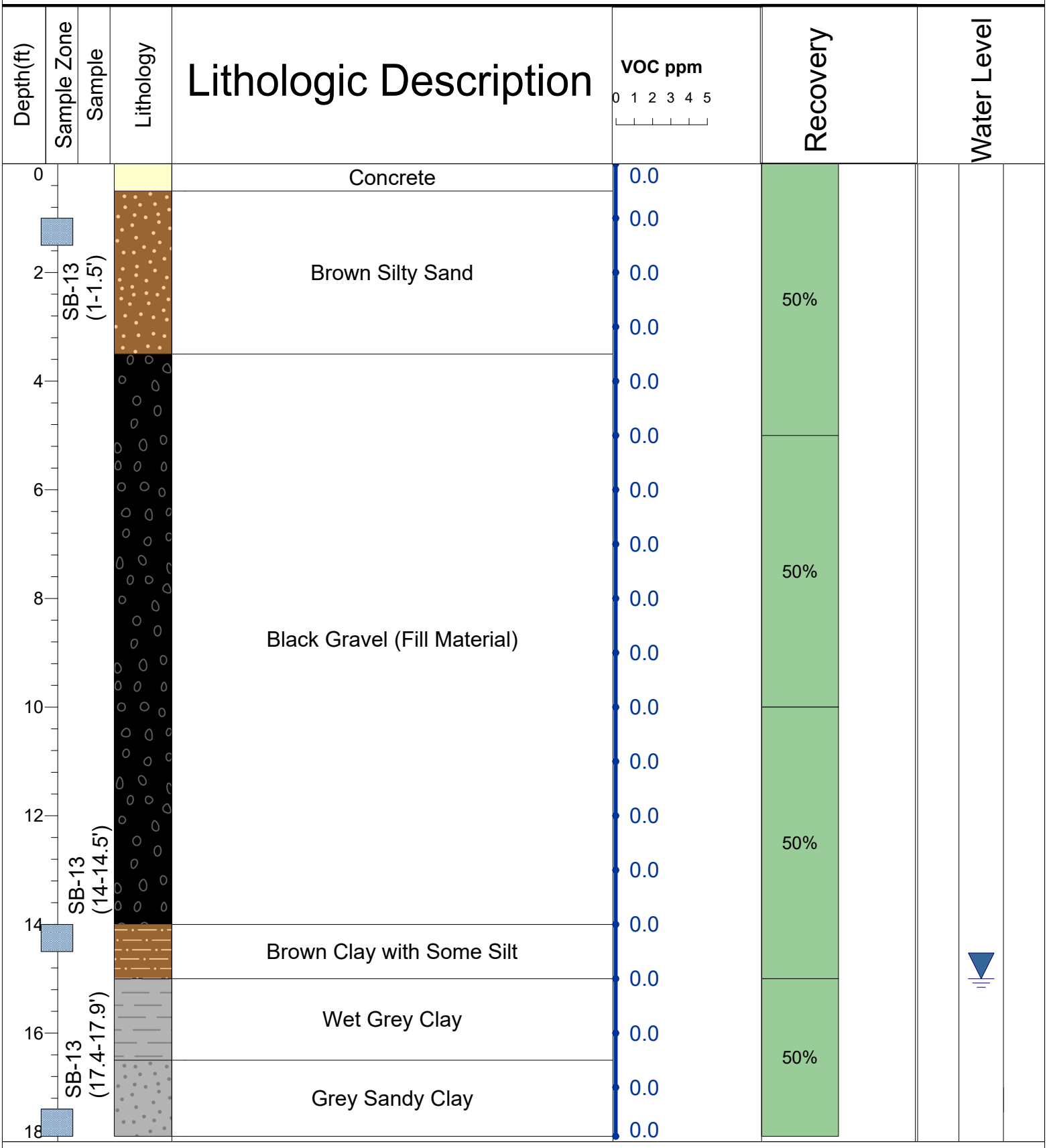
Site Name: Frankford Dev- 5129 Frankford Ave- Phase II
Address: 5129 Frankford Ave, Philadelphia PA
Project Manager: Walter H. Hungarter, III, P.E.
Client: Frankford Community Development Corporation

RT Environmental Services, Inc.

Hole ID: SB-13

Latitude: 40.02177
Longitude: -75.07844

Drill Method: Direct-Push Geoprobe
Driller: Ferris Company
Sampler: KNC



Water Level

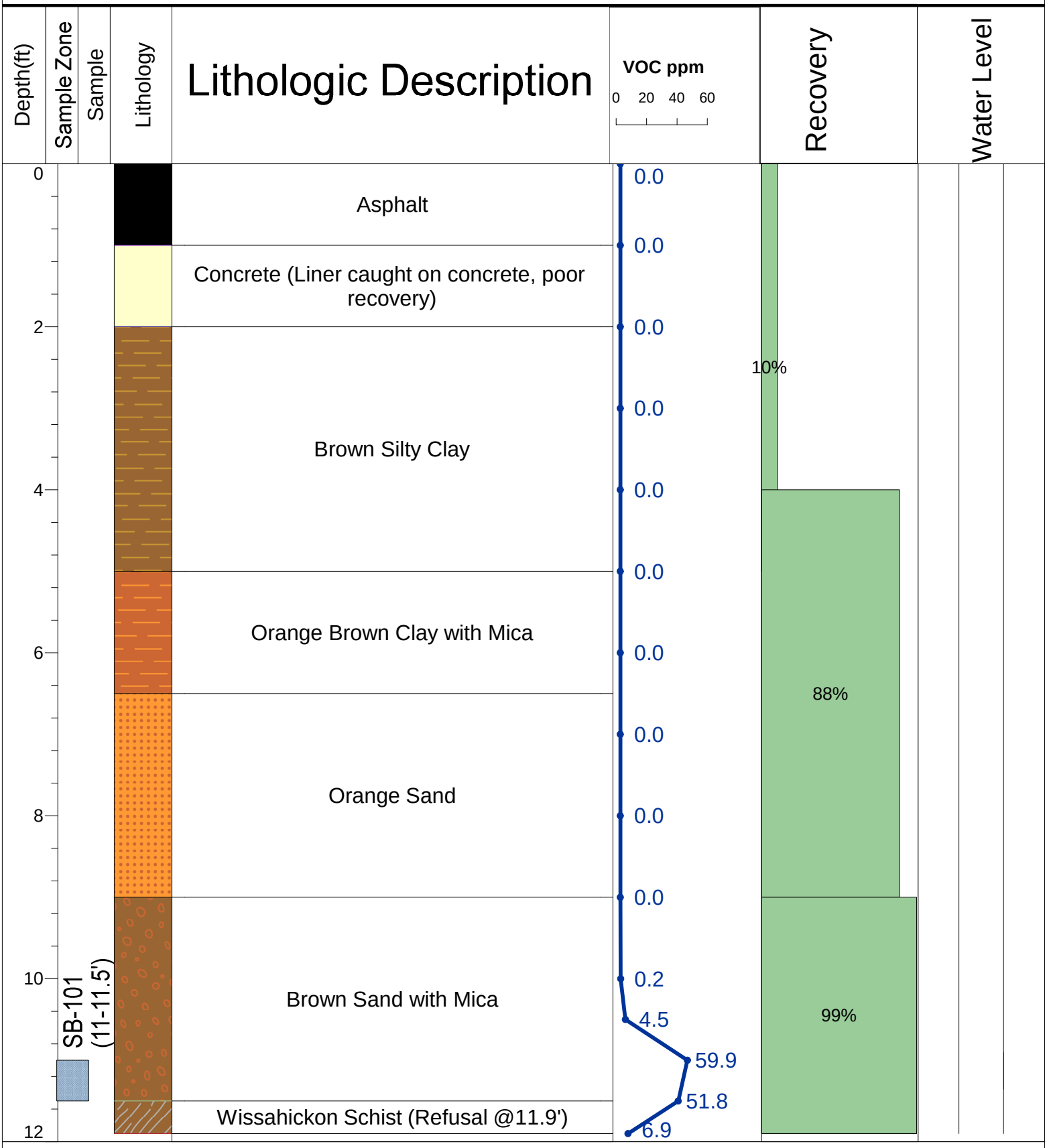
Site Name: Frankford Dev- 5129 Frankford Ave- Phase II
Address: 5129 Frankford Ave, Philadelphia PA
Project Manager: Walter H. Hungarter, III, P.E.
Client: Frankford Community Development Corporation

RT Environmental Services, Inc.

Drill Method: Direct-Push Geoprobe
Driller: Ferris Co.
Sampler: Collin Charnoff
Weather: Sunny, 30's

Hole ID: SB-101

Latitude: 40.0216966
Longitude: -75.0789407



Water Level

Drill Date
December 5, 2022

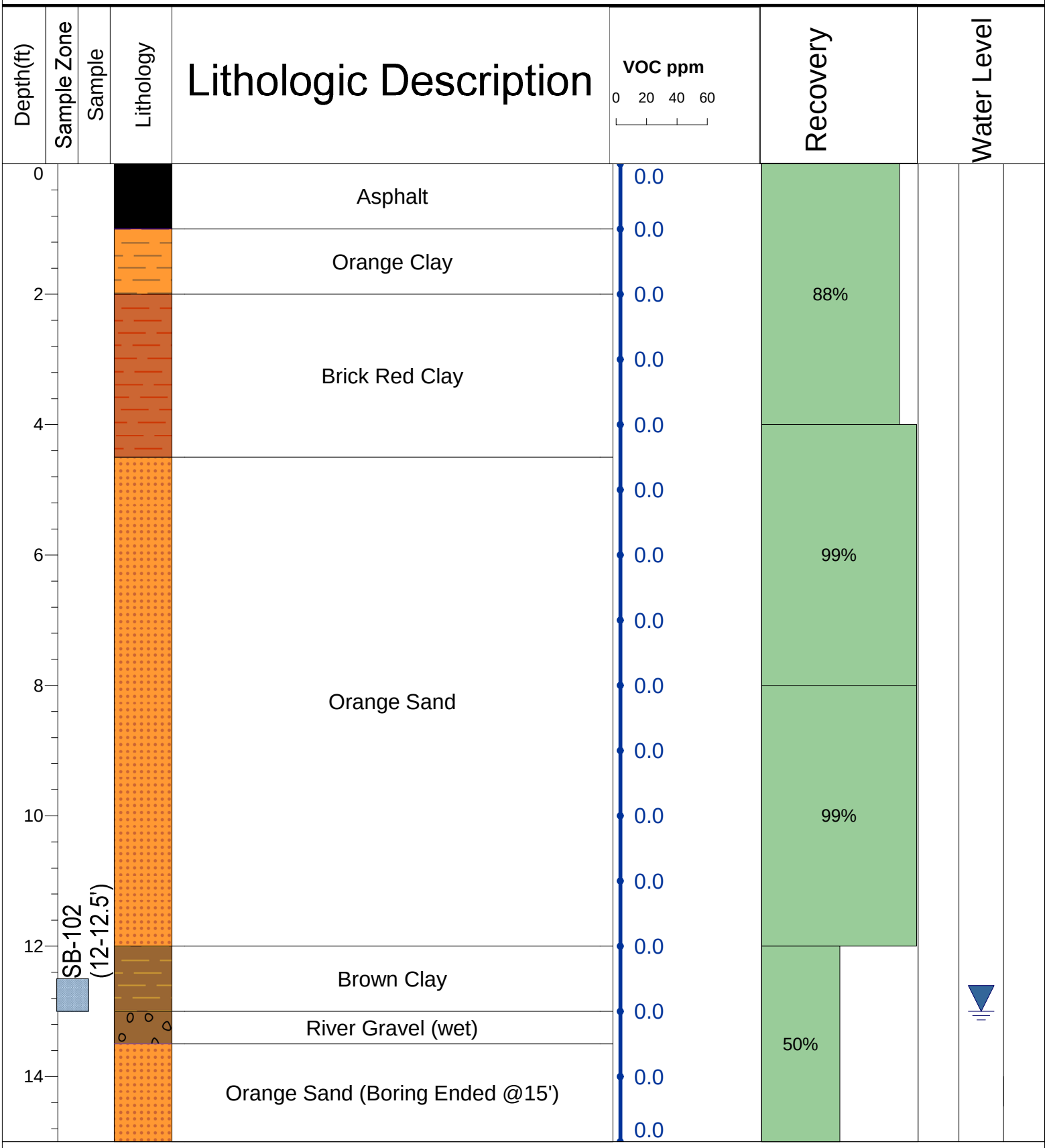
Site Name: Frankford Ave Phase II
Address: 5129 Frankford Ave, Philadelphia, PA
Project Manager: Collin Charnoff
Client: Frankford Community Development

RT Environmental Services, Inc.

Drill Method: Direct-Push Geoprobe
Driller: Ferris Co.
Sampler: Collin Charnoff
Weather: Sunny, 30's

Hole ID: SB-102

Latitude: 40.0215677
Longitude: -75.078758



Water Level

Drill Date
December 5, 2022

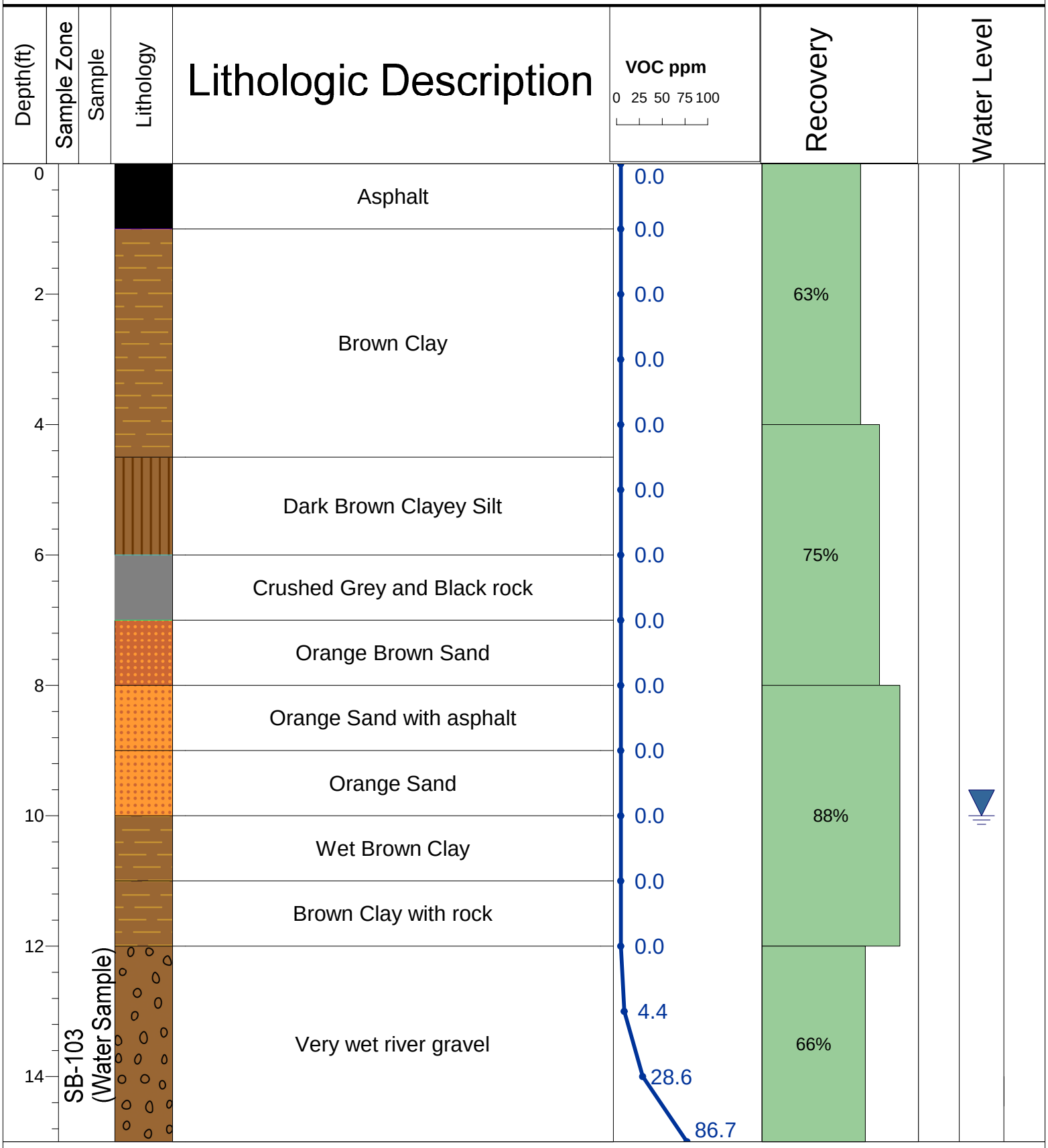
Site Name: Frankford Ave Phase II
Address: 5129 Frankford Ave, Philadelphia, PA
Project Manager: Collin Charnoff
Client: Frankford Community Development

RT Environmental Services, Inc.

Drill Method: Direct-Push Geoprobe
Driller: Ferris Co.
Sampler: Collin Charnoff
Weather: Sunny, 30's

Hole ID: SB-103

Latitude: 40.0214407
Longitude: -75.0783238



Water Level

Drill Date
December 5, 2022

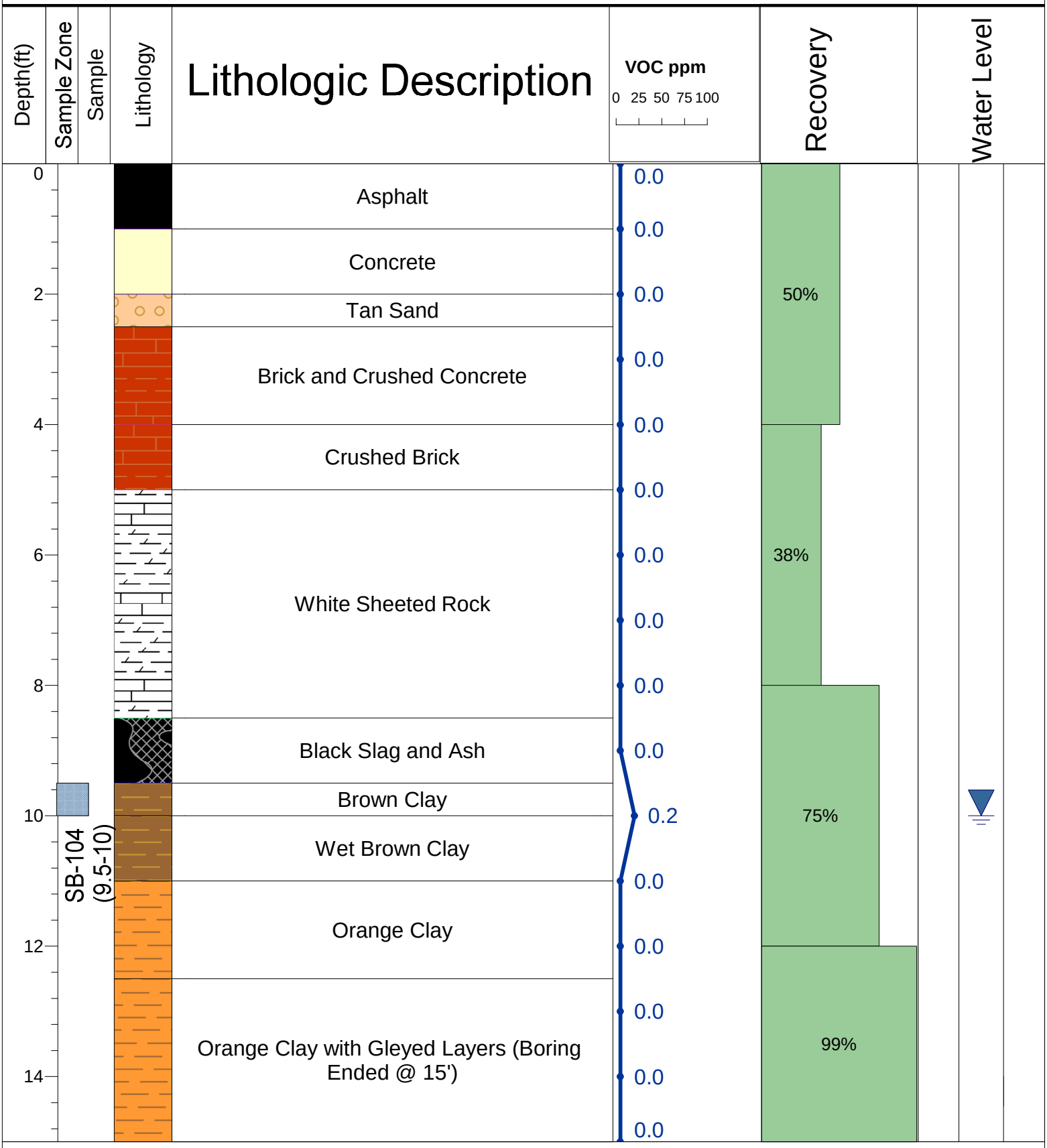
Site Name: Frankford Ave Phase II
Address: 5129 Frankford Ave, Philadelphia, PA
Project Manager: Collin Charnoff
Client: Frankford Community Development

RT Environmental Services, Inc.

Drill Method: Direct-Push Geoprobe
Driller: Ferris Co.
Sampler: Collin Charnoff
Weather: Sunny, 30's

Hole ID: SB-104

Latitude: 40.0211074
Longitude: -75.0780689



Water Level

Drill Date
December 5, 2022

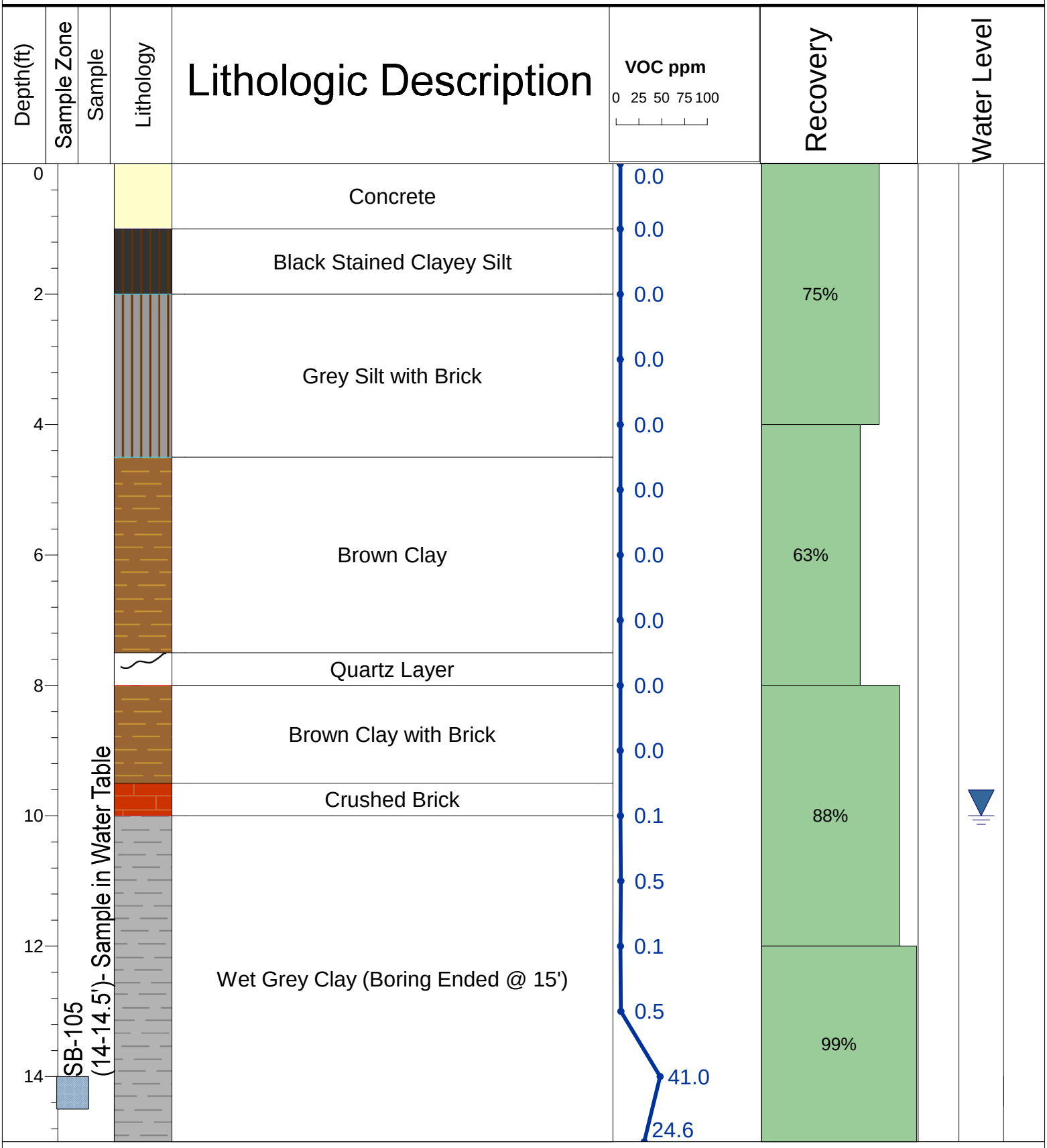
Site Name: Frankford Ave Phase II
Address: 5129 Frankford Ave, Philadelphia, PA
Project Manager: Collin Charnoff
Client: Frankford Community Development

RT Environmental Services, Inc.

Drill Method: Direct-Push Geoprobe
Driller: Ferris Co.
Sampler: Collin Charnoff
Weather: Sunny, 30's

Hole ID: SB-105

Latitude: 40.022174
Longitude: -75.078161



Water Level

Drill Date
December 5, 2022

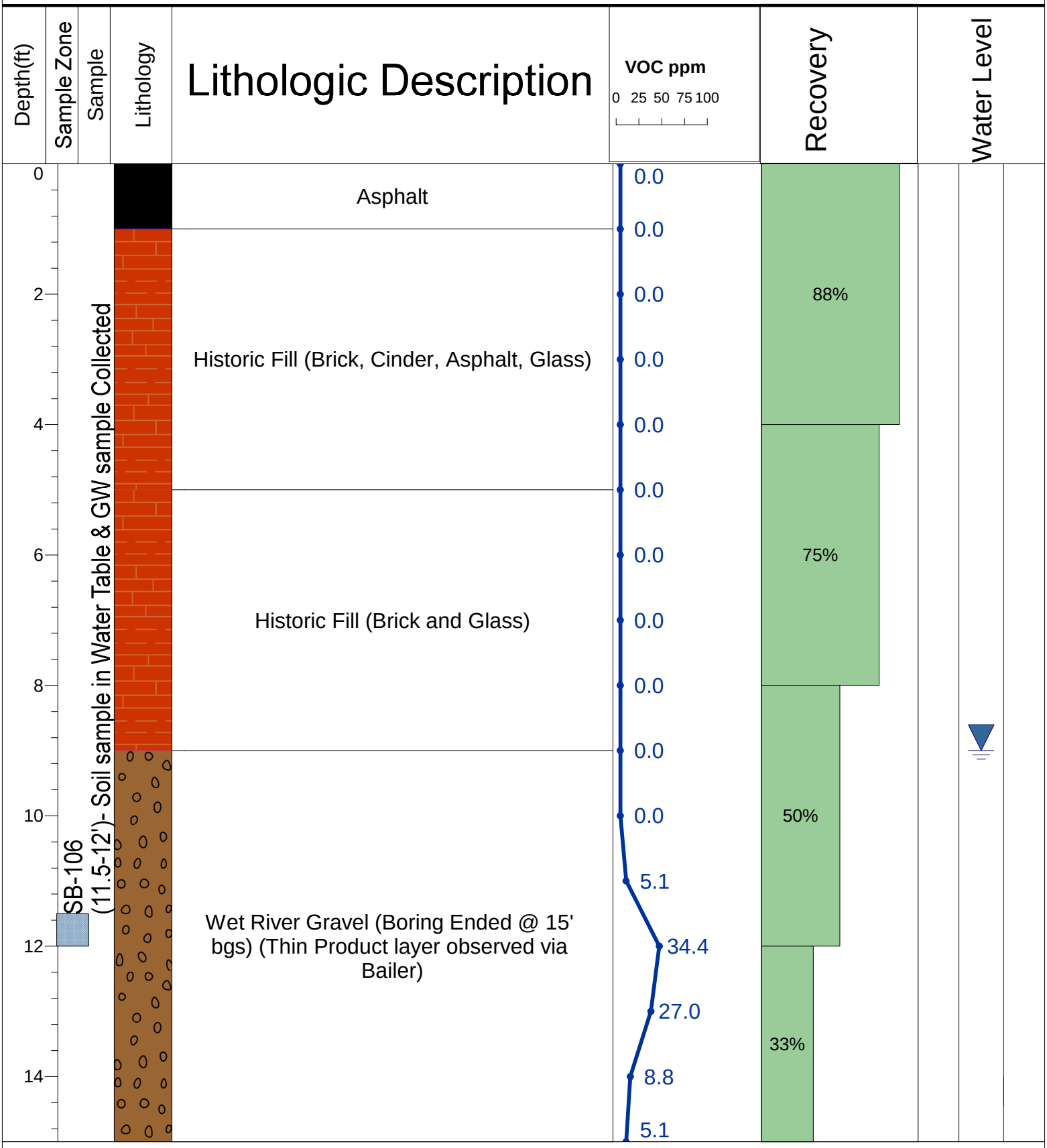
Site Name: Frankford Ave Phase II
Address: 5129 Frankford Ave, Philadelphia, PA
Project Manager: Collin Charnoff
Client: Frankford Community Development

RT Environmental Services, Inc.

Drill Method: Direct-Push Geoprobe
Driller: Ferris Co.
Sampler: Collin Charnoff
Weather: Sunny, 30's

Hole ID: SB-106

Latitude: 40.0216113
Longitude: -75.0778823



Water Level

Drill Date
December 5, 2022

Site Name: Frankford Ave Phase II
Address: 5129 Frankford Ave, Philadelphia, PA
Project Manager: Collin Charnoff
Client: Frankford Community Development

Project No: 00L629

Borehole # SB-1

Project: Store No. 883

Client: Rite Aid

City of Philadelphia

Location: Frankford Avenue and Pratt Street

Geologist: GFM

Depth	Description	Symbol	Moisture	Recovery (ft)	PID (ppm)	Remarks
0	Ground Surface					
	0' - 1' Pavement and gravel Black pavement and associated gravel fill		Dry	3'	0	
	1' - 2' Sand Tan, medium sand fill					
	2' - 2.5' Sand Black, medium sand fill					
	2.5' - 3' Sand and Gravel Brown medium sand and gravel fill		Dry		2	
	3' - 5.5' Sand Tan, medium sand fill					
5			Dry			
	5.5' - 6.5' Sand Black medium sand fill			2.8'	4	Slight petroleum odor
	6.5' - 8' Sand Tan medium sand fill		Moist			
	8' - 8.5' Sand Black medium sand fill			0.8'	6	Soil sample collected at 8.4' bgs Refusal at 8.5' bgs
	End of Borehole					
10						
15						

Driller: Eichelbergers, Inc.

Drill Method: Geoprobe

Drill Date: 6/9/00

BL TETHYS, LLC.
2407 Park Drive First floor
Harrisburg, PA 17110

Hole Size: 2"

Datum: Ground Surface

Sheet 1 of 1

Project No: 00L629

Borehole # SB-2

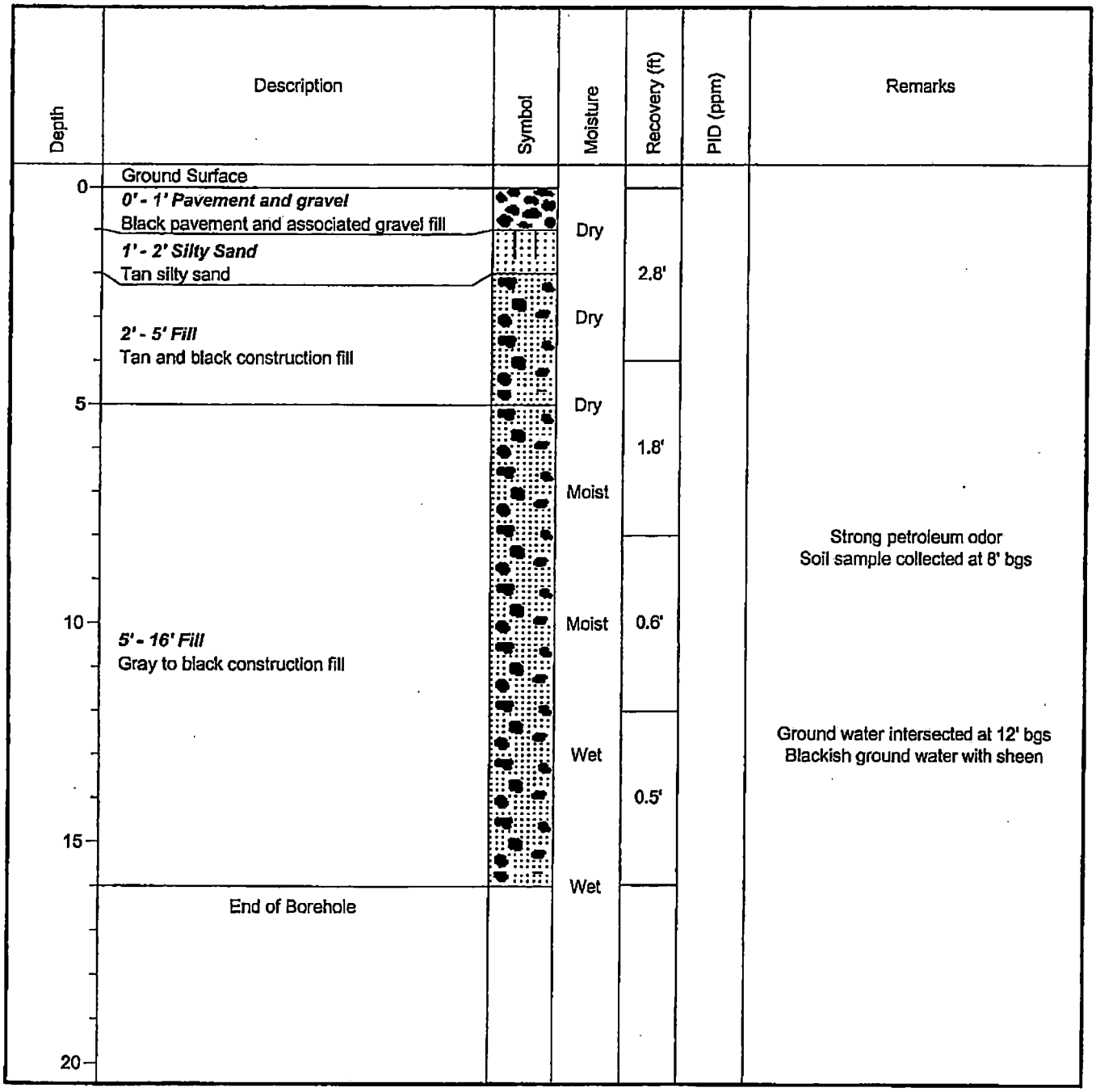
Project: Store No. 883

Client: Rite Aid

City of Philadelphia

Location: Frankford Avenue and Pratt Street

Geologist: GFM



Driller: Eichelbergers, Inc.

Drill Method: Geoprobe

Drill Date: 6/9/00

BL TETHYS, LLC.
2407 Park Drive First floor
Harrisburg, PA 17110

Hole Size: 2"

Datum: Ground Surface

Sheet 1 of 1

Project No: 00L629

Borehole # SB-3

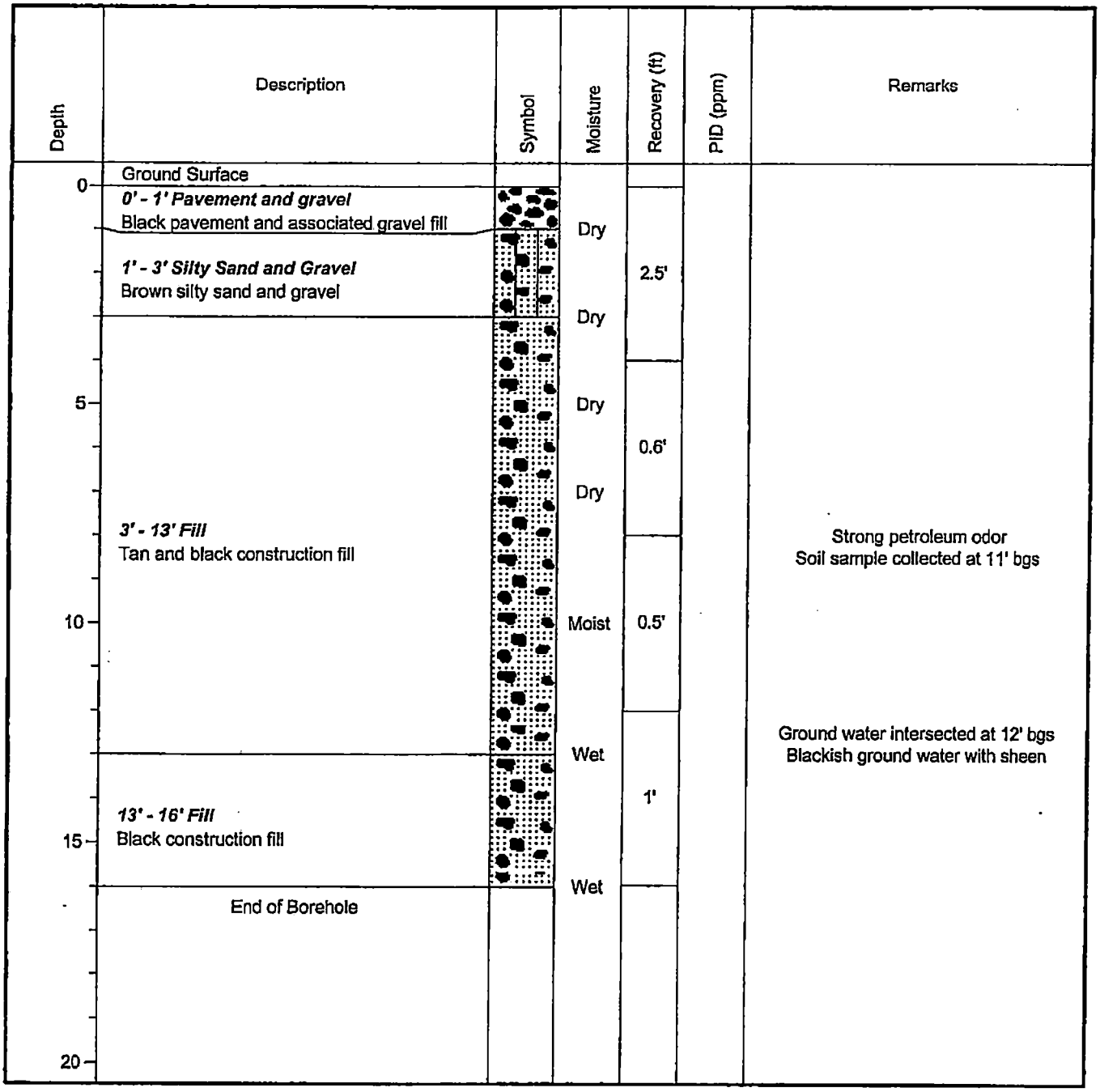
Project: Store No. 883

Client: Rite Aid

City of Philadelphia

Location: Frankford Avenue and Pratt Street

Geologist: GFM



Driller: Eichelbergers, Inc.

Drill Method: Geoprobe

Drill Date: 6/9/00

BL TETHYS, LLC.
2407 Park Drive First floor
Harrisburg, PA 17110

Hole Size: 2"

Datum: Ground Surface

Sheet 1 of 1

Project No: 00L629

Borehole # SB-4

Project: Store No. 883

Client: Rite Aid

City of Philadelphia

Location: Frankford Avenue and Pratt Street

Geologist: GFM

Depth	Description	Symbol	Moisture	Recovery (ft)	PID (ppm)	Remarks
0	Ground Surface					
	0' - 1' Pavement and gravel Black pavement and associated gravel fill		Dry	2.8'		
	1' - 2.5' Silty Sand Tan and black silty sand					
	2.5' - 5' Fill Tan and black construction fill		Dry	0.5		
5	End of Borehole					Refusal at 5' bgs
10						
15						
20						

Driller: Eichelbergers, Inc.

Drill Method: Geoprobe

Drill Date: 6/9/00

BL TETHYS, LLC.
2407 Park Drive First floor
Harrisburg, PA 17110

Hole Size: 2"

Datum: Ground Surface

Sheet 1 of 1

Project No: 00L629

Project: Store No. 883

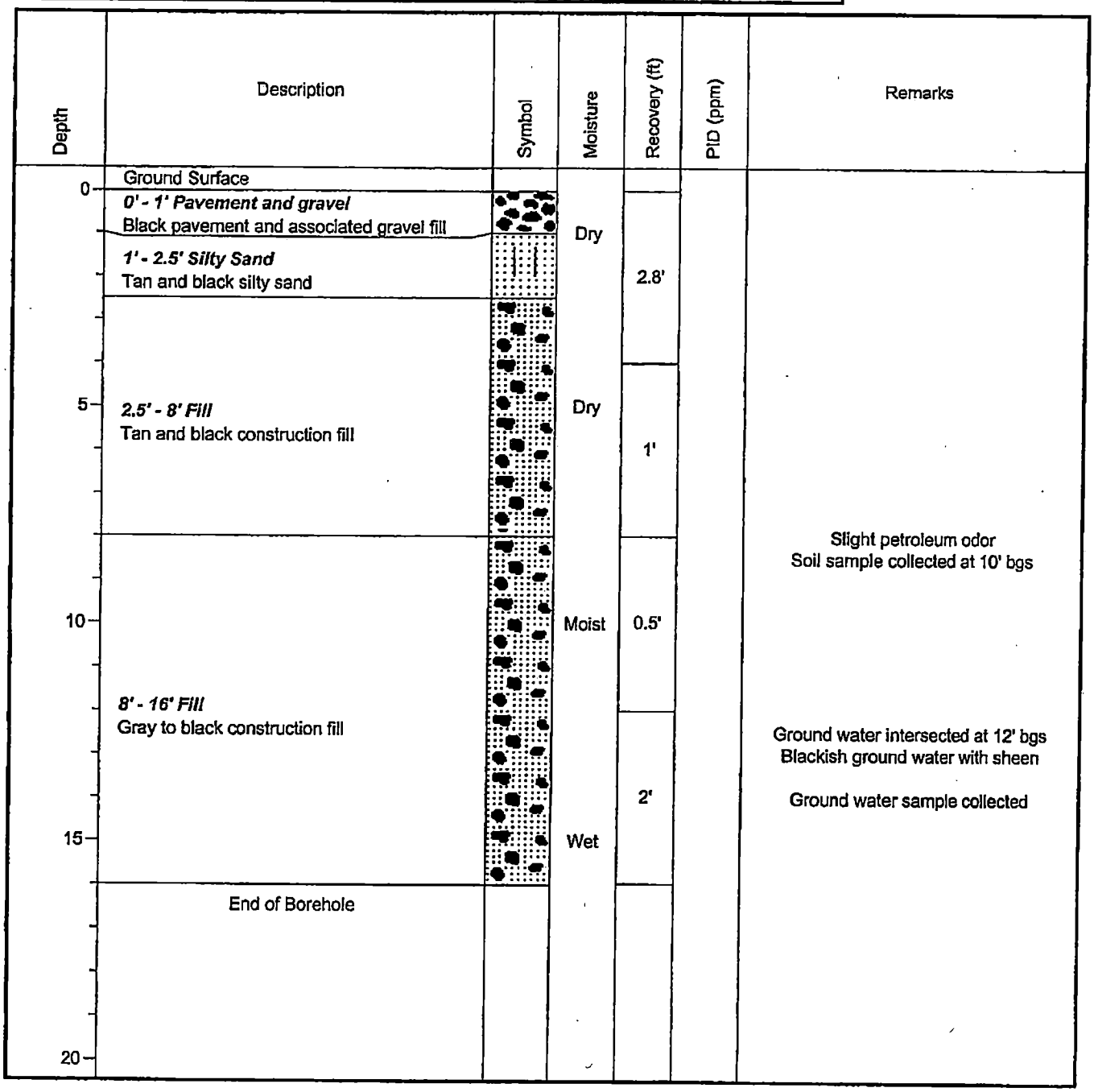
Client: Rite Aid

Location: Frankford Avenue and Pratt Street

Borehole # SB-5

City of Philadelphia

Geologist: GFM



Driller: Eichelbergers, Inc.

Drill Method: Geoprobe

Drill Date: 6/9/00

BL TETHYS, LLC.
2407 Park Drive First floor
Harrisburg, PA 17110

Hole Size: 2"

Datum: Ground Surface

Sheet 1 of 1

Project No: 00L629

Project: Store No. 883

Client: Rite Aid

Location: Frankford Avenue and Pratt Street

Borehole # SB-6

City of Philadelphia

Geologist: GFM

Depth	Description	Symbol	Moisture	Recovery (ft)	PID (ppm)	Remarks
0	Ground Surface					
	0' - 1' Pavement and gravel Black pavement and associated gravel fill		Dry	0.5'		
	1' - 4' Fill Tan, red, and black construction fill					
5	***4' - 8' No Recovery***			0'		
						Slight petroleum odor
10	***8' - 12' Fill*** Gray, tan, and black construction fill		Moist	0.2'		
						Ground water sample collected
	12' - 16' No Recovery			0'		
15						
	End of Borehole					
20						

Driller: Eichelbergers, Inc.

Drill Method: Geoprobe

Drill Date: 6/9/00

BL TETHYS, LLC.
2407 Park Drive First floor
Harrisburg, PA 17110

Hole Size: 2"

Datum: Ground Surface

Sheet 1 of 1

Project No: 00L629

Project: Store No. 883

Client: Rite Aid

Location: Frankford Avenue and Pratt Street

Borehole # SB-7

City of Philadelphia

Geologist: GFM

Depth	Description	Symbol	Moisture	Recovery (ft)	PID (ppm)	Remarks
0	Ground Surface					
	0' - 1' Pavement and gravel Black pavement and associated gravel fill		Dry	3'		
5	***1' - 10' Fill*** Tan and black construction fill		Dry	1.5'		Strong petroleum odor Soil sample collected at 11' bgs
10	***10' - 12' Fill*** Black construction fill		Moist	1.5'		
	End of Borehole		Wet			Ground water intersected at 12' bgs Blackish ground water with sheen
15						
20						

Driller: Eichelbergers, Inc.

Drill Method: Geoprobe

Drill Date: 6/9/00

BL TETHYS, LLC.
2407 Park Drive First floor
Harrisburg, PA 17110

Hole Size: 2"

Datum: Ground Surface

Sheet 1 of 1

WHITESTONE ASSOCIATES, INC.

RECORD OF SUBSURFACE EXPLORATION

Boring No.: B-1

Project:	Proposed Rite Aid Store Development	WAI Project No.:	WP06-8812
Location:	Philadelphia, PA	Client:	Bohler Engineering, Inc.
Surface Elevation:	Not Surveyed	Date Started:	07/21/06
Termination Depth:	16.0 feet bgs	Date Completed:	07/21/06
Drilling Method:	Geoprobe	Logged By:	C. Zieger
Test Method:	Macro-Core	Contractor:	Enviroprobe Services, Inc.
		Machine:	Truck Mounted Geoprobe

Water Depths / Elevations (feet / feet-msl)

While Drilling:	10.0 ▼
At Completion:	10.0 ▽
24 Hours:	NA ▼

Depth (feet)	Strata	DESCRIPTION OF MATERIALS (Classification)	PID Readings (ppm)	Rec. (in.)	Depth (feet)
0.0	P	0.0' - 0.6' Asphalt and Gravel Subbase	0.0		0.0
	FL	0.6' - 12.0' Brown Silt and Gray/Brown Gravel, Wood/Cinders/Ash, No Odors or Staining (FILL)	0.0		
			0.0		
			0.0		
			0.0		
			0.0		
			0.0	24	
5.0			0.0		5.0
			0.0		
			0.0		
			0.0		
			0.0	24	
10.0		Groundwater @ 10.0 fbgs	0.0		10.0
			0.0		
			0.0		
			0.0	30	
	CL	12.0' - 16.0' Green/Gray/Brown Sandy Clay, Wet, Medium Dense, No Staining or Odor	0.0		
			0.0		
			0.0		
15.0			0.0		15.0
			0.0	48	
		Boring B-1 Complete at a Depth of 16.0 Feet Below Ground Surface			
		Sample 8812-B1 Collected @ 9.5 fbgs to 10.0 fbgs (Fill Above Groundwater) No Odors or Staining			
20.0					20.0
25.0					25.0

NOTES: NE = Not Encountered, NA = Not Applicable

WHITESTONE ASSOCIATES, INC.

RECORD OF SUBSURFACE EXPLORATION

Boring No.: B-2

Project:	**Proposed Rite Aid Store Development**			WAI Project No.:	**WP06-8812**
Location:	**Philadelphia, PA**			Client:	**Bohler Engineering, Inc.**
Surface Elevation:	**Not Surveyed**	Date Started:	**07/21/06**	**Water Depths / Elevations (feet / feet-msl)**	
Termination Depth:	**16.0 feet bgs**	Date Completed:	**07/21/ 06**		
Drilling Method:	**Geoprobe**	Logged By:	**C. Zieger**	While Drilling:	**11.0** ▽
Test Method:	**Macro-Core**	Contractor:	**Enviroprobe Services, Inc.**	At Completion:	**10.0** ▽
		Machine:	**Truck Mounted Geoprobe**	24 Hours:	**NA** ▼

Depth (feet)	Strata	DESCRIPTION OF MATERIALS (Classification)	PID Readings (ppm)	Rec. (in.)	Depth (feet)
0.0	P	0.0' - 0.6' Asphalt and Gravel Subbase	0.0		0.0
	FL	0.6' - 12.0' Ash, Cinders, Gravel, Coarse. Very Loose, No Staining or Odor (FILL)	0.0		
			0.0		
			0.0		
			0.0		
			0.0		
			0.0	4	
5.0			0.0		5.0
			0.0		
			0.0		
			0.0		
			0.0	5	
			0.0		
10.0		Groundwater @ 10.0 fbgs	0.0		10.0
			0.0		
			0.0		
			0.0	4	
	FL	12.0' - 16.0' Coarse Gravel and Stone, Wet, Medium Dense, No Odors or Staining (FILL)	0.0		
			0.0		
15.0			0.0		15.0
			0.0		
			0.0	25	
		Boring B-2 Terminated at a Depth of 16.0 Feet Below Ground Surface on Yellow Sandstone			
		Sample 8812-B2 Collected @ 9.5 fbgs to 10.0 fbgs (Sample from Silt) No Odors or Staining No Mottling			
20.0					20.0
25.0					25.0

NOTES: NE = Not Encountered, NA = Not Applicable

WHITESTONE ASSOCIATES INC.

RECORD OF SUBSURFACE EXPLORATION

Boring No.: B-3

Project:	Proposed Rite Aid Store Development			WAI Project No.:	WP06-8812
Location:	Philadelphia, PA			Client:	Bohler Engineering, Inc.
Surface Elevation:	Not Surveyed	Date Started:	07/21/06	Water Depths / Elevations (feet / feet-msl)	
Termination Depth:	16.0 feet bgs	Date Completed:	07/21/06		
Drilling Method:	Geoprobe	Logged By:	C. Zieger	While Drilling:	10.0
Test Method:	Macro-Core	Contractor:	Enviroprobe Services, Inc.	At Completion:	10.0
		Machine:	Truck Mounted Geoprobe	24 Hours:	NA

Depth (feet)	Strata	DESCRIPTION OF MATERIALS (Classification)	PID Readings (ppm)	Rec. (in.)	Depth (feet)
0.0	P	0.0' - 0.6' Asphalt Driveway and Gravel Subbase	0.0		0.0
	FL	0.6' - 16.0' Coarse Gravel, Wood, Cinders, Fly Ash, Little Sand, No Odors or Staining (FILL)	0.0		
			0.0		
			0.0		
			0.0		
			0.0		
			0.0	24	
5.0			0.0		5.0
			0.0		
			0.0		
			0.0		
			0.0		
			0.0	24	
			0.0		
			0.0		
10.0		Groundwater at 10.0 fbgs	0.0		10.0
			0.0		
			0.0		
			0.0	30	
			0.0		
			0.0		
			0.0		
15.0			0.0		15.0
			0.0	40	
		Boring B-3 Complete at a Depth of 16.0 Feet Below Ground Surface			
		Sample 8812-B3 Collected @ 9.5 fbgs to 10.0 fbgs No Odors or Staining			
20.0					20.0
25.0					25.0

NOTES: NE = Not Encountered, NA = Not Applicable

WHITESTONE ASSOCIATES, INC.

RECORD OF SUBSURFACE EXPLORATION

Boring No.: B-4

Project:	Proposed Rite Aid Store Development	WAI Project No.:	WP06-8812
Location:	Philadelphia, PA	Client:	Bohler Engineering, Inc.
Surface Elevation:	Not Surveyed	Date Started:	07/21/06
Termination Depth:	16.0 feet bgs	Date Completed:	07/21/06
Drilling Method:	Geoprobe	Logged By:	C. Zieger
Test Method:	Macro-Core	Contractor:	Enviroprobe Services, Inc.
		Machine:	Truck Mounted Geoprobe

Water Depths / Elevations (feet / feet-msl)

While Drilling:	11.0 ▽
At Completion:	10.0 ▽
24 Hours:	NA ▼

Depth (feet)	Strata	DESCRIPTION OF MATERIALS (Classification)	PID Readings (ppm)	Rec. (in.)	Depth (feet)
0.0	P	0.0' - 1.0' Asphalt Pavement and Gravel Subbase	0.0		0.0
	FL	1.0' - 10.0' Gravel, Fly Ash, Wood, Some Silt and Sand, Loose, No Odor or Staining (FILL)	0.0		
			0.0		
			0.0		
			0.0		
			0.0		
			0.0	30	
5.0			0.0		5.0
			0.0		
			0.0		
			0.0		
			0.0		
			0.0	6	
10.0			0.0		10.0
			0.0		
	FL	10.0' - 16' Slight Odor, Black Stained Fly Ash and Little Silt and Sand, Black Staining Throughout	0.5		
		Groundwater @ 11.0 fbgs	0.4		
			24	20	
			35		
15.0			48		15.0
			60	30	
		Boring B-4 Complete at a Depth of 16.0 Feet Below Ground Surface			
		Sample 8812-B4 Collected @ 15.5 fbgs to 16.0 fbgs			
		Staining and Odors from 10.0 fbgs to 16.0 fbgs			
20.0					20.0
25.0					25.0

NOTES: NE = Not Encountered, NA = Not Applicable

WHITESTONE ASSOCIATES, INC.

RECORD OF SUBSURFACE EXPLORATION

Boring No.: B-5

Project:	Proposed Rite Aid Store Development			WAI Project No.:	WP06-8812
Location:	Philadelphia, PA			Client:	Bohler Engineering, Inc.
Surface Elevation:	Not Surveyed	Date Started:	07/21/06	Water Depths / Elevations (feet / feet-msl)	
Termination Depth:	16.0 feet bgs	Date Completed:	07/21/06		
Drilling Method:	Geoprobe	Logged By:	C. Zieger	While Drilling:	12.0 ▽
Test Method:	Macro-Core	Contractor:	Enviroprobe Services, Inc.	At Completion:	11.5 ▽
		Machine:	Truck Mounted Geoprobe	24 Hours:	NA ▼

Depth (feet)	Strata	DESCRIPTION OF MATERIALS (Classification)	PID Readings (ppm)	Rec. (in.)	Depth (feet)
0.0	P	0.0' - 0.8' Asphalt Pavement and Stone Subbase	0.0		0.0
	FL	0.8' - 16.0' Gravel, Some Brown Silt, Fly Ash, Cinders, Wood, Glass, Odors and Staining from 12.0 fbgs to 16.0 fbgs (FILL)	0.0		
			0.0		
			0.0		
			0.0		
			0.0		
			0.0	12	
5.0			0.0		5.0
			0.0		
			0.0		
			0.0		
			0.0		
			0.0	0	
			0.0		
10.0			0.4		10.0
			2		
		Groundwater @ 12.0 fbgs (Sheen)	6	20	
			32		
			18		
15.0			10		15.0
			8	7	
		Boring B-5 Terminated at a Depth of 16.0 Feet Below Ground Surface (Refusal)			
		Sample 8812-B5 Collected @ 12.0 fbgs to 12.5 fbgs (PID - 32 ppm) Staining and Odors from 10.0 fbgs to 16.0 fbgs			
20.0					20.0
25.0					25.0

NOTES: NE = Not Encountered, NA = Not Applicable

WHITESTONE ASSOCIATES, INC.

RECORD OF SUBSURFACE EXPLORATION

Boring No.: B-6

Project:	Proposed Rite Aid Store Development			WAI Project No.:	WP06-8812
Location:	Philadelphia, PA			Client:	Bohler Engineering, Inc.
Surface Elevation:	Not Surveyed	Date Started:	07/21/06	Water Depths / Elevations (feet / feet-msl)	
Termination Depth:	15.0 feet bgs	Date Completed:	07/21/06		
Drilling Method:	Geoprobe	Logged By:	C. Zieger	While Drilling:	14.0 ▽
Test Method:	Macro-Core	Contractor:	Enviroprobe Services, Inc.	At Completion:	14.0 ▽
		Machine:	Truck Mounted Geoprobe	24 Hours:	NA ▼

Depth (feet)	Strata	DESCRIPTION OF MATERIALS (Classification)	PID Readings (ppm)	Rec. (in.)	Depth (feet)
0.0	P	0.0' - 0.5' Asphalt Pavement and Stone Subbase	0.0		0.0
	FL	0.5' - 15.0' Gravel, Some Brown Silt, Loose, Fly Ash, Wood, Glass, Cinders (FILL)	0.0		
			0.0		
			0.0		
			0.0		
			0.0		
			0.0	20	
5.0			0.0		5.0
			0.0		
			0.0		
			0.0		
			0.0	8	
10.0			0.0		10.0
			0.0		
			0.0		
			0.0	7	
			0.0		
			0.0		
		Groundwater Encountered @ 14.0 fbgs	0.0		
15.0		Boring B-6 Terminated on Rock Refusal at a Depth of 15.0 Feet Below Ground Surface		16	15.0
		No Staining, Odors, or Mottling			
		Groundwater @ 14.0 fbgs			
20.0					20.0
25.0					25.0

NOTES: NE = Not Encountered, NA = Not Applicable

WHITESTONE ASSOCIATES, INC.

RECORD OF SUBSURFACE EXPLORATION

Boring No.: B-7

Project:	Proposed Rite Aid Store Development			WAI Project No.:	WP06-8812
Location:	Philadelphia, PA			Client:	Bohler Engineering, Inc.
Surface Elevation:	Not Surveyed	Date Started:	07/21/06	Water Depths / Elevations (feet / feet-msl)	
Termination Depth:	17.0 feet bgs	Date Completed:	07/21/06		
Drilling Method:	Geoprobe	Logged By:	C. Zieger	While Drilling:	12.0 ▼
Test Method:	Macro-Core	Contractor:	Enviroprobe Services, Inc.	At Completion:	12.0 ▽
		Machine:	Truck Mounted Geoprobe	24 Hours:	NA ▼

Depth (feet)	Strata	DESCRIPTION OF MATERIALS (Classification)	PID Readings (ppm)	Rec. (in.)	Depth (feet)
0.0	P	0.0' - 0.4' Concrete Pavement			0.0
	FL	0.4' - 10.0' Brown, Red, Stained Black Sand, Some Silt, Brick, Fly Ash, No Odors (FILL)	0.0		
			0.0		
			0.0		
			0.0		
			0.0		
			0.0	10	
5.0			0.0		5.0
			0.0		
			0.0		
			0.0		
			0.0	4	
			0.0		
10.0			0.0		10.0
	FL	10.0' - 12.0' Brown Clayey Silt, Medium Dense, No Odor or Staining	0.0		
			0.0		
			0.0	25	
	CL	12.0' - 17.0' Green-Gray Clay, Wet, Medium Dense, No Odors or Staining	0.0		
			0.0		
			0.0		
			0.0		
15.0			0.0		15.0
			0.0	40	
			0.0	12	
		Boring B-7 Terminated at a Depth of 17.0 Feet Below Ground Surface (Refusal)	0.0		
		Sample 8812-B7A Collected @ 10.5 fbgs to 11.0 fbgs			
		Sample 8812-B7B Collected @ 6.0 fbgs to 6.5 fbgs			
		Groundwater Encountered @ 12.0 fbgs			
20.0					20.0
25.0					25.0

NOTES: NE = Not Encountered, NA = Not Applicable

Appendix C
Laboratory Analytical Reports



TestAmerica

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: 460-83626-1
Client Project/Site: Frankford/Darrah

For:
BL Companies
4242 Carlisle Pike
Suite 260
Camp Hill, Pennsylvania 17011

Attn: Marc Baumann

Shalini Isaac

Authorized for release by:
10/7/2014 3:45:37 PM
Shalini Isaac, Project Management Assistant II
shalini.isaac@testamericainc.com

Designee for

Jannel Franklin, Project Manager I
(732)593-2551
jannel.franklin@testamericainc.com

..... LINKS .....

Review your project results through TotalAccess

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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.

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Sample Summary

Client: BL Companies
Project/Site: Frankford/Darrah

TestAmerica Job ID: 460-83626-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-83626-1	MW-1	Water	09/30/14 10:00	09/30/14 13:37
460-83626-2	MW-4	Water	09/30/14 13:00	09/30/14 13:37
460-83626-3	MW-2A	Water	09/30/14 13:12	09/30/14 13:37
460-83626-4	MW-3	Water	09/30/14 13:25	09/30/14 13:37

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	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
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 460-83626-1

Laboratory: TestAmerica Edison

Narrative

CASE NARRATIVE

Client: BL Companies

Project: Frankford/Darrah

Report Number: 460-83626-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 9/30/2014 1:37 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.2° C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples MW-1 (460-83626-1), MW-4 (460-83626-2), MW-2A (460-83626-3) and MW-3 (460-83626-4) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 10/02/2014.

Benzene, MTBE, Toluene and Xylenes, Total failed the recovery criteria high for the MS of sample 460-83497-2 in batch 460-253200. Several analytes failed the recovery criteria high for the MSD of sample 460-83497-2 in batch 460-253200. The presence of the '4' qualifier in the data indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

Refer to the QC report for details.

No other difficulties were encountered during the volatiles analysis.

All other quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples MW-1 (460-83626-1), MW-4 (460-83626-2), MW-2A (460-83626-3) and MW-3 (460-83626-4) were analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8270C. The samples were prepared on 10/02/2014 and analyzed on 10/05/2014 and 10/06/2014.

The following laboratory control sample (LCS) associated with batch 253237 contained one base surrogate outside acceptance limits: (LCS 460-253237/2-A). The laboratory's SOP allows one acid and/or one base surrogate to be outside acceptance limits; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

Job ID: 460-83626-1 (Continued)

Laboratory: TestAmerica Edison (Continued)

Terphenyl-d14 failed the surrogate recovery criteria low for LCS 460-253237/2-A.

Benzo[a]pyrene failed the recovery criteria high for LCSD 460-253237/3-A.

Refer to the QC report for details.

No other difficulties were encountered during the semivolatiles analysis.

All other quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS - SELECTED ION MODE (SIM)

Samples MW-1 (460-83626-1), MW-4 (460-83626-2), MW-2A (460-83626-3) and MW-3 (460-83626-4) were analyzed for semivolatile organic compounds - Selected Ion Mode (SIM) in accordance with EPA SW-846 Method 8270C SIM. The samples were prepared on 10/02/2014 and analyzed on 10/03/2014, 10/04/2014 and 10/06/2014.

No difficulties were encountered during the SIM analysis.

All quality control parameters were within the acceptance limits.

DISSOLVED METALS

Samples MW-1 (460-83626-1), MW-4 (460-83626-2), MW-2A (460-83626-3) and MW-3 (460-83626-4) were analyzed for dissolved metals in accordance with EPA Method 200.8 (ICP/MS). The samples were prepared on 10/06/2014 and analyzed on 10/07/2014.

As a standard practice all non-potable samples and related QC samples (i.e., MB, LCS, Dup, MS, SD) are diluted 5X prior to analysis. Further dilutions may be required dependent upon analyte levels in the samples. Refer to the analytical results forms for dilutions.

No other difficulties were encountered during the dissolved metals analysis.

All quality control parameters were within the acceptance limits.

Client Sample ID: MW-1
Date Collected: 09/30/14 10:00
Date Received: 09/30/14 13:37

Lab Sample ID: 460-83626-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.10	ug/L			10/02/14 14:01	1
Bromomethane	ND		1.0	0.18	ug/L			10/02/14 14:01	1
Vinyl chloride	ND		1.0	0.14	ug/L			10/02/14 14:01	1
Chloroethane	ND		1.0	0.17	ug/L			10/02/14 14:01	1
Methylene Chloride	ND		1.0	0.18	ug/L			10/02/14 14:01	1
Acetone	ND		5.0	2.7	ug/L			10/02/14 14:01	1
Carbon disulfide	ND		1.0	0.13	ug/L			10/02/14 14:01	1
1,1-Dichloroethene	ND		1.0	0.090	ug/L			10/02/14 14:01	1
1,1-Dichloroethane	ND		1.0	0.13	ug/L			10/02/14 14:01	1
trans-1,2-Dichloroethene	**0.15**	**J**	1.0	0.13	ug/L			10/02/14 14:01	1
MTBE	ND		1.0	0.14	ug/L			10/02/14 14:01	1
cis-1,2-Dichloroethene	**2.4**		1.0	0.18	ug/L			10/02/14 14:01	1
Chloroform	**2.0**		1.0	0.080	ug/L			10/02/14 14:01	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			10/02/14 14:01	1
2-Butanone	ND		5.0	2.3	ug/L			10/02/14 14:01	1
1,1,1-Trichloroethane	ND		1.0	0.060	ug/L			10/02/14 14:01	1
Carbon tetrachloride	ND		1.0	0.060	ug/L			10/02/14 14:01	1
Bromodichloromethane	ND		1.0	0.12	ug/L			10/02/14 14:01	1
1,2-Dichloropropane	ND		1.0	0.090	ug/L			10/02/14 14:01	1
cis-1,3-Dichloropropene	ND		1.0	0.18	ug/L			10/02/14 14:01	1
Trichloroethene	**0.66**	**J**	1.0	0.090	ug/L			10/02/14 14:01	1
Dibromochloromethane	ND		1.0	0.20	ug/L			10/02/14 14:01	1
1,1,2-Trichloroethane	ND		1.0	0.19	ug/L			10/02/14 14:01	1
Benzene	ND		1.0	0.080	ug/L			10/02/14 14:01	1
trans-1,3-Dichloropropene	ND		1.0	0.24	ug/L			10/02/14 14:01	1
Bromoform	ND		1.0	0.19	ug/L			10/02/14 14:01	1
4-Methyl-2-pentanone	ND		5.0	0.99	ug/L			10/02/14 14:01	1
2-Hexanone	ND		5.0	0.50	ug/L			10/02/14 14:01	1
Tetrachloroethene	**8.6**		1.0	0.10	ug/L			10/02/14 14:01	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.16	ug/L			10/02/14 14:01	1
Toluene	ND		1.0	0.15	ug/L			10/02/14 14:01	1
Chlorobenzene	ND		1.0	0.11	ug/L			10/02/14 14:01	1
Ethylbenzene	ND		1.0	0.10	ug/L			10/02/14 14:01	1
Styrene	ND		1.0	0.12	ug/L			10/02/14 14:01	1
TBA	ND		10	5.7	ug/L			10/02/14 14:01	1
Xylenes, Total	ND		2.0	0.13	ug/L			10/02/14 14:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 130*		*10/02/14 14:01*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*10/02/14 14:01*	*1*
Bromofluorobenzene	*106*		*64 - 135*		*10/02/14 14:01*	*1*
Dibromofluoromethane (Surr)	*95*		*72 - 137*		*10/02/14 14:01*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.052	0.029	ug/L		10/02/14 11:22	10/06/14 12:17	1
Acenaphthylene	ND		0.052	0.025	ug/L		10/02/14 11:22	10/06/14 12:17	1
Anthracene	**0.044**	**J**	0.052	0.029	ug/L		10/02/14 11:22	10/06/14 12:17	1
Benzo[a]anthracene	**0.31**		0.052	0.036	ug/L		10/02/14 11:22	10/06/14 12:17	1
Benzo[a]pyrene	**0.57**		0.052	0.049	ug/L		10/02/14 11:22	10/06/14 12:17	1

Client Sample ID: MW-1
Date Collected: 09/30/14 10:00
Date Received: 09/30/14 13:37

Lab Sample ID: 460-83626-1
Matrix: Water

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	**1.3**		0.052	0.031	ug/L		10/02/14 11:22	10/06/14 12:17	1
Benzo[g,h,i]perylene	**1.1**		0.052	0.031	ug/L		10/02/14 11:22	10/06/14 12:17	1
Benzo[k]fluoranthene	**0.52**		0.052	0.016	ug/L		10/02/14 11:22	10/06/14 12:17	1
Chrysene	**0.68**		0.052	0.029	ug/L		10/02/14 11:22	10/06/14 12:17	1
Dibenz(a,h)anthracene	**0.19**		0.052	0.038	ug/L		10/02/14 11:22	10/06/14 12:17	1
Fluoranthene	**0.87**		0.052	0.029	ug/L		10/02/14 11:22	10/06/14 12:17	1
Fluorene	ND		0.052	0.029	ug/L		10/02/14 11:22	10/06/14 12:17	1
Indeno[1,2,3-cd]pyrene	**0.84**		0.052	0.029	ug/L		10/02/14 11:22	10/06/14 12:17	1
Naphthalene	**1.2**		0.052	0.025	ug/L		10/02/14 11:22	10/06/14 12:17	1
Phenanthrene	**0.20**		0.052	0.029	ug/L		10/02/14 11:22	10/06/14 12:17	1
Pyrene	**0.77**		0.052	0.035	ug/L		10/02/14 11:22	10/06/14 12:17	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*94*		*50 - 120*	*10/02/14 11:22*	*10/06/14 10:20*	*1*
Nitrobenzene-d5	*91*		*60 - 114*	*10/02/14 11:22*	*10/06/14 10:20*	*1*
Terphenyl-d14	*99*		*72 - 130*	*10/02/14 11:22*	*10/06/14 10:20*	*1*

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5	1.4	ug/L		10/06/14 20:39	10/07/14 04:13	5

Client Sample ID: MW-4
Date Collected: 09/30/14 13:00
Date Received: 09/30/14 13:37

Lab Sample ID: 460-83626-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.10	ug/L			10/02/14 14:27	1
Bromomethane	ND		1.0	0.18	ug/L			10/02/14 14:27	1
Vinyl chloride	ND		1.0	0.14	ug/L			10/02/14 14:27	1
Chloroethane	ND		1.0	0.17	ug/L			10/02/14 14:27	1
Methylene Chloride	ND		1.0	0.18	ug/L			10/02/14 14:27	1
Acetone	ND		5.0	2.7	ug/L			10/02/14 14:27	1
Carbon disulfide	ND		1.0	0.13	ug/L			10/02/14 14:27	1
1,1-Dichloroethene	ND		1.0	0.090	ug/L			10/02/14 14:27	1
1,1-Dichloroethane	ND		1.0	0.13	ug/L			10/02/14 14:27	1
trans-1,2-Dichloroethene	ND		1.0	0.13	ug/L			10/02/14 14:27	1
MTBE	ND		1.0	0.14	ug/L			10/02/14 14:27	1
cis-1,2-Dichloroethene	**0.66**	**J**	1.0	0.18	ug/L			10/02/14 14:27	1
Chloroform	**0.16**	**J**	1.0	0.080	ug/L			10/02/14 14:27	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			10/02/14 14:27	1
2-Butanone	ND		5.0	2.3	ug/L			10/02/14 14:27	1
1,1,1-Trichloroethane	ND		1.0	0.060	ug/L			10/02/14 14:27	1
Carbon tetrachloride	ND		1.0	0.060	ug/L			10/02/14 14:27	1
Bromodichloromethane	ND		1.0	0.12	ug/L			10/02/14 14:27	1
1,2-Dichloropropane	ND		1.0	0.090	ug/L			10/02/14 14:27	1
cis-1,3-Dichloropropene	ND		1.0	0.18	ug/L			10/02/14 14:27	1
Trichloroethene	**0.19**	**J**	1.0	0.090	ug/L			10/02/14 14:27	1
Dibromochloromethane	ND		1.0	0.20	ug/L			10/02/14 14:27	1

Client Sample ID: MW-4
Date Collected: 09/30/14 13:00
Date Received: 09/30/14 13:37

Lab Sample ID: 460-83626-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		1.0	0.19	ug/L			10/02/14 14:27	1
Benzene	ND		1.0	0.080	ug/L			10/02/14 14:27	1
trans-1,3-Dichloropropene	ND		1.0	0.24	ug/L			10/02/14 14:27	1
Bromoform	ND		1.0	0.19	ug/L			10/02/14 14:27	1
4-Methyl-2-pentanone	ND		5.0	0.99	ug/L			10/02/14 14:27	1
2-Hexanone	ND		5.0	0.50	ug/L			10/02/14 14:27	1
Tetrachloroethene	**1.9**		1.0	0.10	ug/L			10/02/14 14:27	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.16	ug/L			10/02/14 14:27	1
Toluene	ND		1.0	0.15	ug/L			10/02/14 14:27	1
Chlorobenzene	ND		1.0	0.11	ug/L			10/02/14 14:27	1
Ethylbenzene	ND		1.0	0.10	ug/L			10/02/14 14:27	1
Styrene	ND		1.0	0.12	ug/L			10/02/14 14:27	1
TBA	ND		10	5.7	ug/L			10/02/14 14:27	1
Xylenes, Total	ND		2.0	0.13	ug/L			10/02/14 14:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*		*10/02/14 14:27*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*10/02/14 14:27*	*1*
Bromofluorobenzene	*105*		*64 - 135*		*10/02/14 14:27*	*1*
Dibromofluoromethane (Surr)	*96*		*72 - 137*		*10/02/14 14:27*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.052	0.029	ug/L		10/02/14 11:22	10/03/14 23:29	1
Acenaphthylene	ND		0.052	0.025	ug/L		10/02/14 11:22	10/03/14 23:29	1
Anthracene	ND		0.052	0.029	ug/L		10/02/14 11:22	10/03/14 23:29	1
Benzo[a]anthracene	ND		0.052	0.036	ug/L		10/02/14 11:22	10/03/14 23:29	1
Benzo[a]pyrene	ND		0.052	0.049	ug/L		10/02/14 11:22	10/03/14 23:29	1
Benzo[b]fluoranthene	ND		0.052	0.031	ug/L		10/02/14 11:22	10/03/14 23:29	1
Benzo[g,h,i]perylene	ND		0.052	0.031	ug/L		10/02/14 11:22	10/03/14 23:29	1
Benzo[k]fluoranthene	ND		0.052	0.016	ug/L		10/02/14 11:22	10/03/14 23:29	1
Chrysene	ND		0.052	0.029	ug/L		10/02/14 11:22	10/03/14 23:29	1
Dibenz(a,h)anthracene	ND		0.052	0.038	ug/L		10/02/14 11:22	10/03/14 23:29	1
Fluoranthene	ND		0.052	0.029	ug/L		10/02/14 11:22	10/03/14 23:29	1
Fluorene	ND		0.052	0.029	ug/L		10/02/14 11:22	10/03/14 23:29	1
Indeno[1,2,3-cd]pyrene	ND		0.052	0.029	ug/L		10/02/14 11:22	10/03/14 23:29	1
Naphthalene	ND		0.052	0.025	ug/L		10/02/14 11:22	10/03/14 23:29	1
Phenanthrene	ND		0.052	0.029	ug/L		10/02/14 11:22	10/03/14 23:29	1
Pyrene	ND		0.052	0.035	ug/L		10/02/14 11:22	10/03/14 23:29	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*91*		*50 - 120*	*10/02/14 11:22*	*10/05/14 19:20*	*1*
Nitrobenzene-d5	*90*		*60 - 114*	*10/02/14 11:22*	*10/05/14 19:20*	*1*
Terphenyl-d14	*101*		*72 - 130*	*10/02/14 11:22*	*10/05/14 19:20*	*1*

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**12**		1.5	1.4	ug/L		10/06/14 20:39	10/07/14 04:19	5

Client Sample ID: MW-2A
Date Collected: 09/30/14 13:12
Date Received: 09/30/14 13:37

Lab Sample ID: 460-83626-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.10	ug/L			10/02/14 14:52	1
Bromomethane	ND		1.0	0.18	ug/L			10/02/14 14:52	1
Vinyl chloride	**0.22**	**J**	1.0	0.14	ug/L			10/02/14 14:52	1
Chloroethane	ND		1.0	0.17	ug/L			10/02/14 14:52	1
Methylene Chloride	ND		1.0	0.18	ug/L			10/02/14 14:52	1
Acetone	ND		5.0	2.7	ug/L			10/02/14 14:52	1
Carbon disulfide	ND		1.0	0.13	ug/L			10/02/14 14:52	1
1,1-Dichloroethene	ND		1.0	0.090	ug/L			10/02/14 14:52	1
1,1-Dichloroethane	ND		1.0	0.13	ug/L			10/02/14 14:52	1
trans-1,2-Dichloroethene	**0.43**	**J**	1.0	0.13	ug/L			10/02/14 14:52	1
MTBE	ND		1.0	0.14	ug/L			10/02/14 14:52	1
cis-1,2-Dichloroethene	**7.2**		1.0	0.18	ug/L			10/02/14 14:52	1
Chloroform	**0.17**	**J**	1.0	0.080	ug/L			10/02/14 14:52	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			10/02/14 14:52	1
2-Butanone	ND		5.0	2.3	ug/L			10/02/14 14:52	1
1,1,1-Trichloroethane	ND		1.0	0.060	ug/L			10/02/14 14:52	1
Carbon tetrachloride	ND		1.0	0.060	ug/L			10/02/14 14:52	1
Bromodichloromethane	ND		1.0	0.12	ug/L			10/02/14 14:52	1
1,2-Dichloropropane	ND		1.0	0.090	ug/L			10/02/14 14:52	1
cis-1,3-Dichloropropene	ND		1.0	0.18	ug/L			10/02/14 14:52	1
Trichloroethene	**2.6**		1.0	0.090	ug/L			10/02/14 14:52	1
Dibromochloromethane	ND		1.0	0.20	ug/L			10/02/14 14:52	1
1,1,2-Trichloroethane	ND		1.0	0.19	ug/L			10/02/14 14:52	1
Benzene	ND		1.0	0.080	ug/L			10/02/14 14:52	1
trans-1,3-Dichloropropene	ND		1.0	0.24	ug/L			10/02/14 14:52	1
Bromoform	ND		1.0	0.19	ug/L			10/02/14 14:52	1
4-Methyl-2-pentanone	ND		5.0	0.99	ug/L			10/02/14 14:52	1
2-Hexanone	ND		5.0	0.50	ug/L			10/02/14 14:52	1
Tetrachloroethene	**19**		1.0	0.10	ug/L			10/02/14 14:52	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.16	ug/L			10/02/14 14:52	1
Toluene	ND		1.0	0.15	ug/L			10/02/14 14:52	1
Chlorobenzene	ND		1.0	0.11	ug/L			10/02/14 14:52	1
Ethylbenzene	ND		1.0	0.10	ug/L			10/02/14 14:52	1
Styrene	ND		1.0	0.12	ug/L			10/02/14 14:52	1
TBA	ND		10	5.7	ug/L			10/02/14 14:52	1
Xylenes, Total	ND		2.0	0.13	ug/L			10/02/14 14:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*10/02/14 14:52*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*10/02/14 14:52*	*1*
Bromofluorobenzene	*109*		*64 - 135*		*10/02/14 14:52*	*1*
Dibromofluoromethane (Surr)	*96*		*72 - 137*		*10/02/14 14:52*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.052	0.029	ug/L		10/02/14 11:22	10/03/14 23:51	1
Acenaphthylene	ND		0.052	0.025	ug/L		10/02/14 11:22	10/03/14 23:51	1
Anthracene	ND		0.052	0.029	ug/L		10/02/14 11:22	10/03/14 23:51	1
Benzo[a]anthracene	ND		0.052	0.036	ug/L		10/02/14 11:22	10/03/14 23:51	1
Benzo[a]pyrene	ND		0.052	0.049	ug/L		10/02/14 11:22	10/03/14 23:51	1

Client Sample ID: MW-2A

Lab Sample ID: 460-83626-3

Date Collected: 09/30/14 13:12
Matrix: Water
Date Received: 09/30/14 13:37

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	**0.041**	**J**	0.052	0.031	ug/L		10/02/14 11:22	10/03/14 23:51	1
Benzo[g,h,i]perylene	ND		0.052	0.031	ug/L		10/02/14 11:22	10/03/14 23:51	1
Benzo[k]fluoranthene	**0.021**	**J**	0.052	0.016	ug/L		10/02/14 11:22	10/03/14 23:51	1
Chrysene	**0.038**	**J**	0.052	0.029	ug/L		10/02/14 11:22	10/03/14 23:51	1
Dibenz(a,h)anthracene	ND		0.052	0.038	ug/L		10/02/14 11:22	10/03/14 23:51	1
Fluoranthene	**0.096**		0.052	0.029	ug/L		10/02/14 11:22	10/03/14 23:51	1
Fluorene	ND		0.052	0.029	ug/L		10/02/14 11:22	10/03/14 23:51	1
Indeno[1,2,3-cd]pyrene	ND		0.052	0.029	ug/L		10/02/14 11:22	10/03/14 23:51	1
Naphthalene	ND		0.052	0.025	ug/L		10/02/14 11:22	10/03/14 23:51	1
Phenanthrene	ND		0.052	0.029	ug/L		10/02/14 11:22	10/03/14 23:51	1
Pyrene	**0.10**		0.052	0.035	ug/L		10/02/14 11:22	10/03/14 23:51	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*92*		*50 - 120*	*10/02/14 11:22*	*10/05/14 19:43*	*1*
Nitrobenzene-d5	*92*		*60 - 114*	*10/02/14 11:22*	*10/05/14 19:43*	*1*
Terphenyl-d14	*103*		*72 - 130*	*10/02/14 11:22*	*10/05/14 19:43*	*1*

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5	1.4	ug/L		10/06/14 20:39	10/07/14 04:24	5

Client Sample ID: MW-3

Lab Sample ID: 460-83626-4

Date Collected: 09/30/14 13:25
Matrix: Water
Date Received: 09/30/14 13:37

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.10	ug/L			10/02/14 15:17	1
Bromomethane	ND		1.0	0.18	ug/L			10/02/14 15:17	1
Vinyl chloride	ND		1.0	0.14	ug/L			10/02/14 15:17	1
Chloroethane	ND		1.0	0.17	ug/L			10/02/14 15:17	1
Methylene Chloride	ND		1.0	0.18	ug/L			10/02/14 15:17	1
Acetone	ND		5.0	2.7	ug/L			10/02/14 15:17	1
Carbon disulfide	ND		1.0	0.13	ug/L			10/02/14 15:17	1
1,1-Dichloroethene	ND		1.0	0.090	ug/L			10/02/14 15:17	1
1,1-Dichloroethane	ND		1.0	0.13	ug/L			10/02/14 15:17	1
trans-1,2-Dichloroethene	ND		1.0	0.13	ug/L			10/02/14 15:17	1
MTBE	ND		1.0	0.14	ug/L			10/02/14 15:17	1
cis-1,2-Dichloroethene	**3.8**		1.0	0.18	ug/L			10/02/14 15:17	1
Chloroform	**5.5**		1.0	0.080	ug/L			10/02/14 15:17	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			10/02/14 15:17	1
2-Butanone	ND		5.0	2.3	ug/L			10/02/14 15:17	1
1,1,1-Trichloroethane	ND		1.0	0.060	ug/L			10/02/14 15:17	1
Carbon tetrachloride	ND		1.0	0.060	ug/L			10/02/14 15:17	1
Bromodichloromethane	ND		1.0	0.12	ug/L			10/02/14 15:17	1
1,2-Dichloropropane	ND		1.0	0.090	ug/L			10/02/14 15:17	1
cis-1,3-Dichloropropene	ND		1.0	0.18	ug/L			10/02/14 15:17	1
Trichloroethene	**2.4**		1.0	0.090	ug/L			10/02/14 15:17	1
Dibromochloromethane	ND		1.0	0.20	ug/L			10/02/14 15:17	1

Client Sample ID: MW-3
Date Collected: 09/30/14 13:25
Date Received: 09/30/14 13:37

Lab Sample ID: 460-83626-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		1.0	0.19	ug/L			10/02/14 15:17	1
Benzene	ND		1.0	0.080	ug/L			10/02/14 15:17	1
trans-1,3-Dichloropropene	ND		1.0	0.24	ug/L			10/02/14 15:17	1
Bromoform	ND		1.0	0.19	ug/L			10/02/14 15:17	1
4-Methyl-2-pentanone	ND		5.0	0.99	ug/L			10/02/14 15:17	1
2-Hexanone	ND		5.0	0.50	ug/L			10/02/14 15:17	1
Tetrachloroethene	**52**		1.0	0.10	ug/L			10/02/14 15:17	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.16	ug/L			10/02/14 15:17	1
Toluene	ND		1.0	0.15	ug/L			10/02/14 15:17	1
Chlorobenzene	ND		1.0	0.11	ug/L			10/02/14 15:17	1
Ethylbenzene	ND		1.0	0.10	ug/L			10/02/14 15:17	1
Styrene	ND		1.0	0.12	ug/L			10/02/14 15:17	1
TBA	ND		10	5.7	ug/L			10/02/14 15:17	1
Xylenes, Total	ND		2.0	0.13	ug/L			10/02/14 15:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*		*10/02/14 15:17*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*10/02/14 15:17*	*1*
Bromofluorobenzene	*105*		*64 - 135*		*10/02/14 15:17*	*1*
Dibromofluoromethane (Surr)	*94*		*72 - 137*		*10/02/14 15:17*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.046**	**J**	0.052	0.029	ug/L		10/02/14 11:22	10/04/14 00:14	1
Acenaphthylene	ND		0.052	0.025	ug/L		10/02/14 11:22	10/04/14 00:14	1
Anthracene	ND		0.052	0.029	ug/L		10/02/14 11:22	10/04/14 00:14	1
Benzo[a]anthracene	ND		0.052	0.036	ug/L		10/02/14 11:22	10/04/14 00:14	1
Benzo[a]pyrene	ND		0.052	0.049	ug/L		10/02/14 11:22	10/04/14 00:14	1
Benzo[b]fluoranthene	**0.034**	**J**	0.052	0.031	ug/L		10/02/14 11:22	10/04/14 00:14	1
Benzo[g,h,i]perylene	ND		0.052	0.031	ug/L		10/02/14 11:22	10/04/14 00:14	1
Benzo[k]fluoranthene	ND		0.052	0.016	ug/L		10/02/14 11:22	10/04/14 00:14	1
Chrysene	ND		0.052	0.029	ug/L		10/02/14 11:22	10/04/14 00:14	1
Dibenz(a,h)anthracene	ND		0.052	0.038	ug/L		10/02/14 11:22	10/04/14 00:14	1
Fluoranthene	ND		0.052	0.029	ug/L		10/02/14 11:22	10/04/14 00:14	1
Fluorene	**0.032**	**J**	0.052	0.029	ug/L		10/02/14 11:22	10/04/14 00:14	1
Indeno[1,2,3-cd]pyrene	ND		0.052	0.029	ug/L		10/02/14 11:22	10/04/14 00:14	1
Naphthalene	**0.65**		0.052	0.025	ug/L		10/02/14 11:22	10/04/14 00:14	1
Phenanthrene	ND		0.052	0.029	ug/L		10/02/14 11:22	10/04/14 00:14	1
Pyrene	ND		0.052	0.035	ug/L		10/02/14 11:22	10/04/14 00:14	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*85*		*50 - 120*	*10/02/14 11:22*	*10/05/14 20:07*	*1*
Nitrobenzene-d5	*86*		*60 - 114*	*10/02/14 11:22*	*10/05/14 20:07*	*1*
Terphenyl-d14	*103*		*72 - 130*	*10/02/14 11:22*	*10/05/14 20:07*	*1*

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5	1.4	ug/L		10/06/14 20:39	10/07/14 04:30	5

Certification Summary

Client: BL Companies
Project/Site: Frankford/Darrah

TestAmerica Job ID: 460-83626-1

Laboratory: TestAmerica Edison

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Jersey	NELAP	2	12028	06-30-15

The following analytes are included in this report, but are not certified under this certification:

Analysis Method	Prep Method	Matrix	Analyte
8270C SIM	3510C	Water	Acenaphthene
8270C SIM	3510C	Water	Acenaphthylene
8270C SIM	3510C	Water	Anthracene
8270C SIM	3510C	Water	Benzo[g,h,i]perylene
8270C SIM	3510C	Water	Chrysene
8270C SIM	3510C	Water	Fluoranthene
8270C SIM	3510C	Water	Fluorene
8270C SIM	3510C	Water	Phenanthrene
8270C SIM	3510C	Water	Pyrene

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8270C SIM	3510C	Water	Naphthalene

Pennsylvania	NELAP	3	68-00522	02-28-15

The following analytes are included in this report, but are not certified under this certification:

Analysis Method	Prep Method	Matrix	Analyte
8270C SIM	3510C	Water	Acenaphthene
8270C SIM	3510C	Water	Acenaphthylene
8270C SIM	3510C	Water	Anthracene
8270C SIM	3510C	Water	Benzo[g,h,i]perylene
8270C SIM	3510C	Water	Chrysene
8270C SIM	3510C	Water	Fluoranthene
8270C SIM	3510C	Water	Fluorene
8270C SIM	3510C	Water	Naphthalene
8270C SIM	3510C	Water	Phenanthrene
8270C SIM	3510C	Water	Pyrene

Method Summary

Client: BL Companies
Project/Site: Frankford/Darrah

TestAmerica Job ID: 460-83626-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL EDI
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL EDI
8270C SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	TAL EDI
200.8	Metals (ICP/MS)	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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

460-83626 Chain of Custody

CHAIN OF CUSTODY REQUEST

3.4/3.2 KOP1

Page 1 of 1

Name (for report and invoice)	Samplers Name (Printed)	Site/Project Identification
Marc Baumann	Marc Baumann	Frankford / Darrah
Company: BL Companies	P. O. #: 00L629-B	State (Location of site): NJ: ☐ NY: ☐ Other: PA
Address: 4242 Carlisle Pike	Analysis Turnaround Time: Standard ☒	Regulatory Program:
City: Camp Hill State: Pa	Rush Charges Authorized For: 2 Week ☐ 1 Week ☐ Other ☐	LAB USE ONLY Project No:
Phone: 717-651-9850 Fax: 717-651-9858		Job No: 836020

Sample Identification	Date	Time	Matrix	No. of Cont.	VOCs	PAHs	Dissolved Lead	Sample Numbers
MW-1	9/30	1000	H_2O	6	↓	↓	↓	
MW-4	9/30	1300	H_2O	6				
MW-2A	9/30	1312	H_2O	6				
MW-3	9/30	1325	H_2O	6				
Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH — Soil:					2		4	
6 = Other _____, 7 = Other _____ — Water:								

Special Instructions

Water Metals Filtered (Yes/No)? Dissolved Lead

Relinquished by	Company	Date / Time	Received by	Company
1) Marc W. Baumann	BL Companies	9/30 1337	1) Julie Hillmann	TAL-NJ
2) Julie Hillmann	TAL-NJ	9/30/14 1450	2) [signature] 1830	
3) [signature]		9/30 1845	3) [signature] 9/30 1845	TA
4)			4)	

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132). TAL - 0016 (0408)

Massachusetts (M-NJ312), North Carolina (No. 578)

TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 83626

Number of Coolers: 1 IR Gun # X-01

Cooler Temperatures

	Temp	Corrected
Cooler #1:	3.9 °C	3.2 °C
Cooler #2:	°C	°C
Cooler #3:	°C	°C
Cooler #4:	°C	°C
Cooler #5:	°C	°C
Cooler #6:	°C	°C
Cooler #7:	°C	°C
Cooler #8:	°C	°C
Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or OAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

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.

Initials: JG Date: 9/30/14

Login Sample Receipt Checklist

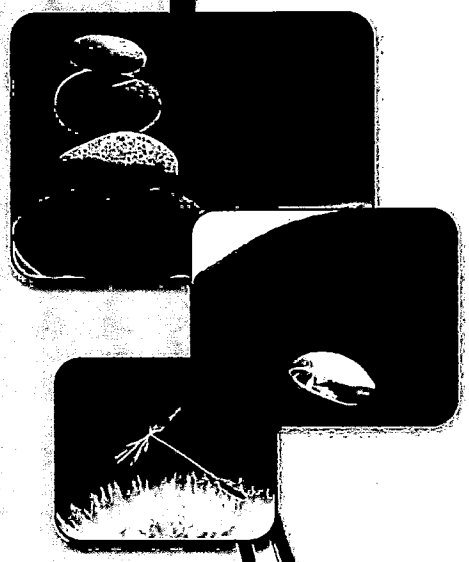
Client: BL Companies

Job Number: 460-83626-1

Login Number: 83626
List Number: 1
Creator: Gilmore, Julie L

List Source: TestAmerica Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	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 3.2
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.	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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



TestAmerica

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ANALYTICAL REPORT

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

TestAmerica Job ID: 460-87578-1
Client Project/Site: R/A Frankford & Darrgh

For:
BL Companies
4242 Carlisle Pike
Suite 260
Camp Hill, Pennsylvania 17011

Attn: Marc Baumann

Shalini Isaac

Authorized for release by:
12/18/2014 8:39:07 AM
Shalini Isaac, Project Management Assistant II
shalini.isaac@testamericainc.com

Designee for

Jannel Franklin, Project Manager I
(732)593-2551
jannel.franklin@testamericainc.com

..... LINKS .....

Review your project results through TotalAccess

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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.

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Receipt Checklists 17

Sample Summary

Client: BL Companies
Project/Site: R/A Frankford & Darrgh

TestAmerica Job ID: 460-87578-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-87578-1	MW-1	Water	12/11/14 11:18	12/11/14 13:08
460-87578-2	MW-2A	Water	12/11/14 11:40	12/11/14 13:08
460-87578-3	MW-3	Water	12/11/14 11:50	12/11/14 13:08
460-87578-4	MW-4	Water	12/11/14 11:05	12/11/14 13:08

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the 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

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	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
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 460-87578-1

Laboratory: TestAmerica Edison

Narrative

CASE NARRATIVE

Client: BL Companies

Project: R/A Frankford & Darrgh

Report Number: 460-87578-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 12/11/2014 1:08 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.3° C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples MW-1 (460-87578-1), MW-2A (460-87578-2), MW-3 (460-87578-3) and MW-4 (460-87578-4) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 12/15/2014.

A full list spike was utilized for this method. Due to the large number of spiked analytes, there is a high probability that one or more analytes will recover outside acceptance limits. The laboratory's SOP allows for five analytes to recover outside criteria for this method when a full list spike is utilized. The LCS associated with batch 269311 had two analytes (Fluoranthene and Benzo[a]pyrene) outside control limits; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

The following laboratory control sample and laboratory control sample duplicate (LCS/LCSD) associated with batch 269311 contained one acid/base surrogate outside acceptance limits: (LCS 460-269311/2-A), (LCSD 460-269311/3-A). The laboratory's SOP allows one acid and/or one base surrogate to be outside acceptance limits; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

Trichloroethene failed the recovery criteria low for the MS of sample 460-87626-3 in batch 460-269244. Bromodichloromethane failed the recovery criteria high.
Several analytes failed the recovery criteria high for the MSD of sample 460-87626-3 in batch 460-269244.

The presence of the '4' qualifier in the data indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

Refer to the QC report for details.

Job ID: 460-87578-1 (Continued)

Laboratory: TestAmerica Edison (Continued)

No other difficulties were encountered during the volatiles analysis.

All other quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples MW-1 (460-87578-1), MW-2A (460-87578-2), MW-3 (460-87578-3) and MW-4 (460-87578-4) were analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8270C. The samples were prepared on 12/15/2014 and analyzed on 12/17/2014.

Terphenyl-d14 failed the surrogate recovery criteria low for LCS 460-269311/2-A and LCSD 460-269311/3-A.

Benzo[a]pyrene and Fluoranthene failed the recovery criteria high for LCS 460-269311/2-A.

Refer to the QC report for details.

No other difficulties were encountered during the semivolatiles analysis.

All other quality control parameters were within the acceptance limits.

DISSOLVED METALS

Samples MW-1 (460-87578-1), MW-2A (460-87578-2), MW-3 (460-87578-3) and MW-4 (460-87578-4) were analyzed for Dissolved Metals in accordance with EPA SW-846 Method 6020. The samples were prepared on 12/12/2014 and analyzed on 12/14/2014.

No difficulties were encountered during the total metals analysis.

All quality control parameters were within the acceptance limits.

Client Sample ID: MW-1
Date Collected: 12/11/14 11:18
Date Received: 12/11/14 13:08

Lab Sample ID: 460-87578-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.10	ug/L			12/15/14 12:03	1
Bromomethane	ND		1.0	0.18	ug/L			12/15/14 12:03	1
Vinyl chloride	ND		1.0	0.14	ug/L			12/15/14 12:03	1
Chloroethane	ND		1.0	0.17	ug/L			12/15/14 12:03	1
Methylene Chloride	ND		1.0	0.18	ug/L			12/15/14 12:03	1
Acetone	ND		5.0	2.7	ug/L			12/15/14 12:03	1
Carbon disulfide	ND		1.0	0.13	ug/L			12/15/14 12:03	1
1,1-Dichloroethene	ND		1.0	0.090	ug/L			12/15/14 12:03	1
1,1-Dichloroethane	ND		1.0	0.13	ug/L			12/15/14 12:03	1
trans-1,2-Dichloroethene	**0.22**	**J**	1.0	0.13	ug/L			12/15/14 12:03	1
MTBE	ND		1.0	0.14	ug/L			12/15/14 12:03	1
cis-1,2-Dichloroethene	**2.0**		1.0	0.18	ug/L			12/15/14 12:03	1
Chloroform	**0.21**	**J**	1.0	0.080	ug/L			12/15/14 12:03	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/15/14 12:03	1
2-Butanone	ND		5.0	2.3	ug/L			12/15/14 12:03	1
1,1,1-Trichloroethane	ND		1.0	0.060	ug/L			12/15/14 12:03	1
Carbon tetrachloride	ND		1.0	0.060	ug/L			12/15/14 12:03	1
Bromodichloromethane	ND		1.0	0.12	ug/L			12/15/14 12:03	1
1,2-Dichloropropane	ND		1.0	0.090	ug/L			12/15/14 12:03	1
cis-1,3-Dichloropropene	ND		1.0	0.18	ug/L			12/15/14 12:03	1
Trichloroethene	**0.85**	**J**	1.0	0.090	ug/L			12/15/14 12:03	1
Dibromochloromethane	ND		1.0	0.20	ug/L			12/15/14 12:03	1
1,1,2-Trichloroethane	ND		1.0	0.19	ug/L			12/15/14 12:03	1
Benzene	ND		1.0	0.080	ug/L			12/15/14 12:03	1
trans-1,3-Dichloropropene	ND		1.0	0.24	ug/L			12/15/14 12:03	1
Bromoform	ND		1.0	0.19	ug/L			12/15/14 12:03	1
4-Methyl-2-pentanone	ND		5.0	0.99	ug/L			12/15/14 12:03	1
2-Hexanone	ND		5.0	0.50	ug/L			12/15/14 12:03	1
Tetrachloroethene	**1.9**		1.0	0.10	ug/L			12/15/14 12:03	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/15/14 12:03	1
Toluene	ND		1.0	0.15	ug/L			12/15/14 12:03	1
Chlorobenzene	ND		1.0	0.11	ug/L			12/15/14 12:03	1
Ethylbenzene	ND		1.0	0.10	ug/L			12/15/14 12:03	1
Styrene	ND		1.0	0.12	ug/L			12/15/14 12:03	1
TBA	ND		10	5.7	ug/L			12/15/14 12:03	1
Xylenes, Total	ND		2.0	0.13	ug/L			12/15/14 12:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 130*		*12/15/14 12:03*	*1*
Toluene-d8 (Surr)	*87*		*70 - 130*		*12/15/14 12:03*	*1*
Bromofluorobenzene	*99*		*64 - 135*		*12/15/14 12:03*	*1*
Dibromofluoromethane (Surr)	*109*		*72 - 137*		*12/15/14 12:03*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	ND		11	1.9	ug/L		12/15/14 11:37	12/17/14 09:49	1
Acenaphthylene	ND		11	2.0	ug/L		12/15/14 11:37	12/17/14 09:49	1
Benzo[g,h,i]perylene	ND		11	1.1	ug/L		12/15/14 11:37	12/17/14 09:49	1
Phenanthrene	ND		11	1.4	ug/L		12/15/14 11:37	12/17/14 09:49	1
Benzo[k]fluoranthene	**0.23**	**J**	1.1	0.16	ug/L		12/15/14 11:37	12/17/14 09:49	1

Client Sample ID: MW-1

Lab Sample ID: 460-87578-1
Matrix: Water

Date Collected: 12/11/14 11:18
Date Received: 12/11/14 13:08

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	**0.24**	**J ***	1.1	0.16	ug/L		12/15/14 11:37	12/17/14 09:49	1
Anthracene	ND		11	0.97	ug/L		12/15/14 11:37	12/17/14 09:49	1
2-Methylnaphthalene	ND		11	1.7	ug/L		12/15/14 11:37	12/17/14 09:49	1
Pyrene	ND		11	1.3	ug/L		12/15/14 11:37	12/17/14 09:49	1
Dibenz(a,h)anthracene	ND		1.1	0.18	ug/L		12/15/14 11:37	12/17/14 09:49	1
Naphthalene	ND		11	2.3	ug/L		12/15/14 11:37	12/17/14 09:49	1
Fluoranthene	ND	*	11	1.3	ug/L		12/15/14 11:37	12/17/14 09:49	1
Benzo[a]anthracene	ND		1.1	0.20	ug/L		12/15/14 11:37	12/17/14 09:49	1
Indeno[1,2,3-cd]pyrene	**0.30**	**J**	1.1	0.13	ug/L		12/15/14 11:37	12/17/14 09:49	1
Chrysene	ND		2.3	1.6	ug/L		12/15/14 11:37	12/17/14 09:49	1
Acenaphthene	ND		11	1.3	ug/L		12/15/14 11:37	12/17/14 09:49	1
Benzo[b]fluoranthene	**0.54**	**J**	1.1	0.24	ug/L		12/15/14 11:37	12/17/14 09:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*88*		*60 - 114*	*12/15/14 11:37*	*12/17/14 09:49*	*1*
2-Fluorobiphenyl	*85*		*50 - 120*	*12/15/14 11:37*	*12/17/14 09:49*	*1*
Terphenyl-d14	*77*		*72 - 130*	*12/15/14 11:37*	*12/17/14 09:49*	*1*

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.2	0.56	ug/L		12/12/14 23:10	12/14/14 07:03	2

Client Sample ID: MW-2A

Lab Sample ID: 460-87578-2
Matrix: Water

Date Collected: 12/11/14 11:40
Date Received: 12/11/14 13:08

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.10	ug/L			12/15/14 12:29	1
Bromomethane	ND		1.0	0.18	ug/L			12/15/14 12:29	1
Vinyl chloride	**0.35**	**J**	1.0	0.14	ug/L			12/15/14 12:29	1
Chloroethane	ND		1.0	0.17	ug/L			12/15/14 12:29	1
Methylene Chloride	ND		1.0	0.18	ug/L			12/15/14 12:29	1
Acetone	**3.1**	**J**	5.0	2.7	ug/L			12/15/14 12:29	1
Carbon disulfide	ND		1.0	0.13	ug/L			12/15/14 12:29	1
1,1-Dichloroethene	ND		1.0	0.090	ug/L			12/15/14 12:29	1
1,1-Dichloroethane	ND		1.0	0.13	ug/L			12/15/14 12:29	1
trans-1,2-Dichloroethene	**0.78**	**J**	1.0	0.13	ug/L			12/15/14 12:29	1
MTBE	ND		1.0	0.14	ug/L			12/15/14 12:29	1
cis-1,2-Dichloroethene	**11**		1.0	0.18	ug/L			12/15/14 12:29	1
Chloroform	**0.25**	**J**	1.0	0.080	ug/L			12/15/14 12:29	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/15/14 12:29	1
2-Butanone	ND		5.0	2.3	ug/L			12/15/14 12:29	1
1,1,1-Trichloroethane	ND		1.0	0.060	ug/L			12/15/14 12:29	1
Carbon tetrachloride	ND		1.0	0.060	ug/L			12/15/14 12:29	1
Bromodichloromethane	ND		1.0	0.12	ug/L			12/15/14 12:29	1
1,2-Dichloropropane	ND		1.0	0.090	ug/L			12/15/14 12:29	1
cis-1,3-Dichloropropene	ND		1.0	0.18	ug/L			12/15/14 12:29	1
Trichloroethene	**3.6**		1.0	0.090	ug/L			12/15/14 12:29	1
Dibromochloromethane	ND		1.0	0.20	ug/L			12/15/14 12:29	1

Client Sample ID: MW-2A
Date Collected: 12/11/14 11:40
Date Received: 12/11/14 13:08

Lab Sample ID: 460-87578-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		1.0	0.19	ug/L			12/15/14 12:29	1
Benzene	ND		1.0	0.080	ug/L			12/15/14 12:29	1
trans-1,3-Dichloropropene	ND		1.0	0.24	ug/L			12/15/14 12:29	1
Bromoform	ND		1.0	0.19	ug/L			12/15/14 12:29	1
4-Methyl-2-pentanone	ND		5.0	0.99	ug/L			12/15/14 12:29	1
2-Hexanone	ND		5.0	0.50	ug/L			12/15/14 12:29	1
Tetrachloroethene	**14**		1.0	0.10	ug/L			12/15/14 12:29	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/15/14 12:29	1
Toluene	ND		1.0	0.15	ug/L			12/15/14 12:29	1
Chlorobenzene	ND		1.0	0.11	ug/L			12/15/14 12:29	1
Ethylbenzene	ND		1.0	0.10	ug/L			12/15/14 12:29	1
Styrene	ND		1.0	0.12	ug/L			12/15/14 12:29	1
TBA	ND		10	5.7	ug/L			12/15/14 12:29	1
Xylenes, Total	ND		2.0	0.13	ug/L			12/15/14 12:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*118*		*70 - 130*		*12/15/14 12:29*	*1*
Toluene-d8 (Surr)	*86*		*70 - 130*		*12/15/14 12:29*	*1*
Bromofluorobenzene	*96*		*64 - 135*		*12/15/14 12:29*	*1*
Dibromofluoromethane (Surr)	*111*		*72 - 137*		*12/15/14 12:29*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	ND		10	1.8	ug/L		12/15/14 11:37	12/17/14 10:17	1
Acenaphthylene	ND		10	1.9	ug/L		12/15/14 11:37	12/17/14 10:17	1
Benzo[g,h,i]perylene	ND		10	0.97	ug/L		12/15/14 11:37	12/17/14 10:17	1
Phenanthrene	ND		10	1.3	ug/L		12/15/14 11:37	12/17/14 10:17	1
Benzo[k]fluoranthene	ND		1.0	0.15	ug/L		12/15/14 11:37	12/17/14 10:17	1
Benzo[a]pyrene	ND	*	1.0	0.15	ug/L		12/15/14 11:37	12/17/14 10:17	1
Anthracene	ND		10	0.89	ug/L		12/15/14 11:37	12/17/14 10:17	1
2-Methylnaphthalene	ND		10	1.6	ug/L		12/15/14 11:37	12/17/14 10:17	1
Pyrene	ND		10	1.1	ug/L		12/15/14 11:37	12/17/14 10:17	1
Dibenz(a,h)anthracene	ND		1.0	0.17	ug/L		12/15/14 11:37	12/17/14 10:17	1
Naphthalene	ND		10	2.1	ug/L		12/15/14 11:37	12/17/14 10:17	1
Fluoranthene	ND	*	10	1.1	ug/L		12/15/14 11:37	12/17/14 10:17	1
Benzo[a]anthracene	ND		1.0	0.19	ug/L		12/15/14 11:37	12/17/14 10:17	1
Indeno[1,2,3-cd]pyrene	ND		1.0	0.11	ug/L		12/15/14 11:37	12/17/14 10:17	1
Chrysene	ND		2.1	1.5	ug/L		12/15/14 11:37	12/17/14 10:17	1
Acenaphthene	ND		10	1.1	ug/L		12/15/14 11:37	12/17/14 10:17	1
Benzo[b]fluoranthene	ND		1.0	0.22	ug/L		12/15/14 11:37	12/17/14 10:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*87*		*60 - 114*	*12/15/14 11:37*	*12/17/14 10:17*	*1*
2-Fluorobiphenyl	*84*		*50 - 120*	*12/15/14 11:37*	*12/17/14 10:17*	*1*
Terphenyl-d14	*81*		*72 - 130*	*12/15/14 11:37*	*12/17/14 10:17*	*1*

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.2	0.56	ug/L		12/12/14 23:10	12/14/14 07:08	2

Client Sample ID: MW-3
Date Collected: 12/11/14 11:50
Date Received: 12/11/14 13:08

Lab Sample ID: 460-87578-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.10	ug/L			12/15/14 12:55	1
Bromomethane	ND		1.0	0.18	ug/L			12/15/14 12:55	1
Vinyl chloride	ND		1.0	0.14	ug/L			12/15/14 12:55	1
Chloroethane	ND		1.0	0.17	ug/L			12/15/14 12:55	1
Methylene Chloride	ND		1.0	0.18	ug/L			12/15/14 12:55	1
Acetone	ND		5.0	2.7	ug/L			12/15/14 12:55	1
Carbon disulfide	ND		1.0	0.13	ug/L			12/15/14 12:55	1
1,1-Dichloroethene	ND		1.0	0.090	ug/L			12/15/14 12:55	1
1,1-Dichloroethane	ND		1.0	0.13	ug/L			12/15/14 12:55	1
trans-1,2-Dichloroethene	ND		1.0	0.13	ug/L			12/15/14 12:55	1
MTBE	ND		1.0	0.14	ug/L			12/15/14 12:55	1
cis-1,2-Dichloroethene	**3.6**		1.0	0.18	ug/L			12/15/14 12:55	1
Chloroform	**8.6**		1.0	0.080	ug/L			12/15/14 12:55	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/15/14 12:55	1
2-Butanone	ND		5.0	2.3	ug/L			12/15/14 12:55	1
1,1,1-Trichloroethane	ND		1.0	0.060	ug/L			12/15/14 12:55	1
Carbon tetrachloride	ND		1.0	0.060	ug/L			12/15/14 12:55	1
Bromodichloromethane	ND		1.0	0.12	ug/L			12/15/14 12:55	1
1,2-Dichloropropane	ND		1.0	0.090	ug/L			12/15/14 12:55	1
cis-1,3-Dichloropropene	ND		1.0	0.18	ug/L			12/15/14 12:55	1
Trichloroethene	**2.4**		1.0	0.090	ug/L			12/15/14 12:55	1
Dibromochloromethane	ND		1.0	0.20	ug/L			12/15/14 12:55	1
1,1,2-Trichloroethane	ND		1.0	0.19	ug/L			12/15/14 12:55	1
Benzene	ND		1.0	0.080	ug/L			12/15/14 12:55	1
trans-1,3-Dichloropropene	ND		1.0	0.24	ug/L			12/15/14 12:55	1
Bromoform	ND		1.0	0.19	ug/L			12/15/14 12:55	1
4-Methyl-2-pentanone	ND		5.0	0.99	ug/L			12/15/14 12:55	1
2-Hexanone	ND		5.0	0.50	ug/L			12/15/14 12:55	1
Tetrachloroethene	**41**		1.0	0.10	ug/L			12/15/14 12:55	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/15/14 12:55	1
Toluene	ND		1.0	0.15	ug/L			12/15/14 12:55	1
Chlorobenzene	ND		1.0	0.11	ug/L			12/15/14 12:55	1
Ethylbenzene	ND		1.0	0.10	ug/L			12/15/14 12:55	1
Styrene	ND		1.0	0.12	ug/L			12/15/14 12:55	1
TBA	**9.2**	J	10	5.7	ug/L			12/15/14 12:55	1
Xylenes, Total	ND		2.0	0.13	ug/L			12/15/14 12:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*70 - 130*		*12/15/14 12:55*	*1*
Toluene-d8 (Surr)	*87*		*70 - 130*		*12/15/14 12:55*	*1*
Bromofluorobenzene	*99*		*64 - 135*		*12/15/14 12:55*	*1*
Dibromofluoromethane (Surr)	*112*		*72 - 137*		*12/15/14 12:55*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	ND		10	1.8	ug/L		12/15/14 11:37	12/17/14 10:44	1
Acenaphthylene	ND		10	1.9	ug/L		12/15/14 11:37	12/17/14 10:44	1
Benzo[g,h,i]perylene	ND		10	0.97	ug/L		12/15/14 11:37	12/17/14 10:44	1
Phenanthrene	ND		10	1.3	ug/L		12/15/14 11:37	12/17/14 10:44	1
Benzo[k]fluoranthene	ND		1.0	0.15	ug/L		12/15/14 11:37	12/17/14 10:44	1

Client Sample ID: MW-3
Date Collected: 12/11/14 11:50
Date Received: 12/11/14 13:08

Lab Sample ID: 460-87578-3
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	ND	*	1.0	0.15	ug/L		12/15/14 11:37	12/17/14 10:44	1
Anthracene	ND		10	0.89	ug/L		12/15/14 11:37	12/17/14 10:44	1
2-Methylnaphthalene	ND		10	1.6	ug/L		12/15/14 11:37	12/17/14 10:44	1
Pyrene	ND		10	1.1	ug/L		12/15/14 11:37	12/17/14 10:44	1
Dibenz(a,h)anthracene	ND		1.0	0.17	ug/L		12/15/14 11:37	12/17/14 10:44	1
Naphthalene	ND		10	2.1	ug/L		12/15/14 11:37	12/17/14 10:44	1
Fluoranthene	ND	*	10	1.1	ug/L		12/15/14 11:37	12/17/14 10:44	1
Benzo[a]anthracene	ND		1.0	0.19	ug/L		12/15/14 11:37	12/17/14 10:44	1
Indeno[1,2,3-cd]pyrene	ND		1.0	0.11	ug/L		12/15/14 11:37	12/17/14 10:44	1
Chrysene	ND		2.1	1.5	ug/L		12/15/14 11:37	12/17/14 10:44	1
Acenaphthene	ND		10	1.1	ug/L		12/15/14 11:37	12/17/14 10:44	1
Benzo[b]fluoranthene	ND		1.0	0.22	ug/L		12/15/14 11:37	12/17/14 10:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*89*		*60 - 114*	*12/15/14 11:37*	*12/17/14 10:44*	*1*
2-Fluorobiphenyl	*83*		*50 - 120*	*12/15/14 11:37*	*12/17/14 10:44*	*1*
Terphenyl-d14	*85*		*72 - 130*	*12/15/14 11:37*	*12/17/14 10:44*	*1*

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.2	0.56	ug/L		12/12/14 23:10	12/14/14 07:14	2

Client Sample ID: MW-4
Date Collected: 12/11/14 11:05
Date Received: 12/11/14 13:08

Lab Sample ID: 460-87578-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.10	ug/L			12/15/14 13:21	1
Bromomethane	ND		1.0	0.18	ug/L			12/15/14 13:21	1
Vinyl chloride	ND		1.0	0.14	ug/L			12/15/14 13:21	1
Chloroethane	ND		1.0	0.17	ug/L			12/15/14 13:21	1
Methylene Chloride	ND		1.0	0.18	ug/L			12/15/14 13:21	1
Acetone	ND		5.0	2.7	ug/L			12/15/14 13:21	1
Carbon disulfide	ND		1.0	0.13	ug/L			12/15/14 13:21	1
1,1-Dichloroethene	ND		1.0	0.090	ug/L			12/15/14 13:21	1
1,1-Dichloroethane	ND		1.0	0.13	ug/L			12/15/14 13:21	1
trans-1,2-Dichloroethene	ND		1.0	0.13	ug/L			12/15/14 13:21	1
MTBE	ND		1.0	0.14	ug/L			12/15/14 13:21	1
cis-1,2-Dichloroethene	**0.86**	**J**	1.0	0.18	ug/L			12/15/14 13:21	1
Chloroform	**0.45**	**J**	1.0	0.080	ug/L			12/15/14 13:21	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			12/15/14 13:21	1
2-Butanone	ND		5.0	2.3	ug/L			12/15/14 13:21	1
1,1,1-Trichloroethane	ND		1.0	0.060	ug/L			12/15/14 13:21	1
Carbon tetrachloride	ND		1.0	0.060	ug/L			12/15/14 13:21	1
Bromodichloromethane	ND		1.0	0.12	ug/L			12/15/14 13:21	1
1,2-Dichloropropane	ND		1.0	0.090	ug/L			12/15/14 13:21	1
cis-1,3-Dichloropropene	ND		1.0	0.18	ug/L			12/15/14 13:21	1
Trichloroethene	**0.42**	**J**	1.0	0.090	ug/L			12/15/14 13:21	1
Dibromochloromethane	ND		1.0	0.20	ug/L			12/15/14 13:21	1

Client Sample ID: MW-4
Date Collected: 12/11/14 11:05
Date Received: 12/11/14 13:08

Lab Sample ID: 460-87578-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		1.0	0.19	ug/L			12/15/14 13:21	1
Benzene	ND		1.0	0.080	ug/L			12/15/14 13:21	1
trans-1,3-Dichloropropene	ND		1.0	0.24	ug/L			12/15/14 13:21	1
Bromoform	ND		1.0	0.19	ug/L			12/15/14 13:21	1
4-Methyl-2-pentanone	ND		5.0	0.99	ug/L			12/15/14 13:21	1
2-Hexanone	ND		5.0	0.50	ug/L			12/15/14 13:21	1
Tetrachloroethene	**2.8**		1.0	0.10	ug/L			12/15/14 13:21	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.16	ug/L			12/15/14 13:21	1
Toluene	ND		1.0	0.15	ug/L			12/15/14 13:21	1
Chlorobenzene	ND		1.0	0.11	ug/L			12/15/14 13:21	1
Ethylbenzene	ND		1.0	0.10	ug/L			12/15/14 13:21	1
Styrene	ND		1.0	0.12	ug/L			12/15/14 13:21	1
TBA	ND		10	5.7	ug/L			12/15/14 13:21	1
Xylenes, Total	ND		2.0	0.13	ug/L			12/15/14 13:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*118*		*70 - 130*		*12/15/14 13:21*	*1*
Toluene-d8 (Surr)	*86*		*70 - 130*		*12/15/14 13:21*	*1*
Bromofluorobenzene	*99*		*64 - 135*		*12/15/14 13:21*	*1*
Dibromofluoromethane (Surr)	*112*		*72 - 137*		*12/15/14 13:21*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	ND		10	1.8	ug/L		12/15/14 11:37	12/17/14 05:11	1
Acenaphthylene	ND		10	1.9	ug/L		12/15/14 11:37	12/17/14 05:11	1
Benzo[g,h,i]perylene	ND		10	0.97	ug/L		12/15/14 11:37	12/17/14 05:11	1
Phenanthrene	ND		10	1.3	ug/L		12/15/14 11:37	12/17/14 05:11	1
Benzo[k]fluoranthene	ND		1.0	0.15	ug/L		12/15/14 11:37	12/17/14 05:11	1
Benzo[a]pyrene	ND	*	1.0	0.15	ug/L		12/15/14 11:37	12/17/14 05:11	1
Anthracene	ND		10	0.89	ug/L		12/15/14 11:37	12/17/14 05:11	1
2-Methylnaphthalene	ND		10	1.6	ug/L		12/15/14 11:37	12/17/14 05:11	1
Pyrene	ND		10	1.1	ug/L		12/15/14 11:37	12/17/14 05:11	1
Dibenz(a,h)anthracene	ND		1.0	0.17	ug/L		12/15/14 11:37	12/17/14 05:11	1
Naphthalene	ND		10	2.1	ug/L		12/15/14 11:37	12/17/14 05:11	1
Fluoranthene	ND	*	10	1.1	ug/L		12/15/14 11:37	12/17/14 05:11	1
Benzo[a]anthracene	ND		1.0	0.19	ug/L		12/15/14 11:37	12/17/14 05:11	1
Indeno[1,2,3-cd]pyrene	ND		1.0	0.11	ug/L		12/15/14 11:37	12/17/14 05:11	1
Chrysene	ND		2.1	1.5	ug/L		12/15/14 11:37	12/17/14 05:11	1
Acenaphthene	ND		10	1.1	ug/L		12/15/14 11:37	12/17/14 05:11	1
Benzo[b]fluoranthene	ND		1.0	0.22	ug/L		12/15/14 11:37	12/17/14 05:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*90*		*60 - 114*	*12/15/14 11:37*	*12/17/14 05:11*	*1*
2-Fluorobiphenyl	*86*		*50 - 120*	*12/15/14 11:37*	*12/17/14 05:11*	*1*
Terphenyl-d14	*81*		*72 - 130*	*12/15/14 11:37*	*12/17/14 05:11*	*1*

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**7.3**		1.2	0.56	ug/L		12/12/14 23:10	12/14/14 07:19	2

Certification Summary

Client: BL Companies
Project/Site: R/A Frankford & Darrgh

TestAmerica Job ID: 460-87578-1

Laboratory: TestAmerica Edison

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Jersey	NELAP	2	12028	06-30-15
Pennsylvania	NELAP	3	68-00522	02-28-15

Method Summary

Client: BL Companies
Project/Site: R/A Frankford & Darrgh

TestAmerica Job ID: 460-87578-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL EDI
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL EDI
6020A	Metals (ICP/MS)	SW846	TAL EDI

Protocol References:

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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

CHAIN OF CUSTODY / ANALYSIS REQUEST

0.5"/0.3" ICAP-1

Name (for report and invoice) Matt Baumann	Samplers Name (Printed) Matt Baumann	Site/Project Identification NA Frankford + Dewalt
Company BL Companies	P. O. # 001629-B	State (Location of site): NJ: ☐ NY: ☐ Other: PA
Address 4242 Carlisle Pike	Analysis Turnaround Time: Standard ☒ 5 day	Regulatory Program:
City Camp Hill State Pa	Rush Charges Authorized For: 2 Week ☐ 1 Week ☐ Other ☐	LAB USE ONLY Project No:
Phone 717-651-9850 Fax 717-651-9858		Job No: 87578

Sample Identification	Date	Time	Matrix	No. of Cont.	VOCs	PAHs	Dissolved Lead	Sample Numbers
MW-1	12/11/14	1118	H_2O	6	V	V	V	
MW-2A	12/11/14	1140	H_2O	6				
MW-3	12/11/14	1150	H_2O	6				
MW-4	12/11/14	1165	H_2O	6				

5-Day RUSH

460-87578 Chain of Custody

Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH, 6 = Other _____, 7 = Other _____

Soil: | Water: 2 | 4

Special Instructions Standard TAT - 5 day

Water Metals Filtered (Yes/No)? YES

Relinquished by	Company	Date / Time	Received by	Company
1)	BL Companies	12/11/14 1200	1) G Donaghy	TAKOP 12/11/14 1308
2)	TAKOP	12/11/14 1350	2)	TA
3)	TA	12/11/14 1840	3)	TA
4)	TA	12/11/14 1840	4) A Hare 1840	TA 12/11

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132). TAL - 0016 (0814)

Massachusetts (M-NJ312), North Carolina (No. 578)

TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 87578

Number of Coolers: 1 IR Gun #: KGP1

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	2.5 °C	2.3 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	°C	°C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

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.

EDS-WI-038, Rev 4, 06/09/14

Initials: JG Date: 12/11/14

Login Sample Receipt Checklist

Client: BL Companies

Job Number: 460-87578-1

Login Number: 87578
List Number: 1
Creator: Gilmore, Julie L

List Source: TestAmerica Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	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 0.3
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.	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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

AMERICAN Westech INCORPORATED

Revised Laboratory Result Summary

Laboratory Project ID: 0903122

BL Companies
Scott Treherne
213 Market St.
6th Floor
Harrisburg, PA 17101

Contact: Scott Treherne
Project Name: Frankford & Darriah
Project Number: 00L629-B
Purchase Order Number: N/A
Sampled By: Scott Treherne
Date Received: March 10, 2009
Time Received: 9:23 AM

Analytical Testing Parameters

Client Sample ID: **MW-1**
Lab Sample ID: **0903122-01**
Collection Date: **3/6/2009**
Collection Time: **10:30 AM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<50.0	ug/L	50.0	SW846 8260B	3/10/2009	3:11 PM	DSW
Benzene	<1.00	ug/L	1.00	SW846 8260B	3/10/2009	3:11 PM	DSW
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
Bromodichloromethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
Bromoform	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
2-Butanone (MEK)	<3.00	ug/L	3.00	SW846 8260B	3/10/2009	3:11 PM	DSW
n-Butylbenzene	<4.00	ug/L	4.00	SW846 8260B	3/10/2009	3:11 PM	DSW
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	3/10/2009	3:11 PM	DSW
Carbon Tetrachloride	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
Chlorodibromomethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
Chloroform	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
Chloromethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
1,1-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
cis-1,2-Dichloroethene	**4.70**	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
1,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
Hexachlorobutadiene	<3.00	ug/L	3.00	SW846 8260B	3/10/2009	3:11 PM	DSW
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	3/10/2009	3:11 PM	DSW
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
4-Isopropyltoluene	<10.0	ug/L	10.0	SW846 8260B	3/10/2009	3:11 PM	DSW
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	3/10/2009	3:11 PM	DSW
Methylene Chloride	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
Naphthalene	<10.0	ug/L	10.0	SW846 8260B	3/10/2009	3:11 PM	DSW
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
Styrene	<4.00	ug/L	4.00	SW846 8260B	3/10/2009	3:11 PM	DSW
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
1,1,2,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
Tetrachloroethene	**2.84**	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
Toluene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	3/10/2009	3:11 PM	DSW
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	3/10/2009	3:11 PM	DSW
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
Trichloroethene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
Vinyl Chloride	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	3/10/2009	3:11 PM	DSW
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:11 PM	DSW
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	3/10/2009	3:11 PM	DSW

- The Bromomethane concentration was determined by a library search of the appropriate retention time and mass spectral ion pattern.

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.91	ug/L	0.91	SW846 8270C	3/13/2009	11:22 PM	CGS
Acenaphthylene	<0.91	ug/L	0.91	SW846 8270C	3/13/2009	11:22 PM	CGS
Anthracene	<0.91	ug/L	0.91	SW846 8270C	3/13/2009	11:22 PM	CGS
Benzo(a)anthracene	**0.63**	ug/L	0.51	SW846 8270C	3/13/2009	11:22 PM	CGS
Benzo(a)pyrene	**1.69**	ug/L	0.20	SW846 8270C	3/13/2009	11:22 PM	CGS
Benzo(b)fluoranthene	**1.86**	ug/L	0.51	SW846 8270C	3/13/2009	11:22 PM	CGS
Benzo(g,h,i)perylene	**2.28**	ug/L	0.20	SW846 8270C	3/13/2009	11:22 PM	CGS
Benzo(k)fluoranthene	**1.83**	ug/L	0.51	SW846 8270C	3/13/2009	11:22 PM	CGS
Chrysene	**1.32**	ug/L	0.91	SW846 8270C	3/13/2009	11:22 PM	CGS
Dibenzo(a,h)anthracene	**1.19**	ug/L	0.51	SW846 8270C	3/13/2009	11:22 PM	CGS
Fluoranthene	**1.44**	ug/L	0.91	SW846 8270C	3/13/2009	11:22 PM	CGS
Fluorene	<0.91	ug/L	0.91	SW846 8270C	3/13/2009	11:22 PM	CGS
Indeno(1,2,3-cd)pyrene	**2.24**	ug/L	0.51	SW846 8270C	3/13/2009	11:22 PM	CGS
1-Methylnaphthalene	<1.01	ug/L	1.01	SW846 8270C	3/13/2009	11:22 PM	CGS

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
2-Methylnaphthalene	<1.01	ug/L	1.01	SW846 8270C	3/13/2009	11:22 PM	CGS
Naphthalene	<0.91	ug/L	0.91	SW846 8270C	3/13/2009	11:22 PM	CGS
Phenanthrene	<0.91	ug/L	0.91	SW846 8270C	3/13/2009	11:22 PM	CGS
Pyrene	**1.49**	ug/L	0.91	SW846 8270C	3/13/2009	11:22 PM	CGS

- Although it is not required to be monitored in the reference methodology, the internal standards yielded low recoveries. All of the surrogates however, were recovered within acceptable quality control guidelines.

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	<0.005	mg/L	0.005	SW846 7421	3/10/2009	4:42 PM	BEH

Analytical Testing Parameters

Client Sample ID: **MW-2A** Collection Date: **3/6/2009**
Lab Sample ID: **0903122-02** Collection Time: **11:00 AM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<50.0	ug/L	50.0	SW846 8260B	3/10/2009	3:39 PM	DSW
Benzene	<1.00	ug/L	1.00	SW846 8260B	3/10/2009	3:39 PM	DSW
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
Bromodichloromethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
Bromoform	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
2-Butanone (MEK)	<3.00	ug/L	3.00	SW846 8260B	3/10/2009	3:39 PM	DSW
n-Butylbenzene	<4.00	ug/L	4.00	SW846 8260B	3/10/2009	3:39 PM	DSW
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	3/10/2009	3:39 PM	DSW
Carbon Tetrachloride	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
Chlorodibromomethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
Chloroform	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
Chloromethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
1,1-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
cis-1,2-Dichloroethene	**3.67**	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
1,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
Hexachlorobutadiene	<3.00	ug/L	3.00	SW846 8260B	3/10/2009	3:39 PM	DSW
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	3/10/2009	3:39 PM	DSW
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
4-Isopropyltoluene	<10.0	ug/L	10.0	SW846 8260B	3/10/2009	3:39 PM	DSW
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	3/10/2009	3:39 PM	DSW
Methylene Chloride	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
Naphthalene	<10.0	ug/L	10.0	SW846 8260B	3/10/2009	3:39 PM	DSW
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
Styrene	<4.00	ug/L	4.00	SW846 8260B	3/10/2009	3:39 PM	DSW
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
1,1,2,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
Tetrachloroethene	**31.0**	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
Toluene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	3/10/2009	3:39 PM	DSW
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	3/10/2009	3:39 PM	DSW
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
Trichloroethene	**2.69**	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
Vinyl Chloride	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	3/10/2009	3:39 PM	DSW
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	3:39 PM	DSW
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	3/10/2009	3:39 PM	DSW

- The Bromomethane concentration was determined by a library search of the appropriate retention time and mass spectral ion pattern.

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.95	ug/L	0.95	SW846 8270C	3/13/2009	11:59 PM	CGS
Acenaphthylene	<0.95	ug/L	0.95	SW846 8270C	3/13/2009	11:59 PM	CGS
Anthracene	<0.95	ug/L	0.95	SW846 8270C	3/13/2009	11:59 PM	CGS
Benzo(a)anthracene	<0.53	ug/L	0.53	SW846 8270C	3/13/2009	11:59 PM	CGS
Benzo(a)pyrene	**1.17**	ug/L	0.21	SW846 8270C	3/13/2009	11:59 PM	CGS
Benzo(b)fluoranthene	**1.23**	ug/L	0.53	SW846 8270C	3/13/2009	11:59 PM	CGS
Benzo(g,h,i)perylene	**0.76**	ug/L	0.21	SW846 8270C	3/13/2009	11:59 PM	CGS
Benzo(k)fluoranthene	**0.87**	ug/L	0.53	SW846 8270C	3/13/2009	11:59 PM	CGS
Chrysene	<0.95	ug/L	0.95	SW846 8270C	3/13/2009	11:59 PM	CGS
Dibenzo(a,h)anthracene	<0.53	ug/L	0.53	SW846 8270C	3/13/2009	11:59 PM	CGS

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Fluoranthene	<0.95	ug/L	0.95	SW846 8270C	3/13/2009	11:59 PM	CGS
Fluorene	<0.95	ug/L	0.95	SW846 8270C	3/13/2009	11:59 PM	CGS
Indeno(1,2,3-cd)pyrene	**0.93**	ug/L	0.53	SW846 8270C	3/13/2009	11:59 PM	CGS
1-Methylnaphthalene	<1.05	ug/L	1.05	SW846 8270C	3/13/2009	11:59 PM	CGS
2-Methylnaphthalene	<1.05	ug/L	1.05	SW846 8270C	3/13/2009	11:59 PM	CGS
Naphthalene	<0.95	ug/L	0.95	SW846 8270C	3/13/2009	11:59 PM	CGS
Phenanthrene	<0.95	ug/L	0.95	SW846 8270C	3/13/2009	11:59 PM	CGS
Pyrene	**0.98**	ug/L	0.95	SW846 8270C	3/13/2009	11:59 PM	CGS

- Although it is not required to be monitored in the reference methodology, the internal standards yielded low recoveries. All of the surrogates however, were recovered within acceptable quality control guidelines.

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	<0.005	mg/L	0.005	SW846 7421	3/10/2009	4:46 PM	BEH

Analytical Testing Parameters

Client Sample ID: **MW-3**
Lab Sample ID: **0903122-03**
Collection Date: **3/6/2009**
Collection Time: **11:15 AM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<50.0	ug/L	50.0	SW846 8260B	3/10/2009	4:08 PM	DSW
Benzene	<1.00	ug/L	1.00	SW846 8260B	3/10/2009	4:08 PM	DSW
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
Bromodichloromethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
Bromoform	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
2-Butanone (MEK)	<3.00	ug/L	3.00	SW846 8260B	3/10/2009	4:08 PM	DSW
n-Butylbenzene	<4.00	ug/L	4.00	SW846 8260B	3/10/2009	4:08 PM	DSW
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	3/10/2009	4:08 PM	DSW
Carbon Tetrachloride	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
Chlorodibromomethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
Chloroform	**4.36**	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
Chloromethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
1,1-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
cis-1,2-Dichloroethene	**9.58**	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
1,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
Hexachlorobutadiene	<3.00	ug/L	3.00	SW846 8260B	3/10/2009	4:08 PM	DSW
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	3/10/2009	4:08 PM	DSW
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
4-Isopropyltoluene	<10.0	ug/L	10.0	SW846 8260B	3/10/2009	4:08 PM	DSW
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	3/10/2009	4:08 PM	DSW
Methylene Chloride	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
Naphthalene	<10.0	ug/L	10.0	SW846 8260B	3/10/2009	4:08 PM	DSW
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
Styrene	<4.00	ug/L	4.00	SW846 8260B	3/10/2009	4:08 PM	DSW
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
1,1,2,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
Tetrachloroethene	**44.8**	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
Toluene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	3/10/2009	4:08 PM	DSW
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	3/10/2009	4:08 PM	DSW
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
Trichloroethene	**4.86**	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
Vinyl Chloride	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	3/10/2009	4:08 PM	DSW
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:08 PM	DSW
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	3/10/2009	4:08 PM	DSW

- The Bromomethane concentration was determined by a library search of the appropriate retention time and mass spectral ion pattern.

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.90	ug/L	0.90	SW846 8270C	3/14/2009	2:28 AM	CGS
Acenaphthylene	<0.90	ug/L	0.90	SW846 8270C	3/14/2009	2:28 AM	CGS
Anthracene	<0.90	ug/L	0.90	SW846 8270C	3/14/2009	2:28 AM	CGS
Benzo(a)anthracene	<0.50	ug/L	0.50	SW846 8270C	3/14/2009	2:28 AM	CGS
Benzo(a)pyrene	**1.01**	ug/L	0.20	SW846 8270C	3/14/2009	2:28 AM	CGS
Benzo(b)fluoranthene	**1.12**	ug/L	0.50	SW846 8270C	3/14/2009	2:28 AM	CGS

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Benzo(g,h,i)perylene	**0.62**	ug/L	0.20	SW846 8270C	3/14/2009	2:28 AM	CGS
Benzo(k)fluoranthene	<0.50	ug/L	0.50	SW846 8270C	3/14/2009	2:28 AM	CGS
Chrysene	<0.90	ug/L	0.90	SW846 8270C	3/14/2009	2:28 AM	CGS
Dibenzo(a,h)anthracene	<0.50	ug/L	0.50	SW846 8270C	3/14/2009	2:28 AM	CGS
Fluoranthene	<0.90	ug/L	0.90	SW846 8270C	3/14/2009	2:28 AM	CGS
Fluorene	<0.90	ug/L	0.90	SW846 8270C	3/14/2009	2:28 AM	CGS
Indeno(1,2,3-cd)pyrene	<0.50	ug/L	0.50	SW846 8270C	3/14/2009	2:28 AM	CGS
1-Methylnaphthalene	<1.00	ug/L	1.00	SW846 8270C	3/14/2009	2:28 AM	CGS
2-Methylnaphthalene	<1.00	ug/L	1.00	SW846 8270C	3/14/2009	2:28 AM	CGS
Naphthalene	<0.90	ug/L	0.90	SW846 8270C	3/14/2009	2:28 AM	CGS
Phenanthrene	<0.90	ug/L	0.90	SW846 8270C	3/14/2009	2:28 AM	CGS
Pyrene	<0.90	ug/L	0.90	SW846 8270C	3/14/2009	2:28 AM	CGS

- Although it is not required to be monitored in the reference methodology, the internal standards yielded low recoveries. All of the surrogates however, were recovered within acceptable quality control guidelines.

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	<0.005	mg/L	0.005	SW846 7421	3/10/2009	4:51 PM	BEH

Analytical Testing Parameters

Client Sample ID: **MW-4** Collection Date: **3/6/2009**
Lab Sample ID: **0903122-04** Collection Time: **10:45 AM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<50.0	ug/L	50.0	SW846 8260B	3/10/2009	4:36 PM	DSW
Benzene	<1.00	ug/L	1.00	SW846 8260B	3/10/2009	4:36 PM	DSW
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
Bromodichloromethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
Bromoform	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
2-Butanone (MEK)	<3.00	ug/L	3.00	SW846 8260B	3/10/2009	4:36 PM	DSW
n-Butylbenzene	<4.00	ug/L	4.00	SW846 8260B	3/10/2009	4:36 PM	DSW
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	3/10/2009	4:36 PM	DSW
Carbon Tetrachloride	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
Chlorodibromomethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
Chloroform	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
Chloromethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
1,1-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
cis-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
1,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
Hexachlorobutadiene	<3.00	ug/L	3.00	SW846 8260B	3/10/2009	4:36 PM	DSW
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	3/10/2009	4:36 PM	DSW
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
4-Isopropyltoluene	<10.0	ug/L	10.0	SW846 8260B	3/10/2009	4:36 PM	DSW
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	3/10/2009	4:36 PM	DSW
Methylene Chloride	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
Naphthalene	<10.0	ug/L	10.0	SW846 8260B	3/10/2009	4:36 PM	DSW
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
Styrene	<4.00	ug/L	4.00	SW846 8260B	3/10/2009	4:36 PM	DSW
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
1,1,2,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
Tetrachloroethene	**2.53**	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
Toluene	**6.23**	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	3/10/2009	4:36 PM	DSW
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	3/10/2009	4:36 PM	DSW
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
Trichloroethene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
Vinyl Chloride	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
m,p-Xylene	**4.14**	ug/L	4.00	SW846 8260B	3/10/2009	4:36 PM	DSW
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	3/10/2009	4:36 PM	DSW
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	3/10/2009	4:36 PM	DSW

- The Bromomethane concentration was determined by a library search of the appropriate retention time and mass spectral ion pattern.

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.92	ug/L	0.92	SW846 8270C	3/14/2009	3:08 AM	CGS
Acenaphthylene	<0.92	ug/L	0.92	SW846 8270C	3/14/2009	3:08 AM	CGS
Anthracene	<0.92	ug/L	0.92	SW846 8270C	3/14/2009	3:08 AM	CGS
Benzo(a)anthracene	<0.51	ug/L	0.51	SW846 8270C	3/14/2009	3:08 AM	CGS
Benzo(a)pyrene	**1.05**	ug/L	0.21	SW846 8270C	3/14/2009	3:08 AM	CGS
Benzo(b)fluoranthene	**1.21**	ug/L	0.51	SW846 8270C	3/14/2009	3:08 AM	CGS
Benzo(g,h,i)perylene	**0.65**	ug/L	0.21	SW846 8270C	3/14/2009	3:08 AM	CGS
Benzo(k)fluoranthene	**0.85**	ug/L	0.51	SW846 8270C	3/14/2009	3:08 AM	CGS
Chrysene	<0.92	ug/L	0.92	SW846 8270C	3/14/2009	3:08 AM	CGS
Dibenzo(a,h)anthracene	<0.51	ug/L	0.51	SW846 8270C	3/14/2009	3:08 AM	CGS
Fluoranthene	<0.92	ug/L	0.92	SW846 8270C	3/14/2009	3:08 AM	CGS
Fluorene	<0.92	ug/L	0.92	SW846 8270C	3/14/2009	3:08 AM	CGS
Indeno(1,2,3-cd)pyrene	<0.51	ug/L	0.51	SW846 8270C	3/14/2009	3:08 AM	CGS
1-Methylnaphthalene	<1.02	ug/L	1.02	SW846 8270C	3/14/2009	3:08 AM	CGS
2-Methylnaphthalene	<1.02	ug/L	1.02	SW846 8270C	3/14/2009	3:08 AM	CGS
Naphthalene	<0.92	ug/L	0.92	SW846 8270C	3/14/2009	3:08 AM	CGS
Phenanthrene	<0.92	ug/L	0.92	SW846 8270C	3/14/2009	3:08 AM	CGS
Pyrene	<0.92	ug/L	0.92	SW846 8270C	3/14/2009	3:08 AM	CGS

- Although it is not required to be monitored in the reference methodology, the internal standards yielded low recoveries. All of the surrogates however, were recovered within acceptable quality control guidelines.

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	**0.043**	mg/L	0.010	SW846 7421	3/10/2009	4:58 PM	BEH

Report Comments:

The **PQL** is the **Practical Quantitation Limit**, which is defined as the lowest quantitation level of an analyte that can be readily achieved within the specified limits of precision and accuracy of an analytical method during routine laboratory operating conditions. The value may be raised depending on the characteristics or behavior of the target analyte.

All samples were analyzed **"as received"** from the client. American Westech Inc. can only assume that all samples were collected and submitted by the CLIENT following the appropriate protocols set forth by the regulatory requirements. This document shall not be reproduced, except in full, without the written approval of American Westech Inc. If there are any questions pertaining to this laboratory report please contact a Client Services Coordinator or the Laboratory Director at (717) 651-9700.

Laboratory Certifications:

- NELAP accredited by the PADEP (22-00578) & NJDEP (PA019) for numerous solid and chemical materials and non-potable water parameters. Please refer to our certified parameter lists for each state for specific information on the approved methodologies.
- PADEP accredited for various drinking water parameters including: Volatile Organic Compounds, Metals, Inorganics, and Microbiology (22-00578). Please refer to our certified parameter list for specific information on the approved methodologies

Reviewed and Approved By:

William W. Smith, Jr.
Laboratory Director

Date Reviewed and Approved:
3-23-09

American Westech Incorporated
4359 Linglestown Road, Harrisburg, PA 17112
Phone: (717) 651-9700 Fax: (717) 657-0752

SAMPLE SUBMITTAL FORM

NELAP accredited by PADEP & NJDEP. Please call for specific parameter accreditations.
PADEP ID (22-00578) - NJDEP ID (PA019)

LABORATORY PROJECT NUMBER: **0903122**

PROJECT DETAILS

Company: BL COMPANIES
Contact: SCOTT TREHERNE
Address: 213 MARKET STREET 6TH FLOOR
City: HARRISBURG State: PA Zip: 17101
Phone: 717-651-9850 Fax: 717-651-9858
Project Name: FRANKFORD ARSENAL
Project No.: 00L629-B
Client P.O. No.:
Westech Proposal/BPA No.:
Purpose: ☒ Regulatory ☐ Informational ☐ PWSID:
Data Deliverables: ☐ Level I ☐ Level II ☐ Level III ☐ Level IV
Report Delivery: ☐ Fax ☒ Email - Address: STREHERNE@BLCOMPANIES.COM
Please Mark TAT Requested * : ☐ 10 Day (Standard) ☒ 5 Day ☐ 72 Hour ☐ 48 Hour ☐ 24 Hour ☐ Same Day

INVOICING INFORMATION

Company: BL COMPANIES
Contact: SAME
Address:
City: State: Zip:
Phone: Fax:
Invoice Delivery: ☒ Mail w/Report ☐ Email (enter address below)
WESTECH Field Services Used? ☒ NO ☐ YES - *(See Field Services Log)*

SAMPLE TYPE (Key): SS = Solid/Sludge; OL = Oil; DW = Drinking Water; GW = Groundwater; SW = Storm/Surface Water; WW = Wastewater; AR = Air; O = Other: _____

* Turnaround times based on business days only. All "RUSH" TATs must be pre-arranged with WESTECH and are subject to "RUSH" surcharges.

SAMPLE RECEIVING INFORMATION *(lab use only)*

Samples received on ice? Temp: 2.0 °C	✓	N	NA	
Cooler temp. within acceptable limits?	✓	N	NA	
Correct bottles used for requested analysis?	✓	N	NA	
Sample bottles in good condition (unbroken)?	✓	N	NA	
Zero headspace samples collected correctly?	✓	N	NA	
Samples within required holding time?	✓	N	NA	
Samples preserved to pH <2 and/or pH >12?	✓	N	NA	62

Shipping Carrier? ☐ Drop Off ☐ WESTECH Pickup ☐ Outside Courier:

LAB ID	SAMPLE IDENTIFICATION / LOCATION DESCRIPTION	SAMPLE DATE	SAMPLE TIME	SAMPLE DETAILS: Total # of Bottles	Sample Type: (See "Sample Type" Key)	Grab: "G" or Composite: "C"	ANALYSIS REQUESTED: VOCs (8260-B)	PAHs (8270-C)	Diss. Pb
01	MW-1	03.06.09	10:30	5	GW	G	X	X	X
02	MW-2A	↓	11:00	5	↓	↓	X	X	X
03	MW-3		11:15	5			X	X	X
04	MW-4	↓	10:45	5	↓	↓	X	X	X
05				5					
06									
07									
08									
09									
10									

	PRINT NAME	SIGNATURE	DATE	TIME
Sampled By:	Scott Treherne	Scott Treherne	03.06.09	11:30
Relinquished By (Sampler):	Scott Treherne	Scott Treherne	03.09.09	
Accepted By:				
Relinquished to WESTECH By:				
Accepted at WESTECH By:	JESSI PEITTER		3/10/09	0923

COMMENTS OR SPECIAL INSTRUCTIONS: *SAMPLE RESULTS MUST MEET MINIMUM PA ACT 2 REQUIREMENTS

AMERICAN Westech INCORPORATED

Laboratory Result Summary

Laboratory Project ID: 0906223

BL Companies
Scott Treherne
213 Market St.
6th Floor
Harrisburg, PA 17101

Contact: Scott Treherne
Project Name: Frankford & Darrah
Project Number: 00L629-B
Purchase Order Number: N/A
Sampled By: Scott Treherne
Date Received: June 12, 2009
Time Received: 11:18 AM

Analytical Testing Parameters

Client Sample ID: **MW-1**
Lab Sample ID: **0906223-01**
Collection Date: **6/11/2009**
Collection Time: **11:00 AM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<50.0	ug/L	50.0	SW846 8260B	6/12/2009	4:51 PM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	6/12/2009	4:51 PM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
Bromodichloromethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
2-Butanone (MEK)	<3.00	ug/L	3.00	SW846 8260B	6/12/2009	4:51 PM	JMS
n-Butylbenzene	<4.00	ug/L	4.00	SW846 8260B	6/12/2009	4:51 PM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	6/12/2009	4:51 PM	JMS
Carbon Tetrachloride	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
Chlorodibromomethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
Chloroform	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
Chloromethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
1,1-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
cis-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
1,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
Hexachlorobutadiene	<3.00	ug/L	3.00	SW846 8260B	6/12/2009	4:51 PM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	6/12/2009	4:51 PM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
4-Isopropyltoluene	<10.0	ug/L	10.0	SW846 8260B	6/12/2009	4:51 PM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	6/12/2009	4:51 PM	JMS
Methylene Chloride	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
Naphthalene	<10.0	ug/L	10.0	SW846 8260B	6/12/2009	4:51 PM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
Styrene	<4.00	ug/L	4.00	SW846 8260B	6/12/2009	4:51 PM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
1,1,2,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
Tetrachloroethene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	6/12/2009	4:51 PM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	6/12/2009	4:51 PM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
Trichloroethene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
Vinyl Chloride	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	6/12/2009	4:51 PM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	4:51 PM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	6/12/2009	4:51 PM	JMS

- The Bromomethane concentration was determined by a library search of the appropriate retention time and mass spectral ion pattern.

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.90	ug/L	0.90	SW846 8270C	6/17/2009	12:57 AM	CGS
Acenaphthylene	<0.90	ug/L	0.90	SW846 8270C	6/17/2009	12:57 AM	CGS
Anthracene	<0.90	ug/L	0.90	SW846 8270C	6/17/2009	12:57 AM	CGS
Benzo(a)anthracene	<0.50	ug/L	0.50	SW846 8270C	6/17/2009	12:57 AM	CGS
Benzo(a)pyrene	**0.67**	ug/L	0.20	SW846 8270C	6/17/2009	12:57 AM	CGS
Benzo(b)fluoranthene	**1.78**	ug/L	0.50	SW846 8270C	6/17/2009	12:57 AM	CGS
Benzo(g,h,i)perylene	**1.20**	ug/L	0.20	SW846 8270C	6/17/2009	12:57 AM	CGS
Benzo(k)fluoranthene	**0.96**	ug/L	0.50	SW846 8270C	6/17/2009	12:57 AM	CGS
Chrysene	**1.06**	ug/L	0.90	SW846 8270C	6/17/2009	12:57 AM	CGS
Dibenzo(a,h)anthracene	<0.50	ug/L	0.50	SW846 8270C	6/17/2009	12:57 AM	CGS
Fluoranthene	**1.41**	ug/L	0.90	SW846 8270C	6/17/2009	12:57 AM	CGS
Fluorene	<0.90	ug/L	0.90	SW846 8270C	6/17/2009	12:57 AM	CGS
Indeno(1,2,3-cd)pyrene	**1.71**	ug/L	0.50	SW846 8270C	6/17/2009	12:57 AM	CGS
1-Methylnaphthalene	<1.00	ug/L	1.00	SW846 8270C	6/17/2009	12:57 AM	CGS
2-Methylnaphthalene	<1.00	ug/L	1.00	SW846 8270C	6/17/2009	12:57 AM	CGS

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Naphthalene	<0.90	ug/L	0.90	SW846 8270C	6/17/2009	12:57 AM	CGS
Phenanthrene	<0.90	ug/L	0.90	SW846 8270C	6/17/2009	12:57 AM	CGS
Pyrene	**1.14**	ug/L	0.90	SW846 8270C	6/17/2009	12:57 AM	CGS

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	<0.005	mg/L	0.005	SW846 7421	6/15/2009	2:52 PM	JAW

Analytical Testing Parameters

Client Sample ID: **MW-2A** Collection Date: **6/11/2009**

Lab Sample ID: **0906223-02** Collection Time: **11:15 AM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<50.0	ug/L	50.0	SW846 8260B	6/12/2009	5:19 PM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	6/12/2009	5:19 PM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
Bromodichloromethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
2-Butanone (MEK)	<3.00	ug/L	3.00	SW846 8260B	6/12/2009	5:19 PM	JMS
n-Butylbenzene	<4.00	ug/L	4.00	SW846 8260B	6/12/2009	5:19 PM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	6/12/2009	5:19 PM	JMS
Carbon Tetrachloride	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
Chlorodibromomethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
Chloroform	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
Chloromethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
1,1-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
cis-1,2-Dichloroethene	**17.8**	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
trans-1,2-Dichloroethene	**2.67**	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
1,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
Hexachlorobutadiene	<3.00	ug/L	3.00	SW846 8260B	6/12/2009	5:19 PM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	6/12/2009	5:19 PM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
4-Isopropyltoluene	<10.0	ug/L	10.0	SW846 8260B	6/12/2009	5:19 PM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	6/12/2009	5:19 PM	JMS
Methylene Chloride	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
Naphthalene	<10.0	ug/L	10.0	SW846 8260B	6/12/2009	5:19 PM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
Styrene	<4.00	ug/L	4.00	SW846 8260B	6/12/2009	5:19 PM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
1,1,2,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
Tetrachloroethene	**11.3**	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	6/12/2009	5:19 PM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	6/12/2009	5:19 PM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
Trichloroethene	**2.92**	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
Vinyl Chloride	**2.54**	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	6/12/2009	5:19 PM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:19 PM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	6/12/2009	5:19 PM	JMS

- The Bromomethane concentration was determined by a library search of the appropriate retention time and mass spectral ion pattern.

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.84	ug/L	0.84	SW846 8270C	6/17/2009	1:37 AM	CGS
Acenaphthylene	<0.84	ug/L	0.84	SW846 8270C	6/17/2009	1:37 AM	CGS
Anthracene	<0.84	ug/L	0.84	SW846 8270C	6/17/2009	1:37 AM	CGS
Benzo(a)anthracene	<0.47	ug/L	0.47	SW846 8270C	6/17/2009	1:37 AM	CGS
Benzo(a)pyrene	<0.19	ug/L	0.19	SW846 8270C	6/17/2009	1:37 AM	CGS
Benzo(b)fluoranthene	**0.50**	ug/L	0.47	SW846 8270C	6/17/2009	1:37 AM	CGS
Benzo(g,h,i)perylene	<0.19	ug/L	0.19	SW846 8270C	6/17/2009	1:37 AM	CGS
Benzo(k)fluoranthene	<0.47	ug/L	0.47	SW846 8270C	6/17/2009	1:37 AM	CGS
Chrysene	<0.84	ug/L	0.84	SW846 8270C	6/17/2009	1:37 AM	CGS
Dibenzo(a,h)anthracene	<0.47	ug/L	0.47	SW846 8270C	6/17/2009	1:37 AM	CGS
Fluoranthene	<0.84	ug/L	0.84	SW846 8270C	6/17/2009	1:37 AM	CGS
Fluorene	<0.84	ug/L	0.84	SW846 8270C	6/17/2009	1:37 AM	CGS
Indeno(1,2,3-cd)pyrene	**0.90**	ug/L	0.47	SW846 8270C	6/17/2009	1:37 AM	CGS
1-Methylnaphthalene	<0.93	ug/L	0.93	SW846 8270C	6/17/2009	1:37 AM	CGS

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
2-Methylnaphthalene	<0.93	ug/L	0.93	SW846 8270C	6/17/2009	1:37 AM	CGS
Naphthalene	<0.84	ug/L	0.84	SW846 8270C	6/17/2009	1:37 AM	CGS
Phenanthrene	<0.84	ug/L	0.84	SW846 8270C	6/17/2009	1:37 AM	CGS
Pyrene	<0.84	ug/L	0.84	SW846 8270C	6/17/2009	1:37 AM	CGS

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	<0.005	mg/L	0.005	SW846 7421	6/15/2009	2:56 PM	JAW

Analytical Testing Parameters

Client Sample ID: **MW-3** Collection Date: **6/11/2009**

Lab Sample ID: **0906223-03** Collection Time: **11:30 AM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<50.0	ug/L	50.0	SW846 8260B	6/12/2009	5:48 PM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	6/12/2009	5:48 PM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
Bromodichloromethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
2-Butanone (MEK)	<3.00	ug/L	3.00	SW846 8260B	6/12/2009	5:48 PM	JMS
n-Butylbenzene	<4.00	ug/L	4.00	SW846 8260B	6/12/2009	5:48 PM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	6/12/2009	5:48 PM	JMS
Carbon Tetrachloride	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
Chlorodibromomethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
Chloroform	**8.74**	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
Chloromethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
1,1-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
cis-1,2-Dichloroethene	**6.38**	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
1,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
Hexachlorobutadiene	<3.00	ug/L	3.00	SW846 8260B	6/12/2009	5:48 PM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	6/12/2009	5:48 PM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
4-Isopropyltoluene	<10.0	ug/L	10.0	SW846 8260B	6/12/2009	5:48 PM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	6/12/2009	5:48 PM	JMS
Methylene Chloride	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
Naphthalene	<10.0	ug/L	10.0	SW846 8260B	6/12/2009	5:48 PM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
Styrene	<4.00	ug/L	4.00	SW846 8260B	6/12/2009	5:48 PM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
1,1,2,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
Tetrachloroethene	**44.7**	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	6/12/2009	5:48 PM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	6/12/2009	5:48 PM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
Trichloroethene	**2.53**	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
Vinyl Chloride	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	6/12/2009	5:48 PM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	5:48 PM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	6/12/2009	5:48 PM	JMS

- The Bromomethane concentration was determined by a library search of the appropriate retention time and mass spectral ion pattern.

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.83	ug/L	0.83	SW846 8270C	6/17/2009	2:16 AM	CGS
Acenaphthylene	<0.83	ug/L	0.83	SW846 8270C	6/17/2009	2:16 AM	CGS
Anthracene	<0.83	ug/L	0.83	SW846 8270C	6/17/2009	2:16 AM	CGS
Benzo(a)anthracene	<0.46	ug/L	0.46	SW846 8270C	6/17/2009	2:16 AM	CGS
Benzo(a)pyrene	**0.26**	ug/L	0.19	SW846 8270C	6/17/2009	2:16 AM	CGS
Benzo(b)fluoranthene	<0.46	ug/L	0.46	SW846 8270C	6/17/2009	2:16 AM	CGS
Benzo(g,h,i)perylene	**0.55**	ug/L	0.19	SW846 8270C	6/17/2009	2:16 AM	CGS
Benzo(k)fluoranthene	<0.46	ug/L	0.46	SW846 8270C	6/17/2009	2:16 AM	CGS
Chrysene	<0.83	ug/L	0.83	SW846 8270C	6/17/2009	2:16 AM	CGS
Dibenzo(a,h)anthracene	<0.46	ug/L	0.46	SW846 8270C	6/17/2009	2:16 AM	CGS
Fluoranthene	<0.83	ug/L	0.83	SW846 8270C	6/17/2009	2:16 AM	CGS
Fluorene	<0.83	ug/L	0.83	SW846 8270C	6/17/2009	2:16 AM	CGS
Indeno(1,2,3-cd)pyrene	**1.10**	ug/L	0.46	SW846 8270C	6/17/2009	2:16 AM	CGS

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
1-Methylnaphthalene	<0.93	ug/L	0.93	SW846 8270C	6/17/2009	2:16 AM	CGS
2-Methylnaphthalene	<0.93	ug/L	0.93	SW846 8270C	6/17/2009	2:16 AM	CGS
Naphthalene	<0.83	ug/L	0.83	SW846 8270C	6/17/2009	2:16 AM	CGS
Phenanthrene	<0.83	ug/L	0.83	SW846 8270C	6/17/2009	2:16 AM	CGS
Pyrene	<0.83	ug/L	0.83	SW846 8270C	6/17/2009	2:16 AM	CGS

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	<0.005	mg/L	0.005	SW846 7421	6/15/2009	3:01 PM	JAW

Analytical Testing Parameters

Client Sample ID: **MW-4** Collection Date: **6/11/2009**

Lab Sample ID: **0906223-04** Collection Time: **10:45 AM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<50.0	ug/L	50.0	SW846 8260B	6/12/2009	6:16 PM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	6/12/2009	6:16 PM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
Bromodichloromethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
2-Butanone (MEK)	<3.00	ug/L	3.00	SW846 8260B	6/12/2009	6:16 PM	JMS
n-Butylbenzene	<4.00	ug/L	4.00	SW846 8260B	6/12/2009	6:16 PM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	6/12/2009	6:16 PM	JMS
Carbon Tetrachloride	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
Chlorodibromomethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
Chloroform	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
Chloromethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
1,1-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
cis-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
1,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
Hexachlorobutadiene	<3.00	ug/L	3.00	SW846 8260B	6/12/2009	6:16 PM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	6/12/2009	6:16 PM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
4-Isopropyltoluene	<10.0	ug/L	10.0	SW846 8260B	6/12/2009	6:16 PM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	6/12/2009	6:16 PM	JMS
Methylene Chloride	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
Naphthalene	<10.0	ug/L	10.0	SW846 8260B	6/12/2009	6:16 PM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
Styrene	<4.00	ug/L	4.00	SW846 8260B	6/12/2009	6:16 PM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
1,1,2,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
Tetrachloroethene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	6/12/2009	6:16 PM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	6/12/2009	6:16 PM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
Trichloroethene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
Vinyl Chloride	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	6/12/2009	6:16 PM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	6/12/2009	6:16 PM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	6/12/2009	6:16 PM	JMS

- The Bromomethane concentration was determined by a library search of the appropriate retention time and mass spectral ion pattern.

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.85	ug/L	0.85	SW846 8270C	6/17/2009	2:56 AM	CGS
Acenaphthylene	<0.85	ug/L	0.85	SW846 8270C	6/17/2009	2:56 AM	CGS
Anthracene	<0.85	ug/L	0.85	SW846 8270C	6/17/2009	2:56 AM	CGS
Benzo(a)anthracene	<0.47	ug/L	0.47	SW846 8270C	6/17/2009	2:56 AM	CGS
Benzo(a)pyrene	<0.19	ug/L	0.19	SW846 8270C	6/17/2009	2:56 AM	CGS
Benzo(b)fluoranthene	0.71	ug/L	0.47	SW846 8270C	6/17/2009	2:56 AM	CGS
Benzo(g,h,i)perylene	<0.19	ug/L	0.19	SW846 8270C	6/17/2009	2:56 AM	CGS
Benzo(k)fluoranthene	<0.47	ug/L	0.47	SW846 8270C	6/17/2009	2:56 AM	CGS
Chrysene	<0.85	ug/L	0.85	SW846 8270C	6/17/2009	2:56 AM	CGS
Dibenzo(a,h)anthracene	<0.47	ug/L	0.47	SW846 8270C	6/17/2009	2:56 AM	CGS
Fluoranthene	<0.85	ug/L	0.85	SW846 8270C	6/17/2009	2:56 AM	CGS
Fluorene	<0.85	ug/L	0.85	SW846 8270C	6/17/2009	2:56 AM	CGS

Laboratory Project ID: 0906223

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Indeno(1,2,3-cd)pyrene	**0.93**	ug/L	0.47	SW846 8270C	6/17/2009	2:56 AM	CGS
1-Methylnaphthalene	<0.94	ug/L	0.94	SW846 8270C	6/17/2009	2:56 AM	CGS
2-Methylnaphthalene	<0.94	ug/L	0.94	SW846 8270C	6/17/2009	2:56 AM	CGS
Naphthalene	<0.85	ug/L	0.85	SW846 8270C	6/17/2009	2:56 AM	CGS
Phenanthrene	<0.85	ug/L	0.85	SW846 8270C	6/17/2009	2:56 AM	CGS
Pyrene	<0.85	ug/L	0.85	SW846 8270C	6/17/2009	2:56 AM	CGS

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	**0.013**	mg/L	0.005	SW846 7421	6/15/2009	3:05 PM	JAW

Report Comments:

Note: Due to the extremely short holding time of 15 minutes, the following test procedures, if reported, were performed outside the recommended holding time: Total Residual Chlorine, laboratory pH, Dissolved Oxygen, Orthophosphate, and Sulfite.

The **PQL** is the **Practical Quantitation Limit,** which is defined as the lowest quantitation level of an analyte that can be readily achieved within the specified limits of precision and accuracy of an analytical method during routine laboratory operating conditions. The value may be raised depending on the characteristics or behavior of the target analyte.

All samples were analyzed **"as received"** from the client. American Westech Inc. can only assume that all samples were collected and submitted by the CLIENT following the appropriate protocols set forth by the regulatory requirements. This document shall not be reproduced, except in full, without the written approval of American Westech Inc. If there are any questions pertaining to this laboratory report please contact a Client Services Coordinator or the Laboratory Director at (717) 651-9700.

Laboratory Certifications:

- NELAP accredited by the PADEP (22-00578) & NJDEP (PA019) for numerous solid and chemical materials and non-potable water parameters. Please refer to our certified parameter lists for each state for specific information on the approved methodologies.
- PADEP accredited for various drinking water parameters including: Volatile Organic Compounds, Metals, Inorganics, and Microbiology (22-00578). Please refer to our certified parameter list for specific information on the approved methodologies.

Reviewed and Approved By:

William W. Smith, Jr.
Laboratory Director

Date Reviewed and Approved:

6-22-09

AMERICAN Westech INCORPORATED

Laboratory Result Summary

Laboratory Project ID: 0909208

BL Companies
Scott Treherne
213 Market St.
6th Floor
Harrisburg, PA 17101

Contact: Scott Treherne
Project Name: Frankford & Darriah
Project Number: 00L629-B
Purchase Order Number: N/A
Sampled By: Greg Holtzman
Date Received: September 10, 2009
Time Received: 4:52 PM

Analytical Testing Parameters

Client Sample ID: **MW - 1**
Lab Sample ID: **0909208-01**

Collection Date: **9/10/2009**
Collection Time: **1:20 PM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<60.0	ug/L	60.0	SW846 8260B	9/11/2009	2:51 PM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	9/11/2009	2:51 PM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
Bromodichloromethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
2-Butanone (MEK)	<6.00	ug/L	6.00	SW846 8260B	9/11/2009	2:51 PM	JMS
n-Butylbenzene	<5.00	ug/L	5.00	SW846 8260B	9/11/2009	2:51 PM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	9/11/2009	2:51 PM	JMS
Carbon Tetrachloride	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
Chlorodibromomethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
Chloroform	<4.00	ug/L	4.00	SW846 8260B	9/11/2009	2:51 PM	JMS
Chloromethane	<4.00	ug/L	4.00	SW846 8260B	9/11/2009	2:51 PM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
1,2-Dibromo-3-chloropropane	<4.00	ug/L	4.00	SW846 8260B	9/11/2009	2:51 PM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
1,1-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
cis-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
1,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
Hexachlorobutadiene	<5.00	ug/L	5.00	SW846 8260B	9/11/2009	2:51 PM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	9/11/2009	2:51 PM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
4-Isopropyltoluene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	9/11/2009	2:51 PM	JMS
Methylene Chloride	<3.00	ug/L	3.00	SW846 8260B	9/11/2009	2:51 PM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
Naphthalene	<15.0	ug/L	15.0	SW846 8260B	9/11/2009	2:51 PM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
Styrene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
1,1,2,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
Tetrachloroethene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
1,2,3-Trichlorobenzene	<20.0	ug/L	20.0	SW846 8260B	9/11/2009	2:51 PM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	9/11/2009	2:51 PM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
Trichloroethene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
1,2,4-Trimethylbenzene	<3.00	ug/L	3.00	SW846 8260B	9/11/2009	2:51 PM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
Vinyl Chloride	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	9/11/2009	2:51 PM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	2:51 PM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	9/11/2009	2:51 PM	JMS

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<1.00	ug/L	1.00	SW846 8270C	9/15/2009	2:02 PM	CGS
Acenaphthylene	<1.00	ug/L	1.00	SW846 8270C	9/15/2009	2:02 PM	CGS
Anthracene	<1.00	ug/L	1.00	SW846 8270C	9/15/2009	2:02 PM	CGS
Benzo(a)anthracene	<0.50	ug/L	0.50	SW846 8270C	9/15/2009	2:02 PM	CGS
Benzo(a)pyrene	**0.42**	ug/L	0.20	SW846 8270C	9/15/2009	2:02 PM	CGS
Benzo(b)fluoranthene	**0.61**	ug/L	0.50	SW846 8270C	9/15/2009	2:02 PM	CGS
Benzo(g,h,i)perylene	**0.22**	ug/L	0.20	SW846 8270C	9/15/2009	2:02 PM	CGS
Benzo(k)fluoranthene	<0.50	ug/L	0.50	SW846 8270C	9/15/2009	2:02 PM	CGS
Chrysene	<0.50	ug/L	0.50	SW846 8270C	9/15/2009	2:02 PM	CGS
Dibenzo(a,h)anthracene	<0.50	ug/L	0.50	SW846 8270C	9/15/2009	2:02 PM	CGS
Fluoranthene	<1.00	ug/L	1.00	SW846 8270C	9/15/2009	2:02 PM	CGS
Fluorene	<1.00	ug/L	1.00	SW846 8270C	9/15/2009	2:02 PM	CGS
Indeno(1,2,3-cd)pyrene	<0.50	ug/L	0.50	SW846 8270C	9/15/2009	2:02 PM	CGS
1-Methylnaphthalene	<0.50	ug/L	0.50	SW846 8270C	9/15/2009	2:02 PM	CGS
2-Methylnaphthalene	<0.50	ug/L	0.50	SW846 8270C	9/15/2009	2:02 PM	CGS
Naphthalene	<0.50	ug/L	0.50	SW846 8270C	9/15/2009	2:02 PM	CGS

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Phenanthrene	<1.00	ug/L	1.00	SW846 8270C	9/15/2009	2:02 PM	CGS
Pyrene	<1.00	ug/L	1.00	SW846 8270C	9/15/2009	2:02 PM	CGS

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	<0.005	mg/L	0.005	SW846 7421	9/16/2009	4:05 AM	BEH

Analytical Testing Parameters

Client Sample ID: **MW - 2A** Collection Date: **9/10/2009**

Lab Sample ID: **0909208-02** Collection Time: **1:30 PM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<60.0	ug/L	60.0	SW846 8260B	9/11/2009	3:19 PM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	9/11/2009	3:19 PM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
Bromodichloromethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
2-Butanone (MEK)	<6.00	ug/L	6.00	SW846 8260B	9/11/2009	3:19 PM	JMS
n-Butylbenzene	<5.00	ug/L	5.00	SW846 8260B	9/11/2009	3:19 PM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	9/11/2009	3:19 PM	JMS
Carbon Tetrachloride	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
Chlorodibromomethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
Chloroform	<4.00	ug/L	4.00	SW846 8260B	9/11/2009	3:19 PM	JMS
Chloromethane	<4.00	ug/L	4.00	SW846 8260B	9/11/2009	3:19 PM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
1,2-Dibromo-3-chloropropane	<4.00	ug/L	4.00	SW846 8260B	9/11/2009	3:19 PM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
1,1-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
cis-1,2-Dichloroethene	**4.85**	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
1,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
Hexachlorobutadiene	<5.00	ug/L	5.00	SW846 8260B	9/11/2009	3:19 PM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	9/11/2009	3:19 PM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
4-Isopropyltoluene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	9/11/2009	3:19 PM	JMS
Methylene Chloride	<3.00	ug/L	3.00	SW846 8260B	9/11/2009	3:19 PM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
Naphthalene	<15.0	ug/L	15.0	SW846 8260B	9/11/2009	3:19 PM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
Styrene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
1,1,2,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
Tetrachloroethene	**27.1**	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
1,2,3-Trichlorobenzene	<20.0	ug/L	20.0	SW846 8260B	9/11/2009	3:19 PM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	9/11/2009	3:19 PM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
Trichloroethene	**3.18**	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
1,2,4-Trimethylbenzene	<3.00	ug/L	3.00	SW846 8260B	9/11/2009	3:19 PM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
Vinyl Chloride	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	9/11/2009	3:19 PM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:19 PM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	9/11/2009	3:19 PM	JMS

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<1.00	ug/L	1.00	SW846 8270C	9/15/2009	2:37 PM	CGS
Acenaphthylene	<1.00	ug/L	1.00	SW846 8270C	9/15/2009	2:37 PM	CGS
Anthracene	<1.00	ug/L	1.00	SW846 8270C	9/15/2009	2:37 PM	CGS
Benzo(a)anthracene	<0.50	ug/L	0.50	SW846 8270C	9/15/2009	2:37 PM	CGS
Benzo(a)pyrene	<0.20	ug/L	0.20	SW846 8270C	9/15/2009	2:37 PM	CGS
Benzo(b)fluoranthene	<0.50	ug/L	0.50	SW846 8270C	9/15/2009	2:37 PM	CGS
Benzo(g,h,i)perylene	<0.20	ug/L	0.20	SW846 8270C	9/15/2009	2:37 PM	CGS
Benzo(k)fluoranthene	<0.50	ug/L	0.50	SW846 8270C	9/15/2009	2:37 PM	CGS
Chrysene	<0.50	ug/L	0.50	SW846 8270C	9/15/2009	2:37 PM	CGS
Dibenzo(a,h)anthracene	<0.50	ug/L	0.50	SW846 8270C	9/15/2009	2:37 PM	CGS
Fluoranthene	<1.00	ug/L	1.00	SW846 8270C	9/15/2009	2:37 PM	CGS
Fluorene	<1.00	ug/L	1.00	SW846 8270C	9/15/2009	2:37 PM	CGS
Indeno(1,2,3-cd)pyrene	<0.50	ug/L	0.50	SW846 8270C	9/15/2009	2:37 PM	CGS
1-Methylnaphthalene	<0.50	ug/L	0.50	SW846 8270C	9/15/2009	2:37 PM	CGS
2-Methylnaphthalene	<0.50	ug/L	0.50	SW846 8270C	9/15/2009	2:37 PM	CGS
Naphthalene	<0.50	ug/L	0.50	SW846 8270C	9/15/2009	2:37 PM	CGS
Phenanthrene	<1.00	ug/L	1.00	SW846 8270C	9/15/2009	2:37 PM	CGS

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Pyrene	<1.00	ug/L	1.00	SW846 8270C	9/15/2009	2:37 PM	CGS

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	<0.005	mg/L	0.005	SW846 7421	9/16/2009	4:10 AM	BEH

Analytical Testing Parameters

Client Sample ID: **MW - 3** Collection Date: **9/10/2009**

Lab Sample ID: **0909208-03** Collection Time: **1:45 PM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<60.0	ug/L	60.0	SW846 8260B	9/11/2009	3:46 PM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	9/11/2009	3:46 PM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
Bromodichloromethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
2-Butanone (MEK)	<6.00	ug/L	6.00	SW846 8260B	9/11/2009	3:46 PM	JMS
n-Butylbenzene	<5.00	ug/L	5.00	SW846 8260B	9/11/2009	3:46 PM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	9/11/2009	3:46 PM	JMS
Carbon Tetrachloride	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
Chlorodibromomethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
Chloroform	**5.44**	ug/L	4.00	SW846 8260B	9/11/2009	3:46 PM	JMS
Chloromethane	<4.00	ug/L	4.00	SW846 8260B	9/11/2009	3:46 PM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
1,2-Dibromo-3-chloropropane	<4.00	ug/L	4.00	SW846 8260B	9/11/2009	3:46 PM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
1,1-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
cis-1,2-Dichloroethene	**9.32**	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
1,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Hexachlorobutadiene	<5.00	ug/L	5.00	SW846 8260B	9/11/2009	3:46 PM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	9/11/2009	3:46 PM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
4-Isopropyltoluene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	9/11/2009	3:46 PM	JMS
Methylene Chloride	<3.00	ug/L	3.00	SW846 8260B	9/11/2009	3:46 PM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
Naphthalene	<15.0	ug/L	15.0	SW846 8260B	9/11/2009	3:46 PM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
Styrene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
1,1,2,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
Tetrachloroethene	**57.0**	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
1,2,3-Trichlorobenzene	<20.0	ug/L	20.0	SW846 8260B	9/11/2009	3:46 PM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	9/11/2009	3:46 PM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
Trichloroethene	**4.61**	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
1,2,4-Trimethylbenzene	<3.00	ug/L	3.00	SW846 8260B	9/11/2009	3:46 PM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
Vinyl Chloride	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	9/11/2009	3:46 PM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	3:46 PM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	9/11/2009	3:46 PM	JMS

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<1.01	ug/L	1.01	SW846 8270C	9/15/2009	3:11 PM	CGS
Acenaphthylene	<1.01	ug/L	1.01	SW846 8270C	9/15/2009	3:11 PM	CGS
Anthracene	<1.01	ug/L	1.01	SW846 8270C	9/15/2009	3:11 PM	CGS
Benzo(a)anthracene	<0.51	ug/L	0.51	SW846 8270C	9/15/2009	3:11 PM	CGS
Benzo(a)pyrene	<0.20	ug/L	0.20	SW846 8270C	9/15/2009	3:11 PM	CGS
Benzo(b)fluoranthene	<0.51	ug/L	0.51	SW846 8270C	9/15/2009	3:11 PM	CGS
Benzo(g,h,i)perylene	<0.20	ug/L	0.20	SW846 8270C	9/15/2009	3:11 PM	CGS
Benzo(k)fluoranthene	<0.51	ug/L	0.51	SW846 8270C	9/15/2009	3:11 PM	CGS
Chrysene	<0.51	ug/L	0.51	SW846 8270C	9/15/2009	3:11 PM	CGS
Dibenzo(a,h)anthracene	<0.51	ug/L	0.51	SW846 8270C	9/15/2009	3:11 PM	CGS
Fluoranthene	<1.01	ug/L	1.01	SW846 8270C	9/15/2009	3:11 PM	CGS
Fluorene	<1.01	ug/L	1.01	SW846 8270C	9/15/2009	3:11 PM	CGS
Indeno(1,2,3-cd)pyrene	<0.51	ug/L	0.51	SW846 8270C	9/15/2009	3:11 PM	CGS
1-Methylnaphthalene	<0.51	ug/L	0.51	SW846 8270C	9/15/2009	3:11 PM	CGS
2-Methylnaphthalene	<0.51	ug/L	0.51	SW846 8270C	9/15/2009	3:11 PM	CGS
Naphthalene	<0.51	ug/L	0.51	SW846 8270C	9/15/2009	3:11 PM	CGS
Phenanthrene	<1.01	ug/L	1.01	SW846 8270C	9/15/2009	3:11 PM	CGS
Pyrene	<1.01	ug/L	1.01	SW846 8270C	9/15/2009	3:11 PM	CGS

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	<0.005	mg/L	0.005	SW846 7421	9/16/2009	4:14 AM	BEH

Analytical Testing Parameters

Client Sample ID: **MW - 4** Collection Date: **9/10/2009**

Lab Sample ID: **0909208-04** Collection Time: **1:50 PM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<60.0	ug/L	60.0	SW846 8260B	9/11/2009	4:13 PM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	9/11/2009	4:13 PM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
Bromodichloromethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
2-Butanone (MEK)	<6.00	ug/L	6.00	SW846 8260B	9/11/2009	4:13 PM	JMS
n-Butylbenzene	<5.00	ug/L	5.00	SW846 8260B	9/11/2009	4:13 PM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	9/11/2009	4:13 PM	JMS
Carbon Tetrachloride	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
Chlorodibromomethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
Chloroform	<4.00	ug/L	4.00	SW846 8260B	9/11/2009	4:13 PM	JMS
Chloromethane	<4.00	ug/L	4.00	SW846 8260B	9/11/2009	4:13 PM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
1,2-Dibromo-3-chloropropane	<4.00	ug/L	4.00	SW846 8260B	9/11/2009	4:13 PM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
1,1-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
cis-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
1,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
Hexachlorobutadiene	<5.00	ug/L	5.00	SW846 8260B	9/11/2009	4:13 PM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	9/11/2009	4:13 PM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
4-Isopropyltoluene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	9/11/2009	4:13 PM	JMS
Methylene Chloride	<3.00	ug/L	3.00	SW846 8260B	9/11/2009	4:13 PM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
Naphthalene	<15.0	ug/L	15.0	SW846 8260B	9/11/2009	4:13 PM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
Styrene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
1,1,2,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
Tetrachloroethene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
1,2,3-Trichlorobenzene	<20.0	ug/L	20.0	SW846 8260B	9/11/2009	4:13 PM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	9/11/2009	4:13 PM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
Trichloroethene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
1,2,4-Trimethylbenzene	<3.00	ug/L	3.00	SW846 8260B	9/11/2009	4:13 PM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
Vinyl Chloride	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	9/11/2009	4:13 PM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	9/11/2009	4:13 PM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	9/11/2009	4:13 PM	JMS

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<1.01	ug/L	1.01	SW846 8270C	9/15/2009	3:46 PM	CGS
Acenaphthylene	<1.01	ug/L	1.01	SW846 8270C	9/15/2009	3:46 PM	CGS
Anthracene	<1.01	ug/L	1.01	SW846 8270C	9/15/2009	3:46 PM	CGS
Benzo(a)anthracene	<0.51	ug/L	0.51	SW846 8270C	9/15/2009	3:46 PM	CGS
Benzo(a)pyrene	<0.20	ug/L	0.20	SW846 8270C	9/15/2009	3:46 PM	CGS
Benzo(b)fluoranthene	<0.51	ug/L	0.51	SW846 8270C	9/15/2009	3:46 PM	CGS
Benzo(g,h,i)perylene	<0.20	ug/L	0.20	SW846 8270C	9/15/2009	3:46 PM	CGS
Benzo(k)fluoranthene	<0.51	ug/L	0.51	SW846 8270C	9/15/2009	3:46 PM	CGS
Chrysene	<0.51	ug/L	0.51	SW846 8270C	9/15/2009	3:46 PM	CGS
Dibenzo(a,h)anthracene	<0.51	ug/L	0.51	SW846 8270C	9/15/2009	3:46 PM	CGS
Fluoranthene	<1.01	ug/L	1.01	SW846 8270C	9/15/2009	3:46 PM	CGS
Fluorene	<1.01	ug/L	1.01	SW846 8270C	9/15/2009	3:46 PM	CGS
Indeno(1,2,3-cd)pyrene	<0.51	ug/L	0.51	SW846 8270C	9/15/2009	3:46 PM	CGS
1-Methylnaphthalene	<0.51	ug/L	0.51	SW846 8270C	9/15/2009	3:46 PM	CGS
2-Methylnaphthalene	<0.51	ug/L	0.51	SW846 8270C	9/15/2009	3:46 PM	CGS
Naphthalene	<0.51	ug/L	0.51	SW846 8270C	9/15/2009	3:46 PM	CGS
Phenanthrene	<1.01	ug/L	1.01	SW846 8270C	9/15/2009	3:46 PM	CGS
Pyrene	<1.01	ug/L	1.01	SW846 8270C	9/15/2009	3:46 PM	CGS

Laboratory Project ID: 0909208

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	**0.023**	mg/L	0.005	SW846 7421	9/16/2009	4:19 AM	BEH

Report Comments:

The **PQL** is the **Practical Quantitation Limit,** which is defined as the lowest quantitation level of an analyte that can be readily achieved within the specified limits of precision and accuracy of an analytical method during routine laboratory operating conditions. The value may be raised depending on the characteristics or behavior of the target analyte.

All samples were analyzed **"as received"** from the client. American Westech Inc. can only assume that all samples were collected and submitted by the CLIENT following the appropriate protocols set forth by the regulatory requirements. This document shall not be reproduced, except in full, without the written approval of American Westech Inc. If there are any questions pertaining to this laboratory report please contact a Client Services Coordinator or the Laboratory Director at (717) 651-9700.

Laboratory Certifications:

- NELAP accredited by the PADEP (22-00578) & NJDEP (PA019) for numerous solid and chemical materials and non-potable water parameters. Please refer to our certified parameter lists for each state for specific information on the approved methodologies.
- PADEP accredited for various drinking water parameters including: Volatile Organic Compounds, Metals, Inorganics, and Microbiology (22-00578). Please refer to our certified parameter list for specific information on the approved methodologies

Reviewed and Approved By:

William W. Smith, Jr.
Laboratory Director

Date Reviewed and Approved:

9-17-09

AMERICAN Westech INCORPORATED

American Westech Incorporated
4359 Linglestown Road, Harrisburg, PA 17112
Phone: (717) 651-9700 Fax: (717) 657-0752

SAMPLE SUBMITTAL FORM

ACCREDITED IN ACCORDANCE WITH nelac

NELAP accredited by PADEP & NJDEP. Please call for specific parameter accreditations.

PADEP ID (22-00578) - NJDEP ID (PA019)

LABORATORY PROJECT NUMBER

0909208

SUBMIT LAB REPORT TO (Westech Client Information):	SUBMIT INVOICE TO:
Company: BL COMPANIES	Company:
Contact: SCOTT TREHERNE	Contact: BL COMPANIES
Address: 213 MARKET STREET 6TH FLOOR	Address:
City: HARRISBURG State: PA Zip: 17101	City: State: Zip:
Phone: 717-651-9850 Fax: 717-651-9858	Phone: Fax:
	Invoice Delivery: ☑ Mail w/Report ☐ Email (enter address below)

CLIENT PROJECT INFORMATION

Project Name: FRANKFORD & DARRAH
Project/PO No.: COL 629-B
Westech Quote/MSA No.:
Purpose: ☑ *Regulatory* ☐ *Informational* ☐ *PWSID:*
Data Deliverables: ☐ Level I ☐ Level II ☐ Level III ☐ Level IV
Report Delivery: ☐ Mail ☐ Fax ☑ Email (email address): STREHERNE@BLCOMPANIES.COM
Results TAT Requested * : ☐ **6-10 Day (Standard)** **OR** ☐ **RUSH* (Indicate Due Date):** ☑ 5 DAY

WESTECH Field Services Used? ☑ NO ☐ YES - *(See Field Services Log)*

SAMPLE TYPE (Key): SS = Solid/Sludge; OL = Oil; DW = Drinking Water; GW = Groundwater; SW = Storm/Surface Water; WW = Wastewater; AR = Air; O = Other: _____

* Turnaround times based on business days only. All "RUSH" TATs must be pre-arranged with WESTECH and are subject to "RUSH" surcharges.

SAMPLE RECEIVING INFORMATION *(lab use only)*

Samples received on ice? Temp: 7.8 °C	Y	N	NA
Cooler temp. within acceptable limits?	Y	N	NA
Correct bottles used for requested analysis?	Y	N	NA
Sample bottles in good condition (unbroken)?	Y	N	NA
Samples within required holding time?	Y	N	NA
Zero headspace samples collected correctly?	Y	N	NA
Samples preserved to pH <2 and/or pH >12?	Y	N	NA

Shipping Carrier? ☑ Drop Off ☐ WESTECH Pickup ☐ Outside Courier:

LAB ID	SAMPLE IDENTIFICATION / LOCATION DESCRIPTION	SAMPLE DATE	SAMPLE TIME	Total # of Bottles	Sample Type: (See "Sample Type" Key)	Grab "G" or Composite "C"	VOCs (8260-B)	PAHs (8270-C)	DISS. PB
01	MW-1	9.10.09	1320	5	GW	G	X	X	X
02	MW-2A	↓	1330	5	↓	↓	X	X	X
03	MW-3		1345	5			X	X	X
04	MW-4		1350	5			X	X	X
05									
06									
07									
08									
09									
10									

	PRINT NAME	SIGNATURE	DATE	TIME
Sampled By:	GREG HOLTZMAN		9.10.09	1400
Relinquished By (Sampler):	GREG HOLTZMAN		9.10.09	1652
Accepted By:				
Relinquished to WESTECH By:				
Accepted at WESTECH By:	Danielle Rile		9/10/09	1652

COMMENTS OR SPECIAL INSTRUCTIONS

* SAMPLE RESULTS MUST MEET MINIMUM PA ACT 2 REQUIREMENTS

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WHITE - Original YELLOW - Laboratory Copy PINK - Client Copy

AMERICAN Westech INCORPORATED

Laboratory Result Summary

Laboratory Project ID: 0912032

BL Companies
John Thatcher
213 Market St.
6th Floor
Harrisburg, PA 17101

Contact: John Thatcher
Project Name: Frankfort & Darrah
Project Number: 00L629-B
Purchase Order Number: N/A
Sampled By: Steve Vedder
Date Received: December 2, 2009
Time Received: 3:22 PM

Analytical Testing Parameters

Client Sample ID: **MW-1**
Lab Sample ID: **0912032-01**
Collection Date: **12/1/2009**
Collection Time: **3:45 PM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<60.0	ug/L	60.0	SW846 8260B	12/4/2009	4:05 PM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	12/4/2009	4:05 PM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
Bromodichloromethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
2-Butanone (MEK)	<6.00	ug/L	6.00	SW846 8260B	12/4/2009	4:05 PM	JMS
n-Butylbenzene	<5.00	ug/L	5.00	SW846 8260B	12/4/2009	4:05 PM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	12/4/2009	4:05 PM	JMS
Carbon Tetrachloride	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
Chlorodibromomethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
Chloroform	<4.00	ug/L	4.00	SW846 8260B	12/4/2009	4:05 PM	JMS
Chloromethane	<4.00	ug/L	4.00	SW846 8260B	12/4/2009	4:05 PM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
1,2-Dibromo-3-chloropropane	<4.00	ug/L	4.00	SW846 8260B	12/4/2009	4:05 PM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
1,1-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
cis-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
1,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
Hexachlorobutadiene	<5.00	ug/L	5.00	SW846 8260B	12/4/2009	4:05 PM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	12/4/2009	4:05 PM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
4-Isopropyltoluene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	12/4/2009	4:05 PM	JMS
Methylene Chloride	<3.00	ug/L	3.00	SW846 8260B	12/4/2009	4:05 PM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
Naphthalene	<15.0	ug/L	15.0	SW846 8260B	12/4/2009	4:05 PM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
Styrene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
1,1,2,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
Tetrachloroethene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
1,2,3-Trichlorobenzene	<20.0	ug/L	20.0	SW846 8260B	12/4/2009	4:05 PM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	12/4/2009	4:05 PM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
Trichloroethene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
1,2,4-Trimethylbenzene	<3.00	ug/L	3.00	SW846 8260B	12/4/2009	4:05 PM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
Vinyl Chloride	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	12/4/2009	4:05 PM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:05 PM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	12/4/2009	4:05 PM	JMS

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.91	ug/L	0.91	SW846 8270C	12/11/2009	1:48 PM	BEH
Acenaphthylene	<0.91	ug/L	0.91	SW846 8270C	12/11/2009	1:48 PM	BEH
Anthracene	<0.91	ug/L	0.91	SW846 8270C	12/11/2009	1:48 PM	BEH
Benzo(a)anthracene	<0.51	ug/L	0.51	SW846 8270C	12/11/2009	1:48 PM	BEH
Benzo(a)pyrene	**0.42**	ug/L	0.20	SW846 8270C	12/11/2009	1:48 PM	BEH
Benzo(b)fluoranthene	**0.56**	ug/L	0.51	SW846 8270C	12/11/2009	1:48 PM	BEH
Benzo(g,h,i)perylene	**0.30**	ug/L	0.20	SW846 8270C	12/11/2009	1:48 PM	BEH
Benzo(k)fluoranthene	<0.51	ug/L	0.51	SW846 8270C	12/11/2009	1:48 PM	BEH
Chrysene	<0.91	ug/L	0.91	SW846 8270C	12/11/2009	1:48 PM	BEH
Dibenzo(a,h)anthracene	<0.51	ug/L	0.51	SW846 8270C	12/11/2009	1:48 PM	BEH
Fluoranthene	<0.91	ug/L	0.91	SW846 8270C	12/11/2009	1:48 PM	BEH
Fluorene	<0.91	ug/L	0.91	SW846 8270C	12/11/2009	1:48 PM	BEH
Indeno(1,2,3-cd)pyrene	<0.51	ug/L	0.51	SW846 8270C	12/11/2009	1:48 PM	BEH
1-Methylnaphthalene	<1.01	ug/L	1.01	SW846 8270C	12/11/2009	1:48 PM	BEH
2-Methylnaphthalene	<1.01	ug/L	1.01	SW846 8270C	12/11/2009	1:48 PM	BEH

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Naphthalene	<0.91	ug/L	0.91	SW846 8270C	12/11/2009	1:48 PM	BEH
Phenanthrene	<0.91	ug/L	0.91	SW846 8270C	12/11/2009	1:48 PM	BEH
Pyrene	<0.91	ug/L	0.91	SW846 8270C	12/11/2009	1:48 PM	BEH

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	<0.005	mg/L	0.005	SW846 7421	12/7/2009	9:44 PM	JAW

Analytical Testing Parameters

Client Sample ID: **MW-2A** Collection Date: **12/1/2009**

Lab Sample ID: **0912032-02** Collection Time: **4:15 PM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<60.0	ug/L	60.0	SW846 8260B	12/4/2009	4:33 PM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	12/4/2009	4:33 PM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
Bromodichloromethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
2-Butanone (MEK)	<6.00	ug/L	6.00	SW846 8260B	12/4/2009	4:33 PM	JMS
n-Butylbenzene	<5.00	ug/L	5.00	SW846 8260B	12/4/2009	4:33 PM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	12/4/2009	4:33 PM	JMS
Carbon Tetrachloride	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
Chlorodibromomethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
Chloroform	<4.00	ug/L	4.00	SW846 8260B	12/4/2009	4:33 PM	JMS
Chloromethane	<4.00	ug/L	4.00	SW846 8260B	12/4/2009	4:33 PM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
1,2-Dibromo-3-chloropropane	<4.00	ug/L	4.00	SW846 8260B	12/4/2009	4:33 PM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
1,1-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
cis-1,2-Dichloroethene	**6.70**	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
1,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
Hexachlorobutadiene	<5.00	ug/L	5.00	SW846 8260B	12/4/2009	4:33 PM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	12/4/2009	4:33 PM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
4-Isopropyltoluene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	12/4/2009	4:33 PM	JMS
Methylene Chloride	<3.00	ug/L	3.00	SW846 8260B	12/4/2009	4:33 PM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
Naphthalene	<15.0	ug/L	15.0	SW846 8260B	12/4/2009	4:33 PM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
Styrene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
1,1,2,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
Tetrachloroethene	**21.8**	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
1,2,3-Trichlorobenzene	<20.0	ug/L	20.0	SW846 8260B	12/4/2009	4:33 PM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	12/4/2009	4:33 PM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
Trichloroethene	**2.61**	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
1,2,4-Trimethylbenzene	<3.00	ug/L	3.00	SW846 8260B	12/4/2009	4:33 PM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
Vinyl Chloride	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	12/4/2009	4:33 PM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	4:33 PM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	12/4/2009	4:33 PM	JMS

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.85	ug/L	0.85	SW846 8270C	12/11/2009	2:27 PM	BEH
Acenaphthylene	<0.85	ug/L	0.85	SW846 8270C	12/11/2009	2:27 PM	BEH
Anthracene	<0.85	ug/L	0.85	SW846 8270C	12/11/2009	2:27 PM	BEH
Benzo(a)anthracene	<0.47	ug/L	0.47	SW846 8270C	12/11/2009	2:27 PM	BEH
Benzo(a)pyrene	<0.19	ug/L	0.19	SW846 8270C	12/11/2009	2:27 PM	BEH
Benzo(b)fluoranthene	<0.47	ug/L	0.47	SW846 8270C	12/11/2009	2:27 PM	BEH
Benzo(g,h,i)perylene	<0.19	ug/L	0.19	SW846 8270C	12/11/2009	2:27 PM	BEH
Benzo(k)fluoranthene	<0.47	ug/L	0.47	SW846 8270C	12/11/2009	2:27 PM	BEH
Chrysene	<0.85	ug/L	0.85	SW846 8270C	12/11/2009	2:27 PM	BEH
Dibenzo(a,h)anthracene	<0.47	ug/L	0.47	SW846 8270C	12/11/2009	2:27 PM	BEH
Fluoranthene	<0.85	ug/L	0.85	SW846 8270C	12/11/2009	2:27 PM	BEH
Fluorene	<0.85	ug/L	0.85	SW846 8270C	12/11/2009	2:27 PM	BEH
Indeno(1,2,3-cd)pyrene	<0.47	ug/L	0.47	SW846 8270C	12/11/2009	2:27 PM	BEH
1-Methylnaphthalene	<0.94	ug/L	0.94	SW846 8270C	12/11/2009	2:27 PM	BEH

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
2-Methylnaphthalene	<0.94	ug/L	0.94	SW846 8270C	12/11/2009	2:27 PM	BEH
Naphthalene	<0.85	ug/L	0.85	SW846 8270C	12/11/2009	2:27 PM	BEH
Phenanthrene	<0.85	ug/L	0.85	SW846 8270C	12/11/2009	2:27 PM	BEH
Pyrene	<0.85	ug/L	0.85	SW846 8270C	12/11/2009	2:27 PM	BEH

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	<0.005	mg/L	0.005	SW846 7421	12/7/2009	9:49 PM	JAW

Analytical Testing Parameters

Client Sample ID: **MW-3** Collection Date: **12/1/2009**

Lab Sample ID: **0912032-03** Collection Time: **4:30 PM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<60.0	ug/L	60.0	SW846 8260B	12/4/2009	5:00 PM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	12/4/2009	5:00 PM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
Bromodichloromethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
2-Butanone (MEK)	<6.00	ug/L	6.00	SW846 8260B	12/4/2009	5:00 PM	JMS
n-Butylbenzene	<5.00	ug/L	5.00	SW846 8260B	12/4/2009	5:00 PM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	12/4/2009	5:00 PM	JMS
Carbon Tetrachloride	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
Chlorodibromomethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
Chloroform	<4.00	ug/L	4.00	SW846 8260B	12/4/2009	5:00 PM	JMS
Chloromethane	<4.00	ug/L	4.00	SW846 8260B	12/4/2009	5:00 PM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
1,2-Dibromo-3-chloropropane	<4.00	ug/L	4.00	SW846 8260B	12/4/2009	5:00 PM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
1,1-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
cis-1,2-Dichloroethene	**8.34**	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
1,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
Hexachlorobutadiene	<5.00	ug/L	5.00	SW846 8260B	12/4/2009	5:00 PM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	12/4/2009	5:00 PM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
4-Isopropyltoluene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	12/4/2009	5:00 PM	JMS
Methylene Chloride	<3.00	ug/L	3.00	SW846 8260B	12/4/2009	5:00 PM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
Naphthalene	<15.0	ug/L	15.0	SW846 8260B	12/4/2009	5:00 PM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
Styrene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
1,1,2,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
Tetrachloroethene	**41.3**	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
1,2,3-Trichlorobenzene	<20.0	ug/L	20.0	SW846 8260B	12/4/2009	5:00 PM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	12/4/2009	5:00 PM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
Trichloroethene	**3.13**	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
1,2,4-Trimethylbenzene	<3.00	ug/L	3.00	SW846 8260B	12/4/2009	5:00 PM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
Vinyl Chloride	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	12/4/2009	5:00 PM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:00 PM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	12/4/2009	5:00 PM	JMS

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.90	ug/L	0.90	SW846 8270C	12/11/2009	3:07 PM	BEH
Acenaphthylene	<0.90	ug/L	0.90	SW846 8270C	12/11/2009	3:07 PM	BEH
Anthracene	<0.90	ug/L	0.90	SW846 8270C	12/11/2009	3:07 PM	BEH
Benzo(a)anthracene	<0.50	ug/L	0.50	SW846 8270C	12/11/2009	3:07 PM	BEH
Benzo(a)pyrene	<0.20	ug/L	0.20	SW846 8270C	12/11/2009	3:07 PM	BEH
Benzo(b)fluoranthene	<0.50	ug/L	0.50	SW846 8270C	12/11/2009	3:07 PM	BEH
Benzo(g,h,i)perylene	<0.20	ug/L	0.20	SW846 8270C	12/11/2009	3:07 PM	BEH
Benzo(k)fluoranthene	<0.50	ug/L	0.50	SW846 8270C	12/11/2009	3:07 PM	BEH
Chrysene	<0.90	ug/L	0.90	SW846 8270C	12/11/2009	3:07 PM	BEH
Dibenzo(a,h)anthracene	<0.50	ug/L	0.50	SW846 8270C	12/11/2009	3:07 PM	BEH
Fluoranthene	<0.90	ug/L	0.90	SW846 8270C	12/11/2009	3:07 PM	BEH
Fluorene	<0.90	ug/L	0.90	SW846 8270C	12/11/2009	3:07 PM	BEH
Indeno(1,2,3-cd)pyrene	<0.50	ug/L	0.50	SW846 8270C	12/11/2009	3:07 PM	BEH

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
1-Methylnaphthalene	<1.00	ug/L	1.00	SW846 8270C	12/11/2009	3:07 PM	BEH
2-Methylnaphthalene	<1.00	ug/L	1.00	SW846 8270C	12/11/2009	3:07 PM	BEH
Naphthalene	<0.90	ug/L	0.90	SW846 8270C	12/11/2009	3:07 PM	BEH
Phenanthrene	<0.90	ug/L	0.90	SW846 8270C	12/11/2009	3:07 PM	BEH
Pyrene	<0.90	ug/L	0.90	SW846 8270C	12/11/2009	3:07 PM	BEH

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	<0.005	mg/L	0.005	SW846 7421	12/7/2009	9:53 PM	JAW

Analytical Testing Parameters

Client Sample ID: **MW-4** Collection Date: **12/1/2009**

Lab Sample ID: **0912032-04** Collection Time: **4:05 PM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<60.0	ug/L	60.0	SW846 8260B	12/4/2009	5:28 PM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	12/4/2009	5:28 PM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
Bromodichloromethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
2-Butanone (MEK)	<6.00	ug/L	6.00	SW846 8260B	12/4/2009	5:28 PM	JMS
n-Butylbenzene	<5.00	ug/L	5.00	SW846 8260B	12/4/2009	5:28 PM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	12/4/2009	5:28 PM	JMS
Carbon Tetrachloride	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
Chlorodibromomethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
Chloroform	<4.00	ug/L	4.00	SW846 8260B	12/4/2009	5:28 PM	JMS
Chloromethane	<4.00	ug/L	4.00	SW846 8260B	12/4/2009	5:28 PM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
1,2-Dibromo-3-chloropropane	<4.00	ug/L	4.00	SW846 8260B	12/4/2009	5:28 PM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
1,1-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
cis-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
1,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS

Laboratory Project ID: 0912032

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
Hexachlorobutadiene	<5.00	ug/L	5.00	SW846 8260B	12/4/2009	5:28 PM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	12/4/2009	5:28 PM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
4-Isopropyltoluene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	12/4/2009	5:28 PM	JMS
Methylene Chloride	<3.00	ug/L	3.00	SW846 8260B	12/4/2009	5:28 PM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
Naphthalene	<15.0	ug/L	15.0	SW846 8260B	12/4/2009	5:28 PM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
Styrene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
1,1,2,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
Tetrachloroethene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
1,2,3-Trichlorobenzene	<20.0	ug/L	20.0	SW846 8260B	12/4/2009	5:28 PM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	12/4/2009	5:28 PM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
Trichloroethene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
1,2,4-Trimethylbenzene	<3.00	ug/L	3.00	SW846 8260B	12/4/2009	5:28 PM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
Vinyl Chloride	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	12/4/2009	5:28 PM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	12/4/2009	5:28 PM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	12/4/2009	5:28 PM	JMS

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.90	ug/L	0.90	SW846 8270C	12/11/2009	3:45 PM	BEH
Acenaphthylene	<0.90	ug/L	0.90	SW846 8270C	12/11/2009	3:45 PM	BEH
Anthracene	<0.90	ug/L	0.90	SW846 8270C	12/11/2009	3:45 PM	BEH
Benzo(a)anthracene	<0.50	ug/L	0.50	SW846 8270C	12/11/2009	3:45 PM	BEH
Benzo(a)pyrene	<0.20	ug/L	0.20	SW846 8270C	12/11/2009	3:45 PM	BEH
Benzo(b)fluoranthene	<0.50	ug/L	0.50	SW846 8270C	12/11/2009	3:45 PM	BEH
Benzo(g,h,i)perylene	<0.20	ug/L	0.20	SW846 8270C	12/11/2009	3:45 PM	BEH
Benzo(k)fluoranthene	<0.50	ug/L	0.50	SW846 8270C	12/11/2009	3:45 PM	BEH
Chrysene	<0.90	ug/L	0.90	SW846 8270C	12/11/2009	3:45 PM	BEH
Dibenzo(a,h)anthracene	<0.50	ug/L	0.50	SW846 8270C	12/11/2009	3:45 PM	BEH
Fluoranthene	<0.90	ug/L	0.90	SW846 8270C	12/11/2009	3:45 PM	BEH
Fluorene	<0.90	ug/L	0.90	SW846 8270C	12/11/2009	3:45 PM	BEH

Laboratory Project ID: 0912032

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Indeno(1,2,3-cd)pyrene	<0.50	ug/L	0.50	SW846 8270C	12/11/2009	3:45 PM	BEH
1-Methylnaphthalene	<1.00	ug/L	1.00	SW846 8270C	12/11/2009	3:45 PM	BEH
2-Methylnaphthalene	<1.00	ug/L	1.00	SW846 8270C	12/11/2009	3:45 PM	BEH
Naphthalene	<0.90	ug/L	0.90	SW846 8270C	12/11/2009	3:45 PM	BEH
Phenanthrene	<0.90	ug/L	0.90	SW846 8270C	12/11/2009	3:45 PM	BEH
Pyrene	<0.90	ug/L	0.90	SW846 8270C	12/11/2009	3:45 PM	BEH

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	**0.016**	mg/L	0.005	SW846 7421	12/7/2009	9:58 PM	JAW

Report Comments:

The **PQL** is the **Practical Quantitation Limit**, which is defined as the lowest quantitation level of an analyte that can be readily achieved within the specified limits of precision and accuracy of an analytical method during routine laboratory operating conditions. The value may be raised depending on the characteristics or behavior of the target analyte.

All samples were analyzed **"as received"** from the client. American Westech Inc. can only assume that all samples were collected and submitted by the CLIENT following the appropriate protocols set forth by the regulatory requirements. This document shall not be reproduced, except in full, without the written approval of American Westech Inc. If there are any questions pertaining to this laboratory report please contact a Client Services Coordinator or the Laboratory Director at (717) 651-9700.

Laboratory Certifications:

- NELAP accredited by the PADEP (22-00578) & NJDEP (PA019) for numerous solid and chemical materials and non-potable water parameters. Please refer to our certified parameter lists for each state for specific information on the approved methodologies.
- PADEP accredited for various drinking water parameters including: Volatile Organic Compounds, Metals, Inorganics, and Microbiology (22-00578). Please refer to our certified parameter list for specific information on the approved methodologies.

Reviewed and Approved By:

William W. Smith, Jr.
Laboratory Director

Date Reviewed and Approved:

12-21-09

AMERICAN Westech INCORPORATED

AMERICAN WESTECH, INC.

4359 Linglestown Road, Harrisburg, PA 17112, (717) 651-9700

1015 Bridge Road, Suite D, Collegeville, PA 19426, (610) 489-1234

SAMPLE SUBMITTAL FORM

ACCREDITED IN ACCORDANCE WITH nelac

PADEP ID (22-00578) - NJDEP ID (PA019)

NELAP accredited by PADEP & NJDEP. Please call for specific parameter accreditations.

LABORATORY PROJECT NUMBER

0912032

SUBMIT LAB REPORT TO (Westech Client Information):			SUBMIT INVOICE TO:		
Company:	BC Companies		Company:		
Contact:	John Thatcher		Contact:		
Address:			Address:		
Address:			Address:		
City:	State:	Zip:	City:	State:	Zip:
Phone:	Fax:		Phone:	Fax:	
Report Delivery: ☐ Mail ☐ Fax ☐ Email (enter address below)			Invoice Delivery: ☐ Mail ☐ Email (enter address below)		

SAMPLE RECEIVING INFORMATION (lab use only)				
Samples received on ice? Temp: 4.7 °C	Y	N	NA	
Cooler temp. within acceptable limits?	Y	N	NA	
Correct bottles/enough volume sent for analysis?	Y	N	NA	
Sample bottles in good condition (unbroken)?	Y	N	NA	
Samples within required holding time?	Y	N	NA	
Zero headspace samples collected correctly?	Y	N	NA	
Samples preserved to pH <2 and/or pH >12?	Y	N	NA	

Shipping Carrier? ☑ Drop Off ☐ WESTECH Pickup ☐ Outside Courier:

CLIENT PROJECT INFORMATION (Required)

Project Name: Frankfort & Darrah (FD)

Project/PO Number: 00L629-B

Purpose: ☐ *Regulatory* ☐ *Informational* ☐ *PWSID:*

WESTECH Field Services Used? ☐ NO ☐ YES - *(See Field Services Log)*

Westech Quote/MSA No.:

Data Deliverables: ☐ *Level I (Standard)* OR

Additional Fee Deliverables: ☐ *Level II* ☐ *Level III* ☐ *Level IV*

Results TAT Requested * : ☒ 6-10 Day (Standard) OR ☐ RUSH** (INDICATE DUE DATE):

NOTES: *Turnaround times begin at 5pm on the day the samples were received by WESTECH. Results will be considered due by 5pm on the due date.

**RUSH TATs will include surcharge unless otherwise agreed to in writing and must be pre-arranged to ensure the due date can be met.

SS = Solid or Sludge
GW = Groundwater
WW = Wastewater
DW = Drinking Water
SW = Storm or Surface Water
OL = Oil A = Air O = Other

LAB ID	SAMPLE IDENTIFICATION / LOCATION DESCRIPTION	SAMPLED BY	SAMPLE DATE	SAMPLE TIME	Total # of Containers	Sample Type:	Grab "G" or Composite "C"	VOCs	PAHs	dissolved lead
01	MW-1	SW	12/1/09	1545	5	GW	G	X	X	X
02	MW-2A	"	"	1615	1	"	"	X		
03	MW-3	"	"	1630	1	"	"	X		
04	MW-4	"	"	1605	1	"	"	X		
05										
06										
07										
08										
09										
10										

	PRINT NAME	SIGNATURE	DATE	TIME
Relinquished by CLIENT:	Steve Vedder	Steve Vedder	12/2/09	1500
Accepted by WESTECH:	Scott V. Wenner	Scott V. Wenner	12/2/09	1500
Relinquished by WESTECH:				
Accepted by WESTECH:				
Relinquished by WESTECH:				
Accepted by WESTECH:				
Relinquished by WESTECH:				
Accepted at WESTECH Lab:	Danielle Love	Danielle Love	12/2/09	1522

COMMENTS, NOTES, OR SPECIAL INSTRUCTIONS

By relinquishing this form to WESTECH, I hereby agree to the terms & conditions printed on the reverse side. *WHITE - Original YELLOW - Laboratory Copy PINK - Client Copy*

AMERICAN Westech INCORPORATED

Laboratory Result Summary

Laboratory Project ID: 1003035

BL Companies
Scott Treherne
213 Market St.
6th Floor
Harrisburg, PA 17101

Contact: Scott Treherne
Project Name: Frankford & Darrah
Project Number: 00L629-B
Purchase Order Number: N/A
Sampled By: Greg Holtzman
Date Received: March 3, 2010
Time Received: 8:37 AM

Analytical Testing Parameters

Client Sample ID: **MW-1**
Lab Sample ID: **1003035-01**
Collection Date: **3/2/2010**
Collection Time: **1:15 PM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<50.0	ug/L	50.0	SW846 8260B	3/5/2010	12:19 AM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	12:19 AM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
Bromodichloromethane	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	12:19 AM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
2-Butanone (MEK)	<3.00	ug/L	3.00	SW846 8260B	3/5/2010	12:19 AM	JMS
n-Butylbenzene	<4.00	ug/L	4.00	SW846 8260B	3/5/2010	12:19 AM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	3/5/2010	12:19 AM	JMS
Carbon Tetrachloride	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	12:19 AM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
Chlorodibromomethane	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	12:19 AM	JMS
Chloroform	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
Chloromethane	<3.00	ug/L	3.00	SW846 8260B	3/5/2010	12:19 AM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
1,1-Dichloroethene	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	12:19 AM	JMS
cis-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
1,2-Dichloropropane	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	12:19 AM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
Hexachlorobutadiene	<3.00	ug/L	3.00	SW846 8260B	3/5/2010	12:19 AM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	3/5/2010	12:19 AM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
4-Isopropyltoluene	<10.0	ug/L	10.0	SW846 8260B	3/5/2010	12:19 AM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	3/5/2010	12:19 AM	JMS
Methylene Chloride	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
Naphthalene	<15.0	ug/L	15.0	SW846 8260B	3/5/2010	12:19 AM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
Styrene	<4.00	ug/L	4.00	SW846 8260B	3/5/2010	12:19 AM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
1,1,2,2-Tetrachloroethane	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	12:19 AM	JMS
Tetrachloroethene	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	12:19 AM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	3/5/2010	12:19 AM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	3/5/2010	12:19 AM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
Trichloroethene	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	12:19 AM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
Vinyl Chloride	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	12:19 AM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	3/5/2010	12:19 AM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:19 AM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	3/5/2010	12:19 AM	JMS

- The Bromomethane concentration was determined by a library search of the appropriate retention time and mass spectral ion pattern.

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.86	ug/L	0.86	SW846 8270C	3/5/2010	4:10 PM	BEH
Acenaphthylene	<0.86	ug/L	0.86	SW846 8270C	3/5/2010	4:10 PM	BEH
Anthracene	<0.86	ug/L	0.86	SW846 8270C	3/5/2010	4:10 PM	BEH
Benzo(a)anthracene	<0.48	ug/L	0.48	SW846 8270C	3/5/2010	4:10 PM	BEH
Benzo(a)pyrene	<0.19	ug/L	0.19	SW846 8270C	3/5/2010	4:10 PM	BEH
Benzo(b)fluoranthene	<0.48	ug/L	0.48	SW846 8270C	3/5/2010	4:10 PM	BEH
Benzo(g,h,i)perylene	<0.19	ug/L	0.19	SW846 8270C	3/5/2010	4:10 PM	BEH
Benzo(k)fluoranthene	<0.48	ug/L	0.48	SW846 8270C	3/5/2010	4:10 PM	BEH
Chrysene	<0.86	ug/L	0.86	SW846 8270C	3/5/2010	4:10 PM	BEH
Dibenzo(a,h)anthracene	<0.48	ug/L	0.48	SW846 8270C	3/5/2010	4:10 PM	BEH
Fluoranthene	<0.86	ug/L	0.86	SW846 8270C	3/5/2010	4:10 PM	BEH
Fluorene	<0.86	ug/L	0.86	SW846 8270C	3/5/2010	4:10 PM	BEH
Indeno(1,2,3-cd)pyrene	<0.48	ug/L	0.48	SW846 8270C	3/5/2010	4:10 PM	BEH
1-Methylnaphthalene	<0.95	ug/L	0.95	SW846 8270C	3/5/2010	4:10 PM	BEH
2-Methylnaphthalene	<0.95	ug/L	0.95	SW846 8270C	3/5/2010	4:10 PM	BEH

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Naphthalene	<0.86	ug/L	0.86	SW846 8270C	3/5/2010	4:10 PM	BEH
Phenanthrene	<0.86	ug/L	0.86	SW846 8270C	3/5/2010	4:10 PM	BEH
Pyrene	<0.86	ug/L	0.86	SW846 8270C	3/5/2010	4:10 PM	BEH

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	<0.005	mg/L	0.005	SW846 7421	3/5/2010	3:03 PM	JAW

- The sample was filtered and preserved at the laboratory for the dissolved Lead analysis.

Analytical Testing Parameters

Client Sample ID: **MW-2A** Collection Date: **3/2/2010**

Lab Sample ID: **1003035-02** Collection Time: **1:20 PM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<50.0	ug/L	50.0	SW846 8260B	3/5/2010	12:47 AM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	12:47 AM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
Bromodichloromethane	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	12:47 AM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
2-Butanone (MEK)	<3.00	ug/L	3.00	SW846 8260B	3/5/2010	12:47 AM	JMS
n-Butylbenzene	<4.00	ug/L	4.00	SW846 8260B	3/5/2010	12:47 AM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	3/5/2010	12:47 AM	JMS
Carbon Tetrachloride	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	12:47 AM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
Chlorodibromomethane	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	12:47 AM	JMS
Chloroform	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
Chloromethane	<3.00	ug/L	3.00	SW846 8260B	3/5/2010	12:47 AM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
1,1-Dichloroethene	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	12:47 AM	JMS
cis-1,2-Dichloroethene	**5.26**	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
1,2-Dichloropropane	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	12:47 AM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
Hexachlorobutadiene	<3.00	ug/L	3.00	SW846 8260B	3/5/2010	12:47 AM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	3/5/2010	12:47 AM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
4-Isopropyltoluene	<10.0	ug/L	10.0	SW846 8260B	3/5/2010	12:47 AM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	3/5/2010	12:47 AM	JMS
Methylene Chloride	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
Naphthalene	<15.0	ug/L	15.0	SW846 8260B	3/5/2010	12:47 AM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
Styrene	<4.00	ug/L	4.00	SW846 8260B	3/5/2010	12:47 AM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
1,1,2,2-Tetrachloroethane	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	12:47 AM	JMS
Tetrachloroethene	**28.0**	ug/L	1.00	SW846 8260B	3/5/2010	12:47 AM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	3/5/2010	12:47 AM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	3/5/2010	12:47 AM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
Trichloroethene	**2.57**	ug/L	1.00	SW846 8260B	3/5/2010	12:47 AM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
Vinyl Chloride	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	12:47 AM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	3/5/2010	12:47 AM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	12:47 AM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	3/5/2010	12:47 AM	JMS

- The Bromomethane concentration was determined by a library search of the appropriate retention time and mass spectral ion pattern.

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.87	ug/L	0.87	SW846 8270C	3/5/2010	4:51 PM	BEH
Acenaphthylene	<0.87	ug/L	0.87	SW846 8270C	3/5/2010	4:51 PM	BEH
Anthracene	<0.87	ug/L	0.87	SW846 8270C	3/5/2010	4:51 PM	BEH
Benzo(a)anthracene	<0.48	ug/L	0.48	SW846 8270C	3/5/2010	4:51 PM	BEH
Benzo(a)pyrene	<0.19	ug/L	0.19	SW846 8270C	3/5/2010	4:51 PM	BEH
Benzo(b)fluoranthene	<0.48	ug/L	0.48	SW846 8270C	3/5/2010	4:51 PM	BEH
Benzo(g,h,i)perylene	<0.19	ug/L	0.19	SW846 8270C	3/5/2010	4:51 PM	BEH
Benzo(k)fluoranthene	<0.48	ug/L	0.48	SW846 8270C	3/5/2010	4:51 PM	BEH
Chrysene	<0.87	ug/L	0.87	SW846 8270C	3/5/2010	4:51 PM	BEH
Dibenzo(a,h)anthracene	<0.48	ug/L	0.48	SW846 8270C	3/5/2010	4:51 PM	BEH
Fluoranthene	<0.87	ug/L	0.87	SW846 8270C	3/5/2010	4:51 PM	BEH
Fluorene	<0.87	ug/L	0.87	SW846 8270C	3/5/2010	4:51 PM	BEH
Indeno(1,2,3-cd)pyrene	<0.48	ug/L	0.48	SW846 8270C	3/5/2010	4:51 PM	BEH

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
1-Methylnaphthalene	<0.96	ug/L	0.96	SW846 8270C	3/5/2010	4:51 PM	BEH
2-Methylnaphthalene	<0.96	ug/L	0.96	SW846 8270C	3/5/2010	4:51 PM	BEH
Naphthalene	<0.87	ug/L	0.87	SW846 8270C	3/5/2010	4:51 PM	BEH
Phenanthrene	<0.87	ug/L	0.87	SW846 8270C	3/5/2010	4:51 PM	BEH
Pyrene	<0.87	ug/L	0.87	SW846 8270C	3/5/2010	4:51 PM	BEH

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	<0.005	mg/L	0.005	SW846 7421	3/5/2010	3:08 PM	JAW

- The sample was filtered and preserved at the laboratory for the dissolved Lead analysis.

Analytical Testing Parameters

Client Sample ID: **MW-3** Collection Date: **3/2/2010**

Lab Sample ID: **1003035-03** Collection Time: **12:50 PM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<50.0	ug/L	50.0	SW846 8260B	3/5/2010	1:16 AM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	1:16 AM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
Bromodichloromethane	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	1:16 AM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
2-Butanone (MEK)	<3.00	ug/L	3.00	SW846 8260B	3/5/2010	1:16 AM	JMS
n-Butylbenzene	<4.00	ug/L	4.00	SW846 8260B	3/5/2010	1:16 AM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	3/5/2010	1:16 AM	JMS
Carbon Tetrachloride	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	1:16 AM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
Chlorodibromomethane	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	1:16 AM	JMS
Chloroform	**6.36**	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
Chloromethane	<3.00	ug/L	3.00	SW846 8260B	3/5/2010	1:16 AM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
1,1-Dichloroethene	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	1:16 AM	JMS
cis-1,2-Dichloroethene	**7.91**	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
1,2-Dichloropropane	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	1:16 AM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
Hexachlorobutadiene	<3.00	ug/L	3.00	SW846 8260B	3/5/2010	1:16 AM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	3/5/2010	1:16 AM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
4-Isopropyltoluene	<10.0	ug/L	10.0	SW846 8260B	3/5/2010	1:16 AM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	3/5/2010	1:16 AM	JMS
Methylene Chloride	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
Naphthalene	<15.0	ug/L	15.0	SW846 8260B	3/5/2010	1:16 AM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
Styrene	<4.00	ug/L	4.00	SW846 8260B	3/5/2010	1:16 AM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
1,1,2,2-Tetrachloroethane	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	1:16 AM	JMS
Tetrachloroethene	**50.0**	ug/L	1.00	SW846 8260B	3/5/2010	1:16 AM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	3/5/2010	1:16 AM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	3/5/2010	1:16 AM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
Trichloroethene	**3.72**	ug/L	1.00	SW846 8260B	3/5/2010	1:16 AM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
Vinyl Chloride	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	1:16 AM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	3/5/2010	1:16 AM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:16 AM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	3/5/2010	1:16 AM	JMS

- The pH of the VOC vial was above the recommended limit of <2. The Bromomethane concentration was determined by a library search of the appropriate retention time and mass spectral ion pattern.

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.90	ug/L	0.90	SW846 8270C	3/9/2010	2:22 PM	BEH
Acenaphthylene	<0.90	ug/L	0.90	SW846 8270C	3/9/2010	2:22 PM	BEH
Anthracene	<0.90	ug/L	0.90	SW846 8270C	3/9/2010	2:22 PM	BEH
Benzo(a)anthracene	<0.50	ug/L	0.50	SW846 8270C	3/9/2010	2:22 PM	BEH
Benzo(a)pyrene	<0.20	ug/L	0.20	SW846 8270C	3/9/2010	2:22 PM	BEH
Benzo(b)fluoranthene	<0.50	ug/L	0.50	SW846 8270C	3/9/2010	2:22 PM	BEH
Benzo(g,h,i)perylene	<0.20	ug/L	0.20	SW846 8270C	3/9/2010	2:22 PM	BEH
Benzo(k)fluoranthene	<0.50	ug/L	0.50	SW846 8270C	3/9/2010	2:22 PM	BEH
Chrysene	<0.90	ug/L	0.90	SW846 8270C	3/9/2010	2:22 PM	BEH
Dibenzo(a,h)anthracene	<0.50	ug/L	0.50	SW846 8270C	3/9/2010	2:22 PM	BEH

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Fluoranthene	<0.90	ug/L	0.90	SW846 8270C	3/9/2010	2:22 PM	BEH
Fluorene	<0.90	ug/L	0.90	SW846 8270C	3/9/2010	2:22 PM	BEH
Indeno(1,2,3-cd)pyrene	<0.50	ug/L	0.50	SW846 8270C	3/9/2010	2:22 PM	BEH
1-Methylnaphthalene	<1.00	ug/L	1.00	SW846 8270C	3/9/2010	2:22 PM	BEH
2-Methylnaphthalene	<1.00	ug/L	1.00	SW846 8270C	3/9/2010	2:22 PM	BEH
Naphthalene	<0.90	ug/L	0.90	SW846 8270C	3/9/2010	2:22 PM	BEH
Phenanthrene	<0.90	ug/L	0.90	SW846 8270C	3/9/2010	2:22 PM	BEH
Pyrene	<0.90	ug/L	0.90	SW846 8270C	3/9/2010	2:22 PM	BEH

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	<0.005	mg/L	0.005	SW846 7421	3/5/2010	3:13 PM	JAW

- The sample was filtered and preserved at the laboratory for the dissolved Lead analysis.

Analytical Testing Parameters

Client Sample ID: **MW-4**
Lab Sample ID: **1003035-04**
Collection Date: **3/2/2010**
Collection Time: **1:10 PM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<50.0	ug/L	50.0	SW846 8260B	3/5/2010	1:44 AM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	1:44 AM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
Bromodichloromethane	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	1:44 AM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
2-Butanone (MEK)	<3.00	ug/L	3.00	SW846 8260B	3/5/2010	1:44 AM	JMS
n-Butylbenzene	<4.00	ug/L	4.00	SW846 8260B	3/5/2010	1:44 AM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	3/5/2010	1:44 AM	JMS
Carbon Tetrachloride	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	1:44 AM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
Chlorodibromomethane	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	1:44 AM	JMS
Chloroform	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
Chloromethane	<3.00	ug/L	3.00	SW846 8260B	3/5/2010	1:44 AM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
1,1-Dichloroethene	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	1:44 AM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
cis-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
1,2-Dichloropropane	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	1:44 AM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
Hexachlorobutadiene	<3.00	ug/L	3.00	SW846 8260B	3/5/2010	1:44 AM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	3/5/2010	1:44 AM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
4-Isopropyltoluene	<10.0	ug/L	10.0	SW846 8260B	3/5/2010	1:44 AM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	3/5/2010	1:44 AM	JMS
Methylene Chloride	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
Naphthalene	<15.0	ug/L	15.0	SW846 8260B	3/5/2010	1:44 AM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
Styrene	<4.00	ug/L	4.00	SW846 8260B	3/5/2010	1:44 AM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
1,1,2,2-Tetrachloroethane	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	1:44 AM	JMS
Tetrachloroethene	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	1:44 AM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	3/5/2010	1:44 AM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	3/5/2010	1:44 AM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
Trichloroethene	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	1:44 AM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
Vinyl Chloride	<1.00	ug/L	1.00	SW846 8260B	3/5/2010	1:44 AM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	3/5/2010	1:44 AM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	3/5/2010	1:44 AM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	3/5/2010	1:44 AM	JMS

- The Bromomethane concentration was determined by a library search of the appropriate retention time and mass spectral ion pattern.

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.95	ug/L	0.95	SW846 8270C	3/5/2010	6:09 PM	BEH
Acenaphthylene	<0.95	ug/L	0.95	SW846 8270C	3/5/2010	6:09 PM	BEH
Anthracene	<0.95	ug/L	0.95	SW846 8270C	3/5/2010	6:09 PM	BEH
Benzo(a)anthracene	**1.12**	ug/L	0.53	SW846 8270C	3/5/2010	6:09 PM	BEH
Benzo(a)pyrene	**1.96**	ug/L	0.21	SW846 8270C	3/5/2010	6:09 PM	BEH
Benzo(b)fluoranthene	**4.44**	ug/L	0.53	SW846 8270C	3/5/2010	6:09 PM	BEH
Benzo(g,h,i)perylene	**1.64**	ug/L	0.21	SW846 8270C	3/5/2010	6:09 PM	BEH
Benzo(k)fluoranthene	**2.05**	ug/L	0.53	SW846 8270C	3/5/2010	6:09 PM	BEH

Laboratory Project ID: 1003035

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Chrysene	**2.96**	ug/L	0.95	SW846 8270C	3/5/2010	6:09 PM	BEH
Dibenzo(a,h)anthracene	<0.53	ug/L	0.53	SW846 8270C	3/5/2010	6:09 PM	BEH
Fluoranthene	**3.35**	ug/L	0.95	SW846 8270C	3/5/2010	6:09 PM	BEH
Fluorene	<0.95	ug/L	0.95	SW846 8270C	3/5/2010	6:09 PM	BEH
Indeno(1,2,3-cd)pyrene	**1.52**	ug/L	0.53	SW846 8270C	3/5/2010	6:09 PM	BEH
1-Methylnaphthalene	<1.05	ug/L	1.05	SW846 8270C	3/5/2010	6:09 PM	BEH
2-Methylnaphthalene	<1.05	ug/L	1.05	SW846 8270C	3/5/2010	6:09 PM	BEH
Naphthalene	<0.95	ug/L	0.95	SW846 8270C	3/5/2010	6:09 PM	BEH
Phenanthrene	<0.95	ug/L	0.95	SW846 8270C	3/5/2010	6:09 PM	BEH
Pyrene	**2.72**	ug/L	0.95	SW846 8270C	3/5/2010	6:09 PM	BEH

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	<0.005	mg/L	0.005	SW846 7421	3/5/2010	3:17 PM	JAW

- The sample was filtered and preserved at the laboratory for the dissolved Lead analysis.

Report Comments:

Note: Due to the extremely short holding time of 15 minutes, the following test procedures, if reported, were performed outside the recommended holding time: Total Residual Chlorine, laboratory pH, Dissolved Oxygen, Orthophosphate, and Sulfite.

The **PQL** is the **Practical Quantitation Limit**, which is defined as the lowest quantitation level of an analyte that can be readily achieved within the specified limits of precision and accuracy of an analytical method during routine laboratory operating conditions. The value may be raised depending on the characteristics or behavior of the target analyte.

All samples were analyzed **"as received"** from the client. American Westech Inc. can only assume that all samples were collected and submitted by the CLIENT following the appropriate protocols set forth by the regulatory requirements. This document shall not be reproduced, except in full, without the written approval of American Westech Inc. If there are any questions pertaining to this laboratory report please contact a Client Services Coordinator or the Laboratory Director at (717) 651-9700.

Laboratory Certifications:

- NELAP accredited by the PADEP (22-00578) & NJDEP (PA019) for numerous solid and chemical materials and non-potable water parameters. Please refer to our certified parameter lists for each state for specific information on the approved methodologies.
- PADEP accredited for various drinking water parameters including: Volatile Organic Compounds, Metals, Inorganics, and Microbiology (22-00578). Please refer to our certified parameter list for specific information on the approved methodologies.

Reviewed and Approved By:

William W. Smith, Jr.
Laboratory Director

Date Reviewed and Approved:

3-10-10

SAMPLE SUBMITTAL FORM

American Westech Incorporated
4359 Linglestown Road, Harrisburg, PA 17112
Phone: (717) 651-9700 Fax: (717) 657-0752

NELAP accredited by PADEP & NJDEP. Please call for specific parameter accreditations.
PADEP ID (22-00578) - NJDEP ID (PA019)

LABORATORY PROJECT NUMBER: 1003035

PROJECT DETAILS

Company: BL COMPANIES
Contact: SCOTT TREHERNE
Address: 213 MARKET STREET
City: HARRISBURG State: PA Zip: 17101
Phone: 717-651-9850 Fax: 717-651-9858
Project Name: FRANKFORD ARSENAL
Project No.: 001629-B
Client P.O. No.:
Westech Proposal/BPA No.:
Purpose: ☒ Regulatory ☐ Informational ☐ PWSID:
Data Deliverables: ☐ Level I ☐ Level II ☐ Level III ☐ Level IV
Report Delivery: ☐ Fax ☒ Email - Address: STREHERNE@BLCOMPANIES.COM
Please Mark TAT Requested * : ☐ 10 Day (Standard) ☒ 5 Day
☐ 72 Hour ☐ 48 Hour ☐ 24 Hour ☐ Same Day

* Turnaround times based on business days only. All "RUSH" TATs must be pre-arranged with WESTECH and are subject to "RUSH" surcharges.

INVOICING INFORMATION

Company:
Contact:
Address: BL COMPANIES
City: State: Zip:
Phone: Fax:
Invoice Delivery: ☒ Mail w/Report ☐ Email (enter address below)
WESTECH Field Services Used? ☒ NO ☐ YES - *(See Field Services Log)*

SAMPLE TYPE (Key)
SS = Solid/Sludge SW = Storm/Surface Water
OL = Oil WW = Wastewater
DW = Drinking Water AR = Air
GW = Groundwater O = Other: _____

SAMPLE RECEIVING INFORMATION *(lab use only)*

Samples received on ice? Temp: 0.2 °C	Y	N	NA	
Cooler temp. within acceptable limits?	Y	N	NA	
Correct bottles used for requested analysis?	Y	~~N~~	NA	
Sample bottles in good condition (unbroken)?	Y	N	NA	
Zero headspace samples collected correctly?	Y	N	NA	
Samples within required holding time?	Y	N	NA	
Samples preserved to pH <2 and/or pH >12?	Y	N	NA	

Shipping Carrier? ☐ Drop Off ☐ WESTECH Pickup ☐ Outside Courier:

SAMPLE DETAILS / ANALYSIS REQUESTED

LAB ID	SAMPLE IDENTIFICATION / LOCATION DESCRIPTION	SAMPLE DATE	SAMPLE TIME	Total # of Bottles	Sample Type: (See "Sample Type" Key)	Grab: "G" or Composite: "C"	VOCs (8260-B)	PAHs (8270-C)	DISS. Pb
01	MW-1	3.2.2010	1315	5	GW	G	X	X	X
02	MW-2A		1320				X	X	X
03	MW-3		1250				X	X	X
04	MW-4		1310				X	X	X
05									
06									
07									
08									
09									
10									

	PRINT NAME	SIGNATURE	DATE	TIME
Sampled By:	GREG HOLTZMAN	Greg Holtzman	3.2.2010	1330
Relinquished By (Sampler):				
Accepted By:				
Relinquished to WESTECH By:				
Accepted at WESTECH By:	DLowe	Dan Lowe	3/3/10	837

COMMENTS OR SPECIAL INSTRUCTIONS
* SAMPLE RESULTS MUST MEET PA ACT 2 REQUIREMENTS
* LAB TO FILTER *

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WHITE - Original YELLOW - Laboratory Copy PINK - Client Copy

AMERICAN Westech INCORPORATED

Laboratory Result Summary

Laboratory Project ID: 1007023

BL Companies
Scott Treherne
213 Market St.
6th Floor
Harrisburg, PA 17101

Contact: Scott Treherne
Project Name: Frankford and Darrah
Project Number: 00L629-B
Purchase Order Number: N/A
Sampled By: Matt Adukeintis
Date Received: July 1, 2010
Time Received: 3:00 PM

Analytical Testing Parameters

Client Sample ID: **MW-2A**
Lab Sample ID: **1007023-01**
Collection Date: **6/30/2010**
Collection Time: **10:15 AM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<50.0	ug/L	50.0	SW846 8260B	7/7/2010	5:23 PM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	5:23 PM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
Bromodichloromethane	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	5:23 PM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
2-Butanone (MEK)	<5.00	ug/L	5.00	SW846 8260B	7/7/2010	5:23 PM	JMS
n-Butylbenzene	<4.00	ug/L	4.00	SW846 8260B	7/7/2010	5:23 PM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	7/7/2010	5:23 PM	JMS
Carbon Tetrachloride	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	5:23 PM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
Chlorodibromomethane	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	5:23 PM	JMS
Chloroform	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
Chloromethane	<3.00	ug/L	3.00	SW846 8260B	7/7/2010	5:23 PM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
1,1-Dichloroethene	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	5:23 PM	JMS
cis-1,2-Dichloroethene	**5.76**	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
1,2-Dichloropropane	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	5:23 PM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
Hexachlorobutadiene	<3.00	ug/L	3.00	SW846 8260B	7/7/2010	5:23 PM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	7/7/2010	5:23 PM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
4-Isopropyltoluene	<10.0	ug/L	10.0	SW846 8260B	7/7/2010	5:23 PM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	7/7/2010	5:23 PM	JMS
Methylene Chloride	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
Naphthalene	<15.0	ug/L	15.0	SW846 8260B	7/7/2010	5:23 PM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
Styrene	<4.00	ug/L	4.00	SW846 8260B	7/7/2010	5:23 PM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
1,1,2,2-Tetrachloroethane	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	5:23 PM	JMS
Tetrachloroethene	**26.1**	ug/L	1.00	SW846 8260B	7/7/2010	5:23 PM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	7/7/2010	5:23 PM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	7/7/2010	5:23 PM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
Trichloroethene	**2.40**	ug/L	1.00	SW846 8260B	7/7/2010	5:23 PM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
Vinyl Chloride	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	5:23 PM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	7/7/2010	5:23 PM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:23 PM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	7/7/2010	5:23 PM	JMS

- The Bromomethane concentration was determined by a library search of the appropriate retention time and mass spectral ion pattern.

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.86	ug/L	0.86	SW846 8270C	7/8/2010	4:17 PM	BEH
Acenaphthylene	<0.86	ug/L	0.86	SW846 8270C	7/8/2010	4:17 PM	BEH
Anthracene	<0.86	ug/L	0.86	SW846 8270C	7/8/2010	4:17 PM	BEH
Benzo(a)anthracene	<0.48	ug/L	0.48	SW846 8270C	7/8/2010	4:17 PM	BEH
Benzo(a)pyrene	<0.19	ug/L	0.19	SW846 8270C	7/8/2010	4:17 PM	BEH
Benzo(b)fluoranthene	<0.48	ug/L	0.48	SW846 8270C	7/8/2010	4:17 PM	BEH
Benzo(g,h,i)perylene	<0.19	ug/L	0.19	SW846 8270C	7/8/2010	4:17 PM	BEH
Benzo(k)fluoranthene	<0.48	ug/L	0.48	SW846 8270C	7/8/2010	4:17 PM	BEH
Chrysene	<0.86	ug/L	0.86	SW846 8270C	7/8/2010	4:17 PM	BEH
Dibenzo(a,h)anthracene	<0.48	ug/L	0.48	SW846 8270C	7/8/2010	4:17 PM	BEH
Fluoranthene	<0.86	ug/L	0.86	SW846 8270C	7/8/2010	4:17 PM	BEH
Fluorene	<0.86	ug/L	0.86	SW846 8270C	7/8/2010	4:17 PM	BEH
Indeno(1,2,3-cd)pyrene	<0.48	ug/L	0.48	SW846 8270C	7/8/2010	4:17 PM	BEH

Laboratory Project ID: 1007023

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
1-Methylnaphthalene	<0.95	ug/L	0.95	SW846 8270C	7/8/2010	4:17 PM	BEH
2-Methylnaphthalene	<0.95	ug/L	0.95	SW846 8270C	7/8/2010	4:17 PM	BEH
Naphthalene	<0.86	ug/L	0.86	SW846 8270C	7/8/2010	4:17 PM	BEH
Phenanthrene	<0.86	ug/L	0.86	SW846 8270C	7/8/2010	4:17 PM	BEH
Pyrene	<0.86	ug/L	0.86	SW846 8270C	7/8/2010	4:17 PM	BEH

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	<0.005	mg/L	0.005	SW846 7421	7/8/2010	3:08 PM	TMS

- The sample was filtered and preserved at the laboratory for the dissolved Lead analysis.

Analytical Testing Parameters

Client Sample ID: **MW-3**
Lab Sample ID: **1007023-02**

Collection Date: **6/30/2010**
Collection Time: **11:18 AM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<50.0	ug/L	50.0	SW846 8260B	7/7/2010	5:52 PM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	5:52 PM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
Bromodichloromethane	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	5:52 PM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
2-Butanone (MEK)	<5.00	ug/L	5.00	SW846 8260B	7/7/2010	5:52 PM	JMS
n-Butylbenzene	<4.00	ug/L	4.00	SW846 8260B	7/7/2010	5:52 PM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	7/7/2010	5:52 PM	JMS
Carbon Tetrachloride	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	5:52 PM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
Chlorodibromomethane	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	5:52 PM	JMS
Chloroform	**5.12**	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
Chloromethane	<3.00	ug/L	3.00	SW846 8260B	7/7/2010	5:52 PM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
1,1-Dichloroethene	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	5:52 PM	JMS
cis-1,2-Dichloroethene	**6.47**	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
1,2-Dichloropropane	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	5:52 PM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
Hexachlorobutadiene	<3.00	ug/L	3.00	SW846 8260B	7/7/2010	5:52 PM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	7/7/2010	5:52 PM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
4-Isopropyltoluene	<10.0	ug/L	10.0	SW846 8260B	7/7/2010	5:52 PM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	7/7/2010	5:52 PM	JMS
Methylene Chloride	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
Naphthalene	<15.0	ug/L	15.0	SW846 8260B	7/7/2010	5:52 PM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
Styrene	<4.00	ug/L	4.00	SW846 8260B	7/7/2010	5:52 PM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
1,1,2,2-Tetrachloroethane	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	5:52 PM	JMS
Tetrachloroethene	**47.2**	ug/L	1.00	SW846 8260B	7/7/2010	5:52 PM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	7/7/2010	5:52 PM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	7/7/2010	5:52 PM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
Trichloroethene	**2.10**	ug/L	1.00	SW846 8260B	7/7/2010	5:52 PM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
Vinyl Chloride	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	5:52 PM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	7/7/2010	5:52 PM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	5:52 PM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	7/7/2010	5:52 PM	JMS

- The Bromomethane concentration was determined by a library search of the appropriate retention time and mass spectral ion pattern.

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.87	ug/L	0.87	SW846 8270C	7/8/2010	4:57 PM	BEH
Acenaphthylene	<0.87	ug/L	0.87	SW846 8270C	7/8/2010	4:57 PM	BEH
Anthracene	<0.87	ug/L	0.87	SW846 8270C	7/8/2010	4:57 PM	BEH
Benzo(a)anthracene	<0.48	ug/L	0.48	SW846 8270C	7/8/2010	4:57 PM	BEH
Benzo(a)pyrene	<0.19	ug/L	0.19	SW846 8270C	7/8/2010	4:57 PM	BEH
Benzo(b)fluoranthene	<0.48	ug/L	0.48	SW846 8270C	7/8/2010	4:57 PM	BEH
Benzo(g,h,i)perylene	<0.19	ug/L	0.19	SW846 8270C	7/8/2010	4:57 PM	BEH
Benzo(k)fluoranthene	<0.48	ug/L	0.48	SW846 8270C	7/8/2010	4:57 PM	BEH

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Chrysene	<0.87	ug/L	0.87	SW846 8270C	7/8/2010	4:57 PM	BEH
Dibenzo(a,h)anthracene	<0.48	ug/L	0.48	SW846 8270C	7/8/2010	4:57 PM	BEH
Fluoranthene	<0.87	ug/L	0.87	SW846 8270C	7/8/2010	4:57 PM	BEH
Fluorene	<0.87	ug/L	0.87	SW846 8270C	7/8/2010	4:57 PM	BEH
Indeno(1,2,3-cd)pyrene	<0.48	ug/L	0.48	SW846 8270C	7/8/2010	4:57 PM	BEH
1-Methylnaphthalene	<0.96	ug/L	0.96	SW846 8270C	7/8/2010	4:57 PM	BEH
2-Methylnaphthalene	<0.96	ug/L	0.96	SW846 8270C	7/8/2010	4:57 PM	BEH
Naphthalene	<0.87	ug/L	0.87	SW846 8270C	7/8/2010	4:57 PM	BEH
Phenanthrene	<0.87	ug/L	0.87	SW846 8270C	7/8/2010	4:57 PM	BEH
Pyrene	<0.87	ug/L	0.87	SW846 8270C	7/8/2010	4:57 PM	BEH

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	<0.005	mg/L	0.005	SW846 7421	7/8/2010	3:31 PM	TMS

- The sample was filtered and preserved at the laboratory for the dissolved Lead analysis.

Analytical Testing Parameters

Client Sample ID: **MW-4**
Lab Sample ID: **1007023-03**
Collection Date: **6/30/2010**
Collection Time: **11:48 AM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<50.0	ug/L	50.0	SW846 8260B	7/7/2010	6:20 PM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	6:20 PM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
Bromodichloromethane	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	6:20 PM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
2-Butanone (MEK)	<5.00	ug/L	5.00	SW846 8260B	7/7/2010	6:20 PM	JMS
n-Butylbenzene	<4.00	ug/L	4.00	SW846 8260B	7/7/2010	6:20 PM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	7/7/2010	6:20 PM	JMS
Carbon Tetrachloride	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	6:20 PM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
Chlorodibromomethane	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	6:20 PM	JMS
Chloroform	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
Chloromethane	<3.00	ug/L	3.00	SW846 8260B	7/7/2010	6:20 PM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS

Laboratory Project ID: 1007023

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
1,1-Dichloroethene	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	6:20 PM	JMS
cis-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
1,2-Dichloropropane	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	6:20 PM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
Hexachlorobutadiene	<3.00	ug/L	3.00	SW846 8260B	7/7/2010	6:20 PM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	7/7/2010	6:20 PM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
4-Isopropyltoluene	<10.0	ug/L	10.0	SW846 8260B	7/7/2010	6:20 PM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	7/7/2010	6:20 PM	JMS
Methylene Chloride	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
Naphthalene	<15.0	ug/L	15.0	SW846 8260B	7/7/2010	6:20 PM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
Styrene	<4.00	ug/L	4.00	SW846 8260B	7/7/2010	6:20 PM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
1,1,2,2-Tetrachloroethane	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	6:20 PM	JMS
Tetrachloroethene	**1.13**	ug/L	1.00	SW846 8260B	7/7/2010	6:20 PM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	7/7/2010	6:20 PM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	7/7/2010	6:20 PM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
Trichloroethene	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	6:20 PM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
Vinyl Chloride	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	6:20 PM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	7/7/2010	6:20 PM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:20 PM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	7/7/2010	6:20 PM	JMS

- The Bromomethane concentration was determined by a library search of the appropriate retention time and mass spectral ion pattern.

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.88	ug/L	0.88	SW846 8270C	7/8/2010	5:36 PM	BEH
Acenaphthylene	<0.88	ug/L	0.88	SW846 8270C	7/8/2010	5:36 PM	BEH
Anthracene	<0.88	ug/L	0.88	SW846 8270C	7/8/2010	5:36 PM	BEH
Benzo(a)anthracene	<0.49	ug/L	0.49	SW846 8270C	7/8/2010	5:36 PM	BEH
Benzo(a)pyrene	<0.20	ug/L	0.20	SW846 8270C	7/8/2010	5:36 PM	BEH
Benzo(b)fluoranthene	<0.49	ug/L	0.49	SW846 8270C	7/8/2010	5:36 PM	BEH
Benzo(g,h,i)perylene	<0.20	ug/L	0.20	SW846 8270C	7/8/2010	5:36 PM	BEH
Benzo(k)fluoranthene	<0.49	ug/L	0.49	SW846 8270C	7/8/2010	5:36 PM	BEH
Chrysene	<0.88	ug/L	0.88	SW846 8270C	7/8/2010	5:36 PM	BEH
Dibenzo(a,h)anthracene	<0.49	ug/L	0.49	SW846 8270C	7/8/2010	5:36 PM	BEH
Fluoranthene	<0.88	ug/L	0.88	SW846 8270C	7/8/2010	5:36 PM	BEH
Fluorene	<0.88	ug/L	0.88	SW846 8270C	7/8/2010	5:36 PM	BEH
Indeno(1,2,3-cd)pyrene	<0.49	ug/L	0.49	SW846 8270C	7/8/2010	5:36 PM	BEH
1-Methylnaphthalene	<0.98	ug/L	0.98	SW846 8270C	7/8/2010	5:36 PM	BEH
2-Methylnaphthalene	<0.98	ug/L	0.98	SW846 8270C	7/8/2010	5:36 PM	BEH
Naphthalene	<0.88	ug/L	0.88	SW846 8270C	7/8/2010	5:36 PM	BEH
Phenanthrene	<0.88	ug/L	0.88	SW846 8270C	7/8/2010	5:36 PM	BEH
Pyrene	<0.88	ug/L	0.88	SW846 8270C	7/8/2010	5:36 PM	BEH

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	**0.007**	mg/L	0.005	SW846 7421	7/8/2010	3:35 PM	TMS

- The sample was filtered and preserved at the laboratory for the dissolved Lead analysis.

Analytical Testing Parameters

Client Sample ID: **MW-1**
Lab Sample ID: **1007023-04**
Collection Date: **6/30/2010**
Collection Time: **12:50 PM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<50.0	ug/L	50.0	SW846 8260B	7/7/2010	6:49 PM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	6:49 PM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
Bromodichloromethane	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	6:49 PM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
2-Butanone (MEK)	<5.00	ug/L	5.00	SW846 8260B	7/7/2010	6:49 PM	JMS
n-Butylbenzene	<4.00	ug/L	4.00	SW846 8260B	7/7/2010	6:49 PM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	7/7/2010	6:49 PM	JMS
Carbon Tetrachloride	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	6:49 PM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
Chlorodibromomethane	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	6:49 PM	JMS
Chloroform	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
Chloromethane	<3.00	ug/L	3.00	SW846 8260B	7/7/2010	6:49 PM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
1,1-Dichloroethene	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	6:49 PM	JMS
cis-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
1,2-Dichloropropane	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	6:49 PM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
Hexachlorobutadiene	<3.00	ug/L	3.00	SW846 8260B	7/7/2010	6:49 PM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	7/7/2010	6:49 PM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
4-Isopropyltoluene	<10.0	ug/L	10.0	SW846 8260B	7/7/2010	6:49 PM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	7/7/2010	6:49 PM	JMS
Methylene Chloride	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
Naphthalene	<15.0	ug/L	15.0	SW846 8260B	7/7/2010	6:49 PM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
Styrene	<4.00	ug/L	4.00	SW846 8260B	7/7/2010	6:49 PM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
1,1,2,2-Tetrachloroethane	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	6:49 PM	JMS
Tetrachloroethene	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	6:49 PM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	7/7/2010	6:49 PM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	7/7/2010	6:49 PM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
Trichloroethene	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	6:49 PM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS
Vinyl Chloride	<1.00	ug/L	1.00	SW846 8260B	7/7/2010	6:49 PM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	7/7/2010	6:49 PM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	7/7/2010	6:49 PM	JMS

Laboratory Project ID: 1007023

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	7/7/2010	6:49 PM	JMS

- The Bromomethane concentration was determined by a library search of the appropriate retention time and mass spectral ion pattern.

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<8.41	ug/L	8.41	SW846 8270C	7/8/2010	6:16 PM	BEH
Acenaphthylene	<8.41	ug/L	8.41	SW846 8270C	7/8/2010	6:16 PM	BEH
Anthracene	<8.41	ug/L	8.41	SW846 8270C	7/8/2010	6:16 PM	BEH
Benzo(a)anthracene	<4.67	ug/L	4.67	SW846 8270C	7/8/2010	6:16 PM	BEH
Benzo(a)pyrene	**4.52**	ug/L	1.87	SW846 8270C	7/8/2010	6:16 PM	BEH
Benzo(b)fluoranthene	**9.20**	ug/L	4.67	SW846 8270C	7/8/2010	6:16 PM	BEH
Benzo(g,h,i)perylene	**6.73**	ug/L	1.87	SW846 8270C	7/8/2010	6:16 PM	BEH
Benzo(k)fluoranthene	**11.8**	ug/L	4.67	SW846 8270C	7/8/2010	6:16 PM	BEH
Chrysene	<8.41	ug/L	8.41	SW846 8270C	7/8/2010	6:16 PM	BEH
Dibenzo(a,h)anthracene	<4.67	ug/L	4.67	SW846 8270C	7/8/2010	6:16 PM	BEH
Fluoranthene	<8.41	ug/L	8.41	SW846 8270C	7/8/2010	6:16 PM	BEH
Fluorene	<8.41	ug/L	8.41	SW846 8270C	7/8/2010	6:16 PM	BEH
Indeno(1,2,3-cd)pyrene	**5.67**	ug/L	4.67	SW846 8270C	7/8/2010	6:16 PM	BEH
1-Methylnaphthalene	<9.34	ug/L	9.34	SW846 8270C	7/8/2010	6:16 PM	BEH
2-Methylnaphthalene	<9.34	ug/L	9.34	SW846 8270C	7/8/2010	6:16 PM	BEH
Naphthalene	<8.41	ug/L	8.41	SW846 8270C	7/8/2010	6:16 PM	BEH
Phenanthrene	<8.41	ug/L	8.41	SW846 8270C	7/8/2010	6:16 PM	BEH
Pyrene	<8.41	ug/L	8.41	SW846 8270C	7/8/2010	6:16 PM	BEH

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	<0.005	mg/L	0.005	SW846 7421	7/8/2010	3:40 PM	TMS

- The sample was filtered and preserved at the laboratory for the dissolved Lead analysis.

Report Comments:

Note: Due to the extremely short holding time of 15 minutes, the following test procedures, if reported, were performed outside the recommended holding time: Total Residual Chlorine, Laboratory pH, Dissolved Oxygen, and Sulfite.

The **PQL** is the **Practical Quantitation Limit**, which is defined as the lowest quantitation level of an analyte that can be readily achieved within the specified limits of precision and accuracy of an analytical method during routine laboratory operating conditions. The value may be raised depending on the characteristics or behavior of the target analyte.

All samples were analyzed **"as received"** from the client. American Westech Inc. can only assume that all samples were collected and submitted by the CLIENT following the appropriate protocols set forth by the regulatory requirements. This document shall not be reproduced, except in full, without the written approval of American Westech Inc. If there are any questions pertaining to this laboratory report please contact a Client Services Coordinator or the Laboratory Director at (717) 651-9700.

Laboratory Certifications:

- NELAP accredited by the PADEP (22-00578) & NJDEP (PA019) for numerous solid and chemical materials and non-potable water parameters. Please refer to our certified parameter lists for each state for specific information on the approved methodologies.
- PADEP accredited for various drinking water parameters including: Volatile Organic Compounds, Metals, Inorganics, and Microbiology (22-00578). Please refer to our certified parameter list for specific information on the approved methodologies.

Reviewed and Approved By:

William W. Smith, Jr.
Laboratory Director

Date Reviewed and Approved:

7-13-10

AMERICAN WESTECH, INC. SAMPLE SUBMITTAL FORM

4359 Linglestown Road, Harrisburg, PA 17112 · Phone: (717) 651-9700 · Fax: (717) 657-0752
1015 Bridge Road, Suite D, Collegeville, PA 19426 · Phone: (610) 489-1234

NELAP accredited by PADEP & NJDEP

PA ID# 22-00578 · NJ ID# PA019

LABORATORY PROJECT NUMBER: **1007023**

SUBMIT LAB REPORT TO (Westech Client Information):			SUBMIT INVOICE TO:		
Company:	BL Companies		Company:	BL Companies	
Contact:	Scott Treherne		Contact:		
Address:	213 Market St.		Address:		
City:	Harrisburg	State: PA Zip: 17101	City:	State:	Zip:
Phone:	717-651-9850	Fax: 717-651-9858	Phone:	Fax:	
Report Delivery:	☐ Mail ☐ Fax ☑ Email (enter address below)		Invoice Delivery:	☑ Mail ☐ Email (enter address below)	
	STreherne@BLCompanies.com				

LABORATORY USE ONLY				
Samples received on ice? Temp: 1.2 °C	Y	N	NA	
Cooler temp. within acceptable limits?	Y	N	NA	
Correct bottles/enough volume for analysis?	Y	N	NA	
Sample bottles in good condition (unbroken)?	Y	N	NA	
Samples within required holding time?	Y	N	NA	
Zero headspace samples collected correctly?	Y	N	NA	
Samples preserved to pH <2 and/or pH >12?	Y	~~N~~	NA	Lab filtr.
Shipping Carrier? ☐ Drop Off ☑ WESTECH Pickup ☐ Outside Courier:				

CLIENT PROJECT INFORMATION (Required)		WESTECH Field Services Used? ☑ NO ☐ YES - *(See Field Services Log)*
Project Name:	Frankford + Darrah	Westech Quote/MSA No.:
Project/PO Number:	00L629-B	Data Deliverables: ☐ *Level I (Standard)* OR
Purpose:	☑ *Regulatory* ☐ *Informational* ☐ *PWSID:*	Additional Fee Deliverables: ☐ *Level II* ☐ *Level III* ☐ *Level IV*

Results TAT Requested * : ☒ **6-10 Day (Standard)** OR ☐ **RUSH** (INDICATE DUE DATE):**

NOTES: *Turnaround times begin at 5pm on the day the samples were received by WESTECH. Results will be considered due by 5pm on the due date.
**RUSH TATs will include surcharge unless otherwise agreed to in writing and must be pre-arranged to ensure the due date can be met.

SAMPLE DETAILS: SS = Solid or Sludge; GW = Groundwater; WW = Wastewater; DW = Drinking Water; SW = Storm or Surface Water; OL = Oil; A = Air; O = Other

ANALYSIS REQUESTED: VOCs (8260B); PAHs (8270C); Diss. Pb

LAB ID	SAMPLE IDENTIFICATION / LOCATION DESCRIPTION	SAMPLE DATE	SAMPLE TIME	SAMPLED BY	Total # of Containers	Sample Type:	Grab "G" or Composite "C"
01	MW-2A	6/30/10	10:15	MSA	5	GW	G
02	MW-3	↓	11:19	↓	↓	↓	↓
03	MW-4		11:48				
04	MW-1		12:50				
05							
06							
07							
08							
09							
10							

CUSTODY CHAIN	PRINT NAME	SIGNATURE	DATE	TIME
Relinquished by SAMPLER:	Matt Adukaitis	Matthew J Adukaitis	6/30/10	16:10
Accepted by:				
Relinquished by:				
Accepted by:	Leslie Hirschfeld	Leslie Hirschfeld	6/30/10	1615
Relinquished by:				
Accepted by:				
Relinquished by:	James Dunkelberger		7-1-10	15:00
Received at WESTECH Lab:	Shanna Drahovsky	Shanna Drahovsky	7/1/10	15:00

COMMENTS, NOTES, OR SPECIAL INSTRUCTIONS:
* Sample results must meet PA ACT 2 requirements.
* Lab to filter *

By relinquishing this form to WESTECH, I hereby agree to the terms & conditions printed on the reverse side.

WHITE - Original YELLOW - Laboratory Copy PINK - Client Copy

AMERICAN Westech INCORPORATED

Laboratory Result Summary

Laboratory Project ID: 1010219

BL Companies
John Thatcher
213 Market St.
6th Floor
Harrisburg, PA 17101

Contact: John Thatcher
Project Name: Frankford and Darrah
Project Number: 00L629-B
Purchase Order Number: N/A
Sampled By: Steve Vedder
Date Received: October 15, 2010
Time Received: 10:45 AM

Analytical Testing Parameters

Client Sample ID: **MW-1**
Lab Sample ID: **1010219-01**
Collection Date: **10/14/2010**
Collection Time: **12:55 PM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<50.0	ug/L	50.0	SW846 8260B	10/16/2010	6:37 AM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	6:37 AM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
Bromodichloromethane	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	6:37 AM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
2-Butanone (MEK)	<5.00	ug/L	5.00	SW846 8260B	10/16/2010	6:37 AM	JMS
n-Butylbenzene	<4.00	ug/L	4.00	SW846 8260B	10/16/2010	6:37 AM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	10/16/2010	6:37 AM	JMS
Carbon Tetrachloride	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	6:37 AM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
Chlorodibromomethane	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	6:37 AM	JMS
Chloroform	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
Chloromethane	<4.00	ug/L	4.00	SW846 8260B	10/16/2010	6:37 AM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
1,1-Dichloroethene	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	6:37 AM	JMS
cis-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
1,2-Dichloropropane	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	6:37 AM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
Hexachlorobutadiene	<3.00	ug/L	3.00	SW846 8260B	10/16/2010	6:37 AM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	10/16/2010	6:37 AM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
4-Isopropyltoluene	<10.0	ug/L	10.0	SW846 8260B	10/16/2010	6:37 AM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	10/16/2010	6:37 AM	JMS
Methylene Chloride	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
Naphthalene	<15.0	ug/L	15.0	SW846 8260B	10/16/2010	6:37 AM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
Styrene	<4.00	ug/L	4.00	SW846 8260B	10/16/2010	6:37 AM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
1,1,2,2-Tetrachloroethane	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	6:37 AM	JMS
Tetrachloroethene	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	6:37 AM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	10/16/2010	6:37 AM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	10/16/2010	6:37 AM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
Trichloroethene	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	6:37 AM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
Vinyl Chloride	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	6:37 AM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	10/16/2010	6:37 AM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	6:37 AM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	10/16/2010	6:37 AM	JMS

- The Bromomethane concentration was determined by a library search of the appropriate retention time and mass spectral ion pattern.

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	6:15 PM	BEH
Acenaphthylene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	6:15 PM	BEH
Anthracene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	6:15 PM	BEH
Benzo(a)anthracene	<0.48	ug/L	0.48	SW846 8270C	10/20/2010	6:15 PM	BEH
Benzo(a)pyrene	**0.55**	ug/L	0.19	SW846 8270C	10/20/2010	6:15 PM	BEH
Benzo(b)fluoranthene	**0.92**	ug/L	0.48	SW846 8270C	10/20/2010	6:15 PM	BEH
Benzo(g,h,i)perylene	**0.63**	ug/L	0.19	SW846 8270C	10/20/2010	6:15 PM	BEH
Benzo(k)fluoranthene	**0.64**	ug/L	0.48	SW846 8270C	10/20/2010	6:15 PM	BEH
Chrysene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	6:15 PM	BEH
Dibenzo(a,h)anthracene	<0.48	ug/L	0.48	SW846 8270C	10/20/2010	6:15 PM	BEH
Fluoranthene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	6:15 PM	BEH
Fluorene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	6:15 PM	BEH
Indeno(1,2,3-cd)pyrene	**0.52**	ug/L	0.48	SW846 8270C	10/20/2010	6:15 PM	BEH

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
1-Methylnaphthalene	<0.95	ug/L	0.95	SW846 8270C	10/20/2010	6:15 PM	BEH
2-Methylnaphthalene	<0.95	ug/L	0.95	SW846 8270C	10/20/2010	6:15 PM	BEH
Naphthalene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	6:15 PM	BEH
Phenanthrene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	6:15 PM	BEH
Pyrene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	6:15 PM	BEH

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	<0.005	mg/L	0.005	SW846 7421	10/20/2010	10:44 AM	WWS

Analytical Testing Parameters

Client Sample ID: **MW-2A** Collection Date: **10/14/2010**

Lab Sample ID: **1010219-02** Collection Time: **12:45 PM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<50.0	ug/L	50.0	SW846 8260B	10/16/2010	7:05 AM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	7:05 AM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
Bromodichloromethane	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	7:05 AM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
2-Butanone (MEK)	<5.00	ug/L	5.00	SW846 8260B	10/16/2010	7:05 AM	JMS
n-Butylbenzene	<4.00	ug/L	4.00	SW846 8260B	10/16/2010	7:05 AM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	10/16/2010	7:05 AM	JMS
Carbon Tetrachloride	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	7:05 AM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
Chlorodibromomethane	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	7:05 AM	JMS
Chloroform	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
Chloromethane	<4.00	ug/L	4.00	SW846 8260B	10/16/2010	7:05 AM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
1,1-Dichloroethene	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	7:05 AM	JMS
cis-1,2-Dichloroethene	**5.18**	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
1,2-Dichloropropane	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	7:05 AM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
Hexachlorobutadiene	<3.00	ug/L	3.00	SW846 8260B	10/16/2010	7:05 AM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	10/16/2010	7:05 AM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
4-Isopropyltoluene	<10.0	ug/L	10.0	SW846 8260B	10/16/2010	7:05 AM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	10/16/2010	7:05 AM	JMS
Methylene Chloride	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
Naphthalene	<15.0	ug/L	15.0	SW846 8260B	10/16/2010	7:05 AM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
Styrene	<4.00	ug/L	4.00	SW846 8260B	10/16/2010	7:05 AM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
1,1,2,2-Tetrachloroethane	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	7:05 AM	JMS
Tetrachloroethene	**28.3**	ug/L	1.00	SW846 8260B	10/16/2010	7:05 AM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	10/16/2010	7:05 AM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	10/16/2010	7:05 AM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
Trichloroethene	**3.82**	ug/L	1.00	SW846 8260B	10/16/2010	7:05 AM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
Vinyl Chloride	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	7:05 AM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	10/16/2010	7:05 AM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:05 AM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	10/16/2010	7:05 AM	JMS

- The Bromomethane concentration was determined by a library search of the appropriate retention time and mass spectral ion pattern.

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	6:55 PM	BEH
Acenaphthylene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	6:55 PM	BEH
Anthracene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	6:55 PM	BEH
Benzo(a)anthracene	<0.48	ug/L	0.48	SW846 8270C	10/20/2010	6:55 PM	BEH
Benzo(a)pyrene	<0.19	ug/L	0.19	SW846 8270C	10/20/2010	6:55 PM	BEH
Benzo(b)fluoranthene	<0.48	ug/L	0.48	SW846 8270C	10/20/2010	6:55 PM	BEH
Benzo(g,h,i)perylene	<0.19	ug/L	0.19	SW846 8270C	10/20/2010	6:55 PM	BEH
Benzo(k)fluoranthene	<0.48	ug/L	0.48	SW846 8270C	10/20/2010	6:55 PM	BEH
Chrysene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	6:55 PM	BEH
Dibenzo(a,h)anthracene	<0.48	ug/L	0.48	SW846 8270C	10/20/2010	6:55 PM	BEH

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Fluoranthene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	6:55 PM	BEH
Fluorene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	6:55 PM	BEH
Indeno(1,2,3-cd)pyrene	<0.48	ug/L	0.48	SW846 8270C	10/20/2010	6:55 PM	BEH
1-Methylnaphthalene	<0.95	ug/L	0.95	SW846 8270C	10/20/2010	6:55 PM	BEH
2-Methylnaphthalene	<0.95	ug/L	0.95	SW846 8270C	10/20/2010	6:55 PM	BEH
Naphthalene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	6:55 PM	BEH
Phenanthrene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	6:55 PM	BEH
Pyrene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	6:55 PM	BEH

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	<0.005	mg/L	0.005	SW846 7421	10/20/2010	10:49 AM	WWS

Analytical Testing Parameters

Client Sample ID: **MW-3** Collection Date: **10/14/2010**

Lab Sample ID: **1010219-03** Collection Time: **12:35 PM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<50.0	ug/L	50.0	SW846 8260B	10/16/2010	7:33 AM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	7:33 AM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
Bromodichloromethane	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	7:33 AM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
2-Butanone (MEK)	<5.00	ug/L	5.00	SW846 8260B	10/16/2010	7:33 AM	JMS
n-Butylbenzene	<4.00	ug/L	4.00	SW846 8260B	10/16/2010	7:33 AM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	10/16/2010	7:33 AM	JMS
Carbon Tetrachloride	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	7:33 AM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
Chlorodibromomethane	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	7:33 AM	JMS
Chloroform	**4.81**	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
Chloromethane	<4.00	ug/L	4.00	SW846 8260B	10/16/2010	7:33 AM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
1,1-Dichloroethene	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	7:33 AM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
cis-1,2-Dichloroethene	**8.51**	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
1,2-Dichloropropane	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	7:33 AM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
Hexachlorobutadiene	<3.00	ug/L	3.00	SW846 8260B	10/16/2010	7:33 AM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	10/16/2010	7:33 AM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
4-Isopropyltoluene	<10.0	ug/L	10.0	SW846 8260B	10/16/2010	7:33 AM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	10/16/2010	7:33 AM	JMS
Methylene Chloride	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
Naphthalene	<15.0	ug/L	15.0	SW846 8260B	10/16/2010	7:33 AM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
Styrene	<4.00	ug/L	4.00	SW846 8260B	10/16/2010	7:33 AM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
1,1,2,2-Tetrachloroethane	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	7:33 AM	JMS
Tetrachloroethene	**50.5**	ug/L	1.00	SW846 8260B	10/16/2010	7:33 AM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	10/16/2010	7:33 AM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	10/16/2010	7:33 AM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
Trichloroethene	**4.32**	ug/L	1.00	SW846 8260B	10/16/2010	7:33 AM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
Vinyl Chloride	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	7:33 AM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	10/16/2010	7:33 AM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	7:33 AM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	10/16/2010	7:33 AM	JMS

- The Bromomethane concentration was determined by a library search of the appropriate retention time and mass spectral ion pattern.

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	7:33 PM	BEH
Acenaphthylene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	7:33 PM	BEH
Anthracene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	7:33 PM	BEH
Benzo(a)anthracene	<0.48	ug/L	0.48	SW846 8270C	10/20/2010	7:33 PM	BEH
Benzo(a)pyrene	<0.19	ug/L	0.19	SW846 8270C	10/20/2010	7:33 PM	BEH
Benzo(b)fluoranthene	<0.48	ug/L	0.48	SW846 8270C	10/20/2010	7:33 PM	BEH
Benzo(g,h,i)perylene	<0.19	ug/L	0.19	SW846 8270C	10/20/2010	7:33 PM	BEH

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Benzo(k)fluoranthene	<0.48	ug/L	0.48	SW846 8270C	10/20/2010	7:33 PM	BEH
Chrysene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	7:33 PM	BEH
Dibenzo(a,h)anthracene	<0.48	ug/L	0.48	SW846 8270C	10/20/2010	7:33 PM	BEH
Fluoranthene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	7:33 PM	BEH
Fluorene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	7:33 PM	BEH
Indeno(1,2,3-cd)pyrene	<0.48	ug/L	0.48	SW846 8270C	10/20/2010	7:33 PM	BEH
1-Methylnaphthalene	<0.95	ug/L	0.95	SW846 8270C	10/20/2010	7:33 PM	BEH
2-Methylnaphthalene	<0.95	ug/L	0.95	SW846 8270C	10/20/2010	7:33 PM	BEH
Naphthalene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	7:33 PM	BEH
Phenanthrene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	7:33 PM	BEH
Pyrene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	7:33 PM	BEH

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	<0.005	mg/L	0.005	SW846 7421	10/20/2010	10:53 AM	WWS

Analytical Testing Parameters

Client Sample ID: **MW-4**
Lab Sample ID: **1010219-04**
Collection Date: **10/14/2010**
Collection Time: **1:03 PM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<50.0	ug/L	50.0	SW846 8260B	10/16/2010	8:01 AM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	8:01 AM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
Bromodichloromethane	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	8:01 AM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
2-Butanone (MEK)	<5.00	ug/L	5.00	SW846 8260B	10/16/2010	8:01 AM	JMS
n-Butylbenzene	<4.00	ug/L	4.00	SW846 8260B	10/16/2010	8:01 AM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	10/16/2010	8:01 AM	JMS
Carbon Tetrachloride	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	8:01 AM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
Chlorodibromomethane	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	8:01 AM	JMS
Chloroform	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
Chloromethane	<4.00	ug/L	4.00	SW846 8260B	10/16/2010	8:01 AM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
1,1-Dichloroethene	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	8:01 AM	JMS
cis-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
1,2-Dichloropropane	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	8:01 AM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
Hexachlorobutadiene	<3.00	ug/L	3.00	SW846 8260B	10/16/2010	8:01 AM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	10/16/2010	8:01 AM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
4-Isopropyltoluene	<10.0	ug/L	10.0	SW846 8260B	10/16/2010	8:01 AM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	10/16/2010	8:01 AM	JMS
Methylene Chloride	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
Naphthalene	<15.0	ug/L	15.0	SW846 8260B	10/16/2010	8:01 AM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
Styrene	<4.00	ug/L	4.00	SW846 8260B	10/16/2010	8:01 AM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
1,1,2,2-Tetrachloroethane	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	8:01 AM	JMS
Tetrachloroethene	**1.77**	ug/L	1.00	SW846 8260B	10/16/2010	8:01 AM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	10/16/2010	8:01 AM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	10/16/2010	8:01 AM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
Trichloroethene	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	8:01 AM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
Vinyl Chloride	<1.00	ug/L	1.00	SW846 8260B	10/16/2010	8:01 AM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	10/16/2010	8:01 AM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	10/16/2010	8:01 AM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	10/16/2010	8:01 AM	JMS

- The Bromomethane concentration was determined by a library search of the appropriate retention time and mass spectral ion pattern.

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	8:14 PM	BEH
Acenaphthylene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	8:14 PM	BEH
Anthracene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	8:14 PM	BEH
Benzo(a)anthracene	<0.48	ug/L	0.48	SW846 8270C	10/20/2010	8:14 PM	BEH

Laboratory Project ID: 1010219

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Benzo(a)pyrene	<0.19	ug/L	0.19	SW846 8270C	10/20/2010	8:14 PM	BEH
Benzo(b)fluoranthene	<0.48	ug/L	0.48	SW846 8270C	10/20/2010	8:14 PM	BEH
Benzo(g,h,i)perylene	<0.19	ug/L	0.19	SW846 8270C	10/20/2010	8:14 PM	BEH
Benzo(k)fluoranthene	<0.48	ug/L	0.48	SW846 8270C	10/20/2010	8:14 PM	BEH
Chrysene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	8:14 PM	BEH
Dibenzo(a,h)anthracene	<0.48	ug/L	0.48	SW846 8270C	10/20/2010	8:14 PM	BEH
Fluoranthene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	8:14 PM	BEH
Fluorene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	8:14 PM	BEH
Indeno(1,2,3-cd)pyrene	<0.48	ug/L	0.48	SW846 8270C	10/20/2010	8:14 PM	BEH
1-Methylnaphthalene	<0.95	ug/L	0.95	SW846 8270C	10/20/2010	8:14 PM	BEH
2-Methylnaphthalene	<0.95	ug/L	0.95	SW846 8270C	10/20/2010	8:14 PM	BEH
Naphthalene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	8:14 PM	BEH
Phenanthrene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	8:14 PM	BEH
Pyrene	<0.86	ug/L	0.86	SW846 8270C	10/20/2010	8:14 PM	BEH

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	**0.012**	mg/L	0.005	SW846 7421	10/20/2010	10:58 AM	WWS

Report Comments:

Note: Due to the extremely short holding time of 15 minutes, the following test procedures, if reported, were performed outside the recommended holding time: Total Residual Chlorine, laboratory pH, Dissolved Oxygen, Orthophosphate, and Sulfite.

The **PQL** is the **Practical Quantitation Limit**, which is defined as the lowest quantitation level of an analyte that can be readily achieved within the specified limits of precision and accuracy of an analytical method during routine laboratory operating conditions. The value may be raised depending on the characteristics or behavior of the target analyte.

All samples were analyzed **"as received"** from the client. American Westech Inc. can only assume that all samples were collected and submitted by the CLIENT following the appropriate protocols set forth by the regulatory requirements. This document shall not be reproduced, except in full, without the written approval of American Westech Inc. If there are any questions pertaining to this laboratory report please contact a Client Services Coordinator or the Laboratory Director at (717) 651-9700.

Laboratory Certifications:

- NELAP accredited by the PADEP (22-00578) & NJDEP (PA019) for numerous solid and chemical materials and non-potable water parameters. Please refer to our certified parameter lists for each state for specific information on the approved methodologies.
- PADEP accredited for various drinking water parameters including: Volatile Organic Compounds, Metals, Inorganics, and Microbiology (22-00578). Please refer to our certified parameter list for specific information on the approved methodologies.

Reviewed and Approved By:

David S. Wildasin
Assistant Laboratory Director

Date Reviewed and Approved:

10-22-10

AMERICAN WESTECH, INC. SAMPLE SUBMITTAL FORM

4359 Linglestown Road, Harrisburg, PA 17112 - Phone: (717) 651-9700 - Fax: (717) 657-0752
1015 Bridge Road, Suite D, Collegeville, PA 19426 - Phone: (610) 489-1234

NELAP accredited by PADEP & NJDEP

ACCREDITED IN ACCORDANCE WITH NELAP
PA ID# 22-00578 - NJ ID# PA019

LABORATORY PROJECT NUMBER: **1010219**

SUBMIT LAB REPORT TO (Westech Client Information):			SUBMIT INVOICE TO:		
Company: BL Companies			Company:		
Contact: John Thatcher			Contact:		
Address:			Address:		
City:	State:	Zip:	City:	State:	Zip:
Phone:	Fax:		Phone:	Fax:	
Report Delivery: ☐ Mail ☐ Fax ☐ Email (enter address below)			Invoice Delivery: ☐ Mail ☐ Email (enter address below)		

SAMPLE RECEIPT CONDITIONS	Y	N	NA	
Samples received on ice? Temp: 3.9 °C	Y	N	NA	
Cooler temp. within acceptable limits?	Y	N	NA	
Correct bottles/enough volume for analysis?	Y	N	NA	
Sample bottles in good condition (unbroken)?	Y	N	NA	
Samples within required holding time?	Y	N	NA	
Zero headspace samples collected correctly?	Y	N	NA	
Samples preserved (pH <2 and/or pH >12)?	Y	N	NA	FAI
Shipping Carrier? ☐ Drop Off ☐ WESTECH Pickup ☐ Outside Courier:				

CLIENT PROJECT INFORMATION (Required)	WESTECH Field Services Used? ☐ NO ☐ YES - (See Field Services Log)
Project Name: Brookfield Oil Parcels (LF+D)	Westech Quote/MSA No.:
Project/PO Number: 00L629-B	Data Deliverables: ☐ Level I (Standard) OR
Purpose: ☐ Regulatory ☐ Informational ☐ PWSID:	Additional Fee Deliverables: ☐ Level II ☐ Level III ☐ Level IV
Results TAT Requested *: ☒ 6-10 Day (Standard) OR ☐ RUSH** (INDICATE DUE DATE):	

NOTES: *Turnaround times begin at 5pm on the day the samples were received by WESTECH. Results will be considered due by 5pm on the due date.
**RUSH TATs will include surcharge unless otherwise agreed to in writing and must be pre-arranged to ensure the due date can be met.

SAMPLE DETAILS: SS = Solid or Sludge; GW = Groundwater; WW = Wastewater; DW = Drinking Water; SW = Storm or Surface Water; OL = Oil; A = Air; O = Other

ANALYSIS REQUESTED: VOCs (8260-C); Parameters (8270-C); Dissolved Lead

LAB ID	SAMPLE IDENTIFICATION / LOCATION DESCRIPTION	SAMPLE DATE	SAMPLE TIME	SAMPLED BY	Total # of Containers	Sample Type:	Grab "G" or Composite "C"	VOCs (8260-C)	Parameters (8270-C)	Dissolved Lead
01	MW-1	10/14/10	1255	SH/AZ	5	GW	G	X	X	X
02	MW-2A	"	1245	"	1	"	"	X	X	X
03	MW-3	"	1235	"	1	"	"	X	X	X
04	MW-4	"	1303	"	1	"	"	X	X	X
05										
06										
07										
08										
09										
10										

CUSTODY CHAIN	PRINT NAME	SIGNATURE	DATE	TIME
Relinquished by SAMPLER:	Steve Vedder	Steve Vedder	10/15/10	0805
Accepted by:				
Relinquished by:				
Accepted by:				
Relinquished by:				
Accepted by:				
Relinquished by:				
Received at WESTECH Lab:	Dave	[signature]	10/16/10	1045

COMMENTS, NOTES, OR SPECIAL INSTRUCTIONS

By relinquishing this form to WESTECH, I hereby agree to the terms & conditions printed on the reverse side.

WHITE - Original YELLOW - Laboratory Copy PINK - Client Copy

Microbac®

Laboratory Result Summary

Laboratory Project ID: 1101091

BL Companies
John Thatcher
4242 Carlisle Pike
Suite 260
Camp Hill, PA 17011

Contact: John Thatcher
Project Name: Frankfort & Darrah
Project Number: 00L629-B
Purchase Order Number: N/A
Sampled By: Andrew Kuder
Date Received: January 7, 2011
Time Received: 9:45 AM

Analytical Testing Parameters

Client Sample ID: **MW - 1**
Lab Sample ID: **1101091-01**
Collection Date: **1/5/2011**
Collection Time: **1:50 PM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<50.0	ug/L	50.0	SW846 8260B	1/10/2011	4:58 PM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	4:58 PM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
Bromodichloromethane	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	4:58 PM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
2-Butanone (MEK)	<5.00	ug/L	5.00	SW846 8260B	1/10/2011	4:58 PM	JMS
n-Butylbenzene	<4.00	ug/L	4.00	SW846 8260B	1/10/2011	4:58 PM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	1/10/2011	4:58 PM	JMS
Carbon Tetrachloride	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	4:58 PM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
Chlorodibromomethane	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	4:58 PM	JMS
Chloroform	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
Chloromethane	<4.00	ug/L	4.00	SW846 8260B	1/10/2011	4:58 PM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
1,1-Dichloroethene	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	4:58 PM	JMS
cis-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
1,2-Dichloropropane	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	4:58 PM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
Hexachlorobutadiene	<3.00	ug/L	3.00	SW846 8260B	1/10/2011	4:58 PM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	1/10/2011	4:58 PM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
4-Isopropyltoluene	<10.0	ug/L	10.0	SW846 8260B	1/10/2011	4:58 PM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	1/10/2011	4:58 PM	JMS
Methylene Chloride	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
Naphthalene	<15.0	ug/L	15.0	SW846 8260B	1/10/2011	4:58 PM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
Styrene	<4.00	ug/L	4.00	SW846 8260B	1/10/2011	4:58 PM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
1,1,2,2-Tetrachloroethane	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	4:58 PM	JMS
Tetrachloroethene	**1.96**	ug/L	1.00	SW846 8260B	1/10/2011	4:58 PM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	1/10/2011	4:58 PM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	1/10/2011	4:58 PM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
Trichloroethene	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	4:58 PM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
Vinyl Chloride	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	4:58 PM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	1/10/2011	4:58 PM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	4:58 PM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	1/10/2011	4:58 PM	JMS

- The Bromomethane concentration was determined by a library search of the appropriate retention time and mass spectral ion pattern.

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.95	ug/L	0.95	SW846 8270C	1/18/2011	6:54 PM	BEH
Acenaphthylene	<0.95	ug/L	0.95	SW846 8270C	1/18/2011	6:54 PM	BEH
Anthracene	<0.95	ug/L	0.95	SW846 8270C	1/18/2011	6:54 PM	BEH
Benzo(a)anthracene	**0.84**	ug/L	0.48	SW846 8270C	1/18/2011	6:54 PM	BEH
Benzo(a)pyrene	**1.09**	ug/L	0.19	SW846 8270C	1/18/2011	6:54 PM	BEH
Benzo(b)fluoranthene	**3.17**	ug/L	0.48	SW846 8270C	1/18/2011	6:54 PM	BEH
Benzo(g,h,i)perylene	**1.44**	ug/L	0.19	SW846 8270C	1/18/2011	6:54 PM	BEH
Benzo(k)fluoranthene	**1.75**	ug/L	0.48	SW846 8270C	1/18/2011	6:54 PM	BEH
Chrysene	**1.98**	ug/L	0.48	SW846 8270C	1/18/2011	6:54 PM	BEH
Dibenzo(a,h)anthracene	<0.48	ug/L	0.48	SW846 8270C	1/18/2011	6:54 PM	BEH
Fluoranthene	**1.89**	ug/L	0.95	SW846 8270C	1/18/2011	6:54 PM	BEH
Fluorene	<0.95	ug/L	0.95	SW846 8270C	1/18/2011	6:54 PM	BEH
Indeno(1,2,3-cd)pyrene	**1.35**	ug/L	0.48	SW846 8270C	1/18/2011	6:54 PM	BEH
1-Methylnaphthalene	<0.95	ug/L	0.95	SW846 8270C	1/18/2011	6:54 PM	BEH
2-Methylnaphthalene	<0.95	ug/L	0.95	SW846 8270C	1/18/2011	6:54 PM	BEH

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Naphthalene	<0.48	ug/L	0.48	SW846 8270C	1/18/2011	6:54 PM	BEH
Phenanthrene	<0.95	ug/L	0.95	SW846 8270C	1/18/2011	6:54 PM	BEH
Pyrene	**1.56**	ug/L	0.95	SW846 8270C	1/18/2011	6:54 PM	BEH

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	<0.005	mg/L	0.005	SW846 7421	1/10/2011	4:50 PM	WWS

Analytical Testing Parameters

Client Sample ID: **MW - 2A**
Collection Date: **1/5/2011**
Lab Sample ID: **1101091-02**
Collection Time: **1:30 PM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<50.0	ug/L	50.0	SW846 8260B	1/10/2011	5:27 PM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	5:27 PM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
Bromodichloromethane	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	5:27 PM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
2-Butanone (MEK)	<5.00	ug/L	5.00	SW846 8260B	1/10/2011	5:27 PM	JMS
n-Butylbenzene	<4.00	ug/L	4.00	SW846 8260B	1/10/2011	5:27 PM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	1/10/2011	5:27 PM	JMS
Carbon Tetrachloride	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	5:27 PM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
Chlorodibromomethane	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	5:27 PM	JMS
Chloroform	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
Chloromethane	<4.00	ug/L	4.00	SW846 8260B	1/10/2011	5:27 PM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
1,1-Dichloroethene	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	5:27 PM	JMS
cis-1,2-Dichloroethene	**6.76**	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
1,2-Dichloropropane	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	5:27 PM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
Hexachlorobutadiene	<3.00	ug/L	3.00	SW846 8260B	1/10/2011	5:27 PM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	1/10/2011	5:27 PM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
4-Isopropyltoluene	<10.0	ug/L	10.0	SW846 8260B	1/10/2011	5:27 PM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	1/10/2011	5:27 PM	JMS
Methylene Chloride	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
Naphthalene	<15.0	ug/L	15.0	SW846 8260B	1/10/2011	5:27 PM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
Styrene	<4.00	ug/L	4.00	SW846 8260B	1/10/2011	5:27 PM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
1,1,2,2-Tetrachloroethane	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	5:27 PM	JMS
Tetrachloroethene	**24.1**	ug/L	1.00	SW846 8260B	1/10/2011	5:27 PM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	1/10/2011	5:27 PM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	1/10/2011	5:27 PM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
Trichloroethene	**3.28**	ug/L	1.00	SW846 8260B	1/10/2011	5:27 PM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
Vinyl Chloride	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	5:27 PM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	1/10/2011	5:27 PM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:27 PM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	1/10/2011	5:27 PM	JMS

- The Bromomethane concentration was determined by a library search of the appropriate retention time and mass spectral ion pattern.

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.97	ug/L	0.97	SW846 8270C	1/18/2011	7:29 PM	BEH
Acenaphthylene	<0.97	ug/L	0.97	SW846 8270C	1/18/2011	7:29 PM	BEH
Anthracene	<0.97	ug/L	0.97	SW846 8270C	1/18/2011	7:29 PM	BEH
Benzo(a)anthracene	<0.49	ug/L	0.49	SW846 8270C	1/18/2011	7:29 PM	BEH
Benzo(a)pyrene	<0.19	ug/L	0.19	SW846 8270C	1/18/2011	7:29 PM	BEH
Benzo(b)fluoranthene	<0.49	ug/L	0.49	SW846 8270C	1/18/2011	7:29 PM	BEH
Benzo(g,h,i)perylene	<0.19	ug/L	0.19	SW846 8270C	1/18/2011	7:29 PM	BEH
Benzo(k)fluoranthene	<0.49	ug/L	0.49	SW846 8270C	1/18/2011	7:29 PM	BEH
Chrysene	<0.49	ug/L	0.49	SW846 8270C	1/18/2011	7:29 PM	BEH
Dibenzo(a,h)anthracene	<0.49	ug/L	0.49	SW846 8270C	1/18/2011	7:29 PM	BEH
Fluoranthene	<0.97	ug/L	0.97	SW846 8270C	1/18/2011	7:29 PM	BEH
Fluorene	<0.97	ug/L	0.97	SW846 8270C	1/18/2011	7:29 PM	BEH
Indeno(1,2,3-cd)pyrene	<0.49	ug/L	0.49	SW846 8270C	1/18/2011	7:29 PM	BEH
1-Methylnaphthalene	<0.97	ug/L	0.97	SW846 8270C	1/18/2011	7:29 PM	BEH

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
2-Methylnaphthalene	<0.97	ug/L	0.97	SW846 8270C	1/18/2011	7:29 PM	BEH
Naphthalene	<0.49	ug/L	0.49	SW846 8270C	1/18/2011	7:29 PM	BEH
Phenanthrene	<0.97	ug/L	0.97	SW846 8270C	1/18/2011	7:29 PM	BEH
Pyrene	<0.97	ug/L	0.97	SW846 8270C	1/18/2011	7:29 PM	BEH

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	<0.005	mg/L	0.005	SW846 7421	1/10/2011	4:54 PM	WWS

Analytical Testing Parameters

Client Sample ID: **MW - 3** Collection Date: **1/5/2011**

Lab Sample ID: **1101091-03** Collection Time: **1:07 PM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<50.0	ug/L	50.0	SW846 8260B	1/10/2011	5:55 PM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	5:55 PM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
Bromodichloromethane	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	5:55 PM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
2-Butanone (MEK)	<5.00	ug/L	5.00	SW846 8260B	1/10/2011	5:55 PM	JMS
n-Butylbenzene	<4.00	ug/L	4.00	SW846 8260B	1/10/2011	5:55 PM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	1/10/2011	5:55 PM	JMS
Carbon Tetrachloride	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	5:55 PM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
Chlorodibromomethane	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	5:55 PM	JMS
Chloroform	**5.51**	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
Chloromethane	<4.00	ug/L	4.00	SW846 8260B	1/10/2011	5:55 PM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
1,1-Dichloroethene	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	5:55 PM	JMS
cis-1,2-Dichloroethene	**6.07**	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
1,2-Dichloropropane	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	5:55 PM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
Hexachlorobutadiene	<3.00	ug/L	3.00	SW846 8260B	1/10/2011	5:55 PM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	1/10/2011	5:55 PM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
4-Isopropyltoluene	<10.0	ug/L	10.0	SW846 8260B	1/10/2011	5:55 PM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	1/10/2011	5:55 PM	JMS
Methylene Chloride	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
Naphthalene	<15.0	ug/L	15.0	SW846 8260B	1/10/2011	5:55 PM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
Styrene	<4.00	ug/L	4.00	SW846 8260B	1/10/2011	5:55 PM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
1,1,2,2-Tetrachloroethane	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	5:55 PM	JMS
Tetrachloroethene	**43.4**	ug/L	1.00	SW846 8260B	1/10/2011	5:55 PM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	1/10/2011	5:55 PM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	1/10/2011	5:55 PM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
Trichloroethene	**3.09**	ug/L	1.00	SW846 8260B	1/10/2011	5:55 PM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
Vinyl Chloride	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	5:55 PM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	1/10/2011	5:55 PM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	5:55 PM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	1/10/2011	5:55 PM	JMS

- The Bromomethane concentration was determined by a library search of the appropriate retention time and mass spectral ion pattern.

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.95	ug/L	0.95	SW846 8270C	1/18/2011	8:04 PM	BEH
Acenaphthylene	<0.95	ug/L	0.95	SW846 8270C	1/18/2011	8:04 PM	BEH
Anthracene	<0.95	ug/L	0.95	SW846 8270C	1/18/2011	8:04 PM	BEH
Benzo(a)anthracene	<0.48	ug/L	0.48	SW846 8270C	1/18/2011	8:04 PM	BEH
Benzo(a)pyrene	<0.19	ug/L	0.19	SW846 8270C	1/18/2011	8:04 PM	BEH
Benzo(b)fluoranthene	<0.48	ug/L	0.48	SW846 8270C	1/18/2011	8:04 PM	BEH
Benzo(g,h,i)perylene	<0.19	ug/L	0.19	SW846 8270C	1/18/2011	8:04 PM	BEH
Benzo(k)fluoranthene	<0.48	ug/L	0.48	SW846 8270C	1/18/2011	8:04 PM	BEH
Chrysene	<0.48	ug/L	0.48	SW846 8270C	1/18/2011	8:04 PM	BEH
Dibenzo(a,h)anthracene	<0.48	ug/L	0.48	SW846 8270C	1/18/2011	8:04 PM	BEH
Fluoranthene	<0.95	ug/L	0.95	SW846 8270C	1/18/2011	8:04 PM	BEH
Fluorene	<0.95	ug/L	0.95	SW846 8270C	1/18/2011	8:04 PM	BEH
Indeno(1,2,3-cd)pyrene	<0.48	ug/L	0.48	SW846 8270C	1/18/2011	8:04 PM	BEH

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
1-Methylnaphthalene	<0.95	ug/L	0.95	SW846 8270C	1/18/2011	8:04 PM	BEH
2-Methylnaphthalene	<0.95	ug/L	0.95	SW846 8270C	1/18/2011	8:04 PM	BEH
Naphthalene	<0.48	ug/L	0.48	SW846 8270C	1/18/2011	8:04 PM	BEH
Phenanthrene	<0.95	ug/L	0.95	SW846 8270C	1/18/2011	8:04 PM	BEH
Pyrene	<0.95	ug/L	0.95	SW846 8270C	1/18/2011	8:04 PM	BEH

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	<0.005	mg/L	0.005	SW846 7421	1/10/2011	4:59 PM	WWS

Analytical Testing Parameters

Client Sample ID: **MW - 4** Collection Date: **1/5/2011**

Lab Sample ID: **1101091-04** Collection Time: **2:15 PM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<50.0	ug/L	50.0	SW846 8260B	1/10/2011	6:23 PM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	6:23 PM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
Bromodichloromethane	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	6:23 PM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
Bromomethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
2-Butanone (MEK)	<5.00	ug/L	5.00	SW846 8260B	1/10/2011	6:23 PM	JMS
n-Butylbenzene	<4.00	ug/L	4.00	SW846 8260B	1/10/2011	6:23 PM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	1/10/2011	6:23 PM	JMS
Carbon Tetrachloride	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	6:23 PM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
Chlorodibromomethane	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	6:23 PM	JMS
Chloroform	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
Chloromethane	<4.00	ug/L	4.00	SW846 8260B	1/10/2011	6:23 PM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
1,1-Dichloroethene	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	6:23 PM	JMS
cis-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
1,2-Dichloropropane	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	6:23 PM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
Hexachlorobutadiene	<3.00	ug/L	3.00	SW846 8260B	1/10/2011	6:23 PM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	1/10/2011	6:23 PM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
4-Isopropyltoluene	<10.0	ug/L	10.0	SW846 8260B	1/10/2011	6:23 PM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	1/10/2011	6:23 PM	JMS
Methylene Chloride	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
Naphthalene	<15.0	ug/L	15.0	SW846 8260B	1/10/2011	6:23 PM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
Styrene	<4.00	ug/L	4.00	SW846 8260B	1/10/2011	6:23 PM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
1,1,2,2-Tetrachloroethane	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	6:23 PM	JMS
Tetrachloroethene	**1.72**	ug/L	1.00	SW846 8260B	1/10/2011	6:23 PM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	1/10/2011	6:23 PM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	1/10/2011	6:23 PM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
Trichloroethene	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	6:23 PM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
Vinyl Chloride	<1.00	ug/L	1.00	SW846 8260B	1/10/2011	6:23 PM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	1/10/2011	6:23 PM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	1/10/2011	6:23 PM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	1/10/2011	6:23 PM	JMS

- The Bromomethane concentration was determined by a library search of the appropriate retention time and mass spectral ion pattern.

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.96	ug/L	0.96	SW846 8270C	1/18/2011	8:38 PM	BEH
Acenaphthylene	<0.96	ug/L	0.96	SW846 8270C	1/18/2011	8:38 PM	BEH
Anthracene	<0.96	ug/L	0.96	SW846 8270C	1/18/2011	8:38 PM	BEH
Benzo(a)anthracene	<0.48	ug/L	0.48	SW846 8270C	1/18/2011	8:38 PM	BEH
Benzo(a)pyrene	<0.19	ug/L	0.19	SW846 8270C	1/18/2011	8:38 PM	BEH
Benzo(b)fluoranthene	<0.48	ug/L	0.48	SW846 8270C	1/18/2011	8:38 PM	BEH
Benzo(g,h,i)perylene	<0.19	ug/L	0.19	SW846 8270C	1/18/2011	8:38 PM	BEH
Benzo(k)fluoranthene	<0.48	ug/L	0.48	SW846 8270C	1/18/2011	8:38 PM	BEH
Chrysene	<0.48	ug/L	0.48	SW846 8270C	1/18/2011	8:38 PM	BEH
Dibenzo(a,h)anthracene	<0.48	ug/L	0.48	SW846 8270C	1/18/2011	8:38 PM	BEH
Fluoranthene	<0.96	ug/L	0.96	SW846 8270C	1/18/2011	8:38 PM	BEH
Fluorene	<0.96	ug/L	0.96	SW846 8270C	1/18/2011	8:38 PM	BEH

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Indeno(1,2,3-cd)pyrene	<0.48	ug/L	0.48	SW846 8270C	1/18/2011	8:38 PM	BEH
1-Methylnaphthalene	<0.96	ug/L	0.96	SW846 8270C	1/18/2011	8:38 PM	BEH
2-Methylnaphthalene	<0.96	ug/L	0.96	SW846 8270C	1/18/2011	8:38 PM	BEH
Naphthalene	<0.48	ug/L	0.48	SW846 8270C	1/18/2011	8:38 PM	BEH
Phenanthrene	<0.96	ug/L	0.96	SW846 8270C	1/18/2011	8:38 PM	BEH
Pyrene	<0.96	ug/L	0.96	SW846 8270C	1/18/2011	8:38 PM	BEH

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	**0.022**	mg/L	0.005	SW846 7421	1/10/2011	5:03 PM	WWS

Report Comments:

Note: Due to the extremely short holding time of 15 minutes, the following test procedures, if reported, were performed outside the recommended holding time: Total Residual Chlorine, laboratory pH, Dissolved Oxygen, Orthophosphate, and Sulfite.

The **PQL** is the **Practical Quantitation Limit**, which is defined as the lowest quantitation level of an analyte that can be readily achieved within the specified limits of precision and accuracy of an analytical method during routine laboratory operating conditions. The value may be raised depending on the characteristics or behavior of the target analyte.

All samples were analyzed **"as received"** from the client. Microbac Laboratories, Inc.- Westech Division can only assume that all samples were collected and submitted by the CLIENT following the appropriate protocols set forth by the regulatory requirements. This document shall not be reproduced, except in full, without the written approval of Microbac Laboratories, Inc.- Westech Division. If there are any questions pertaining to this laboratory report please contact a Client Services Coordinator or the Laboratory Director at (717) 651-9700.

Laboratory Certifications:

- NELAP accredited by the PADEP (22-00578) & NJDEP (PA019) for numerous solid and chemical materials and non-potable water parameters. Please refer to our certified parameter lists for each state for specific information on the approved methodologies.
- PADEP accredited for various drinking water parameters including: Volatile Organic Compounds, Metals, Inorganics, and Microbiology (22-00578). Please refer to our certified parameter list for specific information on the approved methodologies.

Reviewed and Approved By:

David S. Wildasin
Assistant Laboratory Director

Date Reviewed and Approved:

AMERICAN WESTECH, INC. SAMPLE SUBMITTAL FORM

AMERICAN Westech INCORPORATED

4359 Linglestown Road, Harrisburg, PA 17112 · Phone: (717) 651-9700 · Fax: (717) 657-0752
1015 Bridge Road, Suite D, Collegeville, PA 19426 · Phone: (610) 489-1234

NELAP accredited by PADEP & NJDEP

ACCREDITED IN ACCORDANCE WITH nelac
PA ID# 22-00578 · NJ ID# PA019

LABORATORY PROJECT NUMBER: 1101091

SUBMIT LAB REPORT TO (Westech Client Information):			SUBMIT INVOICE TO:		
Company: BL Companies			Company:		
Contact: John Thatcher			Contact: SAME		
Address: 4242 Carlisle Pike			Address:		
City: Harrisburg	State: PA	Zip: 17011	City:	State:	Zip:
Phone: 717-651-9850	Fax: 717-651-9858		Phone:	Fax:	
Report Delivery: ☐ Mail ☐ Fax ☐ Email (enter address below)			Invoice Delivery: ☐ Mail ☐ Email (enter address below)		

LABORATORY USE ONLY:

Samples received on ice? Temp: 1.8 °C	Y	N	NA
Cooler temp. within acceptable limits?	Y	N	NA
Correct bottles/enough volume for analysis?	Y	N	NA
Sample bottles in good condition (unbroken)?	Y	N	NA
Samples within required holding time?	Y	N	NA
Zero headspace samples collected correctly?	Y	N	NA
Samples preserved to pH <2 and/or pH >12?	Y	N	NA

Shipping Carrier? ☐ Drop Off ☒ ~~WESTECH~~ Pickup ☐ Outside Courier: FNW

CLIENT PROJECT INFORMATION (Required)

Project Name: Frankfort + Darrah
Project/PO Number: 00L629-B
Purpose: ☐ *Regulatory* ☐ *Informational* ☐ *PWSID:*

WESTECH Field Services Used? ☐ NO ☐ YES - *(See Field Services Log)*
Westech Quote/MSA No.:
Data Deliverables: ☐ *Level I (Standard)* OR
Additional Fee Deliverables: ☐ *Level II* ☐ *Level III* ☐ *Level IV*

Results TAT Requested * : ☒ 6-10 Day (Standard) OR ☐ RUSH** (INDICATE DUE DATE):

NOTES: *Turnaround times begin at 5pm on the day the samples were received by WESTECH. Results will be considered due by 5pm on the due date.
**RUSH TATs will include surcharge unless otherwise agreed to in writing and must be pre-arranged to ensure the due date can be met.

SS = Solid or Sludge
GW = Groundwater
WW = Wastewater
DW = Drinking Water
SW = Storm or Surface Water
OL = Oil A = Air O = Other

LAB ID	SAMPLE IDENTIFICATION / LOCATION DESCRIPTION	SAMPLE DATE	SAMPLE TIME	SAMPLED BY	Total # of Containers	Sample Type:	Grab "G" or Composite "C"	ANALYSIS REQUESTED: VOCs (8260-B)	PAHs (8270-C)	Dissolved Lead
01	MW-1	1-5-11	13:50	ARK	5	GW	G	X	X	X
02	MW-2A	↓	13:30	↓	↓	↓	↓	X	X	X
03	MW-3	↓	13:07	↓	↓	↓	↓	X	X	X
04	MW-4	↓	14:15	↓	↓	↓	↓	X	X	X
05										
06										
07										
08										
09										
10										

CUSTODY CHAIN	PRINT NAME	SIGNATURE	DATE	TIME
Relinquished by SAMPLER:	Andrew Kyder		1-6-11	
Accepted by:	Matt Stewart		1-6-11	9:45a
Relinquished by:	Matt Stewart		1-7-11	9:45a
Accepted by:				
Relinquished by:				
Accepted by:				
Relinquished by:				
Received at WESTECH Lab:	Sherma Dranovsky	Sherma Dranovsky	1/7/11	09:45

COMMENTS, NOTES, OR SPECIAL INSTRUCTIONS

By relinquishing this form to WESTECH, I hereby agree to the terms & conditions printed on the reverse side.

WHITE - Original YELLOW - Laboratory Copy PINK - Client Copy

Microbac Laboratories, Inc.

Westech Division

Laboratory ID: 1106806

Certificate of Analysis

BL Companies, Inc.
John Thatcher
4242 Carlisle Pike, Suite 260
Camp Hill, PA 17011

Contact: John Thatcher
Project Name: Frankfort & Darrah
Project / PO Number: 00L629-B
Date Received: April 13, 2011
Time Received: 2:50 pm

Analytical Testing Parameters

Client Sample ID: **MW-1**
Lab Sample ID: **1106806-01**

Collection Date: **4/12/2011**
Collection Time: **2:27 pm**
Collected By: Andrew Kuder

METALS

Parameter	Result		Units	PQL	Method	Date	Time	Analyst
Lead, Dissolved	<0.0010		mg/L	0.0010	EPA 200.8	4/20/2011	7:11 pm	BCK

SEMIVOLATILE ORGANIC COMPOUNDS

Parameter	Result		Units	PQL	Method	Date	Time	Analyst
1-Methylnaphthalene	<0.943		ug/L	0.943	EPA 8270C	4/21/2011	1:59 pm	BEH
2-Methylnaphthalene	<0.943		ug/L	0.943	EPA 8270C	4/21/2011	1:59 pm	BEH
Acenaphthene	<0.943		ug/L	0.943	EPA 8270C	4/21/2011	1:59 pm	BEH
Acenaphthylene	<0.943		ug/L	0.943	EPA 8270C	4/21/2011	1:59 pm	BEH
Anthracene	<0.849		ug/L	0.849	EPA 8270C	4/21/2011	1:59 pm	BEH
Benzo (a) anthracene	<0.472		ug/L	0.472	EPA 8270C	4/21/2011	1:59 pm	BEH
Benzo (a) pyrene	**0.667**		ug/L	0.189	EPA 8270C	4/21/2011	1:59 pm	BEH
Benzo (b) fluoranthene	**1.08**		ug/L	0.472	EPA 8270C	4/21/2011	1:59 pm	BEH
Benzo (g,h,i) perylene	**0.337**		ug/L	0.255	EPA 8270C	4/21/2011	1:59 pm	BEH
Benzo (k) fluoranthene	**0.853**		ug/L	0.472	EPA 8270C	4/21/2011	1:59 pm	BEH
Chrysene	<0.849		ug/L	0.849	EPA 8270C	4/21/2011	1:59 pm	BEH
Dibenz (a,h) anthracene	<0.472		ug/L	0.472	EPA 8270C	4/21/2011	1:59 pm	BEH
Fluoranthene	<0.849		ug/L	0.849	EPA 8270C	4/21/2011	1:59 pm	BEH
Fluorene	<0.849		ug/L	0.849	EPA 8270C	4/21/2011	1:59 pm	BEH
Indeno (1,2,3-cd) pyrene	<0.472		ug/L	0.472	EPA 8270C	4/21/2011	1:59 pm	BEH
Naphthalene	<0.849		ug/L	0.849	EPA 8270C	4/21/2011	1:59 pm	BEH
Phenanthrene	<0.849		ug/L	0.849	EPA 8270C	4/21/2011	1:59 pm	BEH
Pyrene	<0.849		ug/L	0.849	EPA 8270C	4/21/2011	1:59 pm	BEH
Surrogate: 2-Fluorobiphenyl	38.4		% Rec	8-127	EPA 8270C	4/21/2011	1:59 pm	BEH
Surrogate: Nitrobenzene-d5	46.4		% Rec	12-141	EPA 8270C	4/21/2011	1:59 pm	BEH
Surrogate: p-Terphenyl-d14	41.0		% Rec	8-103	EPA 8270C	4/21/2011	1:59 pm	BEH

VOLATILE ORGANIC COMPOUNDS

Parameter	Result		Units	PQL	Method	Date	Time	Analyst
1,1,1,2-Tetrachloroethane	<2.00	**Lib-1**	ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
1,1,1-Trichloroethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
1,1,2,2-Tetrachloroethane	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	3:37 pm	JMS
1,1,2-Trichloroethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
1,1-Dichloroethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
1,1-Dichloroethene	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	3:37 pm	JMS

Certificate of Analysis

VOLATILE ORGANIC COMPOUNDS

Parameter	Result		Units	PQL	Method	Date	Time	Analyst
1,1-Dichloropropene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
1,2,3-Trichlorobenzene	<15.0		ug/L	15.0	EPA 8260B	4/15/2011	3:37 pm	JMS
1,2,3-Trichloropropane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
1,2,4-Trichlorobenzene	<15.0		ug/L	15.0	EPA 8260B	4/15/2011	3:37 pm	JMS
1,2,4-Trimethylbenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
1,2-Dibromo-3-chloropropane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
1,2-Dibromoethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
1,2-Dichlorobenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
1,2-Dichloroethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
1,2-Dichloropropane	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	3:37 pm	JMS
1,3,5-Trimethylbenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
1,3-Dichlorobenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
1,3-Dichloropropane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
1,4-Dichlorobenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
2-Butanone (MEK)	<5.00		ug/L	5.00	EPA 8260B	4/15/2011	3:37 pm	JMS
2-Chlorotoluene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
2-Hexanone	<4.00		ug/L	4.00	EPA 8260B	4/15/2011	3:37 pm	JMS
4-Chlorotoluene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
4-Isopropyltoluene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
4-Methyl-2-Pentanone (MIBK)	<3.00		ug/L	3.00	EPA 8260B	4/15/2011	3:37 pm	JMS
Acetone	<50.0		ug/L	50.0	EPA 8260B	4/15/2011	3:37 pm	JMS
Benzene	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	3:37 pm	JMS
Bromobenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
Bromochloromethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
Bromodichloromethane	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	3:37 pm	JMS
Bromoform	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
Bromomethane	<2.00	**Lib-1**	ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
Carbon disulfide	<4.00		ug/L	4.00	EPA 8260B	4/15/2011	3:37 pm	JMS
Carbon Tetrachloride	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	3:37 pm	JMS
Chlorobenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
Chlorodibromomethane	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	3:37 pm	JMS
Chloroethane	<4.00		ug/L	4.00	EPA 8260B	4/15/2011	3:37 pm	JMS
Chloroform	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
Chloromethane	<4.00		ug/L	4.00	EPA 8260B	4/15/2011	3:37 pm	JMS
cis-1,2-Dichloroethene	**6.00**		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
cis-1,3-Dichloropropene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
Dibromomethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
Dichlorodifluoromethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
Ethylbenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
Hexachlorobutadiene	<3.00		ug/L	3.00	EPA 8260B	4/15/2011	3:37 pm	JMS
Isopropylbenzene (Cumene)	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
m,p-Xylenes	<4.00		ug/L	4.00	EPA 8260B	4/15/2011	3:37 pm	JMS
Methylene Chloride	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
Methyl-tert-Butyl Ether	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
Naphthalene	<10.0		ug/L	10.0	EPA 8260B	4/15/2011	3:37 pm	JMS
n-Butyl Benzene	<4.00		ug/L	4.00	EPA 8260B	4/15/2011	3:37 pm	JMS

Certificate of Analysis

VOLATILE ORGANIC COMPOUNDS

Parameter	Result		Units	PQL	Method	Date	Time	Analyst
n-Propylbenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
o-Xylene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
sec-Butylbenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
Styrene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
tert-Butylbenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
Tetrachloroethene	**3.76**		ug/L	1.00	EPA 8260B	4/15/2011	3:37 pm	JMS
Toluene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
Total Xylenes	<6.00		ug/L	6.00	EPA 8260B	4/15/2011	3:37 pm	JMS
trans-1,2-Dichloroethene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
trans-1,3-Dichloropropene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
Trichloroethene	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	3:37 pm	JMS
Trichlorofluoromethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	3:37 pm	JMS
Vinyl chloride	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	3:37 pm	JMS
Surrogate: 1,2-Dichloroethane-d4	101		% Rec	74.1-131.5	EPA 8260B	4/15/2011	3:37 pm	JMS
Surrogate: 4-Bromofluorobenzene	95.9		% Rec	70.4-128	EPA 8260B	4/15/2011	3:37 pm	JMS
Surrogate: Toluene-d8	94.5		% Rec	83.3-118.6	EPA 8260B	4/15/2011	3:37 pm	JMS

Analytical Testing Parameters

Client Sample ID: **MW-2A**
Lab Sample ID: **1106806-02**

Collection Date: **4/12/2011**
Collection Time: **2:10 pm**
Collected By: Andrew Kuder

METALS

Parameter	Result		Units	PQL	Method	Date	Time	Analyst
Lead, Dissolved	<0.0010		mg/L	0.0010	EPA 200.8	4/20/2011	7:20 pm	BCK

SEMIVOLATILE ORGANIC COMPOUNDS

Parameter	Result		Units	PQL	Method	Date	Time	Analyst
1-Methylnaphthalene	<0.935		ug/L	0.935	EPA 8270C	4/20/2011	2:28 pm	BEH
2-Methylnaphthalene	<0.935		ug/L	0.935	EPA 8270C	4/20/2011	2:28 pm	BEH
Acenaphthene	<0.935		ug/L	0.935	EPA 8270C	4/20/2011	2:28 pm	BEH
Acenaphthylene	<0.935		ug/L	0.935	EPA 8270C	4/20/2011	2:28 pm	BEH
Anthracene	<0.841		ug/L	0.841	EPA 8270C	4/20/2011	2:28 pm	BEH
Benzo (a) anthracene	<0.467		ug/L	0.467	EPA 8270C	4/20/2011	2:28 pm	BEH
Benzo (a) pyrene	**0.252**		ug/L	0.187	EPA 8270C	4/20/2011	2:28 pm	BEH
Benzo (b) fluoranthene	<0.467		ug/L	0.467	EPA 8270C	4/20/2011	2:28 pm	BEH
Benzo (g,h,i) perylene	<0.252	**A-18**	ug/L	0.252	EPA 8270C	4/20/2011	2:28 pm	BEH
Benzo (k) fluoranthene	<0.467	**A-18**	ug/L	0.467	EPA 8270C	4/20/2011	2:28 pm	BEH
Chrysene	<0.841		ug/L	0.841	EPA 8270C	4/20/2011	2:28 pm	BEH
Dibenz (a,h) anthracene	<0.467	**A-18**	ug/L	0.467	EPA 8270C	4/20/2011	2:28 pm	BEH
Fluoranthene	<0.841		ug/L	0.841	EPA 8270C	4/20/2011	2:28 pm	BEH
Fluorene	<0.841		ug/L	0.841	EPA 8270C	4/20/2011	2:28 pm	BEH
Indeno (1,2,3-cd) pyrene	<0.467	**A-18**	ug/L	0.467	EPA 8270C	4/20/2011	2:28 pm	BEH
Naphthalene	<0.841		ug/L	0.841	EPA 8270C	4/20/2011	2:28 pm	BEH
Phenanthrene	<0.841		ug/L	0.841	EPA 8270C	4/20/2011	2:28 pm	BEH
Pyrene	<0.841		ug/L	0.841	EPA 8270C	4/20/2011	2:28 pm	BEH

SEMIVOLATILE ORGANIC COMPOUNDS

Parameter	Result		Units	PQL	Method	Date	Time	Analyst
Surrogate: 2-Fluorobiphenyl	39.3		% Rec	8-127	EPA 8270C	4/20/2011	2:28 pm	BEH
Surrogate: Nitrobenzene-d5	47.8		% Rec	12-141	EPA 8270C	4/20/2011	2:28 pm	BEH
Surrogate: p-Terphenyl-d14	39.3		% Rec	8-103	EPA 8270C	4/20/2011	2:28 pm	BEH

VOLATILE ORGANIC COMPOUNDS

Parameter	Result		Units	PQL	Method	Date	Time	Analyst
1,1,1,2-Tetrachloroethane	<2.00	**Lib-1**	ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
1,1,1-Trichloroethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
1,1,2,2-Tetrachloroethane	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	4:08 pm	JMS
1,1,2-Trichloroethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
1,1-Dichloroethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
1,1-Dichloroethene	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	4:08 pm	JMS
1,1-Dichloropropene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
1,2,3-Trichlorobenzene	<15.0		ug/L	15.0	EPA 8260B	4/15/2011	4:08 pm	JMS
1,2,3-Trichloropropane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
1,2,4-Trichlorobenzene	<15.0		ug/L	15.0	EPA 8260B	4/15/2011	4:08 pm	JMS
1,2,4-Trimethylbenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
1,2-Dibromo-3-chloropropane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
1,2-Dibromoethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
1,2-Dichlorobenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
1,2-Dichloroethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
1,2-Dichloropropane	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	4:08 pm	JMS
1,3,5-Trimethylbenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
1,3-Dichlorobenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
1,3-Dichloropropane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
1,4-Dichlorobenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
2-Butanone (MEK)	<5.00		ug/L	5.00	EPA 8260B	4/15/2011	4:08 pm	JMS
2-Chlorotoluene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
2-Hexanone	<4.00		ug/L	4.00	EPA 8260B	4/15/2011	4:08 pm	JMS
4-Chlorotoluene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
4-Isopropyltoluene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
4-Methyl-2-Pentanone (MIBK)	<3.00		ug/L	3.00	EPA 8260B	4/15/2011	4:08 pm	JMS
Acetone	<50.0		ug/L	50.0	EPA 8260B	4/15/2011	4:08 pm	JMS
Benzene	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	4:08 pm	JMS
Bromobenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
Bromochloromethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
Bromodichloromethane	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	4:08 pm	JMS
Bromoform	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
Bromomethane	<2.00	**Lib-1**	ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
Carbon disulfide	<4.00		ug/L	4.00	EPA 8260B	4/15/2011	4:08 pm	JMS
Carbon Tetrachloride	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	4:08 pm	JMS
Chlorobenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
Chlorodibromomethane	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	4:08 pm	JMS
Chloroethane	<4.00		ug/L	4.00	EPA 8260B	4/15/2011	4:08 pm	JMS
Chloroform	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
Chloromethane	<4.00		ug/L	4.00	EPA 8260B	4/15/2011	4:08 pm	JMS
cis-1,2-Dichloroethene	**4.87**		ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS

Certificate of Analysis

VOLATILE ORGANIC COMPOUNDS

Parameter	Result	Units	PQL	Method	Date	Time	Analyst
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
Dibromomethane	<2.00	ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
Ethylbenzene	<2.00	ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
Hexachlorobutadiene	<3.00	ug/L	3.00	EPA 8260B	4/15/2011	4:08 pm	JMS
Isopropylbenzene (Cumene)	<2.00	ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
m,p-Xylenes	<4.00	ug/L	4.00	EPA 8260B	4/15/2011	4:08 pm	JMS
Methylene Chloride	<2.00	ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
Methyl-tert-Butyl Ether	<2.00	ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
Naphthalene	<10.0	ug/L	10.0	EPA 8260B	4/15/2011	4:08 pm	JMS
n-Butyl Benzene	<4.00	ug/L	4.00	EPA 8260B	4/15/2011	4:08 pm	JMS
n-Propylbenzene	<2.00	ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
o-Xylene	<2.00	ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
Styrene	<2.00	ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
Tetrachloroethene	**23.5**	ug/L	1.00	EPA 8260B	4/15/2011	4:08 pm	JMS
Toluene	<2.00	ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
Total Xylenes	<6.00	ug/L	6.00	EPA 8260B	4/15/2011	4:08 pm	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
Trichloroethene	**2.01**	ug/L	1.00	EPA 8260B	4/15/2011	4:08 pm	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	EPA 8260B	4/15/2011	4:08 pm	JMS
Vinyl chloride	<1.00	ug/L	1.00	EPA 8260B	4/15/2011	4:08 pm	JMS
Surrogate: 1,2-Dichloroethane-d4	97.4	% Rec	74.1-131.5	EPA 8260B	4/15/2011	4:08 pm	JMS
Surrogate: 4-Bromofluorobenzene	99.9	% Rec	70.4-128	EPA 8260B	4/15/2011	4:08 pm	JMS
Surrogate: Toluene-d8	97.3	% Rec	83.3-118.6	EPA 8260B	4/15/2011	4:08 pm	JMS

Analytical Testing Parameters

Client Sample ID: **MW-3**
Lab Sample ID: **1106806-03**

Collection Date: **4/12/2011**
Collection Time: **1:54 pm**
Collected By: Andrew Kuder

METALS

Parameter	Result	Units	PQL	Method	Date	Time	Analyst
Lead, Dissolved	<0.0010	mg/L	0.0010	EPA 200.8	4/20/2011	7:23 pm	BCK

SEMIVOLATILE ORGANIC COMPOUNDS

Parameter	Result	Units	PQL	Method	Date	Time	Analyst
1-Methylnaphthalene	<0.930	ug/L	0.930	EPA 8270C	4/20/2011	3:04 pm	BEH
2-Methylnaphthalene	<0.930	ug/L	0.930	EPA 8270C	4/20/2011	3:04 pm	BEH
Acenaphthene	<0.930	ug/L	0.930	EPA 8270C	4/20/2011	3:04 pm	BEH
Acenaphthylene	<0.930	ug/L	0.930	EPA 8270C	4/20/2011	3:04 pm	BEH
Anthracene	<0.837	ug/L	0.837	EPA 8270C	4/20/2011	3:04 pm	BEH
Benzo (a) anthracene	<0.465	ug/L	0.465	EPA 8270C	4/20/2011	3:04 pm	BEH
Benzo (a) pyrene	<0.186	ug/L	0.186	EPA 8270C	4/20/2011	3:04 pm	BEH

SEMIVOLATILE ORGANIC COMPOUNDS

Parameter	Result		Units	PQL	Method	Date	Time	Analyst
Benzo (b) fluoranthene	<0.465		ug/L	0.465	EPA 8270C	4/20/2011	3:04 pm	BEH
Benzo (g,h,i) perylene	<0.251	**A-18**	ug/L	0.251	EPA 8270C	4/20/2011	3:04 pm	BEH
Benzo (k) fluoranthene	<0.465	**A-18**	ug/L	0.465	EPA 8270C	4/20/2011	3:04 pm	BEH
Chrysene	<0.837		ug/L	0.837	EPA 8270C	4/20/2011	3:04 pm	BEH
Dibenz (a,h) anthracene	<0.465	**A-18**	ug/L	0.465	EPA 8270C	4/20/2011	3:04 pm	BEH
Fluoranthene	<0.837		ug/L	0.837	EPA 8270C	4/20/2011	3:04 pm	BEH
Fluorene	<0.837		ug/L	0.837	EPA 8270C	4/20/2011	3:04 pm	BEH
Indeno (1,2,3-cd) pyrene	<0.465	**A-18**	ug/L	0.465	EPA 8270C	4/20/2011	3:04 pm	BEH
Naphthalene	<0.837		ug/L	0.837	EPA 8270C	4/20/2011	3:04 pm	BEH
Phenanthrene	<0.837		ug/L	0.837	EPA 8270C	4/20/2011	3:04 pm	BEH
Pyrene	<0.837		ug/L	0.837	EPA 8270C	4/20/2011	3:04 pm	BEH
Surrogate: 2-Fluorobiphenyl	35.9		% Rec	8-127	EPA 8270C	4/20/2011	3:04 pm	BEH
Surrogate: Nitrobenzene-d5	46.1		% Rec	12-141	EPA 8270C	4/20/2011	3:04 pm	BEH
Surrogate: p-Terphenyl-d14	38.9		% Rec	8-103	EPA 8270C	4/20/2011	3:04 pm	BEH

VOLATILE ORGANIC COMPOUNDS

Parameter	Result		Units	PQL	Method	Date	Time	Analyst
1;1,1,2-Tetrachloroethane	<2.00	**Lib-1**	ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
1,1,1-Trichloroethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
1,1,2,2-Tetrachloroethane	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	4:39 pm	JMS
1,1,2-Trichloroethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
1,1-Dichloroethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
1,1-Dichloroethene	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	4:39 pm	JMS
1,1-Dichloropropene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
1,2,3-Trichlorobenzene	<15.0		ug/L	15.0	EPA 8260B	4/15/2011	4:39 pm	JMS
1,2,3-Trichloropropane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
1,2,4-Trichlorobenzene	<15.0		ug/L	15.0	EPA 8260B	4/15/2011	4:39 pm	JMS
1,2,4-Trimethylbenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
1,2-Dibromo-3-chloropropane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
1,2-Dibromoethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
1,2-Dichlorobenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
1,2-Dichloroethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
1,2-Dichloropropane	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	4:39 pm	JMS
1,3,5-Trimethylbenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
1,3-Dichlorobenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
1,3-Dichloropropane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
1,4-Dichlorobenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
2-Butanone (MEK)	<5.00		ug/L	5.00	EPA 8260B	4/15/2011	4:39 pm	JMS
2-Chlorotoluene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
2-Hexanone	<4.00		ug/L	4.00	EPA 8260B	4/15/2011	4:39 pm	JMS
4-Chlorotoluene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
4-Isopropyltoluene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
4-Methyl-2-Pentanone (MIBK)	<3.00		ug/L	3.00	EPA 8260B	4/15/2011	4:39 pm	JMS
Acetone	<50.0		ug/L	50.0	EPA 8260B	4/15/2011	4:39 pm	JMS
Benzene	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	4:39 pm	JMS
Bromobenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
Bromochloromethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS

VOLATILE ORGANIC COMPOUNDS

Parameter	Result		Units	PQL	Method	Date	Time	Analyst
Bromodichloromethane	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	4:39 pm	JMS
Bromoform	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
Bromomethane	<2.00	Lib-1	ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
Carbon disulfide	<4.00		ug/L	4.00	EPA 8260B	4/15/2011	4:39 pm	JMS
Carbon Tetrachloride	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	4:39 pm	JMS
Chlorobenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
Chlorodibromomethane	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	4:39 pm	JMS
Chloroethane	<4.00		ug/L	4.00	EPA 8260B	4/15/2011	4:39 pm	JMS
Chloroform	**3.87**		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
Chloromethane	<4.00		ug/L	4.00	EPA 8260B	4/15/2011	4:39 pm	JMS
cis-1,2-Dichloroethene	**5.71**		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
cis-1,3-Dichloropropene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
Dibromomethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
Dichlorodifluoromethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
Ethylbenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
Hexachlorobutadiene	<3.00		ug/L	3.00	EPA 8260B	4/15/2011	4:39 pm	JMS
Isopropylbenzene (Cumene)	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
m,p-Xylenes	<4.00		ug/L	4.00	EPA 8260B	4/15/2011	4:39 pm	JMS
Methylene Chloride	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
Methyl-tert-Butyl Ether	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
Naphthalene	<10.0		ug/L	10.0	EPA 8260B	4/15/2011	4:39 pm	JMS
n-Butyl Benzene	<4.00		ug/L	4.00	EPA 8260B	4/15/2011	4:39 pm	JMS
n-Propylbenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
o-Xylene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
sec-Butylbenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
Styrene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
tert-Butylbenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
Tetrachloroethene	**46.9**		ug/L	1.00	EPA 8260B	4/15/2011	4:39 pm	JMS
Toluene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
Total Xylenes	<6.00		ug/L	6.00	EPA 8260B	4/15/2011	4:39 pm	JMS
trans-1,2-Dichloroethene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
trans-1,3-Dichloropropene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
Trichloroethene	**2.33**		ug/L	1.00	EPA 8260B	4/15/2011	4:39 pm	JMS
Trichlorofluoromethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	4:39 pm	JMS
Vinyl chloride	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	4:39 pm	JMS
Surrogate: 1,2-Dichloroethane-d4	95.8		% Rec	74.1-131.5	EPA 8260B	4/15/2011	4:39 pm	JMS
Surrogate: 4-Bromofluorobenzene	102		% Rec	70.4-128	EPA 8260B	4/15/2011	4:39 pm	JMS
Surrogate: Toluene-d8	100		% Rec	83.3-118.6	EPA 8260B	4/15/2011	4:39 pm	JMS

Analytical Testing Parameters

Client Sample ID: **MW-4**
Lab Sample ID: **1106806-04**

Collection Date: **4/12/2011**
Collection Time: **2:45 pm**
Collected By: Andrew Kuder

METALS

Parameter	Result	Units	PQL	Method	Date	Time	Analyst

METALS

Parameter	Result		Units	PQL	Method	Date	Time	Analyst
Lead, Dissolved	**0.0064**		mg/L	0.0010	EPA 200.8	4/20/2011	7:26 pm	BCK

SEMIVOLATILE ORGANIC COMPOUNDS

Parameter	Result		Units	PQL	Method	Date	Time	Analyst
1-Methylnaphthalene	<0.939		ug/L	0.939	EPA 8270C	4/20/2011	3:40 pm	BEH
2-Methylnaphthalene	<0.939		ug/L	0.939	EPA 8270C	4/20/2011	3:40 pm	BEH
Acenaphthene	<0.939		ug/L	0.939	EPA 8270C	4/20/2011	3:40 pm	BEH
Acenaphthylene	<0.939		ug/L	0.939	EPA 8270C	4/20/2011	3:40 pm	BEH
Anthracene	<0.845		ug/L	0.845	EPA 8270C	4/20/2011	3:40 pm	BEH
Benzo (a) anthracene	<0.469		ug/L	0.469	EPA 8270C	4/20/2011	3:40 pm	BEH
Benzo (a) pyrene	<0.188		ug/L	0.188	EPA 8270C	4/20/2011	3:40 pm	BEH
Benzo (b) fluoranthene	<0.469		ug/L	0.469	EPA 8270C	4/20/2011	3:40 pm	BEH
Benzo (g,h,i) perylene	<0.254	**A-18**	ug/L	0.254	EPA 8270C	4/20/2011	3:40 pm	BEH
Benzo (k) fluoranthene	<0.469	**A-18**	ug/L	0.469	EPA 8270C	4/20/2011	3:40 pm	BEH
Chrysene	<0.845		ug/L	0.845	EPA 8270C	4/20/2011	3:40 pm	BEH
Dibenz (a,h) anthracene	<0.469	**A-18**	ug/L	0.469	EPA 8270C	4/20/2011	3:40 pm	BEH
Fluoranthene	<0.845		ug/L	0.845	EPA 8270C	4/20/2011	3:40 pm	BEH
Fluorene	<0.845		ug/L	0.845	EPA 8270C	4/20/2011	3:40 pm	BEH
Indeno (1,2,3-cd) pyrene	<0.469	**A-18**	ug/L	0.469	EPA 8270C	4/20/2011	3:40 pm	BEH
Naphthalene	<0.845		ug/L	0.845	EPA 8270C	4/20/2011	3:40 pm	BEH
Phenanthrene	<0.845		ug/L	0.845	EPA 8270C	4/20/2011	3:40 pm	BEH
Pyrene	<0.845		ug/L	0.845	EPA 8270C	4/20/2011	3:40 pm	BEH
Surrogate: 2-Fluorobiphenyl	38.3		% Rec	8-127	EPA 8270C	4/20/2011	3:40 pm	BEH
Surrogate: Nitrobenzene-d5	47.8		% Rec	12-141	EPA 8270C	4/20/2011	3:40 pm	BEH
Surrogate: p-Terphenyl-d14	42.4		% Rec	8-103	EPA 8270C	4/20/2011	3:40 pm	BEH

VOLATILE ORGANIC COMPOUNDS

Parameter	Result		Units	PQL	Method	Date	Time	Analyst
1,1,1,2-Tetrachloroethane	<2.00	**Lib-1**	ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
1,1,1-Trichloroethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
1,1,2,2-Tetrachloroethane	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	5:10 pm	JMS
1,1,2-Trichloroethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
1,1-Dichloroethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
1,1-Dichloroethene	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	5:10 pm	JMS
1,1-Dichloropropene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
1,2,3-Trichlorobenzene	<15.0		ug/L	15.0	EPA 8260B	4/15/2011	5:10 pm	JMS
1,2,3-Trichloropropane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
1,2,4-Trichlorobenzene	<15.0		ug/L	15.0	EPA 8260B	4/15/2011	5:10 pm	JMS
1,2,4-Trimethylbenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
1,2-Dibromo-3-chloropropane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
1,2-Dibromoethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
1,2-Dichlorobenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
1,2-Dichloroethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
1,2-Dichloropropane	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	5:10 pm	JMS
1,3,5-Trimethylbenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
1,3-Dichlorobenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
1,3-Dichloropropane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS

VOLATILE ORGANIC COMPOUNDS

Parameter	Result		Units	PQL	Method	Date	Time	Analyst
1,4-Dichlorobenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
2-Butanone (MEK)	<5.00		ug/L	5.00	EPA 8260B	4/15/2011	5:10 pm	JMS
2-Chlorotoluene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
2-Hexanone	<4.00		ug/L	4.00	EPA 8260B	4/15/2011	5:10 pm	JMS
4-Chlorotoluene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
4-Isopropyltoluene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
4-Methyl-2-Pentanone (MIBK)	<3.00		ug/L	3.00	EPA 8260B	4/15/2011	5:10 pm	JMS
Acetone	<50.0		ug/L	50.0	EPA 8260B	4/15/2011	5:10 pm	JMS
Benzene	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	5:10 pm	JMS
Bromobenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
Bromochloromethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
Bromodichloromethane	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	5:10 pm	JMS
Bromoform	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
Bromomethane	<2.00	**Lib-1**	ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
Carbon disulfide	<4.00		ug/L	4.00	EPA 8260B	4/15/2011	5:10 pm	JMS
Carbon Tetrachloride	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	5:10 pm	JMS
Chlorobenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
Chlorodibromomethane	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	5:10 pm	JMS
Chloroethane	<4.00		ug/L	4.00	EPA 8260B	4/15/2011	5:10 pm	JMS
Chloroform	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
Chloromethane	<4.00		ug/L	4.00	EPA 8260B	4/15/2011	5:10 pm	JMS
cis-1,2-Dichloroethene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
cis-1,3-Dichloropropene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
Dibromomethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
Dichlorodifluoromethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
Ethylbenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
Hexachlorobutadiene	<3.00		ug/L	3.00	EPA 8260B	4/15/2011	5:10 pm	JMS
Isopropylbenzene (Cumene)	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
m,p-Xylenes	<4.00		ug/L	4.00	EPA 8260B	4/15/2011	5:10 pm	JMS
Methylene Chloride	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
Methyl-tert-Butyl Ether	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
Naphthalene	<10.0		ug/L	10.0	EPA 8260B	4/15/2011	5:10 pm	JMS
n-Butyl Benzene	<4.00		ug/L	4.00	EPA 8260B	4/15/2011	5:10 pm	JMS
n-Propylbenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
o-Xylene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
sec-Butylbenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
Styrene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
tert-Butylbenzene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
Tetrachloroethene	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	5:10 pm	JMS
Toluene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
Total Xylenes	<6.00		ug/L	6.00	EPA 8260B	4/15/2011	5:10 pm	JMS
trans-1,2-Dichloroethene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
trans-1,3-Dichloropropene	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
Trichloroethene	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	5:10 pm	JMS
Trichlorofluoromethane	<2.00		ug/L	2.00	EPA 8260B	4/15/2011	5:10 pm	JMS
Vinyl chloride	<1.00		ug/L	1.00	EPA 8260B	4/15/2011	5:10 pm	JMS

Certificate of Analysis

VOLATILE ORGANIC COMPOUNDS

Parameter	Result	Units	PQL	Method	Date	Time	Analyst
Surrogate: 1,2-Dichloroethane-d4	100	% Rec	74.1-131.5	EPA 8260B	4/15/2011	5:10 pm	JMS
Surrogate: 4-Bromofluorobenzene	92.6	% Rec	70.4-128	EPA 8260B	4/15/2011	5:10 pm	JMS
Surrogate: Toluene-d8	90.9	% Rec	83.3-118.6	EPA 8260B	4/15/2011	5:10 pm	JMS

- **Lib-1:** The concentration was determined by a library search of the appropriate retention time and mass spectral ion pattern.
- **A-18:** CCV recovery was above acceptance limits. The concentration was below the reporting limit.

Laboratory Certifications:

- NELAP accredited by the Pennsylvania DEP (22-00578) for numerous drinking water, non-potable water, and solid and chemical materials parameters. Please refer to the current scope of accreditation and certificate for specific information on the approved methodologies.
- NELAP accredited by the New Jersey DEP (PA019) for numerous non-potable water and solid and chemical materials parameters. Please refer to the current scope of accreditation and certificate for specific information on the approved methodologies.

Report Comments:

The **PQL** is the **Practical Quantitation Limit**, which is defined as the lowest quantitation level of an analyte that can be readily achieved within the specified limits of precision and accuracy of an analytical method during routine laboratory operating conditions. The value may be raised depending on the characteristics or behavior of the target analyte.

All samples were analyzed **"as received"** from the client. Microbac Laboratories, Inc.- Westech Division can only assume that all samples were collected and submitted by the CLIENT following the appropriate protocols set forth by the regulatory requirements. This document shall not be reproduced, except in full, without the written approval of Microbac Laboratories, Inc.- Westech Division. If there are any technical questions pertaining to this laboratory report please contact a Client Services Coordinator or the Laboratory Director at (717) 651-9700.

Reviewed and Approved By:



David S. Wildasin

Operations Manager

Date Reviewed and Approved:

4/25/2011

For any feedback concerning our services, please contact Cherie Gudz, the Division Manager at 717.651.9700. You may also contact both James Nokes, President at president@microbac.com and Sean Hyde, Chief Operating Officer at sean.hyde@microbac.com.

Client #	
W.O.	
Quote #	

CHAIN OF CUSTODY

Microbac®
Microbac Laboratories, Inc
Camp Hill Division
209 Senate Avenue Camp Hill, PA 17011
P: 717-763-0582 F: 717-214-1269

(1)Client/Company Name: BL Companies
Address: 4242 Carlisle Pike, Suite 260
City, State, Zip: Camp Hill, PA 17011
Contact: John Thatcher
Telephone: 717-651-9850
Project: Frankfort + Darrah
Location: Philadelphia, PA
Sampler: AKR
PO: 00L629-B
Send Report via [ ] Mail
[ ] Fax# [X] Email: jthatcher@blcompanies.com
Compliance Monitoring: [X] YES [ ] NO State: PA
[ ] Annual [X] Quarterly [ ] Monthly PWSID #
Comments: Samples were field filtered

[ ] Rush Due Date: _ _
[X] Routine
[X] Results Only
[ ] Custom:

Monitoring Period:
to

Receiving Initials: SKS
Cooler Temp: 2°C

						VOCs (8260-B)	PAHs (8270-C)	Dissolved Lead					
1	MW-1	GW	G	4-12-11	14:27	X	X	X					
2	MW-2A	↓	↓	↓	14:10	X	X	X					
3	MW-3	↓	↓	↓	13:54	X	X	X					
4	MW-4	↓	↓	↓	14:45	X	X	X					
5													
6													
7													

Circle One		
Samples received on ice?	(Y)	N
Samples in good condition?	(Y)	N
Containers match method?	(Y)	N
Correct sample volume?	(Y)	N
Headspace present?	Y	(N)
Complete paperwork?		
Samples within hold time?		
Container*		
Preservative**		
Comments:		
Client Notified?		
Date:		
Field Services:		
Pick-up:		
Composite Sampling:		
Labor - Hours:		
Other		

1106806

1	AKR	4-13-11	940	2		4/13/11	940	PYMT	
		4/13/11	1450	4	Tatiana Dearinsky	4/13/11	14:50		
				6					

Container Type: (AG) Amber Glass (CG) Clear Glass (PL) Plastic (O) Other
Matrix Types: (S) Solid/Soil/Sludge (O) Oil (DW) Drinking Water (GW) Ground Water (SW) Surface Water (WW) Waste Water **State Reporting Types:** (E) Entry (D) Distribution (C) Check (R) Raw (M) Max Residence
Preservative Types (1) HNO3 (2) H2SO4 (3) HCL (4) NaOH (5) Zinc Acetate (6) Methanol (7) Sodium Bisulfate (8) Sodium Thiosulfate (U) Other

Microbac Laboratories, Inc.

Central Pennsylvania Division

Laboratory ID: 1115477

Certificate of Analysis

BL Companies, Inc.
John Thatcher
4242 Carlisle Pike, Suite 260
Camp Hill, PA 17011

Contact: John Thatcher
Project Name: Frankfort & Darrah
Project / PO Number: 00L629-B
Date Received: July 12, 2011
Time Received: 8:35 am

Analytical Testing Parameters

Client Sample ID: **MW-1**
Lab Sample ID: **1115477-01**

Collection Date: **7/11/2011**
Collection Time: **3:02 pm**
Collected By: Leigh Campetti

METALS

Parameter	Result	Units	PQL	Method	Prepared	Analyzed	Analyst
Lead, Dissolved	<0.0010	mg/L	0.0010	EPA 200.8	7/20/2011 1543	7/20/2011 1635	BCK

SEMIVOLATILE ORGANIC COMPOUNDS

Parameter	Result	Units	PQL	Method	Prepared	Analyzed	Analyst
Acenaphthene	<0.990	ug/L	0.990	EPA 8270C	7/12/2011 1054	7/19/2011 1423	BEH
Acenaphthylene	<0.990	ug/L	0.990	EPA 8270C	7/12/2011 1054	7/19/2011 1423	BEH
Anthracene	<0.891	ug/L	0.891	EPA 8270C	7/12/2011 1054	7/19/2011 1423	BEH
Benzo (a) anthracene	<0.297	ug/L	0.297	EPA 8270C	7/12/2011 1054	7/19/2011 1423	BEH
Benzo (a) pyrene	**0.276**	ug/L	0.198	EPA 8270C	7/12/2011 1054	7/19/2011 1423	BEH
Benzo (b) fluoranthene	**0.400**	ug/L	0.297	EPA 8270C	7/12/2011 1054	7/19/2011 1423	BEH
Benzo (g,h,i) perylene	**0.466**	ug/L	0.267	EPA 8270C	7/12/2011 1054	7/19/2011 1423	BEH
Benzo (k) fluoranthene	<0.495	ug/L	0.495	EPA 8270C	7/12/2011 1054	7/19/2011 1423	BEH
Chrysene	<0.891	ug/L	0.891	EPA 8270C	7/12/2011 1054	7/19/2011 1423	BEH
Dibenz (a,h) anthracene	<0.495	ug/L	0.495	EPA 8270C	7/12/2011 1054	7/19/2011 1423	BEH
Fluoranthene	<0.891	ug/L	0.891	EPA 8270C	7/12/2011 1054	7/19/2011 1423	BEH
Fluorene	<0.891	ug/L	0.891	EPA 8270C	7/12/2011 1054	7/19/2011 1423	BEH
Indeno (1,2,3-cd) pyrene	**0.281**	ug/L	0.248	EPA 8270C	7/12/2011 1054	7/19/2011 1423	BEH
1-Methylnaphthalene	<0.990	ug/L	0.990	EPA 8270C	7/12/2011 1054	7/19/2011 1423	BEH
2-Methylnaphthalene	<0.990	ug/L	0.990	EPA 8270C	7/12/2011 1054	7/19/2011 1423	BEH
Naphthalene	<0.891	ug/L	0.891	EPA 8270C	7/12/2011 1054	7/19/2011 1423	BEH
Phenanthrene	<0.891	ug/L	0.891	EPA 8270C	7/12/2011 1054	7/19/2011 1423	BEH
Pyrene	<0.891	ug/L	0.891	EPA 8270C	7/12/2011 1054	7/19/2011 1423	BEH
Surr: 2-Fluorobiphenyl	44.6	% Rec	8-127	EPA 8270C	7/12/2011 1054	7/19/2011 1423	BEH
Surr: Nitrobenzene-d5	45.5	% Rec	12-141	EPA 8270C	7/12/2011 1054	7/19/2011 1423	BEH
Surr: p-Terphenyl-d14	74.0	% Rec	8-103	EPA 8270C	7/12/2011 1054	7/19/2011 1423	BEH

VOLATILE ORGANIC COMPOUNDS

Parameter	Result	Units	PQL	Method	Prepared	Analyzed	Analyst
Acetone	<50.0	ug/L	50.0	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
Benzene	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
Bromobenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS

VOLATILE ORGANIC COMPOUNDS

Parameter	Result	Units	PQL	Method	Prepared	Analyzed	Analyst
Bromochloromethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
Bromodichloromethane	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
Bromoform	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
Bromomethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
2-Butanone (MEK)	<5.00	ug/L	5.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
n-Butyl Benzene	<4.00	ug/L	4.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
Carbon disulfide	<4.00	ug/L	4.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
Carbon Tetrachloride	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
Chlorobenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
Chlorodibromomethane	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
Chloroethane	<4.00	ug/L	4.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
Chloroform	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
Chloromethane	<4.00	ug/L	4.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
Dibromomethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
1,1-Dichloroethene	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
cis-1,2-Dichloroethene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
1,2-Dichloropropane	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
Ethylbenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
Hexachlorobutadiene	<3.00	ug/L	3.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
2-Hexanone	<4.00	ug/L	4.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
Isopropylbenzene (Cumene)	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
4-Isopropyltoluene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
4-Methyl-2-Pentanone (MIBK)	<3.00	ug/L	3.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
Methylene Chloride	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
Methyl-tert-Butyl Ether	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS

VOLATILE ORGANIC COMPOUNDS

Parameter	Result	Units	PQL	Method	Prepared	Analyzed	Analyst
Naphthalene	<10.0	ug/L	10.0	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
n-Propylbenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
Styrene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
1,1,2,2-Tetrachloroethane	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
Tetrachloroethene	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
Toluene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
Trichloroethene	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
Vinyl chloride	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
m,p-Xylenes	<4.00	ug/L	4.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
o-Xylene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
Total Xylenes	<6.00	ug/L	6.00	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
Surr: 1,2-Dichloroethane-d4	93.4	% Rec	74.1-131.5	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
Surr: 4-Bromofluorobenzene	119	% Rec	70.4-128	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS
Surr: Toluene-d8	94.2	% Rec	83.3-118.6	EPA 8260B	7/13/2011 1557	7/13/2011 1557	JMS

Analytical Testing Parameters

Client Sample ID: **MW-2A**
Lab Sample ID: **1115477-02**

Collection Date: **7/11/2011**
Collection Time: **3:11 pm**
Collected By: Leigh Campetti

METALS

Parameter	Result	Units	PQL	Method	Prepared	Analyzed	Analyst
Lead, Dissolved	<0.0010	mg/L	0.0010	EPA 200.8	7/20/2011 1543	7/20/2011 1644	BCK

SEMIVOLATILE ORGANIC COMPOUNDS

Parameter	Result	Units	PQL	Method	Prepared	Analyzed	Analyst
Acenaphthene	<0.990	ug/L	0.990	EPA 8270C	7/12/2011 1054	7/19/2011 1459	BEH
Acenaphthylene	<0.990	ug/L	0.990	EPA 8270C	7/12/2011 1054	7/19/2011 1459	BEH
Anthracene	<0.891	ug/L	0.891	EPA 8270C	7/12/2011 1054	7/19/2011 1459	BEH
Benzo (a) anthracene	<0.297	ug/L	0.297	EPA 8270C	7/12/2011 1054	7/19/2011 1459	BEH
Benzo (a) pyrene	<0.198	ug/L	0.198	EPA 8270C	7/12/2011 1054	7/19/2011 1459	BEH
Benzo (b) fluoranthene	<0.297	ug/L	0.297	EPA 8270C	7/12/2011 1054	7/19/2011 1459	BEH
Benzo (g,h,i) perylene	<0.267	ug/L	0.267	EPA 8270C	7/12/2011 1054	7/19/2011 1459	BEH
Benzo (k) fluoranthene	<0.495	ug/L	0.495	EPA 8270C	7/12/2011 1054	7/19/2011 1459	BEH

SEMIVOLATILE ORGANIC COMPOUNDS

Parameter	Result	Units	PQL	Method	Prepared	Analyzed	Analyst
Chrysene	<0.891	ug/L	0.891	EPA 8270C	7/12/2011 1054	7/19/2011 1459	BEH
Dibenz (a,h) anthracene	<0.495	ug/L	0.495	EPA 8270C	7/12/2011 1054	7/19/2011 1459	BEH
Fluoranthene	<0.891	ug/L	0.891	EPA 8270C	7/12/2011 1054	7/19/2011 1459	BEH
Fluorene	<0.891	ug/L	0.891	EPA 8270C	7/12/2011 1054	7/19/2011 1459	BEH
Indeno (1,2,3-cd) pyrene	<0.248	ug/L	0.248	EPA 8270C	7/12/2011 1054	7/19/2011 1459	BEH
1-Methylnaphthalene	<0.990	ug/L	0.990	EPA 8270C	7/12/2011 1054	7/19/2011 1459	BEH
2-Methylnaphthalene	<0.990	ug/L	0.990	EPA 8270C	7/12/2011 1054	7/19/2011 1459	BEH
Naphthalene	<0.891	ug/L	0.891	EPA 8270C	7/12/2011 1054	7/19/2011 1459	BEH
Phenanthrene	<0.891	ug/L	0.891	EPA 8270C	7/12/2011 1054	7/19/2011 1459	BEH
Pyrene	<0.891	ug/L	0.891	EPA 8270C	7/12/2011 1054	7/19/2011 1459	BEH
Surr: 2-Fluorobiphenyl	51.8	% Rec	8-127	EPA 8270C	7/12/2011 1054	7/19/2011 1459	BEH
Surr: Nitrobenzene-d5	50.5	% Rec	12-141	EPA 8270C	7/12/2011 1054	7/19/2011 1459	BEH
Surr: p-Terphenyl-d14	65.7	% Rec	8-103	EPA 8270C	7/12/2011 1054	7/19/2011 1459	BEH

VOLATILE ORGANIC COMPOUNDS

Parameter	Result	Units	PQL	Method	Prepared	Analyzed	Analyst
Acetone	<50.0	ug/L	50.0	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Benzene	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Bromobenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Bromochloromethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Bromodichloromethane	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Bromoform	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Bromomethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
2-Butanone (MEK)	<5.00	ug/L	5.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
n-Butyl Benzene	<4.00	ug/L	4.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Carbon disulfide	<4.00	ug/L	4.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Carbon Tetrachloride	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Chlorobenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Chlorodibromomethane	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Chloroethane	<4.00	ug/L	4.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Chloroform	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Chloromethane	<4.00	ug/L	4.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Dibromomethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS

VOLATILE ORGANIC COMPOUNDS

Parameter	Result	Units	PQL	Method	Prepared	Analyzed	Analyst
1,1-Dichloroethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
1,1-Dichloroethene	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
cis-1,2-Dichloroethene	**7.40**	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
1,2-Dichloropropane	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Ethylbenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Hexachlorobutadiene	<3.00	ug/L	3.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
2-Hexanone	<4.00	ug/L	4.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Isopropylbenzene (Cumene)	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
4-Isopropyltoluene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
4-Methyl-2-Pentanone (MIBK)	<3.00	ug/L	3.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Methylene Chloride	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Methyl-tert-Butyl Ether	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Naphthalene	<10.0	ug/L	10.0	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
n-Propylbenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Styrene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
1,1,2,2-Tetrachloroethane	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Tetrachloroethene	**23.1**	ug/L	1.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Toluene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Trichloroethene	**2.88**	ug/L	1.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Vinyl chloride	**2.12**	ug/L	1.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
m,p-Xylenes	<4.00	ug/L	4.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
o-Xylene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Total Xylenes	<6.00	ug/L	6.00	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Surr: 1,2-Dichloroethane-d4	101	% Rec	74.1-131.5	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Surr: 4-Bromofluorobenzene	106	% Rec	70.4-128	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS
Surr: Toluene-d8	95.4	% Rec	83.3-118.6	EPA 8260B	7/13/2011 1625	7/13/2011 1625	JMS

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Central Pennsylvania Division

Laboratory ID: 1115477

Certificate of Analysis

Analytical Testing Parameters

Client Sample ID: **MW-3**
Lab Sample ID: **1115477-03**

Collection Date: **7/11/2011**
Collection Time: **2:40 pm**
Collected By: Leigh Campetti

METALS

Parameter	Result	Units	PQL	Method	Prepared	Analyzed	Analyst
Lead, Dissolved	<0.0010	mg/L	0.0010	EPA 200.8	7/20/2011 1543	7/20/2011 1647	BCK

SEMIVOLATILE ORGANIC COMPOUNDS

Parameter	Result	Units	PQL	Method	Prepared	Analyzed	Analyst
Acenaphthene	<0.990	ug/L	0.990	EPA 8270C	7/12/2011 1054	7/19/2011 1535	BEH
Acenaphthylene	<0.990	ug/L	0.990	EPA 8270C	7/12/2011 1054	7/19/2011 1535	BEH
Anthracene	<0.891	ug/L	0.891	EPA 8270C	7/12/2011 1054	7/19/2011 1535	BEH
Benzo (a) anthracene	<0.297	ug/L	0.297	EPA 8270C	7/12/2011 1054	7/19/2011 1535	BEH
Benzo (a) pyrene	<0.198	ug/L	0.198	EPA 8270C	7/12/2011 1054	7/19/2011 1535	BEH
Benzo (b) fluoranthene	<0.297	ug/L	0.297	EPA 8270C	7/12/2011 1054	7/19/2011 1535	BEH
Benzo (g,h,i) perylene	<0.267	ug/L	0.267	EPA 8270C	7/12/2011 1054	7/19/2011 1535	BEH
Benzo (k) fluoranthene	<0.495	ug/L	0.495	EPA 8270C	7/12/2011 1054	7/19/2011 1535	BEH
Chrysene	<0.891	ug/L	0.891	EPA 8270C	7/12/2011 1054	7/19/2011 1535	BEH
Dibenz (a,h) anthracene	<0.495	ug/L	0.495	EPA 8270C	7/12/2011 1054	7/19/2011 1535	BEH
Fluoranthene	<0.891	ug/L	0.891	EPA 8270C	7/12/2011 1054	7/19/2011 1535	BEH
Fluorene	<0.891	ug/L	0.891	EPA 8270C	7/12/2011 1054	7/19/2011 1535	BEH
Indeno (1,2,3-cd) pyrene	<0.248	ug/L	0.248	EPA 8270C	7/12/2011 1054	7/19/2011 1535	BEH
1-Methylnaphthalene	<0.990	ug/L	0.990	EPA 8270C	7/12/2011 1054	7/19/2011 1535	BEH
2-Methylnaphthalene	<0.990	ug/L	0.990	EPA 8270C	7/12/2011 1054	7/19/2011 1535	BEH
Naphthalene	<0.891	ug/L	0.891	EPA 8270C	7/12/2011 1054	7/19/2011 1535	BEH
Phenanthrene	<0.891	ug/L	0.891	EPA 8270C	7/12/2011 1054	7/19/2011 1535	BEH
Pyrene	<0.891	ug/L	0.891	EPA 8270C	7/12/2011 1054	7/19/2011 1535	BEH
Surr: 2-Fluorobiphenyl	56.9	% Rec	8-127	EPA 8270C	7/12/2011 1054	7/19/2011 1535	BEH
Surr: Nitrobenzene-d5	60.4	% Rec	12-141	EPA 8270C	7/12/2011 1054	7/19/2011 1535	BEH
Surr: p-Terphenyl-d14	62.6	% Rec	8-103	EPA 8270C	7/12/2011 1054	7/19/2011 1535	BEH

VOLATILE ORGANIC COMPOUNDS

Parameter	Result	Units	PQL	Method	Prepared	Analyzed	Analyst
Acetone	<50.0	ug/L	50.0	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Benzene	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Bromobenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Bromochloromethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Bromodichloromethane	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Bromoform	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Bromomethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
2-Butanone (MEK)	<5.00	ug/L	5.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
n-Butyl Benzene	<4.00	ug/L	4.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS

VOLATILE ORGANIC COMPOUNDS

Parameter	Result	Units	PQL	Method	Prepared	Analyzed	Analyst
Carbon disulfide	<4.00	ug/L	4.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Carbon Tetrachloride	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Chlorobenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Chlorodibromomethane	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Chloroethane	<4.00	ug/L	4.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Chloroform	**4.29**	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Chloromethane	<4.00	ug/L	4.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Dibromomethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
1,1-Dichloroethene	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
cis-1,2-Dichloroethene	**6.40**	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
1,2-Dichloropropane	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Ethylbenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Hexachlorobutadiene	<3.00	ug/L	3.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
2-Hexanone	<4.00	ug/L	4.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Isopropylbenzene (Cumene)	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
4-Isopropyltoluene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
4-Methyl-2-Pentanone (MIBK)	<3.00	ug/L	3.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Methylene Chloride	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Methyl-tert-Butyl Ether	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Naphthalene	<10.0	ug/L	10.0	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
n-Propylbenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Styrene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
1,1,2,2-Tetrachloroethane	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Tetrachloroethene	**38.7**	ug/L	1.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Toluene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS

VOLATILE ORGANIC COMPOUNDS

Parameter	Result	Units	PQL	Method	Prepared	Analyzed	Analyst
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Trichloroethene	**3.00**	ug/L	1.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Vinyl chloride	**1.51**	ug/L	1.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
m,p-Xylenes	<4.00	ug/L	4.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
o-Xylene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Total Xylenes	<6.00	ug/L	6.00	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Surr: 1,2-Dichloroethane-d4	94.8	% Rec	74.1-131.5	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Surr: 4-Bromofluorobenzene	113	% Rec	70.4-128	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS
Surr: Toluene-d8	101	% Rec	83.3-118.6	EPA 8260B	7/13/2011 1653	7/13/2011 1653	JMS

Analytical Testing Parameters

Client Sample ID: **MW-4**
Lab Sample ID: **1115477-04**

Collection Date: **7/11/2011**
Collection Time: **2:51 pm**
Collected By: Leigh Campetti

METALS

Parameter	Result	Units	PQL	Method	Prepared	Analyzed	Analyst
Lead, Dissolved	**0.0029**	mg/L	0.0010	EPA 200.8	7/20/2011 1543	7/20/2011 1650	BCK

SEMIVOLATILE ORGANIC COMPOUNDS

Parameter	Result	Units	PQL	Method	Prepared	Analyzed	Analyst
Acenaphthene	<0.990	ug/L	0.990	EPA 8270C	7/12/2011 1054	7/19/2011 1610	BEH
Acenaphthylene	<0.990	ug/L	0.990	EPA 8270C	7/12/2011 1054	7/19/2011 1610	BEH
Anthracene	<0.891	ug/L	0.891	EPA 8270C	7/12/2011 1054	7/19/2011 1610	BEH
Benzo (a) anthracene	<0.297	ug/L	0.297	EPA 8270C	7/12/2011 1054	7/19/2011 1610	BEH
Benzo (a) pyrene	<0.198	ug/L	0.198	EPA 8270C	7/12/2011 1054	7/19/2011 1610	BEH
Benzo (b) fluoranthene	<0.297	ug/L	0.297	EPA 8270C	7/12/2011 1054	7/19/2011 1610	BEH
Benzo (g,h,i) perylene	<0.267	ug/L	0.267	EPA 8270C	7/12/2011 1054	7/19/2011 1610	BEH
Benzo (k) fluoranthene	<0.495	ug/L	0.495	EPA 8270C	7/12/2011 1054	7/19/2011 1610	BEH
Chrysene	<0.891	ug/L	0.891	EPA 8270C	7/12/2011 1054	7/19/2011 1610	BEH
Dibenz (a,h) anthracene	<0.495	ug/L	0.495	EPA 8270C	7/12/2011 1054	7/19/2011 1610	BEH
Fluoranthene	<0.891	ug/L	0.891	EPA 8270C	7/12/2011 1054	7/19/2011 1610	BEH
Fluorene	<0.891	ug/L	0.891	EPA 8270C	7/12/2011 1054	7/19/2011 1610	BEH
Indeno (1,2,3-cd) pyrene	<0.248	ug/L	0.248	EPA 8270C	7/12/2011 1054	7/19/2011 1610	BEH
1-Methylnaphthalene	<0.990	ug/L	0.990	EPA 8270C	7/12/2011 1054	7/19/2011 1610	BEH
2-Methylnaphthalene	<0.990	ug/L	0.990	EPA 8270C	7/12/2011 1054	7/19/2011 1610	BEH
Naphthalene	<0.891	ug/L	0.891	EPA 8270C	7/12/2011 1054	7/19/2011 1610	BEH

SEMIVOLATILE ORGANIC COMPOUNDS

Parameter	Result	Units	PQL	Method	Prepared	Analyzed	Analyst
Phenanthrene	<0.891	ug/L	0.891	EPA 8270C	7/12/2011 1054	7/19/2011 1610	BEH
Pyrene	<0.891	ug/L	0.891	EPA 8270C	7/12/2011 1054	7/19/2011 1610	BEH
Surr: 2-Fluorobiphenyl	47.2	% Rec	8-127	EPA 8270C	7/12/2011 1054	7/19/2011 1610	BEH
Surr: Nitrobenzene-d5	50.7	% Rec	12-141	EPA 8270C	7/12/2011 1054	7/19/2011 1610	BEH
Surr: p-Terphenyl-d14	66.8	% Rec	8-103	EPA 8270C	7/12/2011 1054	7/19/2011 1610	BEH

VOLATILE ORGANIC COMPOUNDS

Parameter	Result	Units	PQL	Method	Prepared	Analyzed	Analyst
Acetone	<50.0	ug/L	50.0	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Benzene	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Bromobenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Bromochloromethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Bromodichloromethane	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Bromoform	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Bromomethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
2-Butanone (MEK)	<5.00	ug/L	5.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
n-Butyl Benzene	<4.00	ug/L	4.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Carbon disulfide	<4.00	ug/L	4.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Carbon Tetrachloride	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Chlorobenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Chlorodibromomethane	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Chloroethane	<4.00	ug/L	4.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Chloroform	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Chloromethane	<4.00	ug/L	4.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Dibromomethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
1,1-Dichloroethene	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
cis-1,2-Dichloroethene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
1,2-Dichloropropane	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS

VOLATILE ORGANIC COMPOUNDS

Parameter	Result	Units	PQL	Method	Prepared	Analyzed	Analyst
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Ethylbenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Hexachlorobutadiene	<3.00	ug/L	3.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
2-Hexanone	<4.00	ug/L	4.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Isopropylbenzene (Cumene)	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
4-Isopropyltoluene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
4-Methyl-2-Pentanone (MIBK)	<3.00	ug/L	3.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Methylene Chloride	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Methyl-tert-Butyl Ether	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Naphthalene	<10.0	ug/L	10.0	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
n-Propylbenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Styrene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
1,1,2,2-Tetrachloroethane	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Tetrachloroethene	**3.45**	ug/L	1.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Toluene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Trichloroethene	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Vinyl chloride	<1.00	ug/L	1.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
m,p-Xylenes	<4.00	ug/L	4.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
o-Xylene	<2.00	ug/L	2.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Total Xylenes	<6.00	ug/L	6.00	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Surr: 1,2-Dichloroethane-d4	92.8	% Rec	74.1-131.5	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Surr: 4-Bromofluorobenzene	114	% Rec	70.4-128	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS
Surr: Toluene-d8	101	% Rec	83.3-118.6	EPA 8260B	7/13/2011 1721	7/13/2011 1721	JMS

Microbac Laboratories, Inc

Central Pennsylvania Division

Laboratory ID: 1115477

Certificate of Analysis

Laboratory Certifications:

Below is a list of certifications maintained by Microbac Laboratories, Inc. All data included in this report has been reviewed for and meets all project specific and quality control requirements of the applicable accreditation, unless otherwise noted. A complete list of individual analytes pursuant to each certification below is available upon request.

Microbac Laboratories, Inc. Central Pennsylvania Division
4359 Linglestown Road • Harrisburg, PA 17112

- NELAP (PA): 22-00578
- NELAP (NJ): PA019

Microbac Laboratories, Inc. Camp Hill Division
209 Senate Ave • Camp Hill, PA 17011

- Delaware: 21-00133
- Florida: E871048
- Indiana: C-PA-09
- Kentucky: 90143
- Maryland (Drinking Water): 334
- Massachusetts: M-PA028
- New Jersey: PA069
- New York: 11650
- North Carolina: 42708
- Tennessee: TN02865
- Virginia (Drinking Water): 00433
- Puerto Rico: PA00028

Report Comments:

The **PQL** is the **Practical Quantitation Limit**, which is defined as the lowest quantitation level of an analyte that can be readily achieved within the specified limits of precision and accuracy of an analytical method during routine laboratory operating conditions. The value may be raised depending on the characteristics or behavior of the target analyte.
All samples were analyzed **"as received"** from the client. Microbac Laboratories, Inc.- Central Pennsylvania Division can only assume that all samples were collected and submitted by the CLIENT following the appropriate protocols set forth by the regulatory requirements. This document shall not be reproduced, except in full, without the written approval of Microbac Laboratories, Inc.- Central Pennsylvania Division. If there are any technical questions pertaining to this laboratory report please contact a Client Services Coordinator or the Laboratory Director at (717) 651-9700.

Reviewed and Approved By:

David S. Wildasin
Operations Manager

Date Reviewed and Approved:

7/26/2011

For any feedback concerning our services, please contact Cherie Gudz, the Division Manager at 717.651.9700. You may also contact both James Nokes, President at president@microbac.com and Sean Hyde, Chief Operating Officer at sean.hyde@microbac.com.

Please help us in meeting our Go Green initiative by selecting to have reports and invoices submitted via email only. Please contact Cherie.Gudz@microbac.com to set up email reporting and invoicing options.

Microbac Laboratories, Inc. - Central Pennsylvania Division
Chain of Custody Form

4359 Linglestown Road, Harrisburg, PA 17112 · Phone: (717) 651-9700 · Fax: (717) 657-0752

NELAP accredited by PADEP. See www.microbac.com or contact laboratory for other accreditations.

PA DEP ID #22-578

SUBMIT LAB REPORT TO:			SUBMIT INVOICE TO:		
Company: BL COMPANIES			Company:		
Contact: JOHN THATCHER			Contact:		
Address:			Address: SAME		
City:	State:	Zip:	City:	State:	Zip:
Phone:	Fax:		Phone:	Fax:	
Report Delivery: ☐ Mail ☐ Fax ☒ Email (enter address below) jthatcher@blcompanies.com			Invoice Delivery: ☐ Mail ☐ Email (enter address below)		

KEY

C = HCL (N) = HNO3
S = H2SO4 E = EDTA
O = NaOH M = MeOH
NA = None X = Other
B = Sodium Bisulfate
A = Ascorbic Acid
T = Sodium ThioSulfate
Z = ZnAcetate/NaOH

(P) = Plastic
(G) = Clear Glass
(AG) = Amber Glass
X = Other

SS = Solid/Sludge
(GW) = Groundwater
WW = Wastewater
DW = Drinking Water
SW = Storm/Surface
OL = Oil A = Air O = Other

LABORATORY USE ONLY

Samples received on ice? Temp: 5 °C	(Y)	N	NA
Cooler temp. within acceptable limits?	(Y)	N	NA
Correct bottles/enough volume for analysis?	(Y)	N	NA
Sample bottles in good condition (unbroken)?	(Y)	N	NA
Samples within required holding time?	(Y)	N	NA
Zero headspace samples collected correctly?	Y	N	(NA)
Samples preserved to pH <2 and/or pH >12?	(Y)	N	NA

Delivery Method: ☒ Drop Off ☐ Microbac Pickup ☐ Courier:

CLIENT PROJECT INFORMATION

Project Name: RIA FRANKFORD + DARRAH
Project/PO Number: OOL629-B
Project Location/State: ☐ PA ☐ Other:
Purpose: ☐ *Regulatory* ☐ *Informational* ☐ *PWSID:*

MICROBAC Field Services Used? ☐ NO ☐ YES *(See Field Log)*
MICROBAC Quote/MSA No:
Data Deliverables/Report Type: ☐ *Level I (Standard)* OR
Additional Fee Deliverables: ☐ *Level II* ☐ *Level III* ☐ *Level IV*
State Monitoring Period: ☐ *Monthly* ☐ *Quarterly* ☐ *Annual*

Results TAT Requested *: ☒ 6-10 Day (Standard) OR ☐ RUSH* (INDICATE DUE DATE):

NOTES: *RUSH TATs will include surcharge unless otherwise agreed to in writing and must be pre-arranged to ensure the due date can be met.

ANALYSIS REQUESTED

LAB ID	SAMPLE IDENTIFICATION / LOCATION DESCRIPTION	SAMPLE DATE	SAMPLE TIME	SAMPLED BY	Total # of Containers	Sample Type	Grab 'G' or Composite 'C'	VOCs (8260-B)	PAHs (8270-C)	Dissolved Lead *	BOTTLEWARE: SIZE / TYPE / PRESERVATIVE (SEE K
01	MW-1	7.11.11	1502	LCC	5	GW	G	G/C	AG/NA	P/NA	
02	MW-2A	↓	1511	↓	↓	↓	↓	↓	↓	↓	
03	MW-3		1440								
04	MW-4		1451								
05											
06											
07											
08											
09											
10											

1115477

CUSTODY CHAIN	PRINT NAME	SIGNATURE	DATE	TIME
Relinquished by: LCC	Leigh C. Campetti		7/12/11	0825
Accepted by:				
Relinquished by:				
Accepted by:				
Relinquished by:				
Accepted by:	Bob Harris		7/12/11	0825
Relinquished by:	Bob Harris		7/12/11	0830
Received at MICROBAC:	Shanna Drahovsky	Shanna Drahovsky	7/12/11	0835

COMMENTS, NOTES, OR SPECIAL INSTRUCTIONS

* = Field Filtered

By relinquishing this form, I hereby agree to the terms & conditions printed on the reverse side.

WHITE - Original YELLOW - Laboratory Copy PINK - Client Copy

Page ____ of ____

AMERICAN Westech INCORPORATED

Revised Laboratory Result Summary

Laboratory Project ID: 0809048

BL Companies
John Thatcher
213 Market St.
6th Floor
Harrisburg, PA 17101

Contact: John Thatcher
Project Name: RA Frankford & Darrah
Project Number: 00L629-B
Purchase Order Number: N/A
Sampled By: John Thatcher
Date Received: September 4, 2008
Time Received: 12:13 PM

Analytical Testing Parameters

Client Sample ID: **MW - 1**
Lab Sample ID: **0809048-01**

Collection Date: **9/3/2008**
Collection Time: **1:50 PM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<50.0	ug/L	50.0	SW846 8260B	9/9/2008	4:03 AM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	9/9/2008	4:03 AM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:03 AM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:03 AM	JMS
Bromodichloromethane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:03 AM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:03 AM	JMS
Bromomethane	<4.00	ug/L	4.00	SW846 8260B	9/9/2008	4:03 AM	JMS
2-Butanone (MEK)	<3.00	ug/L	3.00	SW846 8260B	9/9/2008	4:03 AM	JMS
n-Butylbenzene	<4.00	ug/L	4.00	SW846 8260B	9/9/2008	4:03 AM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:03 AM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:03 AM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	9/9/2008	4:03 AM	JMS
Carbon Tetrachloride	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:03 AM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:03 AM	JMS
Chlorodibromomethane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:03 AM	JMS
Chloroform	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:03 AM	JMS
Chloromethane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:03 AM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:03 AM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:03 AM	JMS
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:03 AM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:03 AM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:03 AM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:03 AM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:03 AM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:03 AM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:03 AM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:03 AM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:03 AM	JMS
1,1-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:03 AM	JMS
cis-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:03 AM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:03 AM	JMS
1,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:03 AM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:03 AM	JMS
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:03 AM	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:03 AM	JMS
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:03 AM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:03 AM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:03 AM	JMS
Hexachlorobutadiene	<3.00	ug/L	3.00	SW846 8260B	9/9/2008	4:03 AM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	9/9/2008	4:03 AM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:03 AM	JMS
4-Isopropyltoluene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:03 AM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	9/9/2008	4:03 AM	JMS
Methylene Chloride	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:03 AM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:03 AM	JMS
Naphthalene	<10.0	ug/L	10.0	SW846 8260B	9/9/2008	4:03 AM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:03 AM	JMS
Styrene	<4.00	ug/L	4.00	SW846 8260B	9/9/2008	4:03 AM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:03 AM	JMS
1,1,2,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:03 AM	JMS
Tetrachloroethene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:03 AM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:03 AM	JMS
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	9/9/2008	4:03 AM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	9/9/2008	4:03 AM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:03 AM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:03 AM	JMS
Trichloroethene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:03 AM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:03 AM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:03 AM	JMS
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:03 AM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:03 AM	JMS
Vinyl Chloride	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:03 AM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	9/9/2008	4:03 AM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:03 AM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	9/9/2008	4:03 AM	JMS

- The Bromomethane concentration was determined by a library search of the appropriate retention time and mass spectral ion pattern.

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.90	ug/L	0.90	SW846 8270C	9/9/2008	7:35 PM	CGS
Acenaphthylene	<0.90	ug/L	0.90	SW846 8270C	9/9/2008	7:35 PM	CGS
Anthracene	<0.90	ug/L	0.90	SW846 8270C	9/9/2008	7:35 PM	CGS
Benzo(a)anthracene	<0.50	ug/L	0.50	SW846 8270C	9/9/2008	7:35 PM	CGS
Benzo(a)pyrene	**0.20**	ug/L	0.20	SW846 8270C	9/9/2008	7:35 PM	CGS
Benzo(b)fluoranthene	**0.91**	ug/L	0.50	SW846 8270C	9/9/2008	7:35 PM	CGS
Benzo(g,h,i)perylene	<0.27	ug/L	0.27	SW846 8270C	9/9/2008	7:35 PM	CGS
Benzo(k)fluoranthene	<0.50	ug/L	0.50	SW846 8270C	9/9/2008	7:35 PM	CGS
Chrysene	<0.90	ug/L	0.90	SW846 8270C	9/9/2008	7:35 PM	CGS
Dibenzo(a,h)anthracene	<0.50	ug/L	0.50	SW846 8270C	9/9/2008	7:35 PM	CGS
Fluoranthene	<0.90	ug/L	0.90	SW846 8270C	9/9/2008	7:35 PM	CGS
Fluorene	<0.90	ug/L	0.90	SW846 8270C	9/9/2008	7:35 PM	CGS
Indeno(1,2,3-cd)pyrene	<0.50	ug/L	0.50	SW846 8270C	9/9/2008	7:35 PM	CGS
1-Methylnaphthalene	<1.00	ug/L	1.00	SW846 8270C	9/9/2008	7:35 PM	CGS
2-Methylnaphthalene	<1.00	ug/L	1.00	SW846 8270C	9/9/2008	7:35 PM	CGS

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Naphthalene	<0.90	ug/L	0.90	SW846 8270C	9/9/2008	7:35 PM	CGS
Phenanthrene	<0.90	ug/L	0.90	SW846 8270C	9/9/2008	7:35 PM	CGS
Pyrene	<0.90	ug/L	0.90	SW846 8270C	9/9/2008	7:35 PM	CGS

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	<0.005	mg/L	0.005	SW846 7421	9/8/2008	4:09 PM	BEH

Analytical Testing Parameters

Client Sample ID: **MW - 2A** Collection Date: **9/3/2008**
Lab Sample ID: **0809048-02** Collection Time: **1:20 PM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<50.0	ug/L	50.0	SW846 8260B	9/9/2008	4:31 AM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	9/9/2008	4:31 AM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:31 AM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:31 AM	JMS
Bromodichloromethane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:31 AM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:31 AM	JMS
Bromomethane	<4.00	ug/L	4.00	SW846 8260B	9/9/2008	4:31 AM	JMS
2-Butanone (MEK)	<3.00	ug/L	3.00	SW846 8260B	9/9/2008	4:31 AM	JMS
n-Butylbenzene	<4.00	ug/L	4.00	SW846 8260B	9/9/2008	4:31 AM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:31 AM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:31 AM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	9/9/2008	4:31 AM	JMS
Carbon Tetrachloride	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:31 AM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:31 AM	JMS
Chlorodibromomethane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:31 AM	JMS
Chloroform	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:31 AM	JMS
Chloromethane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:31 AM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:31 AM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:31 AM	JMS
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:31 AM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:31 AM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:31 AM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:31 AM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:31 AM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:31 AM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:31 AM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:31 AM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:31 AM	JMS
1,1-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:31 AM	JMS
cis-1,2-Dichloroethene	**3.58**	ug/L	2.00	SW846 8260B	9/9/2008	4:31 AM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:31 AM	JMS
1,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:31 AM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:31 AM	JMS
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:31 AM	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:31 AM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:31 AM	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:31 AM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:31 AM	JMS
Hexachlorobutadiene	<3.00	ug/L	3.00	SW846 8260B	9/9/2008	4:31 AM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	9/9/2008	4:31 AM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:31 AM	JMS
4-Isopropyltoluene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:31 AM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	9/9/2008	4:31 AM	JMS
Methylene Chloride	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:31 AM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:31 AM	JMS
Naphthalene	<10.0	ug/L	10.0	SW846 8260B	9/9/2008	4:31 AM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:31 AM	JMS
Styrene	<4.00	ug/L	4.00	SW846 8260B	9/9/2008	4:31 AM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:31 AM	JMS
1,1,2,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:31 AM	JMS
Tetrachloroethene	**19.0**	ug/L	2.00	SW846 8260B	9/9/2008	4:31 AM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:31 AM	JMS
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	9/9/2008	4:31 AM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	9/9/2008	4:31 AM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:31 AM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:31 AM	JMS
Trichloroethene	**2.42**	ug/L	2.00	SW846 8260B	9/9/2008	4:31 AM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:31 AM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:31 AM	JMS
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:31 AM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:31 AM	JMS
Vinyl Chloride	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:31 AM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	9/9/2008	4:31 AM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:31 AM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	9/9/2008	4:31 AM	JMS

- The Bromomethane concentration was determined by a library search of the appropriate retention time and mass spectral ion pattern.

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.87	ug/L	0.87	SW846 8270C	9/9/2008	8:13 PM	CGS
Acenaphthylene	<0.87	ug/L	0.87	SW846 8270C	9/9/2008	8:13 PM	CGS
Anthracene	<0.87	ug/L	0.87	SW846 8270C	9/9/2008	8:13 PM	CGS
Benzo(a)anthracene	<0.48	ug/L	0.48	SW846 8270C	9/9/2008	8:13 PM	CGS
Benzo(a)pyrene	<0.19	ug/L	0.19	SW846 8270C	9/9/2008	8:13 PM	CGS
Benzo(b)fluoranthene	<0.48	ug/L	0.48	SW846 8270C	9/9/2008	8:13 PM	CGS
Benzo(g,h,i)perylene	<0.26	ug/L	0.26	SW846 8270C	9/9/2008	8:13 PM	CGS
Benzo(k)fluoranthene	<0.48	ug/L	0.48	SW846 8270C	9/9/2008	8:13 PM	CGS
Chrysene	<0.87	ug/L	0.87	SW846 8270C	9/9/2008	8:13 PM	CGS
Dibenzo(a,h)anthracene	<0.48	ug/L	0.48	SW846 8270C	9/9/2008	8:13 PM	CGS
Fluoranthene	**0.87**	ug/L	0.87	SW846 8270C	9/9/2008	8:13 PM	CGS
Fluorene	<0.87	ug/L	0.87	SW846 8270C	9/9/2008	8:13 PM	CGS
Indeno(1,2,3-cd)pyrene	<0.48	ug/L	0.48	SW846 8270C	9/9/2008	8:13 PM	CGS
1-Methylnaphthalene	<0.96	ug/L	0.96	SW846 8270C	9/9/2008	8:13 PM	CGS

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
2-Methylnaphthalene	<0.96	ug/L	0.96	SW846 8270C	9/9/2008	8:13 PM	CGS
Naphthalene	<0.87	ug/L	0.87	SW846 8270C	9/9/2008	8:13 PM	CGS
Phenanthrene	<0.87	ug/L	0.87	SW846 8270C	9/9/2008	8:13 PM	CGS
Pyrene	<0.87	ug/L	0.87	SW846 8270C	9/9/2008	8:13 PM	CGS

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	<0.005	mg/L	0.005	SW846 7421	9/8/2008	4:31 PM	BEH

Analytical Testing Parameters

Client Sample ID: **MW - 3**
Lab Sample ID: **0809048-03**
Collection Date: **9/3/2008**
Collection Time: **1:30 PM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<50.0	ug/L	50.0	SW846 8260B	9/9/2008	4:59 AM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	9/9/2008	4:59 AM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:59 AM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:59 AM	JMS
Bromodichloromethane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:59 AM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:59 AM	JMS
Bromomethane	<4.00	ug/L	4.00	SW846 8260B	9/9/2008	4:59 AM	JMS
2-Butanone (MEK)	<3.00	ug/L	3.00	SW846 8260B	9/9/2008	4:59 AM	JMS
n-Butylbenzene	<4.00	ug/L	4.00	SW846 8260B	9/9/2008	4:59 AM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:59 AM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:59 AM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	9/9/2008	4:59 AM	JMS
Carbon Tetrachloride	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:59 AM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:59 AM	JMS
Chlorodibromomethane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:59 AM	JMS
Chloroform	**3.72**	ug/L	2.00	SW846 8260B	9/9/2008	4:59 AM	JMS
Chloromethane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:59 AM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:59 AM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:59 AM	JMS
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:59 AM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:59 AM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:59 AM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:59 AM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:59 AM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:59 AM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:59 AM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:59 AM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:59 AM	JMS
1,1-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:59 AM	JMS
cis-1,2-Dichloroethene	**8.72**	ug/L	2.00	SW846 8260B	9/9/2008	4:59 AM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:59 AM	JMS
1,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:59 AM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:59 AM	JMS
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:59 AM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:59 AM	JMS
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:59 AM	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:59 AM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:59 AM	JMS
Hexachlorobutadiene	<3.00	ug/L	3.00	SW846 8260B	9/9/2008	4:59 AM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	9/9/2008	4:59 AM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:59 AM	JMS
4-Isopropyltoluene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:59 AM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	9/9/2008	4:59 AM	JMS
Methylene Chloride	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:59 AM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:59 AM	JMS
Naphthalene	<10.0	ug/L	10.0	SW846 8260B	9/9/2008	4:59 AM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:59 AM	JMS
Styrene	<4.00	ug/L	4.00	SW846 8260B	9/9/2008	4:59 AM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:59 AM	JMS
1,1,2,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:59 AM	JMS
Tetrachloroethene	**39.7**	ug/L	2.00	SW846 8260B	9/9/2008	4:59 AM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:59 AM	JMS
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	9/9/2008	4:59 AM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	9/9/2008	4:59 AM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:59 AM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:59 AM	JMS
Trichloroethene	**2.83**	ug/L	2.00	SW846 8260B	9/9/2008	4:59 AM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:59 AM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:59 AM	JMS
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:59 AM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:59 AM	JMS
Vinyl Chloride	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:59 AM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	9/9/2008	4:59 AM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	4:59 AM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	9/9/2008	4:59 AM	JMS

♦ The Bromomethane concentration was determined by a library search of the appropriate retention time and mass spectral ion pattern.

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.85	ug/L	0.85	SW846 8270C	9/9/2008	8:51 PM	CGS
Acenaphthylene	<0.85	ug/L	0.85	SW846 8270C	9/9/2008	8:51 PM	CGS
Anthracene	<0.85	ug/L	0.85	SW846 8270C	9/9/2008	8:51 PM	CGS
Benzo(a)anthracene	<0.47	ug/L	0.47	SW846 8270C	9/9/2008	8:51 PM	CGS
Benzo(a)pyrene	<0.19	ug/L	0.19	SW846 8270C	9/9/2008	8:51 PM	CGS
Benzo(b)fluoranthene	<0.47	ug/L	0.47	SW846 8270C	9/9/2008	8:51 PM	CGS
Benzo(g,h,i)perylene	<0.26	ug/L	0.26	SW846 8270C	9/9/2008	8:51 PM	CGS
Benzo(k)fluoranthene	<0.47	ug/L	0.47	SW846 8270C	9/9/2008	8:51 PM	CGS
Chrysene	<0.85	ug/L	0.85	SW846 8270C	9/9/2008	8:51 PM	CGS
Dibenzo(a,h)anthracene	<0.47	ug/L	0.47	SW846 8270C	9/9/2008	8:51 PM	CGS
Fluoranthene	<0.85	ug/L	0.85	SW846 8270C	9/9/2008	8:51 PM	CGS
Fluorene	<0.85	ug/L	0.85	SW846 8270C	9/9/2008	8:51 PM	CGS
Indeno(1,2,3-cd)pyrene	<0.47	ug/L	0.47	SW846 8270C	9/9/2008	8:51 PM	CGS

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
1-Methylnaphthalene	<0.94	ug/L	0.94	SW846 8270C	9/9/2008	8:51 PM	CGS
2-Methylnaphthalene	<0.94	ug/L	0.94	SW846 8270C	9/9/2008	8:51 PM	CGS
Naphthalene	<0.85	ug/L	0.85	SW846 8270C	9/9/2008	8:51 PM	CGS
Phenanthrene	<0.85	ug/L	0.85	SW846 8270C	9/9/2008	8:51 PM	CGS
Pyrene	<0.85	ug/L	0.85	SW846 8270C	9/9/2008	8:51 PM	CGS

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	<0.005	mg/L	0.005	SW846 7421	9/8/2008	4:36 PM	BEH

Analytical Testing Parameters

Client Sample ID: **MW - 4** Collection Date: **9/3/2008**
Lab Sample ID: **0809048-04** Collection Time: **1:40 PM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<50.0	ug/L	50.0	SW846 8260B	9/9/2008	5:27 AM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	9/9/2008	5:27 AM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	5:27 AM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	5:27 AM	JMS
Bromodichloromethane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	5:27 AM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	5:27 AM	JMS
Bromomethane	<4.00	ug/L	4.00	SW846 8260B	9/9/2008	5:27 AM	JMS
2-Butanone (MEK)	<3.00	ug/L	3.00	SW846 8260B	9/9/2008	5:27 AM	JMS
n-Butylbenzene	<4.00	ug/L	4.00	SW846 8260B	9/9/2008	5:27 AM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	5:27 AM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	5:27 AM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	9/9/2008	5:27 AM	JMS
Carbon Tetrachloride	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	5:27 AM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	5:27 AM	JMS
Chlorodibromomethane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	5:27 AM	JMS
Chloroform	**2.72**	ug/L	2.00	SW846 8260B	9/9/2008	5:27 AM	JMS
Chloromethane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	5:27 AM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	5:27 AM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	5:27 AM	JMS
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	5:27 AM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	5:27 AM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	5:27 AM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	5:27 AM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	5:27 AM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	5:27 AM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	5:27 AM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	5:27 AM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	5:27 AM	JMS
1,1-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	5:27 AM	JMS
cis-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	5:27 AM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	5:27 AM	JMS
1,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	5:27 AM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	5:27 AM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	5:27 AM	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	5:27 AM	JMS
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	5:27 AM	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	5:27 AM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	5:27 AM	JMS
Hexachlorobutadiene	<3.00	ug/L	3.00	SW846 8260B	9/9/2008	5:27 AM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	9/9/2008	5:27 AM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	5:27 AM	JMS
4-Isopropyltoluene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	5:27 AM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	9/9/2008	5:27 AM	JMS
Methylene Chloride	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	5:27 AM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	5:27 AM	JMS
Naphthalene	<10.0	ug/L	10.0	SW846 8260B	9/9/2008	5:27 AM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	5:27 AM	JMS
Styrene	<4.00	ug/L	4.00	SW846 8260B	9/9/2008	5:27 AM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	5:27 AM	JMS
1,1,2,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	5:27 AM	JMS
Tetrachloroethene	**18.2**	ug/L	2.00	SW846 8260B	9/9/2008	5:27 AM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	5:27 AM	JMS
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	9/9/2008	5:27 AM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	9/9/2008	5:27 AM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	5:27 AM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	5:27 AM	JMS
Trichloroethene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	5:27 AM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	5:27 AM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	5:27 AM	JMS
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	5:27 AM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	5:27 AM	JMS
Vinyl Chloride	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	5:27 AM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	9/9/2008	5:27 AM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	9/9/2008	5:27 AM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	9/9/2008	5:27 AM	JMS

- The Bromomethane concentration was determined by a library search of the appropriate retention time and mass spectral ion pattern.

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.86	ug/L	0.86	SW846 8270C	9/9/2008	9:28 PM	CGS
Acenaphthylene	<0.86	ug/L	0.86	SW846 8270C	9/9/2008	9:28 PM	CGS
Anthracene	<0.86	ug/L	0.86	SW846 8270C	9/9/2008	9:28 PM	CGS
Benzo(a)anthracene	<0.48	ug/L	0.48	SW846 8270C	9/9/2008	9:28 PM	CGS
Benzo(a)pyrene	<0.19	ug/L	0.19	SW846 8270C	9/9/2008	9:28 PM	CGS
Benzo(b)fluoranthene	<0.48	ug/L	0.48	SW846 8270C	9/9/2008	9:28 PM	CGS
Benzo(g,h,i)perylene	<0.26	ug/L	0.26	SW846 8270C	9/9/2008	9:28 PM	CGS
Benzo(k)fluoranthene	<0.48	ug/L	0.48	SW846 8270C	9/9/2008	9:28 PM	CGS
Chrysene	<0.86	ug/L	0.86	SW846 8270C	9/9/2008	9:28 PM	CGS
Dibenzo(a,h)anthracene	<0.48	ug/L	0.48	SW846 8270C	9/9/2008	9:28 PM	CGS
Fluoranthene	<0.86	ug/L	0.86	SW846 8270C	9/9/2008	9:28 PM	CGS
Fluorene	<0.86	ug/L	0.86	SW846 8270C	9/9/2008	9:28 PM	CGS

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Indeno(1,2,3-cd)pyrene	<0.48	ug/L	0.48	SW846 8270C	9/9/2008	9:28 PM	CGS
1-Methylnaphthalene	<0.95	ug/L	0.95	SW846 8270C	9/9/2008	9:28 PM	CGS
2-Methylnaphthalene	<0.95	ug/L	0.95	SW846 8270C	9/9/2008	9:28 PM	CGS
Naphthalene	<0.86	ug/L	0.86	SW846 8270C	9/9/2008	9:28 PM	CGS
Phenanthrene	<0.86	ug/L	0.86	SW846 8270C	9/9/2008	9:28 PM	CGS
Pyrene	<0.86	ug/L	0.86	SW846 8270C	9/9/2008	9:28 PM	CGS

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	**0.013**	mg/L	0.005	SW846 7421	9/8/2008	4:40 PM	BEH

Report Comments:

Note: Due to the extremely short holding time of 15 minutes, the following test procedures, if reported, were performed outside the recommended holding time: Total Residual Chlorine, laboratory pH, Dissolved Oxygen, Orthophosphate, and Sulfite.

The **PQL** is the **Practical Quantitation Limit**, which is defined as the lowest quantitation level of an analyte that can be readily achieved within the specified limits of precision and accuracy of an analytical method during routine laboratory operating conditions. The value may be raised depending on the characteristics or behavior of the target analyte.

All samples were analyzed "**as received**" from the client. American Westech Inc. can only assume that all samples were collected and submitted by the CLIENT following the appropriate protocols set forth by the regulatory requirements. This document shall not be reproduced, except in full, without the written approval of American Westech Inc. If there are any questions pertaining to this laboratory report please contact a Client Services Coordinator or the Laboratory Director at (717) 651-9700.

Laboratory Certifications:

- NELAP accredited by the PADEP (22-00578) & NJDEP (PA019) for numerous solid and chemical materials and non-potable water parameters. Please refer to our certified parameter lists for each state for specific information on the approved methodologies.
- PADEP accredited for various drinking water parameters including: Volatile Organic Compounds, Metals, Inorganics, and Microbiology (22-00578). Please refer to our certified parameter list for specific information on the approved methodologies.

Reviewed and Approved By:

David S. Wildasin
Assistant Laboratory Director

Date Reviewed and Approved:
9-22-08

American Westech Incorporated
4359 Linglestown Road, Harrisburg, PA 17112
Phone: (717) 651-9700 Fax: (717) 657-0752

SAMPLE SUBMITTAL FORM

NELAP accredited by PADEP & NJDEP. Please call for specific parameter accreditations.
PADEP ID (22-00578) • NJDEP ID (PA019)

LABORATORY PROJECT NUMBER: 0809048

PROJECT DETAILS

Company: RL Companies
Contact: John Thatcher
Address:
City: State: Zip:
Phone: Fax:
Project Name: RA Frankford + Darrah
Project No.: 00L629-B
Client P.O. No.:
Westech Proposal/BPA No.:
Purpose: ☐ Regulatory ☐ Informational ☐ PWSID:
Data Deliverables: ☐ Level I ☐ Level II ☐ Level III ☐ Level IV
Report Delivery: ☐ Fax ☐ Email - Address:
Please Mark TAT Requested *: ☐ 10 Day (Standard) ☒ 5 Day ☐ 72 Hour ☐ 48 Hour ☐ 24 Hour ☐ Same Day

* Turnaround times based on business days only. All "RUSH" TATs must be pre-arranged with WESTECH and are subject to "RUSH" surcharges.

INVOICING INFORMATION

Company:
Contact:
Address: SAME
City: State: Zip:
Phone: Fax:
Invoice Delivery: ☐ Mail w/Report ☐ Email (enter address below)
WESTECH Field Services Used? ☐ NO ☐ YES - *(See Field Services Log)*

SAMPLE TYPE (Key): SS = Solid/Sludge; OL = Oil; DW = Drinking Water; GW = Groundwater; SW = Storm/Surface Water; WW = Wastewater; AR = Air; O = Other:

SAMPLE RECEIVING INFORMATION *(lab use only)*

Samples received on ice? Temp: 1.9 °C	Y	N	NA
Cooler temp. within acceptable limits?	Y	N	NA
Correct bottles used for requested analysis?	Y	N	NA
Sample bottles in good condition (unbroken)?	Y	N	NA
Zero headspace samples collected correctly?	Y	N	NA
Samples within required holding time?	Y	N	NA
Samples preserved to pH <2 and/or pH >12?	N/A	N	NA

Shipping Carrier? ☐ Drop Off ☒ WESTECH Pickup ☐ Outside Courier:

SAMPLE DETAILS / ANALYSIS REQUESTED

LAB ID	SAMPLE IDENTIFICATION / LOCATION DESCRIPTION	SAMPLE DATE	SAMPLE TIME	Total # of Bottles	Sample Type: (See "Sample Type" Key)	Grab: "G" or Composite: "C"	VOCs	PAHs	Dissolved Pb
01	MW-1	9/3/08	1350	6	GW	G	X	X	X
02	MW-2A	↓	1320	6	GW	G	X	X	X
03	MW-3		1330	6	GW	G	X	X	X
04	MW-4		1340	6	GW	G	X	X	X
05									
06									
07									
08									
09									
10									

	PRINT NAME	SIGNATURE	DATE	TIME
Sampled By:	John Thatcher		9/3/08	1400
Relinquished By (Sampler):	John Thatcher		9/4/08	0800
Accepted By:	James McGeorge		9-4-08	11:05
Relinquished to WESTECH By:	James McGeorge		9-4-8	11:05
Accepted at WESTECH By:	Jessi Pfitt		914108	1213

COMMENTS OR SPECIAL INSTRUCTIONS

FIELD FILTERED
Must meet PADEP Act 2 standards

AMERICAN Westech INCORPORATED

Laboratory Result Summary

Laboratory Project ID: 0812287

BL Companies
Scott Treherne
213 Market St.
6th Floor
Harrisburg, PA 17101

Contact: Scott Treherne
Project Name: Frankford & Darrah
Project Number: 00L629-B
Purchase Order Number: N/A
Sampled By: Scott Treherne
Date Received: December 18, 2008
Time Received: 4:50 PM

Analytical Testing Parameters

Client Sample ID: **MW - 1**
Lab Sample ID: **0812287-01**
Collection Date: **12/17/2008**
Collection Time: **10:10 AM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<50.0	ug/L	50.0	SW846 8260B	12/19/2008	6:12 PM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	12/19/2008	6:12 PM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:12 PM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:12 PM	JMS
Bromodichloromethane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:12 PM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:12 PM	JMS
Bromomethane	<4.00	ug/L	4.00	SW846 8260B	12/19/2008	6:12 PM	JMS
2-Butanone (MEK)	<3.00	ug/L	3.00	SW846 8260B	12/19/2008	6:12 PM	JMS
n-Butylbenzene	<4.00	ug/L	4.00	SW846 8260B	12/19/2008	6:12 PM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:12 PM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:12 PM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	12/19/2008	6:12 PM	JMS
Carbon Tetrachloride	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:12 PM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:12 PM	JMS
Chlorodibromomethane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:12 PM	JMS
Chloroform	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:12 PM	JMS
Chloromethane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:12 PM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:12 PM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:12 PM	JMS
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:12 PM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:12 PM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:12 PM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:12 PM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:12 PM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:12 PM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:12 PM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:12 PM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:12 PM	JMS
1,1-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:12 PM	JMS
cis-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:12 PM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:12 PM	JMS
1,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:12 PM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:12 PM	JMS
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:12 PM	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:12 PM	JMS
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:12 PM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:12 PM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:12 PM	JMS
Hexachlorobutadiene	<3.00	ug/L	3.00	SW846 8260B	12/19/2008	6:12 PM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	12/19/2008	6:12 PM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:12 PM	JMS
4-Isopropyltoluene	<10.0	ug/L	10.0	SW846 8260B	12/19/2008	6:12 PM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	12/19/2008	6:12 PM	JMS
Methylene Chloride	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:12 PM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:12 PM	JMS
Naphthalene	<10.0	ug/L	10.0	SW846 8260B	12/19/2008	6:12 PM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:12 PM	JMS
Styrene	<4.00	ug/L	4.00	SW846 8260B	12/19/2008	6:12 PM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:12 PM	JMS
1,1,2,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:12 PM	JMS
Tetrachloroethene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:12 PM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:12 PM	JMS
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	12/19/2008	6:12 PM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	12/19/2008	6:12 PM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:12 PM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:12 PM	JMS
Trichloroethene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:12 PM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:12 PM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:12 PM	JMS
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:12 PM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:12 PM	JMS
Vinyl Chloride	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:12 PM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	12/19/2008	6:12 PM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:12 PM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	12/19/2008	6:12 PM	JMS

- The Bromomethane concentration was determined by a library search of the appropriate retention time and mass spectral ion pattern.

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.90	ug/L	0.90	SW846 8270C	12/22/2008	4:30 PM	CGS
Acenaphthylene	<0.90	ug/L	0.90	SW846 8270C	12/22/2008	4:30 PM	CGS
Anthracene	<0.90	ug/L	0.90	SW846 8270C	12/22/2008	4:30 PM	CGS
Benzo(a)anthracene	<0.50	ug/L	0.50	SW846 8270C	12/22/2008	4:30 PM	CGS
Benzo(a)pyrene	**0.62**	ug/L	0.20	SW846 8270C	12/22/2008	4:30 PM	CGS
Benzo(b)fluoranthene	**0.65**	ug/L	0.50	SW846 8270C	12/22/2008	4:30 PM	CGS
Benzo(g,h,i)perylene	**1.09**	ug/L	0.20	SW846 8270C	12/22/2008	4:30 PM	CGS
Benzo(k)fluoranthene	<0.50	ug/L	0.50	SW846 8270C	12/22/2008	4:30 PM	CGS
Chrysene	<0.90	ug/L	0.90	SW846 8270C	12/22/2008	4:30 PM	CGS
Dibenzo(a,h)anthracene	<0.50	ug/L	0.50	SW846 8270C	12/22/2008	4:30 PM	CGS
Fluoranthene	<0.90	ug/L	0.90	SW846 8270C	12/22/2008	4:30 PM	CGS
Fluorene	<0.90	ug/L	0.90	SW846 8270C	12/22/2008	4:30 PM	CGS
Indeno(1,2,3-cd)pyrene	**0.75**	ug/L	0.50	SW846 8270C	12/22/2008	4:30 PM	CGS
1-Methylnaphthalene	<1.00	ug/L	1.00	SW846 8270C	12/22/2008	4:30 PM	CGS
2-Methylnaphthalene	<1.00	ug/L	1.00	SW846 8270C	12/22/2008	4:30 PM	CGS

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Naphthalene	<0.90	ug/L	0.90	SW846 8270C	12/22/2008	4:30 PM	CGS
Phenanthrene	<0.90	ug/L	0.90	SW846 8270C	12/22/2008	4:30 PM	CGS
Pyrene	<0.90	ug/L	0.90	SW846 8270C	12/22/2008	4:30 PM	CGS

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	<0.005	mg/L	0.005	SW846 7421	12/22/2008	5:33 PM	BEH

Analytical Testing Parameters

Client Sample ID: **MW - 2A**
Lab Sample ID: **0812287-02**

Collection Date: **12/17/2008**
Collection Time: **10:56 AM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<50.0	ug/L	50.0	SW846 8260B	12/19/2008	6:40 PM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	12/19/2008	6:40 PM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:40 PM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:40 PM	JMS
Bromodichloromethane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:40 PM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:40 PM	JMS
Bromomethane	<4.00	ug/L	4.00	SW846 8260B	12/19/2008	6:40 PM	JMS
2-Butanone (MEK)	<3.00	ug/L	3.00	SW846 8260B	12/19/2008	6:40 PM	JMS
n-Butylbenzene	<4.00	ug/L	4.00	SW846 8260B	12/19/2008	6:40 PM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:40 PM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:40 PM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	12/19/2008	6:40 PM	JMS
Carbon Tetrachloride	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:40 PM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:40 PM	JMS
Chlorodibromomethane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:40 PM	JMS
Chloroform	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:40 PM	JMS
Chloromethane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:40 PM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:40 PM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:40 PM	JMS
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:40 PM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:40 PM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:40 PM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:40 PM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:40 PM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:40 PM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:40 PM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:40 PM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:40 PM	JMS
1,1-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:40 PM	JMS
cis-1,2-Dichloroethene	**10.9**	ug/L	2.00	SW846 8260B	12/19/2008	6:40 PM	JMS
trans-1,2-Dichloroethene	**2.28**	ug/L	2.00	SW846 8260B	12/19/2008	6:40 PM	JMS
1,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:40 PM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:40 PM	JMS
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:40 PM	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:40 PM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:40 PM	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:40 PM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:40 PM	JMS
Hexachlorobutadiene	<3.00	ug/L	3.00	SW846 8260B	12/19/2008	6:40 PM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	12/19/2008	6:40 PM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:40 PM	JMS
4-Isopropyltoluene	<10.0	ug/L	10.0	SW846 8260B	12/19/2008	6:40 PM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	12/19/2008	6:40 PM	JMS
Methylene Chloride	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:40 PM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:40 PM	JMS
Naphthalene	<10.0	ug/L	10.0	SW846 8260B	12/19/2008	6:40 PM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:40 PM	JMS
Styrene	<4.00	ug/L	4.00	SW846 8260B	12/19/2008	6:40 PM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:40 PM	JMS
1,1,2,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:40 PM	JMS
Tetrachloroethene	**9.10**	ug/L	2.00	SW846 8260B	12/19/2008	6:40 PM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:40 PM	JMS
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	12/19/2008	6:40 PM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	12/19/2008	6:40 PM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:40 PM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:40 PM	JMS
Trichloroethene	**2.10**	ug/L	2.00	SW846 8260B	12/19/2008	6:40 PM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:40 PM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:40 PM	JMS
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:40 PM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:40 PM	JMS
Vinyl Chloride	**3.45**	ug/L	2.00	SW846 8260B	12/19/2008	6:40 PM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	12/19/2008	6:40 PM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	6:40 PM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	12/19/2008	6:40 PM	JMS

- The Bromomethane concentration was determined by a library search of the appropriate retention time and mass spectral ion pattern.

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.90	ug/L	0.90	SW846 8270C	12/22/2008	5:08 PM	CGS
Acenaphthylene	<0.90	ug/L	0.90	SW846 8270C	12/22/2008	5:08 PM	CGS
Anthracene	<0.90	ug/L	0.90	SW846 8270C	12/22/2008	5:08 PM	CGS
Benzo(a)anthracene	**0.68**	ug/L	0.50	SW846 8270C	12/22/2008	5:08 PM	CGS
Benzo(a)pyrene	**0.80**	ug/L	0.20	SW846 8270C	12/22/2008	5:08 PM	CGS
Benzo(b)fluoranthene	**0.53**	ug/L	0.50	SW846 8270C	12/22/2008	5:08 PM	CGS
Benzo(g,h,i)perylene	**0.77**	ug/L	0.20	SW846 8270C	12/22/2008	5:08 PM	CGS
Benzo(k)fluoranthene	<0.50	ug/L	0.50	SW846 8270C	12/22/2008	5:08 PM	CGS
Chrysene	<0.90	ug/L	0.90	SW846 8270C	12/22/2008	5:08 PM	CGS
Dibenzo(a,h)anthracene	<0.50	ug/L	0.50	SW846 8270C	12/22/2008	5:08 PM	CGS
Fluoranthene	**1.25**	ug/L	0.90	SW846 8270C	12/22/2008	5:08 PM	CGS
Fluorene	<0.90	ug/L	0.90	SW846 8270C	12/22/2008	5:08 PM	CGS
Indeno(1,2,3-cd)pyrene	**0.56**	ug/L	0.50	SW846 8270C	12/22/2008	5:08 PM	CGS
1-Methylnaphthalene	<1.00	ug/L	1.00	SW846 8270C	12/22/2008	5:08 PM	CGS

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
2-Methylnaphthalene	<1.00	ug/L	1.00	SW846 8270C	12/22/2008	5:08 PM	CGS
Naphthalene	<0.90	ug/L	0.90	SW846 8270C	12/22/2008	5:08 PM	CGS
Phenanthrene	<0.90	ug/L	0.90	SW846 8270C	12/22/2008	5:08 PM	CGS
Pyrene	**1.19**	ug/L	0.90	SW846 8270C	12/22/2008	5:08 PM	CGS

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	<0.005	mg/L	0.005	SW846 7421	12/22/2008	5:47 PM	BEH

Analytical Testing Parameters

Client Sample ID: **MW - 3**
Lab Sample ID: **0812287-03**

Collection Date: **12/17/2008**
Collection Time: **11:50 AM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<50.0	ug/L	50.0	SW846 8260B	12/19/2008	7:08 PM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	12/19/2008	7:08 PM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:08 PM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:08 PM	JMS
Bromodichloromethane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:08 PM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:08 PM	JMS
Bromomethane	<4.00	ug/L	4.00	SW846 8260B	12/19/2008	7:08 PM	JMS
2-Butanone (MEK)	<3.00	ug/L	3.00	SW846 8260B	12/19/2008	7:08 PM	JMS
n-Butylbenzene	<4.00	ug/L	4.00	SW846 8260B	12/19/2008	7:08 PM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:08 PM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:08 PM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	12/19/2008	7:08 PM	JMS
Carbon Tetrachloride	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:08 PM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:08 PM	JMS
Chlorodibromomethane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:08 PM	JMS
Chloroform	**3.17**	ug/L	2.00	SW846 8260B	12/19/2008	7:08 PM	JMS
Chloromethane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:08 PM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:08 PM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:08 PM	JMS
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:08 PM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:08 PM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:08 PM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:08 PM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:08 PM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:08 PM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:08 PM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:08 PM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:08 PM	JMS
1,1-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:08 PM	JMS
cis-1,2-Dichloroethene	**10.1**	ug/L	2.00	SW846 8260B	12/19/2008	7:08 PM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:08 PM	JMS
1,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:08 PM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:08 PM	JMS
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:08 PM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:08 PM	JMS
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:08 PM	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:08 PM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:08 PM	JMS
Hexachlorobutadiene	<3.00	ug/L	3.00	SW846 8260B	12/19/2008	7:08 PM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	12/19/2008	7:08 PM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:08 PM	JMS
4-Isopropyltoluene	<10.0	ug/L	10.0	SW846 8260B	12/19/2008	7:08 PM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	12/19/2008	7:08 PM	JMS
Methylene Chloride	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:08 PM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:08 PM	JMS
Naphthalene	<10.0	ug/L	10.0	SW846 8260B	12/19/2008	7:08 PM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:08 PM	JMS
Styrene	<4.00	ug/L	4.00	SW846 8260B	12/19/2008	7:08 PM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:08 PM	JMS
1,1,2,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:08 PM	JMS
Tetrachloroethene	**40.9**	ug/L	2.00	SW846 8260B	12/19/2008	7:08 PM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:08 PM	JMS
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	12/19/2008	7:08 PM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	12/19/2008	7:08 PM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:08 PM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:08 PM	JMS
Trichloroethene	**4.66**	ug/L	2.00	SW846 8260B	12/19/2008	7:08 PM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:08 PM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:08 PM	JMS
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:08 PM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:08 PM	JMS
Vinyl Chloride	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:08 PM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	12/19/2008	7:08 PM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:08 PM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	12/19/2008	7:08 PM	JMS

- The Bromomethane concentration was determined by a library search of the appropriate retention time and mass spectral ion pattern.

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.85	ug/L	0.85	SW846 8270C	12/22/2008	5:47 PM	CGS
Acenaphthylene	<0.85	ug/L	0.85	SW846 8270C	12/22/2008	5:47 PM	CGS
Anthracene	<0.85	ug/L	0.85	SW846 8270C	12/22/2008	5:47 PM	CGS
Benzo(a)anthracene	<0.47	ug/L	0.47	SW846 8270C	12/22/2008	5:47 PM	CGS
Benzo(a)pyrene	<0.19	ug/L	0.19	SW846 8270C	12/22/2008	5:47 PM	CGS
Benzo(b)fluoranthene	<0.47	ug/L	0.47	SW846 8270C	12/22/2008	5:47 PM	CGS
Benzo(g,h,i)perylene	**0.54**	ug/L	0.19	SW846 8270C	12/22/2008	5:47 PM	CGS
Benzo(k)fluoranthene	<0.47	ug/L	0.47	SW846 8270C	12/22/2008	5:47 PM	CGS
Chrysene	<0.85	ug/L	0.85	SW846 8270C	12/22/2008	5:47 PM	CGS
Dibenzo(a,h)anthracene	<0.47	ug/L	0.47	SW846 8270C	12/22/2008	5:47 PM	CGS
Fluoranthene	<0.85	ug/L	0.85	SW846 8270C	12/22/2008	5:47 PM	CGS
Fluorene	<0.85	ug/L	0.85	SW846 8270C	12/22/2008	5:47 PM	CGS
Indeno(1,2,3-cd)pyrene	<0.47	ug/L	0.47	SW846 8270C	12/22/2008	5:47 PM	CGS

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
1-Methylnaphthalene	<0.94	ug/L	0.94	SW846 8270C	12/22/2008	5:47 PM	CGS
2-Methylnaphthalene	<0.94	ug/L	0.94	SW846 8270C	12/22/2008	5:47 PM	CGS
Naphthalene	<0.85	ug/L	0.85	SW846 8270C	12/22/2008	5:47 PM	CGS
Phenanthrene	<0.85	ug/L	0.85	SW846 8270C	12/22/2008	5:47 PM	CGS
Pyrene	<0.85	ug/L	0.85	SW846 8270C	12/22/2008	5:47 PM	CGS

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	<0.005	mg/L	0.005	SW846 7421	12/22/2008	5:51 PM	BEH

Analytical Testing Parameters

Client Sample ID: **MW - 4**
Lab Sample ID: **0812287-04**
Collection Date: **12/17/2008**
Collection Time: **11:30 AM**

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acetone	<50.0	ug/L	50.0	SW846 8260B	12/19/2008	7:37 PM	JMS
Benzene	<1.00	ug/L	1.00	SW846 8260B	12/19/2008	7:37 PM	JMS
Bromobenzene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:37 PM	JMS
Bromochloromethane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:37 PM	JMS
Bromodichloromethane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:37 PM	JMS
Bromoform	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:37 PM	JMS
Bromomethane	<4.00	ug/L	4.00	SW846 8260B	12/19/2008	7:37 PM	JMS
2-Butanone (MEK)	<3.00	ug/L	3.00	SW846 8260B	12/19/2008	7:37 PM	JMS
n-Butylbenzene	<4.00	ug/L	4.00	SW846 8260B	12/19/2008	7:37 PM	JMS
sec-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:37 PM	JMS
tert-Butylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:37 PM	JMS
Carbon Disulfide	<4.00	ug/L	4.00	SW846 8260B	12/19/2008	7:37 PM	JMS
Carbon Tetrachloride	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:37 PM	JMS
Chlorobenzene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:37 PM	JMS
Chlorodibromomethane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:37 PM	JMS
Chloroform	**2.54**	ug/L	2.00	SW846 8260B	12/19/2008	7:37 PM	JMS
Chloromethane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:37 PM	JMS
2-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:37 PM	JMS
4-Chlorotoluene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:37 PM	JMS
1,2-Dibromo-3-chloropropane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:37 PM	JMS
1,2-Dibromoethane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:37 PM	JMS
Dibromomethane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:37 PM	JMS
1,2-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:37 PM	JMS
1,3-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:37 PM	JMS
1,4-Dichlorobenzene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:37 PM	JMS
Dichlorodifluoromethane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:37 PM	JMS
1,1-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:37 PM	JMS
1,2-Dichloroethane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:37 PM	JMS
1,1-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:37 PM	JMS
cis-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:37 PM	JMS
trans-1,2-Dichloroethene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:37 PM	JMS
1,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:37 PM	JMS
1,3-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:37 PM	JMS

Volatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
2,2-Dichloropropane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:37 PM	JMS
1,1-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:37 PM	JMS
cis-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:37 PM	JMS
trans-1,3-Dichloropropene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:37 PM	JMS
Ethylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:37 PM	JMS
Hexachlorobutadiene	<3.00	ug/L	3.00	SW846 8260B	12/19/2008	7:37 PM	JMS
2-Hexanone	<4.00	ug/L	4.00	SW846 8260B	12/19/2008	7:37 PM	JMS
Isopropylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:37 PM	JMS
4-Isopropyltoluene	<10.0	ug/L	10.0	SW846 8260B	12/19/2008	7:37 PM	JMS
4-Methyl-2-pentanone (MIBK)	<3.00	ug/L	3.00	SW846 8260B	12/19/2008	7:37 PM	JMS
Methylene Chloride	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:37 PM	JMS
Methyl-tert-butyl-ether (MTBE)	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:37 PM	JMS
Naphthalene	<10.0	ug/L	10.0	SW846 8260B	12/19/2008	7:37 PM	JMS
n-Propylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:37 PM	JMS
Styrene	<4.00	ug/L	4.00	SW846 8260B	12/19/2008	7:37 PM	JMS
1,1,1,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:37 PM	JMS
1,1,2,2-Tetrachloroethane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:37 PM	JMS
Tetrachloroethene	**14.3**	ug/L	2.00	SW846 8260B	12/19/2008	7:37 PM	JMS
Toluene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:37 PM	JMS
1,2,3-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	12/19/2008	7:37 PM	JMS
1,2,4-Trichlorobenzene	<15.0	ug/L	15.0	SW846 8260B	12/19/2008	7:37 PM	JMS
1,1,1-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:37 PM	JMS
1,1,2-Trichloroethane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:37 PM	JMS
Trichloroethene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:37 PM	JMS
Trichlorofluoromethane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:37 PM	JMS
1,2,3-Trichloropropane	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:37 PM	JMS
1,2,4-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:37 PM	JMS
1,3,5-Trimethylbenzene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:37 PM	JMS
Vinyl Chloride	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:37 PM	JMS
m,p-Xylene	<4.00	ug/L	4.00	SW846 8260B	12/19/2008	7:37 PM	JMS
o-Xylene	<2.00	ug/L	2.00	SW846 8260B	12/19/2008	7:37 PM	JMS
Total Xylenes	<6.00	ug/L	6.00	SW846 8260B	12/19/2008	7:37 PM	JMS

- The Bromomethane concentration was determined by a library search of the appropriate retention time and mass spectral ion pattern.

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Acenaphthene	<0.87	ug/L	0.87	SW846 8270C	12/22/2008	6:26 PM	CGS
Acenaphthylene	<0.87	ug/L	0.87	SW846 8270C	12/22/2008	6:26 PM	CGS
Anthracene	<0.87	ug/L	0.87	SW846 8270C	12/22/2008	6:26 PM	CGS
Benzo(a)anthracene	<0.48	ug/L	0.48	SW846 8270C	12/22/2008	6:26 PM	CGS
Benzo(a)pyrene	**0.42**	ug/L	0.19	SW846 8270C	12/22/2008	6:26 PM	CGS
Benzo(b)fluoranthene	<0.48	ug/L	0.48	SW846 8270C	12/22/2008	6:26 PM	CGS
Benzo(g,h,i)perylene	<0.19	ug/L	0.19	SW846 8270C	12/22/2008	6:26 PM	CGS
Benzo(k)fluoranthene	<0.48	ug/L	0.48	SW846 8270C	12/22/2008	6:26 PM	CGS
Chrysene	<0.87	ug/L	0.87	SW846 8270C	12/22/2008	6:26 PM	CGS
Dibenzo(a,h)anthracene	<0.48	ug/L	0.48	SW846 8270C	12/22/2008	6:26 PM	CGS
Fluoranthene	<0.87	ug/L	0.87	SW846 8270C	12/22/2008	6:26 PM	CGS
Fluorene	<0.87	ug/L	0.87	SW846 8270C	12/22/2008	6:26 PM	CGS

Semivolatile Organic Compounds by GC/MS

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Indeno(1,2,3-cd)pyrene	<0.48	ug/L	0.48	SW846 8270C	12/22/2008	6:26 PM	CGS
1-Methylnaphthalene	<0.96	ug/L	0.96	SW846 8270C	12/22/2008	6:26 PM	CGS
2-Methylnaphthalene	<0.96	ug/L	0.96	SW846 8270C	12/22/2008	6:26 PM	CGS
Naphthalene	<0.87	ug/L	0.87	SW846 8270C	12/22/2008	6:26 PM	CGS
Phenanthrene	<0.87	ug/L	0.87	SW846 8270C	12/22/2008	6:26 PM	CGS
Pyrene	<0.87	ug/L	0.87	SW846 8270C	12/22/2008	6:26 PM	CGS

Metals Analysis

Parameter	Results	Units	PQL	Method	Test Date	Test Time	Analyst
Lead, (Dissolved)	**0.006**	mg/L	0.005	SW846 7421	12/22/2008	5:56 PM	BEH

Report Comments:

Note: Due to the extremely short holding time of 15 minutes, the following test procedures, if reported, were performed outside the recommended holding time: Total Residual Chlorine, laboratory pH, Dissolved Oxygen, Orthophosphate, and Sulfite.

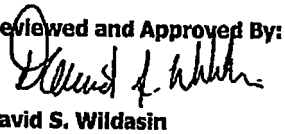
The **PQL** is the **Practical Quantitation Limit**, which is defined as the lowest quantitation level of an analyte that can be readily achieved within the specified limits of precision and accuracy of an analytical method during routine laboratory operating conditions. The value may be raised depending on the characteristics or behavior of the target analyte.

All samples were analyzed **"as received"** from the client. American Westech Inc. can only assume that all samples were collected and submitted by the CLIENT following the appropriate protocols set forth by the regulatory requirements. This document shall not be reproduced, except in full, without the written approval of American Westech Inc. If there are any questions pertaining to this laboratory report please contact a Client Services Coordinator or the Laboratory Director at (717) 651-9700.

Laboratory Certifications:

- NELAP accredited by the PADEP (22-00578) & NJDEP (PA019) for numerous solid and chemical materials and non-potable water parameters. Please refer to our certified parameter lists for each state for specific information on the approved methodologies.
- PADEP accredited for various drinking water parameters including: Volatile Organic Compounds, Metals, Inorganics, and Microbiology (22-00578). Please refer to our certified parameter list for specific information on the approved methodologies.

Reviewed and Approved By:



David S. Wildasin
Assistant Laboratory Director

Date Reviewed and Approved:

American Westech Incorporated
4359 Linglestown Road, Harrisburg, PA 17112
Phone: (717) 651-9700 Fax: (717) 657-0752

SAMPLE SUBMITTAL FORM

NELAP accredited by PADEP & NJDEP. Please call for specific parameter accreditations.
PADEP ID (22-00578) - NJDEP ID (PA019)

LABORATORY PROJECT NUMBER: 0812287

PROJECT DETAILS

Company: BL Companies
Contact: Scott Treherne
Address: 28 Market St., 6th Floor
City: Harrisburg State: PA Zip: 17101
Phone: 717-651-9850 Fax: 717-651-9858
Project Name: Freelford & Darrah
Project No.: 06L629-B
Client P.O. No.:
Westech Proposal/BPA No.:
Purpose: ☑ Regulatory ☐ Informational ☐ PWSID:
Data Deliverables: ☐ Level I ☐ Level II ☐ Level III ☐ Level IV
Report Delivery: ☐ Fax ☑ Email - Address: streherne@blcompanies.com
Please Mark TAT Requested *: ☐ 10 Day (Standard) ☑ 5 Day
☐ 72 Hour ☐ 48 Hour ☐ 24 Hour ☐ Same Day
* Turnaround times based on business days only. All "RUSH" TATs must be pre-arranged with WESTECH and are subject to "RUSH" surcharges.

INVOICING INFORMATION

Company:
Contact: SAME
Address:
City: State: Zip:
Phone: Fax:
Invoice Delivery: ☑ Mail w/Report ☐ Email (enter address below)
WESTECH Field Services Used? ☑ NO ☐ YES - (See Field Services Log)

SAMPLE TYPE (Key): SS = Solid/Sludge; OL = Oil; DW = Drinking Water; GW = Groundwater; SW = Storm/Surface Water; WW = Wastewater; AR = Air; O = Other:

SAMPLE RECEIVING INFORMATION (lab use only)

Samples received on ice? Temp: 2.4 °C	✓	N	NA	
Cooler temp. within acceptable limits?	✓	N	NA	
Correct bottles used for requested analysis?	✓	N	NA	
Sample bottles in good condition (unbroken)?	✓	N	NA	
Zero headspace samples collected correctly?	✓	N	NA	
Samples within required holding time?	✓	N	NA	
Samples preserved to pH <2 and/or pH >12?	✓	N	NA	

Shipping Carrier? ☐ Drop Off ☑ WESTECH Pickup ☐ Outside Courier:

LAB ID	SAMPLE IDENTIFICATION / LOCATION DESCRIPTION	SAMPLE DATE	SAMPLE TIME	Total # of Bottles	Sample Type: (See "Sample Type" Key)	Grab: "G" or Composite: "C"	VOCs (8260-B)	PAHs (8270-C)	Diss. Pb
01	MW-1	12/17/08	1010	5	GW	G	X	X	X
02	MW-2A	↓	1056	5	↓	↓	X	X	X
03	MW-3		1150	5			X	X	X
04	MW-4		1130	5			X	X	X
05									
06									
07									
08									
09									
10									

	PRINT NAME	SIGNATURE	DATE	TIME
Sampled By:	Scott Treherne	Scott Treherne	12/17/08	1215
Relinquished By (Sampler):	Scott Treherne	Scott Treherne	12/18/08	
Accepted By:	JAMES DUNKLEBERGER		12-18-8	16:25
Relinquished to WESTECH By:	James Dunkleberger		12-18-8	16:50
Accepted at WESTECH By:	Shanna Drahovsky	Shanna Drahovsky	12/18/08	16:50

COMMENTS OR SPECIAL INSTRUCTIONS
* Sample results must meet minimum PA Act 2 requirements

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WHITE - Original YELLOW - Laboratory Copy PINK - Client Copy

Sample Summary

RT Environmental Services, Inc

Job No: JD56679

Frankford Ave, PA
Project No: 73539-02 PO#73539-02-03

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
This report contains results reported as ND = Not detected. The following applies: Organics ND = Not detected above the MDL							
JD56679-1	12/05/22	10:00	CEC	12/06/22	SO	Soil	SB-101
JD56679-2	12/05/22	10:25	CEC	12/06/22	SO	Soil	SB-102
JD56679-3	12/05/22	11:20	CEC	12/06/22	AQ	Ground Water	SB-103
JD56679-4	12/05/22	12:00	CEC	12/06/22	SO	Soil	SB-104
JD56679-5	12/05/22	12:55	CEC	12/06/22	SO	Soil	SB-105
JD56679-6	12/05/22	13:35	CEC	12/06/22	SO	Soil	SB-106
JD56679-7	12/05/22	13:40	CEC	12/06/22	AQ	Ground Water	SB-106

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Report of Analysis

Client Sample ID:	SB-101		
Lab Sample ID:	JD56679-1	**Date Sampled:**	12/05/22
Matrix:	SO - Soil	**Date Received:**	12/06/22
Method:	SW846 8260D	**Percent Solids:**	92.5
Project:	Frankford Ave, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C180476.D	1	12/15/22 22:26	PS	n/a	n/a	V3C7910
Run #2							

	Initial Weight
Run #1	5.3 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	4.2	ug/kg	
71-43-2	Benzene	ND	0.51	0.46	ug/kg	
74-97-5	Bromochloromethane	ND	5.1	0.57	ug/kg	
75-27-4	Bromodichloromethane	ND	2.0	0.44	ug/kg	
75-25-2	Bromoform	ND	5.1	1.4	ug/kg	
74-83-9	Bromomethane	ND	5.1	0.78	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	2.5	ug/kg	
75-15-0	Carbon disulfide	2.4	2.0	0.55	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.0	0.63	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	0.47	ug/kg	
75-00-3	Chloroethane	ND	5.1	0.60	ug/kg	
67-66-3	Chloroform	ND	2.0	0.53	ug/kg	
74-87-3	Chloromethane	ND	5.1	2.0	ug/kg	
110-82-7	Cyclohexane	ND	2.0	0.67	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/kg	
124-48-1	Dibromochloromethane	ND	2.0	0.57	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.0	0.43	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.56	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.51	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/kg	
75-71-8	Dichlorodifluoromethane [a]	ND	5.1	0.74	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.0	0.48	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.0	0.67	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.86	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.62	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	0.48	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.48	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.47	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.46	ug/kg	
76-13-1	Freon 113	ND	5.1	2.7	ug/kg	
591-78-6	2-Hexanone	ND	5.1	2.2	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-101		
Lab Sample ID:	JD56679-1	**Date Sampled:**	12/05/22
Matrix:	SO - Soil	**Date Received:**	12/06/22
Method:	SW846 8260D	**Percent Solids:**	92.5
Project:	Frankford Ave, PA		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.0	1.4	ug/kg	
79-20-9	Methyl Acetate	ND	5.1	1.4	ug/kg	
108-87-2	Methylcyclohexane	ND	2.0	0.89	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.48	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.1	2.3	ug/kg	
75-09-2	Methylene chloride	3.6	5.1	2.7	ug/kg	J
91-20-3	Naphthalene	ND	5.1	2.5	ug/kg	
100-42-5	Styrene	ND	2.0	0.41	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	25	4.7	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.61	ug/kg	
127-18-4	Tetrachloroethene	ND	2.0	0.59	ug/kg	
108-88-3	Toluene	ND	1.0	0.54	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.1	2.5	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.1	2.5	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.49	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.57	ug/kg	
79-01-6	Trichloroethene	ND	1.0	0.78	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.1	0.70	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.51	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.44	ug/kg	
75-01-4	Vinyl chloride	ND	2.0	0.49	ug/kg	
	m,p-Xylene	ND	1.0	0.91	ug/kg	
95-47-6	o-Xylene	ND	1.0	0.47	ug/kg	
1330-20-7	Xylene (total)	ND	1.0	0.47	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		80-124%
17060-07-0	1,2-Dichloroethane-D4	108%		75-133%
2037-26-5	Toluene-D8	96%		79-125%
460-00-4	4-Bromofluorobenzene	103%		58-148%

(a) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-101		
Lab Sample ID:	JD56679-1	**Date Sampled:**	12/05/22
Matrix:	SO - Soil	**Date Received:**	12/06/22
Method:	SW846 8270E SW846 3546	**Percent Solids:**	92.5
Project:	Frankford Ave, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3E120808.D	1	12/17/22 14:34	KLS	12/16/22 17:33	OP43557	E3E5566
Run #2							

	Initial Weight	Final Volume
Run #1	30.9 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	35	12	ug/kg	
208-96-8	Acenaphthylene [a]	ND	35	18	ug/kg	
120-12-7	Anthracene	36.1	35	21	ug/kg	
56-55-3	Benzo(a)anthracene	14.1	35	9.9	ug/kg	J
50-32-8	Benzo(a)pyrene	ND	35	16	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	35	15	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	35	17	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	35	16	ug/kg	
218-01-9	Chrysene	12.4	35	11	ug/kg	J
53-70-3	Dibenzo(a,h)anthracene	ND	35	15	ug/kg	
206-44-0	Fluoranthene	31.6	35	16	ug/kg	J
86-73-7	Fluorene	ND	35	16	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	35	16	ug/kg	
91-20-3	Naphthalene	ND	35	9.9	ug/kg	
85-01-8	Phenanthrene	88.4	35	12	ug/kg	
129-00-0	Pyrene	89.1	35	11	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	75%		10-109%
321-60-8	2-Fluorobiphenyl	74%		11-109%
1718-51-0	Terphenyl-d14	73%		10-120%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-101		
Lab Sample ID:	JD56679-1	**Date Sampled:**	12/05/22
Matrix:	SO - Soil	**Date Received:**	12/06/22
		Percent Solids:	92.5
Project:	Frankford Ave, PA		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic [a]	4.7	4.3	mg/kg	2	12/08/22	12/09/22	ND	SW846 6010D [2]	SW846 3050B [4]
Barium	117	21	mg/kg	1	12/08/22	12/08/22	ND	SW846 6010D [2]	SW846 3050B [4]
Cadmium [a]	< 1.1	1.1	mg/kg	2	12/08/22	12/09/22	ND	SW846 6010D [2]	SW846 3050B [4]
Chromium [a]	28.9	2.1	mg/kg	2	12/08/22	12/09/22	ND	SW846 6010D [2]	SW846 3050B [4]
Lead [a]	5.7	4.3	mg/kg	2	12/08/22	12/09/22	ND	SW846 6010D [2]	SW846 3050B [4]
Mercury	< 0.033	0.033	mg/kg	1	12/07/22	12/08/22	LM	SW846 7471B [1]	SW846 7471B [3]
Selenium [a]	< 4.3	4.3	mg/kg	2	12/08/22	12/09/22	ND	SW846 6010D [2]	SW846 3050B [4]
Silver [a]	1.8	1.1	mg/kg	2	12/08/22	12/09/22	ND	SW846 6010D [2]	SW846 3050B [4]

(1) Instrument QC Batch: MA53427
(2) Instrument QC Batch: MA53437
(3) Prep QC Batch: MP36815
(4) Prep QC Batch: MP36824

(a) Elevated detection limit due to dilution required for high interfering element.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SB-102		
Lab Sample ID:	JD56679-2	**Date Sampled:**	12/05/22
Matrix:	SO - Soil	**Date Received:**	12/06/22
Method:	SW846 8260D	**Percent Solids:**	77.9
Project:	Frankford Ave, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C180473.D	1	12/15/22 21:10	PS	n/a	n/a	V3C7910
Run #2							

	Initial Weight
Run #1	5.7 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	23.3	11	4.7	ug/kg	
71-43-2	Benzene	ND	0.56	0.51	ug/kg	
74-97-5	Bromochloromethane	ND	5.6	0.63	ug/kg	
75-27-4	Bromodichloromethane	ND	2.3	0.48	ug/kg	
75-25-2	Bromoform	ND	5.6	1.5	ug/kg	
74-83-9	Bromomethane	ND	5.6	0.86	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	2.7	ug/kg	
75-15-0	Carbon disulfide	ND	2.3	0.60	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.3	0.70	ug/kg	
108-90-7	Chlorobenzene	ND	2.3	0.52	ug/kg	
75-00-3	Chloroethane	ND	5.6	0.67	ug/kg	
67-66-3	Chloroform	ND	2.3	0.58	ug/kg	
74-87-3	Chloromethane	ND	5.6	2.2	ug/kg	
110-82-7	Cyclohexane	ND	2.3	0.74	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.3	0.78	ug/kg	
124-48-1	Dibromochloromethane	ND	2.3	0.63	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.1	0.47	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.1	0.61	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.1	0.56	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.1	0.56	ug/kg	
75-71-8	Dichlorodifluoromethane [a]	ND	5.6	0.82	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.1	0.56	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.1	0.53	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.1	0.74	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.1	0.95	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.1	0.69	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.3	0.53	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.3	0.53	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.3	0.51	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	0.51	ug/kg	
76-13-1	Freon 113	ND	5.6	3.0	ug/kg	
591-78-6	2-Hexanone	ND	5.6	2.4	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-102		
Lab Sample ID:	JD56679-2	**Date Sampled:**	12/05/22
Matrix:	SO - Soil	**Date Received:**	12/06/22
Method:	SW846 8260D	**Percent Solids:**	77.9
Project:	Frankford Ave, PA		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.3	1.6	ug/kg	
79-20-9	Methyl Acetate	ND	5.6	1.6	ug/kg	
108-87-2	Methylcyclohexane	ND	2.3	0.99	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.1	0.53	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.6	2.6	ug/kg	
75-09-2	Methylene chloride	3.6	5.6	2.9	ug/kg	J
91-20-3	Naphthalene	ND	5.6	2.8	ug/kg	
100-42-5	Styrene	ND	2.3	0.45	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	28	5.1	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.3	0.67	ug/kg	
127-18-4	Tetrachloroethene	ND	2.3	0.65	ug/kg	
108-88-3	Toluene	ND	1.1	0.59	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.6	2.8	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.6	2.8	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.3	0.54	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.3	0.62	ug/kg	
79-01-6	Trichloroethene	ND	1.1	0.86	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.6	0.77	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	2.3	0.56	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	2.3	0.49	ug/kg	
75-01-4	Vinyl chloride	ND	2.3	0.54	ug/kg	
	m,p-Xylene	ND	1.1	1.0	ug/kg	
95-47-6	o-Xylene	ND	1.1	0.52	ug/kg	
1330-20-7	Xylene (total)	ND	1.1	0.52	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		80-124%
17060-07-0	1,2-Dichloroethane-D4	107%		75-133%
2037-26-5	Toluene-D8	97%		79-125%
460-00-4	4-Bromofluorobenzene	102%		58-148%

(a) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-102		
Lab Sample ID:	JD56679-2	**Date Sampled:**	12/05/22
Matrix:	SO - Soil	**Date Received:**	12/06/22
Method:	SW846 8270E SW846 3546	**Percent Solids:**	77.9
Project:	Frankford Ave, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	3E120825.D	2	12/17/22 21:53	KLS	12/16/22 17:33	OP43557	E3E5566
Run #2							

	Initial Weight	Final Volume
Run #1	30.5 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	84	29	ug/kg	
208-96-8	Acenaphthylene [b]	ND	84	43	ug/kg	
120-12-7	Anthracene	ND	84	52	ug/kg	
56-55-3	Benzo(a)anthracene	28.7	84	24	ug/kg	J
50-32-8	Benzo(a)pyrene	ND	84	38	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	84	37	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	84	42	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	84	39	ug/kg	
218-01-9	Chrysene	29.2	84	27	ug/kg	J
53-70-3	Dibenzo(a,h)anthracene	ND	84	37	ug/kg	
206-44-0	Fluoranthene	ND	84	38	ug/kg	
86-73-7	Fluorene	ND	84	39	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	84	39	ug/kg	
91-20-3	Naphthalene	ND	84	24	ug/kg	
85-01-8	Phenanthrene	ND	84	28	ug/kg	
129-00-0	Pyrene	42.6	84	27	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	56%		10-109%
321-60-8	2-Fluorobiphenyl	58%		11-109%
1718-51-0	Terphenyl-d14	68%		10-120%

(a) Dilution required due to viscosity of the extract matrix.
(b) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-102		
Lab Sample ID:	JD56679-2	**Date Sampled:**	12/05/22
Matrix:	SO - Soil	**Date Received:**	12/06/22
		Percent Solids:	77.9
Project:	Frankford Ave, PA		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	3.1	2.6	mg/kg	1	12/08/22	12/08/22	ND	SW846 6010D [2]	SW846 3050B [4]
Barium	137	26	mg/kg	1	12/08/22	12/08/22	ND	SW846 6010D [2]	SW846 3050B [4]
Cadmium	< 0.65	0.65	mg/kg	1	12/08/22	12/08/22	ND	SW846 6010D [2]	SW846 3050B [4]
Chromium	18.8	1.3	mg/kg	1	12/08/22	12/08/22	ND	SW846 6010D [2]	SW846 3050B [4]
Lead	9.5	2.6	mg/kg	1	12/08/22	12/08/22	ND	SW846 6010D [2]	SW846 3050B [4]
Mercury	< 0.040	0.040	mg/kg	1	12/07/22	12/08/22	LM	SW846 7471B [1]	SW846 7471B [3]
Selenium	< 2.6	2.6	mg/kg	1	12/08/22	12/08/22	ND	SW846 6010D [2]	SW846 3050B [4]
Silver [a]	2.1	1.3	mg/kg	2	12/08/22	12/09/22	ND	SW846 6010D [2]	SW846 3050B [4]

(1) Instrument QC Batch: MA53427
(2) Instrument QC Batch: MA53437
(3) Prep QC Batch: MP36815
(4) Prep QC Batch: MP36824

(a) Elevated detection limit due to dilution required for high interfering element.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SB-103		
Lab Sample ID:	JD56679-3	**Date Sampled:**	12/05/22
Matrix:	AQ - Ground Water	**Date Received:**	12/06/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Frankford Ave, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1A228568.D	1	12/09/22 15:39	NW	n/a	n/a	V1A9775
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	3.8	10	3.1	ug/l	J
71-43-2	Benzene	ND	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.7	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.78	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
76-13-1	Freon 113	ND	5.0	0.58	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-103		
Lab Sample ID:	JD56679-3	**Date Sampled:**	12/05/22
Matrix:	AQ - Ground Water	**Date Received:**	12/06/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Frankford Ave, PA		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
79-20-9	Methyl Acetate	ND	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	5.8	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.56	ug/l	
108-88-3	Toluene	ND	1.0	0.49	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.52	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		80-120%
17060-07-0	1,2-Dichloroethane-D4	112%		80-120%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	100%		82-114%

(a) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-104
Lab Sample ID: JD56679-4
Matrix: SO - Soil
Method: SW846 8260D
Project: Frankford Ave, PA

Date Sampled: 12/05/22
Date Received: 12/06/22
Percent Solids: 80.7

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C180474.D	1	12/15/22 21:35	PS	n/a	n/a	V3C7910
Run #2							

	Initial Weight
Run #1	5.9 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	11.7	11	4.3	ug/kg	
71-43-2	Benzene	ND	0.53	0.48	ug/kg	
74-97-5	Bromochloromethane	ND	5.3	0.59	ug/kg	
75-27-4	Bromodichloromethane	ND	2.1	0.45	ug/kg	
75-25-2	Bromoform	ND	5.3	1.4	ug/kg	
74-83-9	Bromomethane	ND	5.3	0.80	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	2.6	ug/kg	
75-15-0	Carbon disulfide	ND	2.1	0.56	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.1	0.65	ug/kg	
108-90-7	Chlorobenzene	ND	2.1	0.48	ug/kg	
75-00-3	Chloroethane	ND	5.3	0.62	ug/kg	
67-66-3	Chloroform	ND	2.1	0.55	ug/kg	
74-87-3	Chloromethane	ND	5.3	2.1	ug/kg	
110-82-7	Cyclohexane	ND	2.1	0.69	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.1	0.73	ug/kg	
124-48-1	Dibromochloromethane	ND	2.1	0.59	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.1	0.44	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.1	0.57	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.1	0.52	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.1	0.52	ug/kg	
75-71-8	Dichlorodifluoromethane [a]	ND	5.3	0.76	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.1	0.52	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.1	0.49	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.1	0.69	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.1	0.88	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.1	0.64	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.1	0.50	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.1	0.50	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.1	0.48	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	0.48	ug/kg	
76-13-1	Freon 113	ND	5.3	2.8	ug/kg	
591-78-6	2-Hexanone	ND	5.3	2.2	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-104		
Lab Sample ID:	JD56679-4	**Date Sampled:**	12/05/22
Matrix:	SO - Soil	**Date Received:**	12/06/22
Method:	SW846 8260D	**Percent Solids:**	80.7
Project:	Frankford Ave, PA		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.1	1.5	ug/kg	
79-20-9	Methyl Acetate	ND	5.3	1.5	ug/kg	
108-87-2	Methylcyclohexane	ND	2.1	0.92	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.1	0.49	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.3	2.4	ug/kg	
75-09-2	Methylene chloride	3.2	5.3	2.7	ug/kg	J
91-20-3	Naphthalene	ND	5.3	2.6	ug/kg	
100-42-5	Styrene	ND	2.1	0.42	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	26	4.8	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.1	0.63	ug/kg	
127-18-4	Tetrachloroethene	ND	2.1	0.61	ug/kg	
108-88-3	Toluene	ND	1.1	0.55	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.3	2.6	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.3	2.6	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.1	0.51	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.1	0.58	ug/kg	
79-01-6	Trichloroethene	ND	1.1	0.80	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.3	0.72	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	2.1	0.53	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	2.1	0.45	ug/kg	
75-01-4	Vinyl chloride	ND	2.1	0.51	ug/kg	
	m,p-Xylene	ND	1.1	0.94	ug/kg	
95-47-6	o-Xylene	ND	1.1	0.48	ug/kg	
1330-20-7	Xylene (total)	ND	1.1	0.48	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		80-124%
17060-07-0	1,2-Dichloroethane-D4	105%		75-133%
2037-26-5	Toluene-D8	97%		79-125%
460-00-4	4-Bromofluorobenzene	105%		58-148%

(a) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-104		
Lab Sample ID:	JD56679-4	**Date Sampled:**	12/05/22
Matrix:	SO - Soil	**Date Received:**	12/06/22
Method:	SW846 8270E SW846 3546	**Percent Solids:**	80.7
Project:	Frankford Ave, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	3E120850.D	2	12/20/22 19:20	JY	12/16/22 17:33	OP43557	E3E5567
Run #2							

	Initial Weight	Final Volume
Run #1	30.4 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	122	82	28	ug/kg	
208-96-8	Acenaphthylene	86.7	82	41	ug/kg	
120-12-7	Anthracene	354	82	50	ug/kg	
56-55-3	Benzo(a)anthracene	1020	82	23	ug/kg	
50-32-8	Benzo(a)pyrene	897	82	37	ug/kg	
205-99-2	Benzo(b)fluoranthene	1120	82	36	ug/kg	
191-24-2	Benzo(g,h,i)perylene	539	82	41	ug/kg	
207-08-9	Benzo(k)fluoranthene	353	82	38	ug/kg	
218-01-9	Chrysene	943	82	26	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	169	82	36	ug/kg	
206-44-0	Fluoranthene	2240	82	36	ug/kg	
86-73-7	Fluorene	119	82	37	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	660	82	38	ug/kg	
91-20-3	Naphthalene	62.4	82	23	ug/kg	J
85-01-8	Phenanthrene	1670	82	27	ug/kg	
129-00-0	Pyrene	1950	82	26	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	61%		10-109%
321-60-8	2-Fluorobiphenyl	64%		11-109%
1718-51-0	Terphenyl-d14	67%		10-120%

(a) Dilution required due to viscosity of the extract matrix.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-104		
Lab Sample ID:	JD56679-4	**Date Sampled:**	12/05/22
Matrix:	SO - Soil	**Date Received:**	12/06/22
		Percent Solids:	80.7
Project:	Frankford Ave, PA		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	9.9	2.5	mg/kg	1	12/08/22	12/08/22	ND	SW846 6010D [2]	SW846 3050B [3]
Barium	110	25	mg/kg	1	12/08/22	12/08/22	ND	SW846 6010D [2]	SW846 3050B [3]
Cadmium	5.6	0.63	mg/kg	1	12/08/22	12/08/22	ND	SW846 6010D [2]	SW846 3050B [3]
Chromium	26.6	1.3	mg/kg	1	12/08/22	12/08/22	ND	SW846 6010D [2]	SW846 3050B [3]
Lead	377	2.5	mg/kg	1	12/08/22	12/08/22	ND	SW846 6010D [2]	SW846 3050B [3]
Mercury	1.1	0.073	mg/kg	2	12/08/22	12/09/22	LM	SW846 7471B [1]	SW846 7471B [4]
Selenium	< 2.5	2.5	mg/kg	1	12/08/22	12/08/22	ND	SW846 6010D [2]	SW846 3050B [3]
Silver	2.0	0.63	mg/kg	1	12/08/22	12/08/22	ND	SW846 6010D [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA53434
(2) Instrument QC Batch: MA53437
(3) Prep QC Batch: MP36824
(4) Prep QC Batch: MP36849

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SB-105		
Lab Sample ID:	JD56679-5	**Date Sampled:**	12/05/22
Matrix:	SO - Soil	**Date Received:**	12/06/22
Method:	SW846 8260D	**Percent Solids:**	78.2
Project:	Frankford Ave, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1F1107.D	1	12/16/22 13:22	ED	n/a	n/a	V1F37
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	8.1 g	10.0 ml	100 ul
Run #2			

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [b]	ND	930	380	ug/kg	
71-43-2	Benzene	ND	46	42	ug/kg	
74-97-5	Bromochloromethane	ND	460	52	ug/kg	
75-27-4	Bromodichloromethane	ND	190	40	ug/kg	
75-25-2	Bromoform	ND	460	130	ug/kg	
74-83-9	Bromomethane [c]	ND	460	71	ug/kg	
78-93-3	2-Butanone (MEK)	ND	930	230	ug/kg	
75-15-0	Carbon disulfide	ND	190	50	ug/kg	
56-23-5	Carbon tetrachloride [c]	ND	190	57	ug/kg	
108-90-7	Chlorobenzene	ND	190	43	ug/kg	
75-00-3	Chloroethane	ND	460	55	ug/kg	
67-66-3	Chloroform	ND	190	48	ug/kg	
74-87-3	Chloromethane	ND	460	180	ug/kg	
110-82-7	Cyclohexane	ND	190	61	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	190	64	ug/kg	
124-48-1	Dibromochloromethane	ND	190	52	ug/kg	
106-93-4	1,2-Dibromoethane	ND	93	39	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	93	51	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	93	46	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	93	46	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	460	68	ug/kg	
75-34-3	1,1-Dichloroethane	ND	93	46	ug/kg	
107-06-2	1,2-Dichloroethane	ND	93	44	ug/kg	
75-35-4	1,1-Dichloroethene	ND	93	61	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	93	78	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	93	57	ug/kg	
78-87-5	1,2-Dichloropropane	ND	190	44	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	190	44	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	190	42	ug/kg	
100-41-4	Ethylbenzene	ND	93	42	ug/kg	
76-13-1	Freon 113 [c]	ND	460	250	ug/kg	
591-78-6	2-Hexanone	ND	460	200	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-105		
Lab Sample ID:	JD56679-5	**Date Sampled:**	12/05/22
Matrix:	SO - Soil	**Date Received:**	12/06/22
Method:	SW846 8260D	**Percent Solids:**	78.2
Project:	Frankford Ave, PA		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	226	190	130	ug/kg	
79-20-9	Methyl Acetate	193	460	130	ug/kg	J
108-87-2	Methylcyclohexane	1240	190	81	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	93	44	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	460	210	ug/kg	
75-09-2	Methylene chloride	ND	460	240	ug/kg	
91-20-3	Naphthalene	ND	460	230	ug/kg	
100-42-5	Styrene	ND	190	37	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	2300	420	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	190	56	ug/kg	
127-18-4	Tetrachloroethene	ND	190	54	ug/kg	
108-88-3	Toluene	ND	93	49	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	460	230	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	460	230	ug/kg	
71-55-6	1,1,1-Trichloroethane [c]	ND	190	45	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	190	51	ug/kg	
79-01-6	Trichloroethene	ND	93	71	ug/kg	
75-69-4	Trichlorofluoromethane	ND	460	64	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	190	46	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	190	40	ug/kg	
75-01-4	Vinyl chloride	ND	190	45	ug/kg	
	m,p-Xylene	ND	93	83	ug/kg	
95-47-6	o-Xylene	ND	93	43	ug/kg	
1330-20-7	Xylene (total)	ND	93	43	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	84%		80-124%
17060-07-0	1,2-Dichloroethane-D4	95%		75-133%
2037-26-5	Toluene-D8	104%		79-125%
460-00-4	4-Bromofluorobenzene	131%		58-148%

(a) Dilution required due to high concentration of non-target compound.
(b) Associated CCV outside of control limits high, sample was ND.
(c) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-105		
Lab Sample ID:	JD56679-5	**Date Sampled:**	12/05/22
Matrix:	SO - Soil	**Date Received:**	12/06/22
Method:	SW846 8270E SW846 3546	**Percent Solids:**	78.2
Project:	Frankford Ave, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3E120809.D	1	12/17/22 14:59	KLS	12/16/22 17:33	OP43557	E3E5566
Run #2							

	Initial Weight	Final Volume
Run #1	31.3 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	41	14	ug/kg	
208-96-8	Acenaphthylene [a]	ND	41	21	ug/kg	
120-12-7	Anthracene	ND	41	25	ug/kg	
56-55-3	Benzo(a)anthracene	ND	41	12	ug/kg	
50-32-8	Benzo(a)pyrene	ND	41	19	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	41	18	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	41	20	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	41	19	ug/kg	
218-01-9	Chrysene	ND	41	13	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	41	18	ug/kg	
206-44-0	Fluoranthene	ND	41	18	ug/kg	
86-73-7	Fluorene	ND	41	19	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	41	19	ug/kg	
91-20-3	Naphthalene	ND	41	12	ug/kg	
85-01-8	Phenanthrene	ND	41	14	ug/kg	
129-00-0	Pyrene	ND	41	13	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	71%		10-109%
321-60-8	2-Fluorobiphenyl	65%		11-109%
1718-51-0	Terphenyl-d14	78%		10-120%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-105		
Lab Sample ID:	JD56679-5	**Date Sampled:**	12/05/22
Matrix:	SO - Soil	**Date Received:**	12/06/22
		Percent Solids:	78.2
Project:	Frankford Ave, PA		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic [a]	7.1	5.2	mg/kg	2	12/08/22	12/09/22	ND	SW846 6010D [2]	SW846 3050B [3]
Barium	84.9	26	mg/kg	1	12/08/22	12/08/22	ND	SW846 6010D [2]	SW846 3050B [3]
Cadmium [a]	< 1.3	1.3	mg/kg	2	12/08/22	12/09/22	ND	SW846 6010D [2]	SW846 3050B [3]
Chromium [a]	30.4	2.6	mg/kg	2	12/08/22	12/09/22	ND	SW846 6010D [2]	SW846 3050B [3]
Lead [a]	19.3	5.2	mg/kg	2	12/08/22	12/09/22	ND	SW846 6010D [2]	SW846 3050B [3]
Mercury	0.043	0.038	mg/kg	1	12/08/22	12/09/22	LM	SW846 7471B [1]	SW846 7471B [4]
Selenium [a]	< 5.2	5.2	mg/kg	2	12/08/22	12/09/22	ND	SW846 6010D [2]	SW846 3050B [3]
Silver [a]	1.6	1.3	mg/kg	2	12/08/22	12/09/22	ND	SW846 6010D [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA53434
(2) Instrument QC Batch: MA53437
(3) Prep QC Batch: MP36824
(4) Prep QC Batch: MP36849

(a) Elevated detection limit due to dilution required for high interfering element.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SB-106		
Lab Sample ID:	JD56679-6	**Date Sampled:**	12/05/22
Matrix:	SO - Soil	**Date Received:**	12/06/22
Method:	SW846 8260D	**Percent Solids:**	72.5
Project:	Frankford Ave, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C180475.D	1	12/15/22 22:01	PS	n/a	n/a	V3C7910
Run #2							

	Initial Weight
Run #1	4.4 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	28.6	16	6.5	ug/kg	
71-43-2	Benzene	ND	0.78	0.71	ug/kg	
74-97-5	Bromochloromethane	ND	7.8	0.88	ug/kg	
75-27-4	Bromodichloromethane	ND	3.1	0.67	ug/kg	
75-25-2	Bromoform	ND	7.8	2.1	ug/kg	
74-83-9	Bromomethane	ND	7.8	1.2	ug/kg	
78-93-3	2-Butanone (MEK)	ND	16	3.8	ug/kg	
75-15-0	Carbon disulfide	0.98	3.1	0.84	ug/kg	J
56-23-5	Carbon tetrachloride	ND	3.1	0.97	ug/kg	
108-90-7	Chlorobenzene	ND	3.1	0.72	ug/kg	
75-00-3	Chloroethane	ND	7.8	0.93	ug/kg	
67-66-3	Chloroform	ND	3.1	0.81	ug/kg	
74-87-3	Chloromethane	ND	7.8	3.1	ug/kg	
110-82-7	Cyclohexane	ND	3.1	1.0	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.1	1.1	ug/kg	
124-48-1	Dibromochloromethane	ND	3.1	0.88	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.6	0.66	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.6	0.86	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.6	0.78	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.6	0.77	ug/kg	
75-71-8	Dichlorodifluoromethane [a]	ND	7.8	1.1	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.6	0.78	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.6	0.74	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.6	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.6	1.3	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.6	0.96	ug/kg	
78-87-5	1,2-Dichloropropane	ND	3.1	0.74	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.1	0.74	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.1	0.72	ug/kg	
100-41-4	Ethylbenzene	ND	1.6	0.71	ug/kg	
76-13-1	Freon 113	ND	7.8	4.2	ug/kg	
591-78-6	2-Hexanone	ND	7.8	3.3	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-106		
Lab Sample ID:	JD56679-6	**Date Sampled:**	12/05/22
Matrix:	SO - Soil	**Date Received:**	12/06/22
Method:	SW846 8260D	**Percent Solids:**	72.5
Project:	Frankford Ave, PA		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	3.1	2.2	ug/kg	
79-20-9	Methyl Acetate	ND	7.8	2.2	ug/kg	
108-87-2	Methylcyclohexane	ND	3.1	1.4	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.6	0.74	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	7.8	3.6	ug/kg	
75-09-2	Methylene chloride	ND	7.8	4.1	ug/kg	
91-20-3	Naphthalene	ND	7.8	3.9	ug/kg	
100-42-5	Styrene	ND	3.1	0.63	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	39	7.2	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.1	0.94	ug/kg	
127-18-4	Tetrachloroethene	ND	3.1	0.91	ug/kg	
108-88-3	Toluene	ND	1.6	0.82	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	7.8	3.9	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	7.8	3.9	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	3.1	0.76	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.1	0.87	ug/kg	
79-01-6	Trichloroethene	ND	1.6	1.2	ug/kg	
75-69-4	Trichlorofluoromethane	ND	7.8	1.1	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	3.1	0.78	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	3.1	0.68	ug/kg	
75-01-4	Vinyl chloride	ND	3.1	0.75	ug/kg	
	m,p-Xylene	ND	1.6	1.4	ug/kg	
95-47-6	o-Xylene	ND	1.6	0.72	ug/kg	
1330-20-7	Xylene (total)	ND	1.6	0.72	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		80-124%
17060-07-0	1,2-Dichloroethane-D4	101%		75-133%
2037-26-5	Toluene-D8	99%		79-125%
460-00-4	4-Bromofluorobenzene	104%		58-148%

(a) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-106		
Lab Sample ID:	JD56679-6	**Date Sampled:**	12/05/22
Matrix:	SO - Soil	**Date Received:**	12/06/22
Method:	SW846 8270E SW846 3546	**Percent Solids:**	72.5
Project:	Frankford Ave, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3E120819.D	1	12/17/22 19:18	KLS	12/16/22 17:33	OP43557	E3E5566
Run #2							

	Initial Weight	Final Volume
Run #1	31.4 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	63.2	44	15	ug/kg	
208-96-8	Acenaphthylene [a]	ND	44	22	ug/kg	
120-12-7	Anthracene	ND	44	27	ug/kg	
56-55-3	Benzo(a)anthracene	ND	44	12	ug/kg	
50-32-8	Benzo(a)pyrene	ND	44	20	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	44	19	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	44	22	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	44	21	ug/kg	
218-01-9	Chrysene	ND	44	14	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	44	19	ug/kg	
206-44-0	Fluoranthene	30.5	44	20	ug/kg	J
86-73-7	Fluorene	ND	44	20	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	44	21	ug/kg	
91-20-3	Naphthalene	181	44	12	ug/kg	
85-01-8	Phenanthrene	55.3	44	15	ug/kg	
129-00-0	Pyrene	45.2	44	14	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	64%		10-109%
321-60-8	2-Fluorobiphenyl	64%		11-109%
1718-51-0	Terphenyl-d14	44%		10-120%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-106		
Lab Sample ID:	JD56679-6	**Date Sampled:**	12/05/22
Matrix:	SO - Soil	**Date Received:**	12/06/22
		Percent Solids:	72.5
Project:	Frankford Ave, PA		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic [a]	36.0	14	mg/kg	5	12/08/22	12/09/22	ND	SW846 6010D [2]	SW846 3050B [3]
Barium	1110	29	mg/kg	1	12/08/22	12/08/22	ND	SW846 6010D [2]	SW846 3050B [3]
Cadmium [a]	20.3	3.6	mg/kg	5	12/08/22	12/09/22	ND	SW846 6010D [2]	SW846 3050B [3]
Chromium [a]	54.4	7.2	mg/kg	5	12/08/22	12/09/22	ND	SW846 6010D [2]	SW846 3050B [3]
Lead	105000	290	mg/kg	100	12/08/22	12/09/22	ND	SW846 6010D [2]	SW846 3050B [3]
Mercury	0.16	0.042	mg/kg	1	12/08/22	12/09/22	LM	SW846 7471B [1]	SW846 7471B [4]
Selenium [a]	< 14	14	mg/kg	5	12/08/22	12/09/22	ND	SW846 6010D [2]	SW846 3050B [3]
Silver [a]	4.6	3.6	mg/kg	5	12/08/22	12/09/22	ND	SW846 6010D [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA53434
(2) Instrument QC Batch: MA53437
(3) Prep QC Batch: MP36824
(4) Prep QC Batch: MP36849

(a) Elevated detection limit due to dilution required for high interfering element.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SB-106		
Lab Sample ID:	JD56679-7	**Date Sampled:**	12/05/22
Matrix:	AQ - Ground Water	**Date Received:**	12/06/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Frankford Ave, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1A228569.D	1	12/09/22 16:03	NW	n/a	n/a	V1A9775
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.7	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.78	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
76-13-1	Freon 113	ND	5.0	0.58	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-106		
Lab Sample ID:	JD56679-7	**Date Sampled:**	12/05/22
Matrix:	AQ - Ground Water	**Date Received:**	12/06/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Frankford Ave, PA		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
79-20-9	Methyl Acetate	ND	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	5.8	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.56	ug/l	
108-88-3	Toluene	ND	1.0	0.49	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.52	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		80-120%
17060-07-0	1,2-Dichloroethane-D4	111%		80-120%
2037-26-5	Toluene-D8	100%		80-120%
460-00-4	4-Bromofluorobenzene	102%		82-114%

(a) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SO
SLC
CW

PM

CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200
www.sgs.com/chemus

Page __ of __

FED-EX Tracking #	Bottle Order Control # TS-111722-200
SGS Quote #	SGS Job # JD 56679

Client / Reporting Information

Company Name: RT Environmental Services
Street Address: 215 W. Church Rd
City: King of Prussia State: PA Zip: 19406
Project Contact: Collin Charnoff E-mail: ccharnoff@rtenv.com
Phone #: 610-265-1510
Sampler(s) Name(s): Collin Charnoff Phone #: 610-265-1510

Project Information

Project Name: Frankford Ave Phase II
Street: 5129 Frankford Ave
City: Philadelphia State: PA
Project # / Client Purchase Order #: 73539-02- / 73539-02-03
Project Manager: Collin Charnoff

Billing Information (if different from Report to)

Company Name:
Street Address:
City State Zip:
Attention:

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL- Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB - Field Blank; EB-Equipment Blank; RB - Rinse Blank; TB - Trip Blank

SGS Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Grab (G) Comp (C)	Source Chlorinated (Y/N)	Matrix	# of bottles	Number of Bottles: HCl	NaOH	HNO_3	H_2SO_4	NONE	DI Water	MEOH	ENCORE	pH Check (Lab Use Only)	VOCs	PAHs	~~TAL Metals~~ CEC RCRA 8 Metals								LAB USE ONLY
1	SB-101		12-5-22	10:00	CEC	6		So.l	5										X	X	X								
2	SB-102			10:25				So.l	5										X	X	X								B24
3	SB-103			11:20				GW	5										X										P73
4	SB-104			12:00				So.l	5										X	X	X								14F4
5	SB-105			12:55				So.l	5										X	X	X								4955
6	SB-106			13:35				So.l	5										X	X	X								
7	SB-106			13:40				GW	5										X										

Turn Around Time (Business Days)

Approved By (SGS PM) / Date:

- [ ] 10 Business Days
- [ ] 5 Business Days
- [ ] 3 Business Days*
- [ ] 2 Business Days*
- [ ] 1 Business Day*
- [ ] Other
- All data available via SGS Engage
- * Approval needed for 1-3 BD TAT

Deliverable

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] NJ Reduced (Level 3)
- [ ] Full Tier I (Level 4)
- [ ] Commercial "C"
- [ ] NJ DKQP
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] MA MCP Criteria
- [ ] CT RCP Criteria
- [ ] State Forms
- [ ] EDD Format

Commercial "A" = Results only; Commercial "B" = Results + QC Summary
Commercial "C" = Results + QC Summary + Partial Raw data

Comments / Special Instructions

SGS Courier

4B

Initial Assessment

[redacted]/en/terms-and-conditions

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by:	Date / Time:	Received By:	Relinquished By:	Date / Time:	Received By:
1	Collin Charnoff	12/6/22 7:15	1	2	12/7 1745	2
3			3	4		4
5			5			

Custody Seal # ☐ Intact ☐ Not intact ☐ Absent

Therm ID: See Sample Receipt Summary — On Ice: 8 — Cooler Temp. °C: 1.7

C-1p

EHSA-QAC-0023-05 Rev.Date:8/5/22

SGS Sample Receipt Summary

Job Number: JD56679 **Client:** RT ENVIRONMENTAL SERVICES, INC **Project:** FRANKFORD AVE, PA

Date / Time Received: 12/6/2022 5:44:00 PM **Delivery Method:** **Airbill #'s:**

Cooler Temps (Raw Measured) °C: Cooler 1: (1.7);

Cooler Temps (Corrected) °C: Cooler 1: (1.7);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:			
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☑	☐
2. Trip Blank listed on COC:	☐		☑	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Test Strip Lot #s: pH 1-12: 231619 pH 12+: 203117A Other: (Specify)

Comments: 1). Sample -3,-7 Received additional volume 2 x40mL HCL Vials for 8011 analysis but not requested on COC. Please confirm

Responded to by: Marie Meidhof

Response Date: 12/9/2022

Method 8011 is not needed for samples -3, 7.

Job Change Order: JD56679

Requested Date:	12/9/2022	**Received Date:**	12/6/2022
Account Name:	RT Environmental Services, Inc	**Due Date:**	12/13/2022
Project Description:	Frankford Ave, PA	**Deliverable:**	COMMBN
C/O Initiated By:	MARIE.MEID **PM:** MM	**TAT (Days):**	7

==========

Sample #: JD56679-1 to 7

Dept:

TAT: 7

Change:

Add VMS+NAP, VMS+124TMB, VMS+135TMB, VMS+TBA.

==========

Above Changes Per: Collin C. **Date/Time:** 12/9/2022

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Walter Hungarter
RT Environmental Services, Inc.
215 West Church Road
Suite 300
King of Prussia, Pennsylvania 19406

Generated 4/11/2023 10:43:57 AM Revision 1

JOB DESCRIPTION

Frankford Dev - Phase II

JOB NUMBER

460-277470-1

Eurofins Edison
777 New Durham Road
Edison NJ 08817

See page two for job notes and contact information.

my EOL

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing Northeast, LLC Edison and its client. All questions regarding this report should be directed to the Eurofins Environment Testing Northeast, LLC Edison Project Manager or designee who has signed this report.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



Generated
4/11/2023 10:43:57 AM
Revision 1

Authorized for release by
Jill Miller, Senior Project Manager
Jill.Miller@et.eurofinsus.com
(484)802-0929

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Definitions/Glossary

Client: RT Environmental Services, Inc.
Project/Site: Frankford Dev - Phase II

Job ID: 460-277470-1

Qualifiers

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 460-277470-1

Laboratory: Eurofins Edison

Narrative

Job Narrative
460-277470-1
Revision(1)

Receipt
The samples were received on 3/30/2023 2:37 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.9°C and 1.2°C

Revision(1)
Incorrect units reported for Arsenic. This report corrects that error.

Metals
Method 6020B: The method blank for preparation batch 460-901642 and analytical batch 460-901942 contained lead above the method detection limit. This target analyte concentration was less than 10% of the sample concentration; therefore, re-extraction and/or re-analysis of samples was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample ID: SB-1-(1.5-2)

Lab Sample ID: 460-277470-1
Date Collected: 03/30/23 08:17
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 69.1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	11.9		1.3	0.13	mg/Kg	☼	04/06/23 06:07	04/07/23 16:17	1
Barium	408		2.6	0.19	mg/Kg	☼	04/06/23 06:07	04/07/23 16:17	1
Cadmium	0.66	J	1.3	0.15	mg/Kg	☼	04/06/23 06:07	04/07/23 16:17	1
Lead	502		0.78	0.26	mg/Kg	☼	04/06/23 06:07	04/07/23 16:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	30.9		1.0	1.0	%			04/03/23 18:43	1
Percent Solids (EPA Moisture)	69.1		1.0	1.0	%			04/03/23 18:43	1

Client Sample ID: SB-1-(11.5-12)

Lab Sample ID: 460-277470-2
Date Collected: 03/30/23 08:24
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 65.2

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	27.4		6.1	0.63	mg/Kg	☼	04/06/23 06:07	04/07/23 16:24	5
Barium	148		12.2	0.88	mg/Kg	☼	04/06/23 06:07	04/07/23 16:24	5
Cadmium	0.69	U	6.1	0.69	mg/Kg	☼	04/06/23 06:07	04/07/23 16:24	5
Lead	481		3.6	1.2	mg/Kg	☼	04/06/23 06:07	04/07/23 16:24	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	34.8		1.0	1.0	%			04/03/23 18:43	1
Percent Solids (EPA Moisture)	65.2		1.0	1.0	%			04/03/23 18:43	1

Client Sample ID: SB-1-(19-19.3)

Lab Sample ID: 460-277470-3
Date Collected: 03/30/23 08:30
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 79.4

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	3.3		0.93	0.096	mg/Kg	☼	04/06/23 06:07	04/07/23 16:26	1
Barium	145		1.9	0.14	mg/Kg	☼	04/06/23 06:07	04/07/23 16:26	1
Cadmium	0.11	U	0.93	0.11	mg/Kg	☼	04/06/23 06:07	04/07/23 16:26	1
Lead	15.3		0.56	0.19	mg/Kg	☼	04/06/23 06:07	04/07/23 16:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	20.6		1.0	1.0	%			04/03/23 18:43	1
Percent Solids (EPA Moisture)	79.4		1.0	1.0	%			04/03/23 18:43	1

Client Sample ID: SB-2-(1-1.5)

Lab Sample ID: 460-277470-4
Date Collected: 03/30/23 08:45
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 84.0

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	12.0		1.0	0.11	mg/Kg	☼	04/06/23 06:07	04/07/23 16:29	1
Barium	420		2.1	0.15	mg/Kg	☼	04/06/23 06:07	04/07/23 16:29	1
Cadmium	0.42	J	1.0	0.12	mg/Kg	☼	04/06/23 06:07	04/07/23 16:29	1
Lead	314		0.62	0.21	mg/Kg	☼	04/06/23 06:07	04/07/23 16:29	1

Client Sample ID: SB-2-(1-1.5)

Lab Sample ID: 460-277470-4
Date Collected: 03/30/23 08:45
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 84.0

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	16.0		1.0	1.0	%			04/03/23 18:43	1
Percent Solids (EPA Moisture)	84.0		1.0	1.0	%			04/03/23 18:43	1

Client Sample ID: SB-2-(11.5-12)

Lab Sample ID: 460-277470-5
Date Collected: 03/30/23 08:46
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 70.9

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	28.2		6.3	0.65	mg/Kg	☼	04/06/23 06:07	04/07/23 16:31	5
Barium	889		12.6	0.91	mg/Kg	☼	04/06/23 06:07	04/07/23 16:31	5
Cadmium	1.8	J	6.3	0.71	mg/Kg	☼	04/06/23 06:07	04/07/23 16:31	5
Lead	3880		3.8	1.3	mg/Kg	☼	04/06/23 06:07	04/07/23 16:31	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	29.1		1.0	1.0	%			04/03/23 18:43	1
Percent Solids (EPA Moisture)	70.9		1.0	1.0	%			04/03/23 18:43	1

Client Sample ID: SB-2-(19-19.3)

Lab Sample ID: 460-277470-6
Date Collected: 03/30/23 08:51
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 91.7

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.85		0.78	0.081	mg/Kg	☼	04/06/23 06:07	04/07/23 16:33	1
Barium	25.0		1.6	0.11	mg/Kg	☼	04/06/23 06:07	04/07/23 16:33	1
Cadmium	0.11	J	0.78	0.089	mg/Kg	☼	04/06/23 06:07	04/07/23 16:33	1
Lead	50.1		0.47	0.16	mg/Kg	☼	04/06/23 06:07	04/07/23 16:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	8.3		1.0	1.0	%			04/03/23 18:43	1
Percent Solids (EPA Moisture)	91.7		1.0	1.0	%			04/03/23 18:43	1

Client Sample ID: SB-3-(1.5-2)

Lab Sample ID: 460-277470-7
Date Collected: 03/30/23 09:05
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 74.0

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	19.8		2.3	0.24	mg/Kg	☼	04/06/23 06:07	04/07/23 16:36	2
Barium	419		4.6	0.33	mg/Kg	☼	04/06/23 06:07	04/07/23 16:36	2
Cadmium	0.34	J	2.3	0.26	mg/Kg	☼	04/06/23 06:07	04/07/23 16:36	2
Lead	1410		1.4	0.46	mg/Kg	☼	04/06/23 06:07	04/07/23 16:36	2

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	26.0		1.0	1.0	%			04/03/23 18:43	1
Percent Solids (EPA Moisture)	74.0		1.0	1.0	%			04/03/23 18:43	1

Client Sample ID: SB-3-(11.5-12)

Lab Sample ID: 460-277470-8
Date Collected: 03/30/23 09:03
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 74.7

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	10.2		1.2	0.13	mg/Kg	☼	04/06/23 06:07	04/07/23 16:38	1
Barium	835		2.5	0.18	mg/Kg	☼	04/06/23 06:07	04/07/23 16:38	1
Cadmium	0.59	J	1.2	0.14	mg/Kg	☼	04/06/23 06:07	04/07/23 16:38	1
Lead	712		0.74	0.25	mg/Kg	☼	04/06/23 06:07	04/07/23 16:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	25.3		1.0	1.0	%			04/03/23 18:43	1
Percent Solids (EPA Moisture)	74.7		1.0	1.0	%			04/03/23 18:43	1

Client Sample ID: SB-3-(18.5-19)

Lab Sample ID: 460-277470-9
Date Collected: 03/30/23 09:06
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 88.8

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0		0.85	0.088	mg/Kg	☼	04/06/23 06:07	04/07/23 16:40	1
Barium	48.6		1.7	0.12	mg/Kg	☼	04/06/23 06:07	04/07/23 16:40	1
Cadmium	0.096	U	0.85	0.096	mg/Kg	☼	04/06/23 06:07	04/07/23 16:40	1
Lead	10.3		0.51	0.17	mg/Kg	☼	04/06/23 06:07	04/07/23 16:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	11.2		1.0	1.0	%			04/03/23 18:43	1
Percent Solids (EPA Moisture)	88.8		1.0	1.0	%			04/03/23 18:43	1

Client Sample ID: SB-4-(1.5-2)

Lab Sample ID: 460-277470-10
Date Collected: 03/30/23 09:20
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 56.7

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	14.9		1.6	0.17	mg/Kg	☼	04/06/23 06:07	04/07/23 16:43	1
Barium	505		3.3	0.24	mg/Kg	☼	04/06/23 06:07	04/07/23 16:43	1
Cadmium	3.0		1.6	0.18	mg/Kg	☼	04/06/23 06:07	04/07/23 16:43	1
Lead	1120		0.98	0.33	mg/Kg	☼	04/06/23 06:07	04/07/23 16:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	43.3		1.0	1.0	%			04/03/23 18:43	1
Percent Solids (EPA Moisture)	56.7		1.0	1.0	%			04/03/23 18:43	1

Client Sample ID: SB-4-(11.5-12)

Lab Sample ID: 460-277470-11
Date Collected: 03/30/23 09:22
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 71.3

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	13.3		1.3	0.13	mg/Kg	☼	04/06/23 06:07	04/07/23 16:55	1
Barium	1040		2.5	0.18	mg/Kg	☼	04/06/23 06:07	04/07/23 16:55	1
Cadmium	3.4		1.3	0.14	mg/Kg	☼	04/06/23 06:07	04/07/23 16:55	1
Lead	1010		0.75	0.25	mg/Kg	☼	04/06/23 06:07	04/07/23 16:55	1

Client Sample ID: SB-4-(11.5-12)

Lab Sample ID: 460-277470-11
Date Collected: 03/30/23 09:22
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 71.3

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	28.7		1.0	1.0	%			04/03/23 18:43	1
Percent Solids (EPA Moisture)	71.3		1.0	1.0	%			04/03/23 18:43	1

Client Sample ID: SB-4-(18.8-19.3)

Lab Sample ID: 460-277470-12
Date Collected: 03/30/23 09:29
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 73.3

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	5.3		1.1	0.12	mg/Kg	☼	04/06/23 06:07	04/07/23 16:58	1
Barium	57.3		2.3	0.16	mg/Kg	☼	04/06/23 06:07	04/07/23 16:58	1
Cadmium	0.13	U	1.1	0.13	mg/Kg	☼	04/06/23 06:07	04/07/23 16:58	1
Lead	10.9		0.68	0.23	mg/Kg	☼	04/06/23 06:07	04/07/23 16:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	26.7		1.0	1.0	%			04/03/23 18:43	1
Percent Solids (EPA Moisture)	73.3		1.0	1.0	%			04/03/23 18:43	1

Client Sample ID: SB-5-(1-1.5)

Lab Sample ID: 460-277470-13
Date Collected: 03/30/23 09:44
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 75.2

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	19.6		1.2	0.12	mg/Kg	☼	04/06/23 06:07	04/07/23 17:00	1
Barium	377		2.4	0.18	mg/Kg	☼	04/06/23 06:07	04/07/23 17:00	1
Cadmium	1.8		1.2	0.14	mg/Kg	☼	04/06/23 06:07	04/07/23 17:00	1
Lead	1180		0.73	0.24	mg/Kg	☼	04/06/23 06:07	04/07/23 17:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	24.8		1.0	1.0	%			04/03/23 18:43	1
Percent Solids (EPA Moisture)	75.2		1.0	1.0	%			04/03/23 18:43	1

Client Sample ID: SB-5-(11.5-12)

Lab Sample ID: 460-277470-14
Date Collected: 03/30/23 09:45
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 68.2

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	68.1		6.0	0.61	mg/Kg	☼	04/06/23 06:07	04/07/23 17:02	5
Barium	2800		11.9	0.86	mg/Kg	☼	04/06/23 06:07	04/07/23 17:02	5
Cadmium	3.1	J	6.0	0.67	mg/Kg	☼	04/06/23 06:07	04/07/23 17:02	5
Lead	6140		3.6	1.2	mg/Kg	☼	04/06/23 06:07	04/07/23 17:02	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	31.8		1.0	1.0	%			04/03/23 18:43	1
Percent Solids (EPA Moisture)	68.2		1.0	1.0	%			04/03/23 18:43	1

Client Sample ID: SB-5-(19.5-20)

Lab Sample ID: 460-277470-15
Date Collected: 03/30/23 09:50
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 88.8

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.2		1.1	0.12	mg/Kg	☼	04/06/23 06:07	04/07/23 16:08	1
Barium	47.6		2.3	0.16	mg/Kg	☼	04/06/23 06:07	04/07/23 16:08	1
Cadmium	0.13	U	1.1	0.13	mg/Kg	☼	04/06/23 06:07	04/07/23 16:08	1
Lead	16.0		0.68	0.23	mg/Kg	☼	04/06/23 06:07	04/07/23 16:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	11.2		1.0	1.0	%			04/03/23 18:43	1
Percent Solids (EPA Moisture)	88.8		1.0	1.0	%			04/03/23 18:43	1

Client Sample ID: SB-6-(1.5-2)

Lab Sample ID: 460-277470-16
Date Collected: 03/30/23 10:05
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 95.0

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	3.6		0.96	0.099	mg/Kg	☼	04/06/23 06:07	04/07/23 17:05	1
Barium	55.5		1.9	0.14	mg/Kg	☼	04/06/23 06:07	04/07/23 17:05	1
Cadmium	0.58	J	0.96	0.11	mg/Kg	☼	04/06/23 06:07	04/07/23 17:05	1
Lead	107		0.57	0.19	mg/Kg	☼	04/06/23 06:07	04/07/23 17:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	5.0		1.0	1.0	%			04/03/23 18:43	1
Percent Solids (EPA Moisture)	95.0		1.0	1.0	%			04/03/23 18:43	1

Client Sample ID: SB-6-(11.5-12)

Lab Sample ID: 460-277470-17
Date Collected: 03/30/23 10:07
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 59.8

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	29.4		7.5	0.77	mg/Kg	☼	04/06/23 06:07	04/07/23 17:07	5
Barium	1180		14.9	1.1	mg/Kg	☼	04/06/23 06:07	04/07/23 17:07	5
Cadmium	2.0	J	7.5	0.84	mg/Kg	☼	04/06/23 06:07	04/07/23 17:07	5
Lead	1980		4.5	1.5	mg/Kg	☼	04/06/23 06:07	04/07/23 17:07	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	40.2		1.0	1.0	%			04/03/23 18:43	1
Percent Solids (EPA Moisture)	59.8		1.0	1.0	%			04/03/23 18:43	1

Client Sample ID: SB-6-(18.5-19)

Lab Sample ID: 460-277470-18
Date Collected: 03/30/23 10:08
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 74.9

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	3.1		1.2	0.12	mg/Kg	☼	04/06/23 06:07	04/07/23 17:09	1
Barium	151		2.3	0.17	mg/Kg	☼	04/06/23 06:07	04/07/23 17:09	1
Cadmium	0.20	J	1.2	0.13	mg/Kg	☼	04/06/23 06:07	04/07/23 17:09	1
Lead	27.1		0.70	0.23	mg/Kg	☼	04/06/23 06:07	04/07/23 17:09	1

Client Sample ID: SB-6-(18.5-19)

Lab Sample ID: 460-277470-18
Date Collected: 03/30/23 10:08
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 74.9

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	25.1		1.0	1.0	%			04/03/23 18:43	1
Percent Solids (EPA Moisture)	74.9		1.0	1.0	%			04/03/23 18:43	1

Client Sample ID: SB-7-(1-1.5)

Lab Sample ID: 460-277470-19
Date Collected: 03/30/23 10:18
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 70.8

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	10.1		1.1	0.11	mg/Kg	☼	04/06/23 06:07	04/07/23 17:13	1
Barium	359		2.1	0.16	mg/Kg	☼	04/06/23 06:07	04/07/23 17:13	1
Cadmium	0.35	J	1.1	0.12	mg/Kg	☼	04/06/23 06:07	04/07/23 17:13	1
Lead	327		0.64	0.21	mg/Kg	☼	04/06/23 06:07	04/07/23 17:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	29.2		1.0	1.0	%			04/03/23 18:43	1
Percent Solids (EPA Moisture)	70.8		1.0	1.0	%			04/03/23 18:43	1

Client Sample ID: SB-7-(11.5-12)

Lab Sample ID: 460-277470-20
Date Collected: 03/30/23 10:20
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 72.3

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	22.3		5.8	0.59	mg/Kg	☼	04/06/23 06:07	04/07/23 17:15	5
Barium	430		11.5	0.84	mg/Kg	☼	04/06/23 06:07	04/07/23 17:15	5
Cadmium	0.68	J	5.8	0.65	mg/Kg	☼	04/06/23 06:07	04/07/23 17:15	5
Lead	3630		3.5	1.2	mg/Kg	☼	04/06/23 06:07	04/07/23 17:15	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	27.7		1.0	1.0	%			04/03/23 18:43	1
Percent Solids (EPA Moisture)	72.3		1.0	1.0	%			04/03/23 18:43	1

Client Sample ID: SB-7-(19-19.6)

Lab Sample ID: 460-277470-21
Date Collected: 03/30/23 10:22
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 59.7

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.2		1.5	0.15	mg/Kg	☼	04/06/23 06:41	04/07/23 20:05	1
Barium	116		3.0	0.22	mg/Kg	☼	04/06/23 06:41	04/07/23 20:05	1
Cadmium	0.17	J	1.5	0.17	mg/Kg	☼	04/06/23 06:41	04/07/23 20:05	1
Lead	18.2	B	0.90	0.30	mg/Kg	☼	04/06/23 06:41	04/07/23 20:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	40.3		1.0	1.0	%			04/03/23 18:43	1
Percent Solids (EPA Moisture)	59.7		1.0	1.0	%			04/03/23 18:43	1

Client Sample ID: SB-8-(1.5-2)

Lab Sample ID: 460-277470-22
Date Collected: 03/30/23 10:31
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 77.7

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	9.7		1.1	0.12	mg/Kg	☼	04/06/23 06:41	04/07/23 20:07	1
Barium	293		2.3	0.17	mg/Kg	☼	04/06/23 06:41	04/07/23 20:07	1
Cadmium	1.0	J	1.1	0.13	mg/Kg	☼	04/06/23 06:41	04/07/23 20:07	1
Lead	718	B	0.69	0.23	mg/Kg	☼	04/06/23 06:41	04/07/23 20:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	22.3		1.0	1.0	%			04/03/23 18:43	1
Percent Solids (EPA Moisture)	77.7		1.0	1.0	%			04/03/23 18:43	1

Client Sample ID: SB-8-(11.5-12)

Lab Sample ID: 460-277470-23
Date Collected: 03/30/23 10:33
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 80.8

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.6		0.99	0.10	mg/Kg	☼	04/06/23 06:41	04/07/23 20:09	1
Barium	293		2.0	0.14	mg/Kg	☼	04/06/23 06:41	04/07/23 20:09	1
Cadmium	0.87	J	0.99	0.11	mg/Kg	☼	04/06/23 06:41	04/07/23 20:09	1
Lead	588	B	0.59	0.20	mg/Kg	☼	04/06/23 06:41	04/07/23 20:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	19.2		1.0	1.0	%			04/03/23 18:43	1
Percent Solids (EPA Moisture)	80.8		1.0	1.0	%			04/03/23 18:43	1

Client Sample ID: SB-8-(18.5-19)

Lab Sample ID: 460-277470-24
Date Collected: 03/30/23 10:37
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 90.2

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	8.5		2.0	0.20	mg/Kg	☼	04/06/23 06:41	04/07/23 20:12	2
Barium	51.9		4.0	0.29	mg/Kg	☼	04/06/23 06:41	04/07/23 20:12	2
Cadmium	0.22	U	2.0	0.22	mg/Kg	☼	04/06/23 06:41	04/07/23 20:12	2
Lead	67.5	B	1.2	0.40	mg/Kg	☼	04/06/23 06:41	04/07/23 20:12	2

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	9.8		1.0	1.0	%			04/03/23 18:43	1
Percent Solids (EPA Moisture)	90.2		1.0	1.0	%			04/03/23 18:43	1

Client Sample ID: SB-9-(1.5-2)

Lab Sample ID: 460-277470-25
Date Collected: 03/30/23 10:47
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 90.3

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.1		1.1	0.11	mg/Kg	☼	04/06/23 06:41	04/07/23 19:51	1
Barium	66.3		2.2	0.16	mg/Kg	☼	04/06/23 06:41	04/07/23 19:51	1
Cadmium	1.1		1.1	0.13	mg/Kg	☼	04/06/23 06:41	04/07/23 19:51	1
Lead	101	B	0.66	0.22	mg/Kg	☼	04/06/23 06:41	04/07/23 19:51	1

Client Sample ID: SB-9-(1.5-2)

Lab Sample ID: 460-277470-25
Date Collected: 03/30/23 10:47
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 90.3

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	9.7		1.0	1.0	%			04/03/23 18:43	1
Percent Solids (EPA Moisture)	90.3		1.0	1.0	%			04/03/23 18:43	1

Client Sample ID: SB-9-(11.5-12)

Lab Sample ID: 460-277470-26
Date Collected: 03/30/23 10:50
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 72.7

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	11.7		1.2	0.12	mg/Kg	☼	04/06/23 06:41	04/07/23 20:14	1
Barium	458		2.4	0.17	mg/Kg	☼	04/06/23 06:41	04/07/23 20:14	1
Cadmium	1.8		1.2	0.14	mg/Kg	☼	04/06/23 06:41	04/07/23 20:14	1
Lead	1440	B	0.72	0.24	mg/Kg	☼	04/06/23 06:41	04/07/23 20:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	27.3		1.0	1.0	%			04/03/23 18:43	1
Percent Solids (EPA Moisture)	72.7		1.0	1.0	%			04/03/23 18:43	1

Client Sample ID: SB-9-(19.5-20)

Lab Sample ID: 460-277470-27
Date Collected: 03/30/23 10:52
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 60.9

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.85	J	1.2	0.13	mg/Kg	☼	04/06/23 06:41	04/07/23 20:16	1
Barium	48.8		2.5	0.18	mg/Kg	☼	04/06/23 06:41	04/07/23 20:16	1
Cadmium	0.14	U	1.2	0.14	mg/Kg	☼	04/06/23 06:41	04/07/23 20:16	1
Lead	7.4	B	0.74	0.25	mg/Kg	☼	04/06/23 06:41	04/07/23 20:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	39.1		1.0	1.0	%			04/03/23 18:43	1
Percent Solids (EPA Moisture)	60.9		1.0	1.0	%			04/03/23 18:43	1

Client Sample ID: SB-10-(1.5-2)

Lab Sample ID: 460-277470-28
Date Collected: 03/30/23 11:13
Matrix: Solid
Date Received: 03/30/23 14:37

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	16.4		1.0	1.0	%			04/03/23 18:43	1
Percent Solids (EPA Moisture)	83.6		1.0	1.0	%			04/03/23 18:43	1

Client Sample ID: SB-10-(1.5-2)

Lab Sample ID: 460-277470-28
Date Collected: 03/30/23 11:13
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 83.6

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	3.6		1.1	0.11	mg/Kg	☼	04/06/23 06:41	04/07/23 20:19	1

Client Sample ID: SB-10-(14-14.5)
Lab Sample ID: 460-277470-29
Date Collected: 03/30/23 11:18
Matrix: Solid
Date Received: 03/30/23 14:37

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	19.6		1.0	1.0	%			04/03/23 18:43	1
Percent Solids (EPA Moisture)	80.4		1.0	1.0	%			04/03/23 18:43	1

Client Sample ID: SB-10-(14-14.5)
Lab Sample ID: 460-277470-29
Date Collected: 03/30/23 11:18
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 80.4

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.9		0.90	0.092	mg/Kg	☼	04/06/23 06:41	04/07/23 20:26	1

Client Sample ID: SB-10-(19.3-19.8)
Lab Sample ID: 460-277470-30
Date Collected: 03/30/23 11:24
Matrix: Solid
Date Received: 03/30/23 14:37

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	10.8		1.0	1.0	%			04/03/23 18:43	1
Percent Solids (EPA Moisture)	89.2		1.0	1.0	%			04/03/23 18:43	1

Client Sample ID: SB-10-(19.3-19.8)
Lab Sample ID: 460-277470-30
Date Collected: 03/30/23 11:24
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 89.2

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.4		1.0	0.10	mg/Kg	☼	04/06/23 06:41	04/07/23 20:28	1

Client Sample ID: SB-11-(1.0-1.5)
Lab Sample ID: 460-277470-31
Date Collected: 03/30/23 11:30
Matrix: Solid
Date Received: 03/30/23 14:37

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	14.7		1.0	1.0	%			04/03/23 18:43	1
Percent Solids (EPA Moisture)	85.3		1.0	1.0	%			04/03/23 18:43	1

Client Sample ID: SB-11-(1.0-1.5)
Lab Sample ID: 460-277470-31
Date Collected: 03/30/23 11:30
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 85.3

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.9		0.99	0.10	mg/Kg	☼	04/06/23 06:41	04/07/23 20:30	1

Client Sample ID: SB-11-(14-14.5)
Lab Sample ID: 460-277470-32
Date Collected: 03/30/23 11:32
Matrix: Solid
Date Received: 03/30/23 14:37

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	18.1		1.0	1.0	%			04/03/23 18:43	1

Client Sample ID: SB-11-(14-14.5)
Lab Sample ID: 460-277470-32
Date Collected: 03/30/23 11:32
Matrix: Solid
Date Received: 03/30/23 14:37

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids (EPA Moisture)	81.9		1.0	1.0	%			04/03/23 18:43	1

Client Sample ID: SB-11-(14-14.5)
Lab Sample ID: 460-277470-32
Date Collected: 03/30/23 11:32
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 81.9

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	5.8		0.98	0.10	mg/Kg	☼	04/06/23 06:41	04/07/23 20:33	1

Client Sample ID: SB-11-(16.5-17)
Lab Sample ID: 460-277470-33
Date Collected: 03/30/23 11:34
Matrix: Solid
Date Received: 03/30/23 14:37

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	15.8		1.0	1.0	%			04/03/23 18:43	1
Percent Solids (EPA Moisture)	84.2		1.0	1.0	%			04/03/23 18:43	1

Client Sample ID: SB-11-(16.5-17)
Lab Sample ID: 460-277470-33
Date Collected: 03/30/23 11:34
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 84.2

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.72	J	1.0	0.11	mg/Kg	☼	04/06/23 06:41	04/07/23 20:35	1

Client Sample ID: SB-12-(1.5-2)
Lab Sample ID: 460-277470-34
Date Collected: 03/30/23 11:40
Matrix: Solid
Date Received: 03/30/23 14:37

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	17.7		1.0	1.0	%			04/03/23 18:43	1
Percent Solids (EPA Moisture)	82.3		1.0	1.0	%			04/03/23 18:43	1

Client Sample ID: SB-12-(1.5-2)
Lab Sample ID: 460-277470-34
Date Collected: 03/30/23 11:40
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 82.3

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.0		1.1	0.11	mg/Kg	☼	04/06/23 06:41	04/07/23 20:37	1

Client Sample ID: SB-12-(14-14.5)
Lab Sample ID: 460-277470-35
Date Collected: 03/30/23 11:42
Matrix: Solid
Date Received: 03/30/23 14:37

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	19.2		1.0	1.0	%			04/03/23 18:43	1
Percent Solids (EPA Moisture)	80.8		1.0	1.0	%			04/03/23 18:43	1

Client Sample ID: SB-12-(14-14.5)

Lab Sample ID: 460-277470-35
Date Collected: 03/30/23 11:42
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 80.8

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0		1.0	0.10	mg/Kg	☼	04/06/23 06:41	04/07/23 20:40	1

Client Sample ID: SB-12-(18.5-19)

Lab Sample ID: 460-277470-36
Date Collected: 03/30/23 11:44
Matrix: Solid
Date Received: 03/30/23 14:37

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	13.9		1.0	1.0	%			04/03/23 18:43	1
Percent Solids (EPA Moisture)	86.1		1.0	1.0	%			04/03/23 18:43	1

Client Sample ID: SB-12-(18.5-19)

Lab Sample ID: 460-277470-36
Date Collected: 03/30/23 11:44
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 86.1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.59	J	0.93	0.096	mg/Kg	☼	04/06/23 06:41	04/07/23 20:42	1

Client Sample ID: SB-13-(1-1.5)

Lab Sample ID: 460-277470-37
Date Collected: 03/30/23 12:00
Matrix: Solid
Date Received: 03/30/23 14:37

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	6.4		1.0	1.0	%			04/03/23 18:43	1
Percent Solids (EPA Moisture)	93.6		1.0	1.0	%			04/03/23 18:43	1

Client Sample ID: SB-13-(1-1.5)

Lab Sample ID: 460-277470-37
Date Collected: 03/30/23 12:00
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 93.6

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.7		0.94	0.096	mg/Kg	☼	04/06/23 06:41	04/07/23 20:44	1

Client Sample ID: SB-13-(14-14.5)

Lab Sample ID: 460-277470-38
Date Collected: 03/30/23 12:03
Matrix: Solid
Date Received: 03/30/23 14:37

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	22.5		1.0	1.0	%			04/03/23 18:43	1
Percent Solids (EPA Moisture)	77.5		1.0	1.0	%			04/03/23 18:43	1

Client Sample ID: SB-13-(14-14.5)

Lab Sample ID: 460-277470-38
Date Collected: 03/30/23 12:03
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 77.5

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	5.4		1.0	0.11	mg/Kg	☼	04/06/23 06:41	04/07/23 20:51	1

Client: RT Environmental Services, Inc.
Project/Site: Frankford Dev - Phase II

Job ID: 460-277470-1

Client Sample ID: SB-13-(17.5-17.9)

Lab Sample ID: 460-277470-39

Date Collected: 03/30/23 12:06
Matrix: Solid
Date Received: 03/30/23 14:37

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	16.1		1.0	1.0	%			04/03/23 18:43	1
Percent Solids (EPA Moisture)	83.9		1.0	1.0	%			04/03/23 18:43	1

Client Sample ID: SB-13-(17.5-17.9)

Lab Sample ID: 460-277470-39

Date Collected: 03/30/23 12:06
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 83.9

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.70	J	1.1	0.11	mg/Kg	☼	04/06/23 06:41	04/07/23 20:54	1

Lab Chronicle

Client: RT Environmental Services, Inc.
Project/Site: Frankford Dev - Phase II

Job ID: 460-277470-1

Client Sample ID: SB-1-(1.5-2)
Date Collected: 03/30/23 08:17
Date Received: 03/30/23 14:37

Lab Sample ID: 460-277470-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	901135	CJC	EET EDI	04/03/23 18:43

Client Sample ID: SB-1-(1.5-2)
Date Collected: 03/30/23 08:17
Date Received: 03/30/23 14:37

Lab Sample ID: 460-277470-1
Matrix: Solid
Percent Solids: 69.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			901640	FBT	EET EDI	04/06/23 06:07
Total/NA	Analysis	6020B		1	901942	YZH	EET EDI	04/07/23 16:17

Client Sample ID: SB-1-(11.5-12)
Date Collected: 03/30/23 08:24
Date Received: 03/30/23 14:37

Lab Sample ID: 460-277470-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	901135	CJC	EET EDI	04/03/23 18:43

Client Sample ID: SB-1-(11.5-12)
Date Collected: 03/30/23 08:24
Date Received: 03/30/23 14:37

Lab Sample ID: 460-277470-2
Matrix: Solid
Percent Solids: 65.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			901640	FBT	EET EDI	04/06/23 06:07
Total/NA	Analysis	6020B		5	901942	YZH	EET EDI	04/07/23 16:24

Client Sample ID: SB-1-(19-19.3)
Date Collected: 03/30/23 08:30
Date Received: 03/30/23 14:37

Lab Sample ID: 460-277470-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	901135	CJC	EET EDI	04/03/23 18:43

Client Sample ID: SB-1-(19-19.3)
Date Collected: 03/30/23 08:30
Date Received: 03/30/23 14:37

Lab Sample ID: 460-277470-3
Matrix: Solid
Percent Solids: 79.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			901640	FBT	EET EDI	04/06/23 06:07
Total/NA	Analysis	6020B		1	901942	YZH	EET EDI	04/07/23 16:26

Client Sample ID: SB-2-(1-1.5)
Date Collected: 03/30/23 08:45
Date Received: 03/30/23 14:37

Lab Sample ID: 460-277470-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	901135	CJC	EET EDI	04/03/23 18:43

Lab Chronicle

Client: RT Environmental Services, Inc.
Project/Site: Frankford Dev - Phase II

Job ID: 460-277470-1

Client Sample ID: SB-2-(1-1.5)
Date Collected: 03/30/23 08:45
Date Received: 03/30/23 14:37

Lab Sample ID: 460-277470-4
Matrix: Solid
Percent Solids: 84.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			901640	FBT	EET EDI	04/06/23 06:07
Total/NA	Analysis	6020B		1	901942	YZH	EET EDI	04/07/23 16:29

Client Sample ID: SB-2-(11.5-12)
Date Collected: 03/30/23 08:46
Date Received: 03/30/23 14:37

Lab Sample ID: 460-277470-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	901135	CJC	EET EDI	04/03/23 18:43

Client Sample ID: SB-2-(11.5-12)
Date Collected: 03/30/23 08:46
Date Received: 03/30/23 14:37

Lab Sample ID: 460-277470-5
Matrix: Solid
Percent Solids: 70.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			901640	FBT	EET EDI	04/06/23 06:07
Total/NA	Analysis	6020B		5	901942	YZH	EET EDI	04/07/23 16:31

Client Sample ID: SB-2-(19-19.3)
Date Collected: 03/30/23 08:51
Date Received: 03/30/23 14:37

Lab Sample ID: 460-277470-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	901135	CJC	EET EDI	04/03/23 18:43

Client Sample ID: SB-2-(19-19.3)
Date Collected: 03/30/23 08:51
Date Received: 03/30/23 14:37

Lab Sample ID: 460-277470-6
Matrix: Solid
Percent Solids: 91.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			901640	FBT	EET EDI	04/06/23 06:07
Total/NA	Analysis	6020B		1	901942	YZH	EET EDI	04/07/23 16:33

Client Sample ID: SB-3-(1.5-2)
Date Collected: 03/30/23 09:05
Date Received: 03/30/23 14:37

Lab Sample ID: 460-277470-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	901135	CJC	EET EDI	04/03/23 18:43

Lab Chronicle

Client: RT Environmental Services, Inc.
Project/Site: Frankford Dev - Phase II

Job ID: 460-277470-1

Client Sample ID: SB-3-(1.5-2)
Date Collected: 03/30/23 09:05
Date Received: 03/30/23 14:37

Lab Sample ID: 460-277470-7
Matrix: Solid
Percent Solids: 74.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			901640	FBT	EET EDI	04/06/23 06:07
Total/NA	Analysis	6020B		2	901942	YZH	EET EDI	04/07/23 16:36

Client Sample ID: SB-3-(11.5-12)
Date Collected: 03/30/23 09:03
Date Received: 03/30/23 14:37

Lab Sample ID: 460-277470-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	901135	CJC	EET EDI	04/03/23 18:43

Client Sample ID: SB-3-(11.5-12)
Date Collected: 03/30/23 09:03
Date Received: 03/30/23 14:37

Lab Sample ID: 460-277470-8
Matrix: Solid
Percent Solids: 74.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			901640	FBT	EET EDI	04/06/23 06:07
Total/NA	Analysis	6020B		1	901942	YZH	EET EDI	04/07/23 16:38

Client Sample ID: SB-3-(18.5-19)
Date Collected: 03/30/23 09:06
Date Received: 03/30/23 14:37

Lab Sample ID: 460-277470-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	901135	CJC	EET EDI	04/03/23 18:43

Client Sample ID: SB-3-(18.5-19)
Date Collected: 03/30/23 09:06
Date Received: 03/30/23 14:37

Lab Sample ID: 460-277470-9
Matrix: Solid
Percent Solids: 88.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			901640	FBT	EET EDI	04/06/23 06:07
Total/NA	Analysis	6020B		1	901942	YZH	EET EDI	04/07/23 16:40

Client Sample ID: SB-4-(1.5-2)
Date Collected: 03/30/23 09:20
Date Received: 03/30/23 14:37

Lab Sample ID: 460-277470-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	901135	CJC	EET EDI	04/03/23 18:43

Lab Chronicle

Client: RT Environmental Services, Inc.
Project/Site: Frankford Dev - Phase II

Job ID: 460-277470-1

Client Sample ID: SB-4-(1.5-2)
Date Collected: 03/30/23 09:20
Date Received: 03/30/23 14:37

Lab Sample ID: 460-277470-10
Matrix: Solid
Percent Solids: 56.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			901640	FBT	EET EDI	04/06/23 06:07
Total/NA	Analysis	6020B		1	901942	YZH	EET EDI	04/07/23 16:43

Client Sample ID: SB-4-(11.5-12)
Date Collected: 03/30/23 09:22
Date Received: 03/30/23 14:37

Lab Sample ID: 460-277470-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	901136	CJC	EET EDI	04/03/23 18:43

Client Sample ID: SB-4-(11.5-12)
Date Collected: 03/30/23 09:22
Date Received: 03/30/23 14:37

Lab Sample ID: 460-277470-11
Matrix: Solid
Percent Solids: 71.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			901640	FBT	EET EDI	04/06/23 06:07
Total/NA	Analysis	6020B		1	901942	YZH	EET EDI	04/07/23 16:55

Client Sample ID: SB-4-(18.8-19.3)
Date Collected: 03/30/23 09:29
Date Received: 03/30/23 14:37

Lab Sample ID: 460-277470-12
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	901136	CJC	EET EDI	04/03/23 18:43

Client Sample ID: SB-4-(18.8-19.3)
Date Collected: 03/30/23 09:29
Date Received: 03/30/23 14:37

Lab Sample ID: 460-277470-12
Matrix: Solid
Percent Solids: 73.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			901640	FBT	EET EDI	04/06/23 06:07
Total/NA	Analysis	6020B		1	901942	YZH	EET EDI	04/07/23 16:58

Client Sample ID: SB-5-(1-1.5)
Date Collected: 03/30/23 09:44
Date Received: 03/30/23 14:37

Lab Sample ID: 460-277470-13
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	901136	CJC	EET EDI	04/03/23 18:43

Lab Chronicle

Client: RT Environmental Services, Inc.
Project/Site: Frankford Dev - Phase II

Job ID: 460-277470-1

Client Sample ID: SB-5-(1-1.5)

Lab Sample ID: 460-277470-13
Date Collected: 03/30/23 09:44
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 75.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			901640	FBT	EET EDI	04/06/23 06:07
Total/NA	Analysis	6020B		1	901942	YZH	EET EDI	04/07/23 17:00

Client Sample ID: SB-5-(11.5-12)

Lab Sample ID: 460-277470-14
Date Collected: 03/30/23 09:45
Matrix: Solid
Date Received: 03/30/23 14:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	901136	CJC	EET EDI	04/03/23 18:43

Client Sample ID: SB-5-(11.5-12)

Lab Sample ID: 460-277470-14
Date Collected: 03/30/23 09:45
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 68.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			901640	FBT	EET EDI	04/06/23 06:07
Total/NA	Analysis	6020B		5	901942	YZH	EET EDI	04/07/23 17:02

Client Sample ID: SB-5-(19.5-20)

Lab Sample ID: 460-277470-15
Date Collected: 03/30/23 09:50
Matrix: Solid
Date Received: 03/30/23 14:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	901136	CJC	EET EDI	04/03/23 18:43

Client Sample ID: SB-5-(19.5-20)

Lab Sample ID: 460-277470-15
Date Collected: 03/30/23 09:50
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 88.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			901640	FBT	EET EDI	04/06/23 06:07
Total/NA	Analysis	6020B		1	901942	YZH	EET EDI	04/07/23 16:08

Client Sample ID: SB-6-(1.5-2)

Lab Sample ID: 460-277470-16
Date Collected: 03/30/23 10:05
Matrix: Solid
Date Received: 03/30/23 14:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	901136	CJC	EET EDI	04/03/23 18:43

Lab Chronicle

Client: RT Environmental Services, Inc.
Project/Site: Frankford Dev - Phase II

Job ID: 460-277470-1

Client Sample ID: SB-6-(1.5-2)

Lab Sample ID: 460-277470-16
Date Collected: 03/30/23 10:05
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 95.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			901640	FBT	EET EDI	04/06/23 06:07
Total/NA	Analysis	6020B		1	901942	YZH	EET EDI	04/07/23 17:05

Client Sample ID: SB-6-(11.5-12)

Lab Sample ID: 460-277470-17
Date Collected: 03/30/23 10:07
Matrix: Solid
Date Received: 03/30/23 14:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	901136	CJC	EET EDI	04/03/23 18:43

Client Sample ID: SB-6-(11.5-12)

Lab Sample ID: 460-277470-17
Date Collected: 03/30/23 10:07
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 59.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			901640	FBT	EET EDI	04/06/23 06:07
Total/NA	Analysis	6020B		5	901942	YZH	EET EDI	04/07/23 17:07

Client Sample ID: SB-6-(18.5-19)

Lab Sample ID: 460-277470-18
Date Collected: 03/30/23 10:08
Matrix: Solid
Date Received: 03/30/23 14:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	901136	CJC	EET EDI	04/03/23 18:43

Client Sample ID: SB-6-(18.5-19)

Lab Sample ID: 460-277470-18
Date Collected: 03/30/23 10:08
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 74.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			901640	FBT	EET EDI	04/06/23 06:07
Total/NA	Analysis	6020B		1	901942	YZH	EET EDI	04/07/23 17:09

Client Sample ID: SB-7-(1-1.5)

Lab Sample ID: 460-277470-19
Date Collected: 03/30/23 10:18
Matrix: Solid
Date Received: 03/30/23 14:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	901136	CJC	EET EDI	04/03/23 18:43

Lab Chronicle

Client: RT Environmental Services, Inc.
Project/Site: Frankford Dev - Phase II

Job ID: 460-277470-1

Client Sample ID: SB-7-(1-1.5)

Lab Sample ID: 460-277470-19
Date Collected: 03/30/23 10:18
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 70.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			901640	FBT	EET EDI	04/06/23 06:07
Total/NA	Analysis	6020B		1	901942	YZH	EET EDI	04/07/23 17:13

Client Sample ID: SB-7-(11.5-12)

Lab Sample ID: 460-277470-20
Date Collected: 03/30/23 10:20
Matrix: Solid
Date Received: 03/30/23 14:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	901136	CJC	EET EDI	04/03/23 18:43

Client Sample ID: SB-7-(11.5-12)

Lab Sample ID: 460-277470-20
Date Collected: 03/30/23 10:20
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 72.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			901640	FBT	EET EDI	04/06/23 06:07
Total/NA	Analysis	6020B		5	901942	YZH	EET EDI	04/07/23 17:15

Client Sample ID: SB-7-(19-19.6)

Lab Sample ID: 460-277470-21
Date Collected: 03/30/23 10:22
Matrix: Solid
Date Received: 03/30/23 14:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	901136	CJC	EET EDI	04/03/23 18:43

Client Sample ID: SB-7-(19-19.6)

Lab Sample ID: 460-277470-21
Date Collected: 03/30/23 10:22
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 59.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			901642	FBT	EET EDI	04/06/23 06:41
Total/NA	Analysis	6020B		1	901942	YZH	EET EDI	04/07/23 20:05

Client Sample ID: SB-8-(1.5-2)

Lab Sample ID: 460-277470-22
Date Collected: 03/30/23 10:31
Matrix: Solid
Date Received: 03/30/23 14:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	901136	CJC	EET EDI	04/03/23 18:43

Lab Chronicle

Client: RT Environmental Services, Inc.
Project/Site: Frankford Dev - Phase II

Job ID: 460-277470-1

Client Sample ID: SB-8-(1.5-2)
Date Collected: 03/30/23 10:31
Date Received: 03/30/23 14:37

Lab Sample ID: 460-277470-22
Matrix: Solid
Percent Solids: 77.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			901642	FBT	EET EDI	04/06/23 06:41
Total/NA	Analysis	6020B		1	901942	YZH	EET EDI	04/07/23 20:07

Client Sample ID: SB-8-(11.5-12)
Date Collected: 03/30/23 10:33
Date Received: 03/30/23 14:37

Lab Sample ID: 460-277470-23
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	901136	CJC	EET EDI	04/03/23 18:43

Client Sample ID: SB-8-(11.5-12)
Date Collected: 03/30/23 10:33
Date Received: 03/30/23 14:37

Lab Sample ID: 460-277470-23
Matrix: Solid
Percent Solids: 80.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			901642	FBT	EET EDI	04/06/23 06:41
Total/NA	Analysis	6020B		1	901942	YZH	EET EDI	04/07/23 20:09

Client Sample ID: SB-8-(18.5-19)
Date Collected: 03/30/23 10:37
Date Received: 03/30/23 14:37

Lab Sample ID: 460-277470-24
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	901136	CJC	EET EDI	04/03/23 18:43

Client Sample ID: SB-8-(18.5-19)
Date Collected: 03/30/23 10:37
Date Received: 03/30/23 14:37

Lab Sample ID: 460-277470-24
Matrix: Solid
Percent Solids: 90.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			901642	FBT	EET EDI	04/06/23 06:41
Total/NA	Analysis	6020B		2	901942	YZH	EET EDI	04/07/23 20:12

Client Sample ID: SB-9-(1.5-2)
Date Collected: 03/30/23 10:47
Date Received: 03/30/23 14:37

Lab Sample ID: 460-277470-25
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	901136	CJC	EET EDI	04/03/23 18:43

Lab Chronicle

Client: RT Environmental Services, Inc.
Project/Site: Frankford Dev - Phase II

Job ID: 460-277470-1

Client Sample ID: SB-9-(1.5-2)

Lab Sample ID: 460-277470-25
Date Collected: 03/30/23 10:47
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 90.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			901642	FBT	EET EDI	04/06/23 06:41
Total/NA	Analysis	6020B		1	901942	YZH	EET EDI	04/07/23 19:51

Client Sample ID: SB-9-(11.5-12)

Lab Sample ID: 460-277470-26
Date Collected: 03/30/23 10:50
Matrix: Solid
Date Received: 03/30/23 14:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	901136	CJC	EET EDI	04/03/23 18:43

Client Sample ID: SB-9-(11.5-12)

Lab Sample ID: 460-277470-26
Date Collected: 03/30/23 10:50
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 72.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			901642	FBT	EET EDI	04/06/23 06:41
Total/NA	Analysis	6020B		1	901942	YZH	EET EDI	04/07/23 20:14

Client Sample ID: SB-9-(19.5-20)

Lab Sample ID: 460-277470-27
Date Collected: 03/30/23 10:52
Matrix: Solid
Date Received: 03/30/23 14:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	901136	CJC	EET EDI	04/03/23 18:43

Client Sample ID: SB-9-(19.5-20)

Lab Sample ID: 460-277470-27
Date Collected: 03/30/23 10:52
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 60.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			901642	FBT	EET EDI	04/06/23 06:41
Total/NA	Analysis	6020B		1	901942	YZH	EET EDI	04/07/23 20:16

Client Sample ID: SB-10-(1.5-2)

Lab Sample ID: 460-277470-28
Date Collected: 03/30/23 11:13
Matrix: Solid
Date Received: 03/30/23 14:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	901136	CJC	EET EDI	04/03/23 18:43

Client Sample ID: SB-10-(1.5-2)

Lab Sample ID: 460-277470-28
Date Collected: 03/30/23 11:13
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 83.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			901642	FBT	EET EDI	04/06/23 06:41
Total/NA	Analysis	6020B		1	901942	YZH	EET EDI	04/07/23 20:19

Client Sample ID: SB-10-(14-14.5)

Lab Sample ID: 460-277470-29
Date Collected: 03/30/23 11:18
Matrix: Solid
Date Received: 03/30/23 14:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	901136	CJC	EET EDI	04/03/23 18:43

Client Sample ID: SB-10-(14-14.5)

Lab Sample ID: 460-277470-29
Date Collected: 03/30/23 11:18
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 80.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			901642	FBT	EET EDI	04/06/23 06:41
Total/NA	Analysis	6020B		1	901942	YZH	EET EDI	04/07/23 20:26

Client Sample ID: SB-10-(19.3-19.8)

Lab Sample ID: 460-277470-30
Date Collected: 03/30/23 11:24
Matrix: Solid
Date Received: 03/30/23 14:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	901136	CJC	EET EDI	04/03/23 18:43

Client Sample ID: SB-10-(19.3-19.8)

Lab Sample ID: 460-277470-30
Date Collected: 03/30/23 11:24
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 89.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			901642	FBT	EET EDI	04/06/23 06:41
Total/NA	Analysis	6020B		1	901942	YZH	EET EDI	04/07/23 20:28

Client Sample ID: SB-11-(1.0-1.5)

Lab Sample ID: 460-277470-31
Date Collected: 03/30/23 11:30
Matrix: Solid
Date Received: 03/30/23 14:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	901137	CJC	EET EDI	04/03/23 18:43

Lab Chronicle

Client: RT Environmental Services, Inc.
Project/Site: Frankford Dev - Phase II

Job ID: 460-277470-1

Client Sample ID: SB-11-(1.0-1.5)
Date Collected: 03/30/23 11:30
Date Received: 03/30/23 14:37

Lab Sample ID: 460-277470-31
Matrix: Solid
Percent Solids: 85.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			901642	FBT	EET EDI	04/06/23 06:41
Total/NA	Analysis	6020B		1	901942	YZH	EET EDI	04/07/23 20:30

Client Sample ID: SB-11-(14-14.5)
Date Collected: 03/30/23 11:32
Date Received: 03/30/23 14:37

Lab Sample ID: 460-277470-32
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	901137	CJC	EET EDI	04/03/23 18:43

Client Sample ID: SB-11-(14-14.5)
Date Collected: 03/30/23 11:32
Date Received: 03/30/23 14:37

Lab Sample ID: 460-277470-32
Matrix: Solid
Percent Solids: 81.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			901642	FBT	EET EDI	04/06/23 06:41
Total/NA	Analysis	6020B		1	901942	YZH	EET EDI	04/07/23 20:33

Client Sample ID: SB-11-(16.5-17)
Date Collected: 03/30/23 11:34
Date Received: 03/30/23 14:37

Lab Sample ID: 460-277470-33
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	901137	CJC	EET EDI	04/03/23 18:43

Client Sample ID: SB-11-(16.5-17)
Date Collected: 03/30/23 11:34
Date Received: 03/30/23 14:37

Lab Sample ID: 460-277470-33
Matrix: Solid
Percent Solids: 84.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			901642	FBT	EET EDI	04/06/23 06:41
Total/NA	Analysis	6020B		1	901942	YZH	EET EDI	04/07/23 20:35

Client Sample ID: SB-12-(1.5-2)
Date Collected: 03/30/23 11:40
Date Received: 03/30/23 14:37

Lab Sample ID: 460-277470-34
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	901137	CJC	EET EDI	04/03/23 18:43

Lab Chronicle

Client: RT Environmental Services, Inc.
Project/Site: Frankford Dev - Phase II

Job ID: 460-277470-1

Client Sample ID: SB-12-(1.5-2)

Lab Sample ID: 460-277470-34
Date Collected: 03/30/23 11:40
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 82.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			901642	FBT	EET EDI	04/06/23 06:41
Total/NA	Analysis	6020B		1	901942	YZH	EET EDI	04/07/23 20:37

Client Sample ID: SB-12-(14-14.5)

Lab Sample ID: 460-277470-35
Date Collected: 03/30/23 11:42
Matrix: Solid
Date Received: 03/30/23 14:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	901137	CJC	EET EDI	04/03/23 18:43

Client Sample ID: SB-12-(14-14.5)

Lab Sample ID: 460-277470-35
Date Collected: 03/30/23 11:42
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 80.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			901642	FBT	EET EDI	04/06/23 06:41
Total/NA	Analysis	6020B		1	901942	YZH	EET EDI	04/07/23 20:40

Client Sample ID: SB-12-(18.5-19)

Lab Sample ID: 460-277470-36
Date Collected: 03/30/23 11:44
Matrix: Solid
Date Received: 03/30/23 14:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	901137	CJC	EET EDI	04/03/23 18:43

Client Sample ID: SB-12-(18.5-19)

Lab Sample ID: 460-277470-36
Date Collected: 03/30/23 11:44
Matrix: Solid
Date Received: 03/30/23 14:37
Percent Solids: 86.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			901642	FBT	EET EDI	04/06/23 06:41
Total/NA	Analysis	6020B		1	901942	YZH	EET EDI	04/07/23 20:42

Client Sample ID: SB-13-(1-1.5)

Lab Sample ID: 460-277470-37
Date Collected: 03/30/23 12:00
Matrix: Solid
Date Received: 03/30/23 14:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	901137	CJC	EET EDI	04/03/23 18:43

Lab Chronicle

Client: RT Environmental Services, Inc.
Project/Site: Frankford Dev - Phase II

Job ID: 460-277470-1

Client Sample ID: SB-13-(1-1.5)
Date Collected: 03/30/23 12:00
Date Received: 03/30/23 14:37

Lab Sample ID: 460-277470-37
Matrix: Solid
Percent Solids: 93.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			901642	FBT	EET EDI	04/06/23 06:41
Total/NA	Analysis	6020B		1	901942	YZH	EET EDI	04/07/23 20:44

Client Sample ID: SB-13-(14-14.5)
Date Collected: 03/30/23 12:03
Date Received: 03/30/23 14:37

Lab Sample ID: 460-277470-38
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	901137	CJC	EET EDI	04/03/23 18:43

Client Sample ID: SB-13-(14-14.5)
Date Collected: 03/30/23 12:03
Date Received: 03/30/23 14:37

Lab Sample ID: 460-277470-38
Matrix: Solid
Percent Solids: 77.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			901642	FBT	EET EDI	04/06/23 06:41
Total/NA	Analysis	6020B		1	901942	YZH	EET EDI	04/07/23 20:51

Client Sample ID: SB-13-(17.5-17.9)
Date Collected: 03/30/23 12:06
Date Received: 03/30/23 14:37

Lab Sample ID: 460-277470-39
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	901137	CJC	EET EDI	04/03/23 18:43

Client Sample ID: SB-13-(17.5-17.9)
Date Collected: 03/30/23 12:06
Date Received: 03/30/23 14:37

Lab Sample ID: 460-277470-39
Matrix: Solid
Percent Solids: 83.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			901642	FBT	EET EDI	04/06/23 06:41
Total/NA	Analysis	6020B		1	901942	YZH	EET EDI	04/07/23 20:54

Laboratory References:

EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Accreditation/Certification Summary

Client: RT Environmental Services, Inc. Job ID: 460-277470-1
Project/Site: Frankford Dev - Phase II

Laboratory: Eurofins Edison

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0818	01-30-24
DE Haz. Subst. Cleanup Act (HSCA)	State	N/A	01-01-24
Georgia	State	12028 (NJ)	06-30-23
Massachusetts	State	M-NJ312	06-30-23
New Jersey	NELAP	12028	06-30-23
New York	NELAP	11452	04-01-24
Pennsylvania	NELAP	68-00522	03-01-24
Rhode Island	State	LAO00376	12-30-23
USDA	US Federal Programs	P330-20-00244	11-03-23

Method Summary

Client: RT Environmental Services, Inc.
Project/Site: Frankford Dev - Phase II

Job ID: 460-277470-1

Method	Method Description	Protocol	Laboratory
6020B	Metals (ICP/MS)	SW846	EET EDI
Moisture	Percent Moisture	EPA	EET EDI
3050B	Preparation, Metals	SW846	EET 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:

EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Sample Summary

Client: RT Environmental Services, Inc.
Project/Site: Frankford Dev - Phase II

Job ID: 460-277470-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-277470-1	SB-1-(1.5-2)	Solid	03/30/23 08:17	03/30/23 14:37
460-277470-2	SB-1-(11.5-12)	Solid	03/30/23 08:24	03/30/23 14:37
460-277470-3	SB-1-(19-19.3)	Solid	03/30/23 08:30	03/30/23 14:37
460-277470-4	SB-2-(1-1.5)	Solid	03/30/23 08:45	03/30/23 14:37
460-277470-5	SB-2-(11.5-12)	Solid	03/30/23 08:46	03/30/23 14:37
460-277470-6	SB-2-(19-19.3)	Solid	03/30/23 08:51	03/30/23 14:37
460-277470-7	SB-3-(1.5-2)	Solid	03/30/23 09:05	03/30/23 14:37
460-277470-8	SB-3-(11.5-12)	Solid	03/30/23 09:03	03/30/23 14:37
460-277470-9	SB-3-(18.5-19)	Solid	03/30/23 09:06	03/30/23 14:37
460-277470-10	SB-4-(1.5-2)	Solid	03/30/23 09:20	03/30/23 14:37
460-277470-11	SB-4-(11.5-12)	Solid	03/30/23 09:22	03/30/23 14:37
460-277470-12	SB-4-(18.8-19.3)	Solid	03/30/23 09:29	03/30/23 14:37
460-277470-13	SB-5-(1-1.5)	Solid	03/30/23 09:44	03/30/23 14:37
460-277470-14	SB-5-(11.5-12)	Solid	03/30/23 09:45	03/30/23 14:37
460-277470-15	SB-5-(19.5-20)	Solid	03/30/23 09:50	03/30/23 14:37
460-277470-16	SB-6-(1.5-2)	Solid	03/30/23 10:05	03/30/23 14:37
460-277470-17	SB-6-(11.5-12)	Solid	03/30/23 10:07	03/30/23 14:37
460-277470-18	SB-6-(18.5-19)	Solid	03/30/23 10:08	03/30/23 14:37
460-277470-19	SB-7-(1-1.5)	Solid	03/30/23 10:18	03/30/23 14:37
460-277470-20	SB-7-(11.5-12)	Solid	03/30/23 10:20	03/30/23 14:37
460-277470-21	SB-7-(19-19.6)	Solid	03/30/23 10:22	03/30/23 14:37
460-277470-22	SB-8-(1.5-2)	Solid	03/30/23 10:31	03/30/23 14:37
460-277470-23	SB-8-(11.5-12)	Solid	03/30/23 10:33	03/30/23 14:37
460-277470-24	SB-8-(18.5-19)	Solid	03/30/23 10:37	03/30/23 14:37
460-277470-25	SB-9-(1.5-2)	Solid	03/30/23 10:47	03/30/23 14:37
460-277470-26	SB-9-(11.5-12)	Solid	03/30/23 10:50	03/30/23 14:37
460-277470-27	SB-9-(19.5-20)	Solid	03/30/23 10:52	03/30/23 14:37
460-277470-28	SB-10-(1.5-2)	Solid	03/30/23 11:13	03/30/23 14:37
460-277470-29	SB-10-(14-14.5)	Solid	03/30/23 11:18	03/30/23 14:37
460-277470-30	SB-10-(19.3-19.8)	Solid	03/30/23 11:24	03/30/23 14:37
460-277470-31	SB-11-(1.0-1.5)	Solid	03/30/23 11:30	03/30/23 14:37
460-277470-32	SB-11-(14-14.5)	Solid	03/30/23 11:32	03/30/23 14:37
460-277470-33	SB-11-(16.5-17)	Solid	03/30/23 11:34	03/30/23 14:37
460-277470-34	SB-12-(1.5-2)	Solid	03/30/23 11:40	03/30/23 14:37
460-277470-35	SB-12-(14-14.5)	Solid	03/30/23 11:42	03/30/23 14:37
460-277470-36	SB-12-(18.5-19)	Solid	03/30/23 11:44	03/30/23 14:37
460-277470-37	SB-13-(1-1.5)	Solid	03/30/23 12:00	03/30/23 14:37
460-277470-38	SB-13-(14-14.5)	Solid	03/30/23 12:03	03/30/23 14:37
460-277470-39	SB-13-(17.5-17.9)	Solid	03/30/23 12:06	03/30/23 14:37

450-KOP

Chain of Custody Record 485651

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9.3 KOP-2
9.0 V2C 0.1 CC

Address: _____

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TAL-8210

Client Contact	Project Manager: Walter Hungarter	Site Contact:	Date:	COC No:
Company Name: ET Environmental Services	Tel/Email: WHungarter@ETEN.com	Lab Contact:	Carrier:	____ of ____ COCs
Address: 215 W Church Road	Analysis Turnaround Time			Sampler:
City/State/Zip: King of Prussia PA 19406	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 610-265-1510	TAT if different from Below _____			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: Frankford Dev – Project II	☐ 1 week			Job / SDG No.: 277470
Site: Frankford Avenue Philadelphia PA	☐ 2 days			
PO # 73539-04-03	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	arsenic	lead	cadmium	chromium	Sample Specific Notes:
SB-1-(1.5-2)	3/30/23	8:17	G	Soil	1			X	X	X	X	1
SB-1-(11.5-12)		8:24						X	X	X	X	2
SB-1-(19-19.3)		8:30						X	X	X	X	3
SB-2-(1-1.5)		8:45						X	X	X	X	4
SB-2-(11.5-12)		8:46						X	X	X	X	5
SB-2-(19-19.3)		8:57						X	X	X	X	6
SB-3-(1.5-2)		9:05						X	X	X	X	7
SB-3-(11.5-12)		9:03						X	X	X	X	8
SB-3-(18.5-19)		9:06						X	X	X	X	9
SB-4-(1.5-2)		9:20						X	X	X	X	10
SB-4-(11.5-12)		9:22						X	X	X	X	11
SB-4-(18.8-19.3)		9:24						X	X	X	X	12

460-277470 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months Federal

Special Instructions/QC Requirements & Comments:
Please send results to kcameron@eten.com & WHungarter@eten.com

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: 222955 222955 | Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ | Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	ETEN-KOP	3/30/23		EETN-KOP	3/30/23 1437
Relinquished by:	Company: EETN-KOP	Date/Time: 3/30/23 1510	Received by: Bkenrish	Company:	Date/Time: 3/31/23 10:30
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

IR: 9 0.9c | 0.9c 1.2c | 1.2c

Chain of Custody Record

620016

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TAL-8210

Address: _____

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Walter Hungarter	Site Contact:	Date:	COC No:
Company Name: RI Environmental Services Inc	Tel/Email: whungarter@rienv.com	Lab Contact:	Carrier:	_____ of _____ COCs
Address: 215 W Church Road	Analysis Turnaround Time			Sampler:
City/State/Zip: King of Prussia PA 19406	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 610-225-1510	TAT if different from Below _____			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: Frankford Dev - Phase II	☐ 1 week			
Site: Frankford Ave Philadelphia PA	☐ 2 days			Job / SDG No.:
PO# 73539-04-03	☐ 1 day			277470

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	arsenic	lead	cadmium	barium	Sample Specific Notes:
SB-5-(1-1.5)	3/30/23	9:44	G	SOIL	1			X	X	X	X	13
SB-5-(11.5-12)		9:45						X	X	X	X	14
SB-5-(19.5-20)		9:50						X	X	X	X	15
SB-6-(1.5-2)		10:05						X	X	X	X	16
SB-6-(11.5-12)		10:07						X	X	X	X	17
SB-6-(18.5-19)		10:08						X	X	X	X	18
SB-7-(1-1.5)		10:18						X	X	X	X	19
SB-7-(11.5-12)		10:20						X	X	X	X	20
SB-7-(19-19.6)		10:22						X	X	X	X	21
SB-8-(1.5-2)		10:31						X	X	X	X	22
SB-8-(11.5-12)		10:33						X	X	X	X	23
SB-8-(18.5-19)		10:37						X	X	X	X	24

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments:
Please send results to kcamerona@rienv.com and whungarter@rienv.com Fedex

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No 2229852, 2229853 | Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ | Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	RI Environmental	3/30/23		EETN-KOP	3/30/23 1437
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	EETN-KOP	3/31/23 1510			3/31/23 10:30
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

IR: 9.0-9c 10.9c 1.2c 11.2c

9.3 °C Rad 2
9.0 °C rec on ice

4/11/2023 (Rev. 1)

Chain of Custody Record

620017

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TAL-8210

Address: _____

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Walter Hunsinger	Site Contact:	Date:	COC No:
Company Name: RT Environmental Services	Tel/Email: whunsinger@rtenv.com	Lab Contact:	Carrier:	____ of ____ COCs
Address: 215 W Church Road	Analysis Turnaround Time			Sampler:
City/State/Zip: King of Prussia PA 19406	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: (610-265-1510	TAT if different from Below ____			Walk-in Client:
Fax:	☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day			Lab Sampling:
Project Name: Frankford Dev - Phase II				Job / SDG No.: 77470
Site: Frankford Avenue Philadelphia PA				
PO# 73539-04-03				

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	Arsenic	Lead	Cadmium	Barium	Sample Specific Notes:
SB-9-(1.5-2)	3/30/23	10:47	G	Soil	1			X	X	X	X	25
SB-9-(11.5-12)		10:50						X	X	X	X	26
SB-9-(19.5-20)		10:52						X	X	X	X	27
SB-10-(1.5-2)		11:13						X				28
SB-10-(14-14.5)		11:18						X				29
SB-10-(19.3-19.8)		11:24						X				30
SB-11-(1.5-1.5)		11:30						X				31
SB-11-(14-14.5)		11:32						X				32
SB-11-(16.5-17)		11:34						X				33
SB-12-(1.5-2)		11:40						X				34
SB-12-(14-14.5)		11:42						X				35
SB-12-(18.5-19)		11:44						X				36

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments:
Please send results to kcameron@rtenv.com & whunsinger@rtenv.com Fedex

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.: 222952, 222953	Cooler Temp. (°C): Obs'd:____ Corr'd:____	Therm ID No.:____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	RT Environmental	3/30/23		EETN-KOP	3/30/23 1437
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	EETN-KOP	3/30/23 1510	Bhavish		3/31/23 10:30
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

IR-9 0.9c 10.9c 1.2c 11.2c

Chain of Custody Record

621238

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TAL-8210

Address: _____

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Walter Hungarter	Site Contact:	Date:	COC No:
Company Name: RT Environmental Services	Tel/Email: whungarter@rtenv.com	Lab Contact:	Carrier:	____ of ____ COCs
Address: 215 W Church Road	Analysis Turnaround Time			Sampler:
City/State/Zip: King of Prussia PA 19406	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 610-265-1570	TAT if different from Below ____			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: Frankford Dev-Phase II	☐ 1 week			Job / SDG No.: 277470
Site: Frankford Ave Philadelphia PA	☐ 2 days			
PO# 73539-04-03	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	arsenic	Sample Specific Notes:
SB-13-(1-1.5)	3/30/23	12:00	G	Soil	1			X	37
SB-13-(14-14.5)	↓	12:03	↓	↓	↓			X	38
SB-13-(17.5-17.9)	↓	12:06	↓	↓	↓			X	39

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:
Please send results to kcameron@rtenv.com & whungarter@rtenv.com Tat

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: 2229853, 2229853 | Cooler Temp. (°C): Obs'd: ____ Corr'd: ____ | Therm ID No.: ____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	RT Environmental	3/30/23		EETN-KOP	3/30/23 1437
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	EETN-KOP	3/30/23 1510	Blevish		3/31/23 10:30
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

IR: 9 0.9c 10.9c 1.2c 11.2c

4/11/2023 (Rev. 1)

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Eurofins TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 177470

Number of Coolers: 2 IR Gun # 9

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	0.9 °C	0.9 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	1.2 °C	1.2 °C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

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.*

EDS-WI-038, Rev 4.1
10/22/2019

Initials: BKavish **Date:** 3/31/23

Login Sample Receipt Checklist

Client: RT Environmental Services, Inc.

Job Number: 460-277470-1

Login Number: 277470
List Number: 1
Creator: Rivera, Kenneth

List Source: Eurofins Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	2229552,2229553
Sample custody seals, if present, are intact.	True	
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	
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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Walter Hungarter
RT Environmental Services, Inc.
215 West Church Road
Suite 300
King of Prussia, Pennsylvania 19406

Generated 4/25/2023 1:58:32 PM

JOB DESCRIPTION

Frankford Phase 2

JOB NUMBER

460-278564-1

Eurofins Edison
777 New Durham Road
Edison NJ 08817

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



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Authorized for release by
Jill Miller, Senior Project Manager
Jill.Miller@et.eurofinsus.com
(484)802-0929

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Definitions/Glossary

Client: RT Environmental Services, Inc.
Project/Site: Frankford Phase 2

Job ID: 460-278564-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 460-278564-1

Laboratory: Eurofins Edison

Narrative

Job Narrative
460-278564-1

Comments
No additional comments.

Receipt
The samples were received on 4/18/2023 8:00 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.4º C.

GC/MS VOA
Method 8260D: The continuing calibration verification (CCV) associated with batch 460-904554 recovered above the upper control limit for Vinyl chloride. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8260D: The continuing calibration verification (CCV) analyzed in batch 460-904796 was outside the method criteria for the following analytes: Dichlorodifluoromethane (biased low) and Vinyl chloride (biased high). A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analytes is considered estimated.

Method 8260D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for analytical batch 460-904796 recovered outside control limits for the following analyte: Bromomethane.

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.

Client: RT Environmental Services, Inc.
Project/Site: Frankford Phase 2

Job ID: 460-278564-1

Client Sample ID: MW-1

Date Collected: 04/17/23 09:50
Date Received: 04/18/23 20:00

Lab Sample ID: 460-278564-1

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	0.40	U	1.0	0.40	ug/L			04/22/23 10:13	1
Bromomethane	0.55	U	1.0	0.55	ug/L			04/22/23 10:13	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			04/22/23 10:13	1
Chloroethane	0.32	U	1.0	0.32	ug/L			04/22/23 10:13	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			04/22/23 10:13	1
Acetone	4.4	U	5.0	4.4	ug/L			04/22/23 10:13	1
Carbon disulfide	0.82	U	1.0	0.82	ug/L			04/22/23 10:13	1
Trichlorofluoromethane	0.32	U	1.0	0.32	ug/L			04/22/23 10:13	1
1,1-Dichloroethene	0.26	U	1.0	0.26	ug/L			04/22/23 10:13	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			04/22/23 10:13	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			04/22/23 10:13	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			04/22/23 10:13	1
Chloroform	**5.9**		1.0	0.33	ug/L			04/22/23 10:13	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			04/22/23 10:13	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			04/22/23 10:13	1
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			04/22/23 10:13	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			04/22/23 10:13	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			04/22/23 10:13	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			04/22/23 10:13	1
cis-1,3-Dichloropropene	0.22	U	1.0	0.22	ug/L			04/22/23 10:13	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			04/22/23 10:13	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			04/22/23 10:13	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			04/22/23 10:13	1
Benzene	0.20	U	1.0	0.20	ug/L			04/22/23 10:13	1
trans-1,3-Dichloropropene	0.22	U	1.0	0.22	ug/L			04/22/23 10:13	1
Bromoform	0.54	U	1.0	0.54	ug/L			04/22/23 10:13	1
4-Methyl-2-pentanone (MIBK)	1.3	U	5.0	1.3	ug/L			04/22/23 10:13	1
2-Hexanone	1.1	U	5.0	1.1	ug/L			04/22/23 10:13	1
Tetrachloroethene	**1.5**		1.0	0.25	ug/L			04/22/23 10:13	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			04/22/23 10:13	1
Toluene	0.38	U	1.0	0.38	ug/L			04/22/23 10:13	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			04/22/23 10:13	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			04/22/23 10:13	1
Styrene	0.42	U	1.0	0.42	ug/L			04/22/23 10:13	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			04/22/23 10:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			04/22/23 10:13	1
Methyl tert-butyl ether	0.22	U	1.0	0.22	ug/L			04/22/23 10:13	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			04/22/23 10:13	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			04/22/23 10:13	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			04/22/23 10:13	1
1,4-Dichlorobenzene	0.33	U	1.0	0.33	ug/L			04/22/23 10:13	1
1,2-Dichlorobenzene	0.21	U	1.0	0.21	ug/L			04/22/23 10:13	1
Naphthalene	0.88	U	1.0	0.88	ug/L			04/22/23 10:13	1
Dichlorodifluoromethane	0.31	U	1.0	0.31	ug/L			04/22/23 10:13	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			04/22/23 10:13	1
1,2,4-Trimethylbenzene	0.37	U	1.0	0.37	ug/L			04/22/23 10:13	1
1,2-Dibromo-3-Chloropropane	0.38	U	1.0	0.38	ug/L			04/22/23 10:13	1
1,3,5-Trimethylbenzene	0.33	U	1.0	0.33	ug/L			04/22/23 10:13	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			04/22/23 10:13	1

Client Sample ID: MW-1

Lab Sample ID: 460-278564-1

Date Collected: 04/17/23 09:50

Matrix: Water

Date Received: 04/18/23 20:00

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl acetate	0.79	U	5.0	0.79	ug/L			04/22/23 10:13	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*04/22/23 10:13*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*70 - 128*		*04/22/23 10:13*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*04/22/23 10:13*	*1*
4-Bromofluorobenzene	*111*		*76 - 120*		*04/22/23 10:13*	*1*
Dibromofluoromethane (Surr)	*93*		*77 - 124*		*04/22/23 10:13*	*1*

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.30	U	1.2	0.30	ug/L		04/20/23 23:09	04/21/23 00:14	1
Cadmium	0.38	U	2.0	0.38	ug/L		04/20/23 23:09	04/21/23 00:14	1
Barium	**258**		4.0	0.93	ug/L		04/20/23 23:09	04/21/23 00:14	1
Arsenic	1.2	U	2.0	1.2	ug/L		04/20/23 23:09	04/21/23 00:14	1

Client Sample ID: MW-2

Lab Sample ID: 460-278564-2

Date Collected: 04/17/23 14:00

Matrix: Water

Date Received: 04/18/23 20:00

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	0.40	U	1.0	0.40	ug/L			04/24/23 12:07	1
Bromomethane	0.55	U *1	1.0	0.55	ug/L			04/24/23 12:07	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			04/24/23 12:07	1
Chloroethane	0.32	U	1.0	0.32	ug/L			04/24/23 12:07	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			04/24/23 12:07	1
Acetone	4.4	U	5.0	4.4	ug/L			04/24/23 12:07	1
Carbon disulfide	0.82	U	1.0	0.82	ug/L			04/24/23 12:07	1
Trichlorofluoromethane	0.32	U	1.0	0.32	ug/L			04/24/23 12:07	1
1,1-Dichloroethene	0.26	U	1.0	0.26	ug/L			04/24/23 12:07	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			04/24/23 12:07	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			04/24/23 12:07	1
cis-1,2-Dichloroethene	**0.51**	**J**	1.0	0.22	ug/L			04/24/23 12:07	1
Chloroform	0.33	U	1.0	0.33	ug/L			04/24/23 12:07	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			04/24/23 12:07	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			04/24/23 12:07	1
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			04/24/23 12:07	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			04/24/23 12:07	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			04/24/23 12:07	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			04/24/23 12:07	1
cis-1,3-Dichloropropene	0.22	U	1.0	0.22	ug/L			04/24/23 12:07	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			04/24/23 12:07	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			04/24/23 12:07	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			04/24/23 12:07	1
Benzene	0.20	U	1.0	0.20	ug/L			04/24/23 12:07	1
trans-1,3-Dichloropropene	0.22	U	1.0	0.22	ug/L			04/24/23 12:07	1
Bromoform	0.54	U	1.0	0.54	ug/L			04/24/23 12:07	1
4-Methyl-2-pentanone (MIBK)	1.3	U	5.0	1.3	ug/L			04/24/23 12:07	1

Client Sample ID: MW-2

Date Collected: 04/17/23 14:00
Date Received: 04/18/23 20:00

Lab Sample ID: 460-278564-2

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Hexanone	1.1	U	5.0	1.1	ug/L			04/24/23 12:07	1
Tetrachloroethene	**0.63**	**J**	1.0	0.25	ug/L			04/24/23 12:07	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			04/24/23 12:07	1
Toluene	0.38	U	1.0	0.38	ug/L			04/24/23 12:07	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			04/24/23 12:07	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			04/24/23 12:07	1
Styrene	0.42	U	1.0	0.42	ug/L			04/24/23 12:07	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			04/24/23 12:07	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			04/24/23 12:07	1
Methyl tert-butyl ether	0.22	U	1.0	0.22	ug/L			04/24/23 12:07	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			04/24/23 12:07	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			04/24/23 12:07	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			04/24/23 12:07	1
1,4-Dichlorobenzene	0.33	U	1.0	0.33	ug/L			04/24/23 12:07	1
1,2-Dichlorobenzene	0.21	U	1.0	0.21	ug/L			04/24/23 12:07	1
Naphthalene	0.88	U	1.0	0.88	ug/L			04/24/23 12:07	1
Dichlorodifluoromethane	0.31	U	1.0	0.31	ug/L			04/24/23 12:07	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			04/24/23 12:07	1
1,2,4-Trimethylbenzene	0.37	U	1.0	0.37	ug/L			04/24/23 12:07	1
1,2-Dibromo-3-Chloropropane	0.38	U	1.0	0.38	ug/L			04/24/23 12:07	1
1,3,5-Trimethylbenzene	0.33	U	1.0	0.33	ug/L			04/24/23 12:07	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			04/24/23 12:07	1
Methyl acetate	0.79	U	5.0	0.79	ug/L			04/24/23 12:07	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*04/24/23 12:07*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*70 - 128*		*04/24/23 12:07*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*04/24/23 12:07*	*1*
4-Bromofluorobenzene	*111*		*76 - 120*		*04/24/23 12:07*	*1*
Dibromofluoromethane (Surr)	*94*		*77 - 124*		*04/24/23 12:07*	*1*

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.30	U	1.2	0.30	ug/L		04/20/23 23:09	04/21/23 00:16	1
Cadmium	0.38	U	2.0	0.38	ug/L		04/20/23 23:09	04/21/23 00:16	1
Barium	**156**		4.0	0.93	ug/L		04/20/23 23:09	04/21/23 00:16	1
Arsenic	**1.3**	**J**	2.0	1.2	ug/L		04/20/23 23:09	04/21/23 00:16	1

Client Sample ID: MW-3

Date Collected: 04/17/23 15:25
Date Received: 04/18/23 20:00

Lab Sample ID: 460-278564-3

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	0.40	U	1.0	0.40	ug/L			04/22/23 11:03	1
Bromomethane	0.55	U	1.0	0.55	ug/L			04/22/23 11:03	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			04/22/23 11:03	1
Chloroethane	0.32	U	1.0	0.32	ug/L			04/22/23 11:03	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			04/22/23 11:03	1

Client: RT Environmental Services, Inc.
Project/Site: Frankford Phase 2

Job ID: 460-278564-1

Client Sample ID: MW-3
Date Collected: 04/17/23 15:25
Date Received: 04/18/23 20:00

Lab Sample ID: 460-278564-3
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	4.4	U	5.0	4.4	ug/L			04/22/23 11:03	1
Carbon disulfide	0.82	U	1.0	0.82	ug/L			04/22/23 11:03	1
Trichlorofluoromethane	0.32	U	1.0	0.32	ug/L			04/22/23 11:03	1
1,1-Dichloroethene	0.26	U	1.0	0.26	ug/L			04/22/23 11:03	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			04/22/23 11:03	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			04/22/23 11:03	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			04/22/23 11:03	1
Chloroform	0.33	U	1.0	0.33	ug/L			04/22/23 11:03	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			04/22/23 11:03	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			04/22/23 11:03	1
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			04/22/23 11:03	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			04/22/23 11:03	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			04/22/23 11:03	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			04/22/23 11:03	1
cis-1,3-Dichloropropene	0.22	U	1.0	0.22	ug/L			04/22/23 11:03	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			04/22/23 11:03	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			04/22/23 11:03	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			04/22/23 11:03	1
Benzene	0.20	U	1.0	0.20	ug/L			04/22/23 11:03	1
trans-1,3-Dichloropropene	0.22	U	1.0	0.22	ug/L			04/22/23 11:03	1
Bromoform	0.54	U	1.0	0.54	ug/L			04/22/23 11:03	1
4-Methyl-2-pentanone (MIBK)	1.3	U	5.0	1.3	ug/L			04/22/23 11:03	1
2-Hexanone	1.1	U	5.0	1.1	ug/L			04/22/23 11:03	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			04/22/23 11:03	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			04/22/23 11:03	1
Toluene	0.38	U	1.0	0.38	ug/L			04/22/23 11:03	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			04/22/23 11:03	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			04/22/23 11:03	1
Styrene	0.42	U	1.0	0.42	ug/L			04/22/23 11:03	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			04/22/23 11:03	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			04/22/23 11:03	1
Methyl tert-butyl ether	0.22	U	1.0	0.22	ug/L			04/22/23 11:03	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			04/22/23 11:03	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			04/22/23 11:03	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			04/22/23 11:03	1
1,4-Dichlorobenzene	0.33	U	1.0	0.33	ug/L			04/22/23 11:03	1
1,2-Dichlorobenzene	0.21	U	1.0	0.21	ug/L			04/22/23 11:03	1
Naphthalene	0.88	U	1.0	0.88	ug/L			04/22/23 11:03	1
Dichlorodifluoromethane	0.31	U	1.0	0.31	ug/L			04/22/23 11:03	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			04/22/23 11:03	1
1,2,4-Trimethylbenzene	0.37	U	1.0	0.37	ug/L			04/22/23 11:03	1
1,2-Dibromo-3-Chloropropane	0.38	U	1.0	0.38	ug/L			04/22/23 11:03	1
1,3,5-Trimethylbenzene	0.33	U	1.0	0.33	ug/L			04/22/23 11:03	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			04/22/23 11:03	1
Methyl acetate	0.79	U	5.0	0.79	ug/L			04/22/23 11:03	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*04/22/23 11:03*	*1*

Client Sample ID: MW-3

Date Collected: 04/17/23 15:25
Date Received: 04/18/23 20:00

Lab Sample ID: 460-278564-3
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*70 - 128*		*04/22/23 11:03*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*04/22/23 11:03*	*1*
4-Bromofluorobenzene	*118*		*76 - 120*		*04/22/23 11:03*	*1*
Dibromofluoromethane (Surr)	*95*		*77 - 124*		*04/22/23 11:03*	*1*

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.30	U	1.2	0.30	ug/L		04/20/23 23:09	04/21/23 00:18	1
Cadmium	0.38	U	2.0	0.38	ug/L		04/20/23 23:09	04/21/23 00:18	1
Barium	**212**		4.0	0.93	ug/L		04/20/23 23:09	04/21/23 00:18	1
Arsenic	1.2	U	2.0	1.2	ug/L		04/20/23 23:09	04/21/23 00:18	1

Client Sample ID: MW-4

Date Collected: 04/17/23 13:00
Date Received: 04/18/23 20:00

Lab Sample ID: 460-278564-4
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	0.40	U	1.0	0.40	ug/L			04/22/23 11:28	1
Bromomethane	0.55	U	1.0	0.55	ug/L			04/22/23 11:28	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			04/22/23 11:28	1
Chloroethane	0.32	U	1.0	0.32	ug/L			04/22/23 11:28	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			04/22/23 11:28	1
Acetone	4.4	U	5.0	4.4	ug/L			04/22/23 11:28	1
Carbon disulfide	0.82	U	1.0	0.82	ug/L			04/22/23 11:28	1
Trichlorofluoromethane	0.32	U	1.0	0.32	ug/L			04/22/23 11:28	1
1,1-Dichloroethene	0.26	U	1.0	0.26	ug/L			04/22/23 11:28	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			04/22/23 11:28	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			04/22/23 11:28	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			04/22/23 11:28	1
Chloroform	0.33	U	1.0	0.33	ug/L			04/22/23 11:28	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			04/22/23 11:28	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			04/22/23 11:28	1
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			04/22/23 11:28	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			04/22/23 11:28	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			04/22/23 11:28	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			04/22/23 11:28	1
cis-1,3-Dichloropropene	0.22	U	1.0	0.22	ug/L			04/22/23 11:28	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			04/22/23 11:28	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			04/22/23 11:28	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			04/22/23 11:28	1
Benzene	0.20	U	1.0	0.20	ug/L			04/22/23 11:28	1
trans-1,3-Dichloropropene	0.22	U	1.0	0.22	ug/L			04/22/23 11:28	1
Bromoform	0.54	U	1.0	0.54	ug/L			04/22/23 11:28	1
4-Methyl-2-pentanone (MIBK)	1.3	U	5.0	1.3	ug/L			04/22/23 11:28	1
2-Hexanone	1.1	U	5.0	1.1	ug/L			04/22/23 11:28	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			04/22/23 11:28	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			04/22/23 11:28	1
Toluene	0.38	U	1.0	0.38	ug/L			04/22/23 11:28	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			04/22/23 11:28	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			04/22/23 11:28	1

Client Sample ID: MW-4

Date Collected: 04/17/23 13:00
Date Received: 04/18/23 20:00

Lab Sample ID: 460-278564-4

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	0.42	U	1.0	0.42	ug/L			04/22/23 11:28	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			04/22/23 11:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			04/22/23 11:28	1
Methyl tert-butyl ether	**0.30**	**J**	1.0	0.22	ug/L			04/22/23 11:28	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			04/22/23 11:28	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			04/22/23 11:28	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			04/22/23 11:28	1
1,4-Dichlorobenzene	0.33	U	1.0	0.33	ug/L			04/22/23 11:28	1
1,2-Dichlorobenzene	0.21	U	1.0	0.21	ug/L			04/22/23 11:28	1
Naphthalene	0.88	U	1.0	0.88	ug/L			04/22/23 11:28	1
Dichlorodifluoromethane	0.31	U	1.0	0.31	ug/L			04/22/23 11:28	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			04/22/23 11:28	1
1,2,4-Trimethylbenzene	0.37	U	1.0	0.37	ug/L			04/22/23 11:28	1
1,2-Dibromo-3-Chloropropane	0.38	U	1.0	0.38	ug/L			04/22/23 11:28	1
1,3,5-Trimethylbenzene	0.33	U	1.0	0.33	ug/L			04/22/23 11:28	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			04/22/23 11:28	1
Methyl acetate	0.79	U	5.0	0.79	ug/L			04/22/23 11:28	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*04/22/23 11:28*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*86*		*70 - 128*		*04/22/23 11:28*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*04/22/23 11:28*	*1*
4-Bromofluorobenzene	*108*		*76 - 120*		*04/22/23 11:28*	*1*
Dibromofluoromethane (Surr)	*91*		*77 - 124*		*04/22/23 11:28*	*1*

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.30	U	1.2	0.30	ug/L		04/20/23 23:09	04/21/23 00:21	1
Cadmium	0.38	U	2.0	0.38	ug/L		04/20/23 23:09	04/21/23 00:21	1
Barium	**550**		4.0	0.93	ug/L		04/20/23 23:09	04/21/23 00:21	1
Arsenic	1.2	U	2.0	1.2	ug/L		04/20/23 23:09	04/21/23 00:21	1

Client Sample ID: MW-5

Date Collected: 04/17/23 11:55
Date Received: 04/18/23 20:00

Lab Sample ID: 460-278564-5

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	0.40	U	1.0	0.40	ug/L			04/22/23 11:53	1
Bromomethane	0.55	U	1.0	0.55	ug/L			04/22/23 11:53	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			04/22/23 11:53	1
Chloroethane	0.32	U	1.0	0.32	ug/L			04/22/23 11:53	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			04/22/23 11:53	1
Acetone	4.4	U	5.0	4.4	ug/L			04/22/23 11:53	1
Carbon disulfide	0.82	U	1.0	0.82	ug/L			04/22/23 11:53	1
Trichlorofluoromethane	0.32	U	1.0	0.32	ug/L			04/22/23 11:53	1
1,1-Dichloroethene	0.26	U	1.0	0.26	ug/L			04/22/23 11:53	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			04/22/23 11:53	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			04/22/23 11:53	1

Client: RT Environmental Services, Inc.
Project/Site: Frankford Phase 2

Job ID: 460-278564-1

Client Sample ID: MW-5
Date Collected: 04/17/23 11:55
Date Received: 04/18/23 20:00

Lab Sample ID: 460-278564-5
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**1.4**		1.0	0.22	ug/L			04/22/23 11:53	1
Chloroform	**1.4**		1.0	0.33	ug/L			04/22/23 11:53	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			04/22/23 11:53	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			04/22/23 11:53	1
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			04/22/23 11:53	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			04/22/23 11:53	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			04/22/23 11:53	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			04/22/23 11:53	1
cis-1,3-Dichloropropene	0.22	U	1.0	0.22	ug/L			04/22/23 11:53	1
Trichloroethene	**1.9**		1.0	0.31	ug/L			04/22/23 11:53	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			04/22/23 11:53	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			04/22/23 11:53	1
Benzene	0.20	U	1.0	0.20	ug/L			04/22/23 11:53	1
trans-1,3-Dichloropropene	0.22	U	1.0	0.22	ug/L			04/22/23 11:53	1
Bromoform	0.54	U	1.0	0.54	ug/L			04/22/23 11:53	1
4-Methyl-2-pentanone (MIBK)	1.3	U	5.0	1.3	ug/L			04/22/23 11:53	1
2-Hexanone	1.1	U	5.0	1.1	ug/L			04/22/23 11:53	1
Tetrachloroethene	**25**		1.0	0.25	ug/L			04/22/23 11:53	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			04/22/23 11:53	1
Toluene	0.38	U	1.0	0.38	ug/L			04/22/23 11:53	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			04/22/23 11:53	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			04/22/23 11:53	1
Styrene	0.42	U	1.0	0.42	ug/L			04/22/23 11:53	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			04/22/23 11:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			04/22/23 11:53	1
Methyl tert-butyl ether	0.22	U	1.0	0.22	ug/L			04/22/23 11:53	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			04/22/23 11:53	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			04/22/23 11:53	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			04/22/23 11:53	1
1,4-Dichlorobenzene	0.33	U	1.0	0.33	ug/L			04/22/23 11:53	1
1,2-Dichlorobenzene	0.21	U	1.0	0.21	ug/L			04/22/23 11:53	1
Naphthalene	0.88	U	1.0	0.88	ug/L			04/22/23 11:53	1
Dichlorodifluoromethane	0.31	U	1.0	0.31	ug/L			04/22/23 11:53	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			04/22/23 11:53	1
1,2,4-Trimethylbenzene	0.37	U	1.0	0.37	ug/L			04/22/23 11:53	1
1,2-Dibromo-3-Chloropropane	0.38	U	1.0	0.38	ug/L			04/22/23 11:53	1
1,3,5-Trimethylbenzene	0.33	U	1.0	0.33	ug/L			04/22/23 11:53	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			04/22/23 11:53	1
Methyl acetate	0.79	U	5.0	0.79	ug/L			04/22/23 11:53	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*04/22/23 11:53*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*70 - 128*		*04/22/23 11:53*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*04/22/23 11:53*	*1*
4-Bromofluorobenzene	*107*		*76 - 120*		*04/22/23 11:53*	*1*
Dibromofluoromethane (Surr)	*91*		*77 - 124*		*04/22/23 11:53*	*1*

Client Sample Results

Client: RT Environmental Services, Inc.
Project/Site: Frankford Phase 2

Job ID: 460-278564-1

Client Sample ID: MW-5
Date Collected: 04/17/23 11:55
Date Received: 04/18/23 20:00

Lab Sample ID: 460-278564-5
Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**1.6**		1.2	0.30	ug/L		04/20/23 23:09	04/21/23 00:23	1
Cadmium	0.38	U	2.0	0.38	ug/L		04/20/23 23:09	04/21/23 00:23	1
Barium	**173**		4.0	0.93	ug/L		04/20/23 23:09	04/21/23 00:23	1
Arsenic	1.2	U	2.0	1.2	ug/L		04/20/23 23:09	04/21/23 00:23	1

Lab Chronicle

Client: RT Environmental Services, Inc.
Project/Site: Frankford Phase 2

Job ID: 460-278564-1

Client Sample ID: MW-1
Date Collected: 04/17/23 09:50
Date Received: 04/18/23 20:00

Lab Sample ID: 460-278564-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	904554	KLB	EET EDI	04/22/23 10:13
Dissolved	Filtration	FILTRATION			904335	VAD	EET EDI	04/20/23 23:05
Dissolved	Prep	3005A			904336	VAD	EET EDI	04/20/23 23:09
Dissolved	Analysis	6020B		1	904236	CDC	EET EDI	04/21/23 00:14

Client Sample ID: MW-2
Date Collected: 04/17/23 14:00
Date Received: 04/18/23 20:00

Lab Sample ID: 460-278564-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	904796	CJM	EET EDI	04/24/23 12:07
Dissolved	Filtration	FILTRATION			904335	VAD	EET EDI	04/20/23 23:05
Dissolved	Prep	3005A			904336	VAD	EET EDI	04/20/23 23:09
Dissolved	Analysis	6020B		1	904236	CDC	EET EDI	04/21/23 00:16

Client Sample ID: MW-3
Date Collected: 04/17/23 15:25
Date Received: 04/18/23 20:00

Lab Sample ID: 460-278564-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	904554	KLB	EET EDI	04/22/23 11:03
Dissolved	Filtration	FILTRATION			904335	VAD	EET EDI	04/20/23 23:05
Dissolved	Prep	3005A			904336	VAD	EET EDI	04/20/23 23:09
Dissolved	Analysis	6020B		1	904236	CDC	EET EDI	04/21/23 00:18

Client Sample ID: MW-4
Date Collected: 04/17/23 13:00
Date Received: 04/18/23 20:00

Lab Sample ID: 460-278564-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	904554	KLB	EET EDI	04/22/23 11:28
Dissolved	Filtration	FILTRATION			904335	VAD	EET EDI	04/20/23 23:05
Dissolved	Prep	3005A			904336	VAD	EET EDI	04/20/23 23:09
Dissolved	Analysis	6020B		1	904236	CDC	EET EDI	04/21/23 00:21

Client Sample ID: MW-5
Date Collected: 04/17/23 11:55
Date Received: 04/18/23 20:00

Lab Sample ID: 460-278564-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	904554	KLB	EET EDI	04/22/23 11:53
Dissolved	Filtration	FILTRATION			904335	VAD	EET EDI	04/20/23 23:05
Dissolved	Prep	3005A			904336	VAD	EET EDI	04/20/23 23:09
Dissolved	Analysis	6020B		1	904236	CDC	EET EDI	04/21/23 00:23

Lab Chronicle

Client: RT Environmental Services, Inc.
Project/Site: Frankford Phase 2

Job ID: 460-278564-1

Laboratory References:

EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Accreditation/Certification Summary

Client: RT Environmental Services, Inc. Job ID: 460-278564-1
Project/Site: Frankford Phase 2

Laboratory: Eurofins Edison

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0818	01-30-24
DE Haz. Subst. Cleanup Act (HSCA)	State	N/A	01-01-24
Georgia	State	12028 (NJ)	06-30-23
Massachusetts	State	M-NJ312	06-30-23
New Jersey	NELAP	12028	06-30-23
New York	NELAP	11452	04-01-24
Pennsylvania	NELAP	68-00522	03-01-24
Rhode Island	State	LAO00376	12-30-23
USDA	US Federal Programs	P330-20-00244	11-03-23

Method Summary

Client: RT Environmental Services, Inc.
Project/Site: Frankford Phase 2

Job ID: 460-278564-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET EDI
6020B	Metals (ICP/MS)	SW846	EET EDI
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET EDI
5030C	Purge and Trap	SW846	EET EDI
FILTRATION	Sample Filtration	None	EET EDI

Protocol References:

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Sample Summary

Client: RT Environmental Services, Inc.
Project/Site: Frankford Phase 2

Job ID: 460-278564-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-278564-1	MW-1	Water	04/17/23 09:50	04/18/23 20:00
460-278564-2	MW-2	Water	04/17/23 14:00	04/18/23 20:00
460-278564-3	MW-3	Water	04/17/23 15:25	04/18/23 20:00
460-278564-4	MW-4	Water	04/17/23 13:00	04/18/23 20:00
460-278564-5	MW-5	Water	04/17/23 11:55	04/18/23 20:00

Chain of Custody Record

620265

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Address: _____

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TAL-8210

Client Contact	Project Manager: Walter Hungarter	Site Contact:	Date:	COC No:
Company Name: RI Environmental Services	Tel/Email: WHungarter@rienv.com	Lab Contact:	Carrier:	_____ of _____ COCs
Address: 215 N Church Road	Analysis Turnaround Time			Sampler:
City/State/Zip: King of Prussia PA 19406	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 610-265-1570	TAT if different from Below _____			Walk-in Client:
Fax:	☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day			Lab Sampling:
Project Name: Frankford Phase 2				Job / SDG No.: 278564
Site: Frankford Ave Philadelphia PA				
PO # 73539-04-03				

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	VOCs	Dissolved Lead	Dissolved Arsenic	Dissolved Cadmium	Dissolved Barium	Sample Specific Notes:
MW-1	4/17/23	9:50	G	GW	6			X	X	X	X	X	LAB Filtered
MW-2		14:00						X	X	X	X	X	LAB Filtered
MW-3		15:25						X	X	X	X	X	Lab Filtered
MW-4		13:00						X	X	X	X	X	Lab Filtered
MW-5		11:55						X	X	X	X	X	Lab Filtered

460-278564 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments:
Please send results to kramer@rienv.com and whungarter@rienv.com

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	RI ENV	4/17/23 5:10		EETN-KOP	4/18/23 902
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	EETN-KOP	4/18/23			4/18/23 1851
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
		4/8 2000	Angela Casalka	EAEd	4/18/23 20:00

4/25/2023

TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 278564

Number of Coolers: 1 IR Gun # 2

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	2.4 °C	2.4 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	°C	°C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

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.*

Initials: SK Date: 4/18/23

Login Sample Receipt Checklist

Client: RT Environmental Services, Inc.

Job Number: 460-278564-1

Login Number: 278564
List Number: 1
Creator: Rivera, Kenneth

List Source: Eurofins Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
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	
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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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1 2 3 4 5 6 7 8 9 10 11

ANALYTICAL REPORT

PREPARED FOR

Attn: Walter Hungarter
RT Environmental Services, Inc.
215 West Church Road
Suite 300
King of Prussia, Pennsylvania 19406

Generated 5/12/2023 3:27:13 PM

JOB DESCRIPTION

Frankford Phase 2

JOB NUMBER

460-279729-1

Eurofins Edison
777 New Durham Road
Edison NJ 08817

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



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5/12/2023 3:27:13 PM

Authorized for release by
Jill Miller, Senior Project Manager
Jill.Miller@et.eurofinsus.com
(484)802-0929

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Definitions/Glossary

Client: RT Environmental Services, Inc.
Project/Site: Frankford Phase 2

Job ID: 460-279729-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 460-279729-1

Laboratory: Eurofins Edison

Narrative

Job Narrative
460-279729-1

Comments
No additional comments.

Receipt
The samples were received on 5/5/2023 7:00 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.0º C.

GC/MS VOA
Method 8260D: Four surrogates are used for this analysis. The laboratory's SOP allows one of these surrogates to be outside acceptance criteria without performing re-analysis. The following samples contained an allowable number of surrogate compounds outside limits: MW-4 (460-279729-4) and MW-5 (460-279729-5). The results have been reported and qualified.

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.

Field Service / Mobile Lab
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.

Client: RT Environmental Services, Inc.
Project/Site: Frankford Phase 2

Job ID: 460-279729-1

Client Sample ID: MW-1

Date Collected: 05/04/23 09:47
Date Received: 05/05/23 19:00

Lab Sample ID: 460-279729-1

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	0.40	U	1.0	0.40	ug/L			05/09/23 22:45	1
Bromomethane	0.55	U	1.0	0.55	ug/L			05/09/23 22:45	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			05/09/23 22:45	1
Chloroethane	0.32	U	1.0	0.32	ug/L			05/09/23 22:45	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			05/09/23 22:45	1
Acetone	4.4	U	5.0	4.4	ug/L			05/09/23 22:45	1
Carbon disulfide	0.82	U	1.0	0.82	ug/L			05/09/23 22:45	1
Trichlorofluoromethane	0.32	U	1.0	0.32	ug/L			05/09/23 22:45	1
1,1-Dichloroethene	0.26	U	1.0	0.26	ug/L			05/09/23 22:45	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			05/09/23 22:45	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			05/09/23 22:45	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			05/09/23 22:45	1
Chloroform	**5.5**		1.0	0.33	ug/L			05/09/23 22:45	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			05/09/23 22:45	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			05/09/23 22:45	1
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			05/09/23 22:45	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			05/09/23 22:45	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			05/09/23 22:45	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			05/09/23 22:45	1
cis-1,3-Dichloropropene	0.22	U	1.0	0.22	ug/L			05/09/23 22:45	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			05/09/23 22:45	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			05/09/23 22:45	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			05/09/23 22:45	1
Benzene	0.20	U	1.0	0.20	ug/L			05/09/23 22:45	1
trans-1,3-Dichloropropene	0.22	U	1.0	0.22	ug/L			05/09/23 22:45	1
Bromoform	0.54	U	1.0	0.54	ug/L			05/09/23 22:45	1
4-Methyl-2-pentanone (MIBK)	1.3	U	5.0	1.3	ug/L			05/09/23 22:45	1
2-Hexanone	1.1	U	5.0	1.1	ug/L			05/09/23 22:45	1
Tetrachloroethene	**1.3**		1.0	0.25	ug/L			05/09/23 22:45	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			05/09/23 22:45	1
Toluene	0.38	U	1.0	0.38	ug/L			05/09/23 22:45	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			05/09/23 22:45	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			05/09/23 22:45	1
Styrene	0.42	U	1.0	0.42	ug/L			05/09/23 22:45	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			05/09/23 22:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			05/09/23 22:45	1
Methyl tert-butyl ether	0.22	U	1.0	0.22	ug/L			05/09/23 22:45	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			05/09/23 22:45	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			05/09/23 22:45	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			05/09/23 22:45	1
1,4-Dichlorobenzene	0.33	U	1.0	0.33	ug/L			05/09/23 22:45	1
1,2-Dichlorobenzene	0.21	U	1.0	0.21	ug/L			05/09/23 22:45	1
Naphthalene	0.88	U	1.0	0.88	ug/L			05/09/23 22:45	1
Dichlorodifluoromethane	0.31	U	1.0	0.31	ug/L			05/09/23 22:45	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			05/09/23 22:45	1
1,2,4-Trimethylbenzene	0.37	U	1.0	0.37	ug/L			05/09/23 22:45	1
1,2-Dibromo-3-Chloropropane	0.38	U	1.0	0.38	ug/L			05/09/23 22:45	1
1,3,5-Trimethylbenzene	0.33	U	1.0	0.33	ug/L			05/09/23 22:45	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			05/09/23 22:45	1

Client Sample ID: MW-1

Date Collected: 05/04/23 09:47
Date Received: 05/05/23 19:00

Lab Sample ID: 460-279729-1
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl acetate	0.79	U	5.0	0.79	ug/L			05/09/23 22:45	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*05/09/23 22:45*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 128*		*05/09/23 22:45*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*05/09/23 22:45*	*1*
4-Bromofluorobenzene	*88*		*76 - 120*		*05/09/23 22:45*	*1*
Dibromofluoromethane (Surr)	*102*		*77 - 124*		*05/09/23 22:45*	*1*

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.30	U	1.2	0.30	ug/L		05/11/23 23:45	05/12/23 02:45	1
Cadmium	0.38	U	2.0	0.38	ug/L		05/11/23 23:45	05/12/23 02:45	1
Barium	**246**		4.0	0.93	ug/L		05/11/23 23:45	05/12/23 02:45	1
Arsenic	1.2	U	2.0	1.2	ug/L		05/11/23 23:45	05/12/23 02:45	1

Client Sample ID: MW-2

Date Collected: 05/04/23 13:35
Date Received: 05/05/23 19:00

Lab Sample ID: 460-279729-2
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	0.40	U	1.0	0.40	ug/L			05/09/23 23:06	1
Bromomethane	0.55	U	1.0	0.55	ug/L			05/09/23 23:06	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			05/09/23 23:06	1
Chloroethane	0.32	U	1.0	0.32	ug/L			05/09/23 23:06	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			05/09/23 23:06	1
Acetone	4.4	U	5.0	4.4	ug/L			05/09/23 23:06	1
Carbon disulfide	0.82	U	1.0	0.82	ug/L			05/09/23 23:06	1
Trichlorofluoromethane	0.32	U	1.0	0.32	ug/L			05/09/23 23:06	1
1,1-Dichloroethene	0.26	U	1.0	0.26	ug/L			05/09/23 23:06	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			05/09/23 23:06	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			05/09/23 23:06	1
cis-1,2-Dichloroethene	**0.84**	**J**	1.0	0.22	ug/L			05/09/23 23:06	1
Chloroform	0.33	U	1.0	0.33	ug/L			05/09/23 23:06	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			05/09/23 23:06	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			05/09/23 23:06	1
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			05/09/23 23:06	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			05/09/23 23:06	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			05/09/23 23:06	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			05/09/23 23:06	1
cis-1,3-Dichloropropene	0.22	U	1.0	0.22	ug/L			05/09/23 23:06	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			05/09/23 23:06	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			05/09/23 23:06	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			05/09/23 23:06	1
Benzene	0.20	U	1.0	0.20	ug/L			05/09/23 23:06	1
trans-1,3-Dichloropropene	0.22	U	1.0	0.22	ug/L			05/09/23 23:06	1
Bromoform	0.54	U	1.0	0.54	ug/L			05/09/23 23:06	1
4-Methyl-2-pentanone (MIBK)	1.3	U	5.0	1.3	ug/L			05/09/23 23:06	1

Client Sample ID: MW-2

Date Collected: 05/04/23 13:35
Date Received: 05/05/23 19:00

Lab Sample ID: 460-279729-2
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Hexanone	1.1	U	5.0	1.1	ug/L			05/09/23 23:06	1
Tetrachloroethene	**0.52**	**J**	1.0	0.25	ug/L			05/09/23 23:06	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			05/09/23 23:06	1
Toluene	0.38	U	1.0	0.38	ug/L			05/09/23 23:06	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			05/09/23 23:06	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			05/09/23 23:06	1
Styrene	0.42	U	1.0	0.42	ug/L			05/09/23 23:06	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			05/09/23 23:06	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			05/09/23 23:06	1
Methyl tert-butyl ether	0.22	U	1.0	0.22	ug/L			05/09/23 23:06	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			05/09/23 23:06	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			05/09/23 23:06	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			05/09/23 23:06	1
1,4-Dichlorobenzene	0.33	U	1.0	0.33	ug/L			05/09/23 23:06	1
1,2-Dichlorobenzene	0.21	U	1.0	0.21	ug/L			05/09/23 23:06	1
Naphthalene	0.88	U	1.0	0.88	ug/L			05/09/23 23:06	1
Dichlorodifluoromethane	0.31	U	1.0	0.31	ug/L			05/09/23 23:06	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			05/09/23 23:06	1
1,2,4-Trimethylbenzene	0.37	U	1.0	0.37	ug/L			05/09/23 23:06	1
1,2-Dibromo-3-Chloropropane	0.38	U	1.0	0.38	ug/L			05/09/23 23:06	1
1,3,5-Trimethylbenzene	0.33	U	1.0	0.33	ug/L			05/09/23 23:06	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			05/09/23 23:06	1
Methyl acetate	0.79	U	5.0	0.79	ug/L			05/09/23 23:06	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*05/09/23 23:06*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*122*		*70 - 128*		*05/09/23 23:06*	*1*
Toluene-d8 (Surr)	*114*		*80 - 120*		*05/09/23 23:06*	*1*
4-Bromofluorobenzene	*97*		*76 - 120*		*05/09/23 23:06*	*1*
Dibromofluoromethane (Surr)	*119*		*77 - 124*		*05/09/23 23:06*	*1*

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.30	U	1.2	0.30	ug/L		05/11/23 23:45	05/12/23 02:47	1
Cadmium	**0.54**	**J**	2.0	0.38	ug/L		05/11/23 23:45	05/12/23 02:47	1
Barium	**201**		4.0	0.93	ug/L		05/11/23 23:45	05/12/23 02:47	1
Arsenic	1.2	U	2.0	1.2	ug/L		05/11/23 23:45	05/12/23 02:47	1

Client Sample ID: MW-3

Date Collected: 05/04/23 14:47
Date Received: 05/05/23 19:00

Lab Sample ID: 460-279729-3
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	0.40	U	1.0	0.40	ug/L			05/09/23 23:27	1
Bromomethane	0.55	U	1.0	0.55	ug/L			05/09/23 23:27	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			05/09/23 23:27	1
Chloroethane	0.32	U	1.0	0.32	ug/L			05/09/23 23:27	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			05/09/23 23:27	1

Client: RT Environmental Services, Inc.
Project/Site: Frankford Phase 2

Job ID: 460-279729-1

Client Sample ID: MW-3
Date Collected: 05/04/23 14:47
Date Received: 05/05/23 19:00

Lab Sample ID: 460-279729-3
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	4.4	U	5.0	4.4	ug/L			05/09/23 23:27	1
Carbon disulfide	0.82	U	1.0	0.82	ug/L			05/09/23 23:27	1
Trichlorofluoromethane	0.32	U	1.0	0.32	ug/L			05/09/23 23:27	1
1,1-Dichloroethene	0.26	U	1.0	0.26	ug/L			05/09/23 23:27	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			05/09/23 23:27	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			05/09/23 23:27	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			05/09/23 23:27	1
Chloroform	0.33	U	1.0	0.33	ug/L			05/09/23 23:27	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			05/09/23 23:27	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			05/09/23 23:27	1
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			05/09/23 23:27	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			05/09/23 23:27	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			05/09/23 23:27	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			05/09/23 23:27	1
cis-1,3-Dichloropropene	0.22	U	1.0	0.22	ug/L			05/09/23 23:27	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			05/09/23 23:27	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			05/09/23 23:27	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			05/09/23 23:27	1
Benzene	0.20	U	1.0	0.20	ug/L			05/09/23 23:27	1
trans-1,3-Dichloropropene	0.22	U	1.0	0.22	ug/L			05/09/23 23:27	1
Bromoform	0.54	U	1.0	0.54	ug/L			05/09/23 23:27	1
4-Methyl-2-pentanone (MIBK)	1.3	U	5.0	1.3	ug/L			05/09/23 23:27	1
2-Hexanone	1.1	U	5.0	1.1	ug/L			05/09/23 23:27	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			05/09/23 23:27	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			05/09/23 23:27	1
Toluene	0.38	U	1.0	0.38	ug/L			05/09/23 23:27	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			05/09/23 23:27	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			05/09/23 23:27	1
Styrene	0.42	U	1.0	0.42	ug/L			05/09/23 23:27	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			05/09/23 23:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			05/09/23 23:27	1
Methyl tert-butyl ether	0.22	U	1.0	0.22	ug/L			05/09/23 23:27	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			05/09/23 23:27	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			05/09/23 23:27	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			05/09/23 23:27	1
1,4-Dichlorobenzene	0.33	U	1.0	0.33	ug/L			05/09/23 23:27	1
1,2-Dichlorobenzene	0.21	U	1.0	0.21	ug/L			05/09/23 23:27	1
Naphthalene	0.88	U	1.0	0.88	ug/L			05/09/23 23:27	1
Dichlorodifluoromethane	0.31	U	1.0	0.31	ug/L			05/09/23 23:27	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			05/09/23 23:27	1
1,2,4-Trimethylbenzene	0.37	U	1.0	0.37	ug/L			05/09/23 23:27	1
1,2-Dibromo-3-Chloropropane	0.38	U	1.0	0.38	ug/L			05/09/23 23:27	1
1,3,5-Trimethylbenzene	0.33	U	1.0	0.33	ug/L			05/09/23 23:27	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			05/09/23 23:27	1
Methyl acetate	0.79	U	5.0	0.79	ug/L			05/09/23 23:27	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*05/09/23 23:27*	*1*

Client Sample ID: MW-3

Lab Sample ID: 460-279729-3

Date Collected: 05/04/23 14:47

Matrix: Water

Date Received: 05/05/23 19:00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*120*		*70 - 128*		*05/09/23 23:27*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*05/09/23 23:27*	*1*
4-Bromofluorobenzene	*80*		*76 - 120*		*05/09/23 23:27*	*1*
Dibromofluoromethane (Surr)	*110*		*77 - 124*		*05/09/23 23:27*	*1*

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.30	U	1.2	0.30	ug/L		05/11/23 23:45	05/12/23 02:52	1
Cadmium	0.38	U	2.0	0.38	ug/L		05/11/23 23:45	05/12/23 02:52	1
Barium	**248**		4.0	0.93	ug/L		05/11/23 23:45	05/12/23 02:52	1
Arsenic	1.2	U	2.0	1.2	ug/L		05/11/23 23:45	05/12/23 02:52	1

Client Sample ID: MW-4

Lab Sample ID: 460-279729-4

Date Collected: 05/04/23 12:09

Matrix: Water

Date Received: 05/05/23 19:00

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	0.40	U	1.0	0.40	ug/L			05/09/23 23:48	1
Bromomethane	0.55	U	1.0	0.55	ug/L			05/09/23 23:48	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			05/09/23 23:48	1
Chloroethane	0.32	U	1.0	0.32	ug/L			05/09/23 23:48	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			05/09/23 23:48	1
Acetone	4.4	U	5.0	4.4	ug/L			05/09/23 23:48	1
Carbon disulfide	0.82	U	1.0	0.82	ug/L			05/09/23 23:48	1
Trichlorofluoromethane	0.32	U	1.0	0.32	ug/L			05/09/23 23:48	1
1,1-Dichloroethene	0.26	U	1.0	0.26	ug/L			05/09/23 23:48	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			05/09/23 23:48	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			05/09/23 23:48	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			05/09/23 23:48	1
Chloroform	0.33	U	1.0	0.33	ug/L			05/09/23 23:48	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			05/09/23 23:48	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			05/09/23 23:48	1
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			05/09/23 23:48	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			05/09/23 23:48	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			05/09/23 23:48	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			05/09/23 23:48	1
cis-1,3-Dichloropropene	0.22	U	1.0	0.22	ug/L			05/09/23 23:48	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			05/09/23 23:48	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			05/09/23 23:48	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			05/09/23 23:48	1
Benzene	0.20	U	1.0	0.20	ug/L			05/09/23 23:48	1
trans-1,3-Dichloropropene	0.22	U	1.0	0.22	ug/L			05/09/23 23:48	1
Bromoform	0.54	U	1.0	0.54	ug/L			05/09/23 23:48	1
4-Methyl-2-pentanone (MIBK)	1.3	U	5.0	1.3	ug/L			05/09/23 23:48	1
2-Hexanone	1.1	U	5.0	1.1	ug/L			05/09/23 23:48	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			05/09/23 23:48	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			05/09/23 23:48	1
Toluene	0.38	U	1.0	0.38	ug/L			05/09/23 23:48	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			05/09/23 23:48	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			05/09/23 23:48	1

Client Sample ID: MW-4

Lab Sample ID: 460-279729-4

Date Collected: 05/04/23 12:09

Matrix: Water

Date Received: 05/05/23 19:00

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	0.42	U	1.0	0.42	ug/L			05/09/23 23:48	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			05/09/23 23:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			05/09/23 23:48	1
Methyl tert-butyl ether	**0.25**	**J**	1.0	0.22	ug/L			05/09/23 23:48	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			05/09/23 23:48	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			05/09/23 23:48	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			05/09/23 23:48	1
1,4-Dichlorobenzene	0.33	U	1.0	0.33	ug/L			05/09/23 23:48	1
1,2-Dichlorobenzene	0.21	U	1.0	0.21	ug/L			05/09/23 23:48	1
Naphthalene	0.88	U	1.0	0.88	ug/L			05/09/23 23:48	1
Dichlorodifluoromethane	0.31	U	1.0	0.31	ug/L			05/09/23 23:48	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			05/09/23 23:48	1
1,2,4-Trimethylbenzene	0.37	U	1.0	0.37	ug/L			05/09/23 23:48	1
1,2-Dibromo-3-Chloropropane	0.38	U	1.0	0.38	ug/L			05/09/23 23:48	1
1,3,5-Trimethylbenzene	0.33	U	1.0	0.33	ug/L			05/09/23 23:48	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			05/09/23 23:48	1
Methyl acetate	0.79	U	5.0	0.79	ug/L			05/09/23 23:48	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*05/09/23 23:48*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 128*		*05/09/23 23:48*	*1*
Toluene-d8 (Surr)	*125*	*S1+*	*80 - 120*		*05/09/23 23:48*	*1*
4-Bromofluorobenzene	*91*		*76 - 120*		*05/09/23 23:48*	*1*
Dibromofluoromethane (Surr)	*110*		*77 - 124*		*05/09/23 23:48*	*1*

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.30	U	1.2	0.30	ug/L		05/11/23 21:51	05/12/23 00:38	1
Cadmium	0.38	U	2.0	0.38	ug/L		05/11/23 21:51	05/12/23 00:38	1
Barium	**749**		4.0	0.93	ug/L		05/11/23 21:51	05/12/23 00:38	1
Arsenic	**2.2**		2.0	1.2	ug/L		05/11/23 21:51	05/12/23 00:38	1

Client Sample ID: MW-5

Lab Sample ID: 460-279729-5

Date Collected: 05/04/23 11:23

Matrix: Water

Date Received: 05/05/23 19:00

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	0.40	U	1.0	0.40	ug/L			05/10/23 00:09	1
Bromomethane	0.55	U	1.0	0.55	ug/L			05/10/23 00:09	1
Vinyl chloride	**0.41**	**J**	1.0	0.17	ug/L			05/10/23 00:09	1
Chloroethane	0.32	U	1.0	0.32	ug/L			05/10/23 00:09	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			05/10/23 00:09	1
Acetone	4.4	U	5.0	4.4	ug/L			05/10/23 00:09	1
Carbon disulfide	0.82	U	1.0	0.82	ug/L			05/10/23 00:09	1
Trichlorofluoromethane	0.32	U	1.0	0.32	ug/L			05/10/23 00:09	1
1,1-Dichloroethene	0.26	U	1.0	0.26	ug/L			05/10/23 00:09	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			05/10/23 00:09	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			05/10/23 00:09	1

Client: RT Environmental Services, Inc.
Project/Site: Frankford Phase 2

Job ID: 460-279729-1

Client Sample ID: MW-5
Date Collected: 05/04/23 11:23
Date Received: 05/05/23 19:00

Lab Sample ID: 460-279729-5
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**1.6**		1.0	0.22	ug/L			05/10/23 00:09	1
Chloroform	**1.6**		1.0	0.33	ug/L			05/10/23 00:09	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			05/10/23 00:09	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			05/10/23 00:09	1
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			05/10/23 00:09	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			05/10/23 00:09	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			05/10/23 00:09	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			05/10/23 00:09	1
cis-1,3-Dichloropropene	0.22	U	1.0	0.22	ug/L			05/10/23 00:09	1
Trichloroethene	**2.1**		1.0	0.31	ug/L			05/10/23 00:09	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			05/10/23 00:09	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			05/10/23 00:09	1
Benzene	0.20	U	1.0	0.20	ug/L			05/10/23 00:09	1
trans-1,3-Dichloropropene	0.22	U	1.0	0.22	ug/L			05/10/23 00:09	1
Bromoform	0.54	U	1.0	0.54	ug/L			05/10/23 00:09	1
4-Methyl-2-pentanone (MIBK)	1.3	U	5.0	1.3	ug/L			05/10/23 00:09	1
2-Hexanone	1.1	U	5.0	1.1	ug/L			05/10/23 00:09	1
Tetrachloroethene	**30**		1.0	0.25	ug/L			05/10/23 00:09	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			05/10/23 00:09	1
Toluene	0.38	U	1.0	0.38	ug/L			05/10/23 00:09	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			05/10/23 00:09	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			05/10/23 00:09	1
Styrene	0.42	U	1.0	0.42	ug/L			05/10/23 00:09	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			05/10/23 00:09	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			05/10/23 00:09	1
Methyl tert-butyl ether	0.22	U	1.0	0.22	ug/L			05/10/23 00:09	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			05/10/23 00:09	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			05/10/23 00:09	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			05/10/23 00:09	1
1,4-Dichlorobenzene	0.33	U	1.0	0.33	ug/L			05/10/23 00:09	1
1,2-Dichlorobenzene	0.21	U	1.0	0.21	ug/L			05/10/23 00:09	1
Naphthalene	0.88	U	1.0	0.88	ug/L			05/10/23 00:09	1
Dichlorodifluoromethane	0.31	U	1.0	0.31	ug/L			05/10/23 00:09	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			05/10/23 00:09	1
1,2,4-Trimethylbenzene	0.37	U	1.0	0.37	ug/L			05/10/23 00:09	1
1,2-Dibromo-3-Chloropropane	0.38	U	1.0	0.38	ug/L			05/10/23 00:09	1
1,3,5-Trimethylbenzene	0.33	U	1.0	0.33	ug/L			05/10/23 00:09	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			05/10/23 00:09	1
Methyl acetate	0.79	U	5.0	0.79	ug/L			05/10/23 00:09	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*05/10/23 00:09*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 128*		*05/10/23 00:09*	*1*
Toluene-d8 (Surr)	*128*	*S1+*	*80 - 120*		*05/10/23 00:09*	*1*
4-Bromofluorobenzene	*92*		*76 - 120*		*05/10/23 00:09*	*1*
Dibromofluoromethane (Surr)	*111*		*77 - 124*		*05/10/23 00:09*	*1*

Client Sample Results

Client: RT Environmental Services, Inc.
Project/Site: Frankford Phase 2

Job ID: 460-279729-1

Client Sample ID: MW-5

Date Collected: 05/04/23 11:23
Date Received: 05/05/23 19:00

Lab Sample ID: 460-279729-5

Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**2.0**		1.2	0.30	ug/L		05/11/23 21:51	05/12/23 00:43	1
Cadmium	0.38	U	2.0	0.38	ug/L		05/11/23 21:51	05/12/23 00:43	1
Barium	**157**		4.0	0.93	ug/L		05/11/23 21:51	05/12/23 00:43	1
Arsenic	1.2	U	2.0	1.2	ug/L		05/11/23 21:51	05/12/23 00:43	1

Lab Chronicle

Client: RT Environmental Services, Inc.
Project/Site: Frankford Phase 2

Job ID: 460-279729-1

Client Sample ID: MW-1
Date Collected: 05/04/23 09:47
Date Received: 05/05/23 19:00

Lab Sample ID: 460-279729-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	908063	KLB	EET EDI	05/09/23 22:45
Dissolved	Prep	3005A			908680	VAD	EET EDI	05/11/23 23:45
Dissolved	Analysis	6020B		1	908622	CDC	EET EDI	05/12/23 02:45

Client Sample ID: MW-2
Date Collected: 05/04/23 13:35
Date Received: 05/05/23 19:00

Lab Sample ID: 460-279729-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	908063	KLB	EET EDI	05/09/23 23:06
Dissolved	Prep	3005A			908680	VAD	EET EDI	05/11/23 23:45
Dissolved	Analysis	6020B		1	908622	CDC	EET EDI	05/12/23 02:47

Client Sample ID: MW-3
Date Collected: 05/04/23 14:47
Date Received: 05/05/23 19:00

Lab Sample ID: 460-279729-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	908063	KLB	EET EDI	05/09/23 23:27
Dissolved	Prep	3005A			908680	VAD	EET EDI	05/11/23 23:45
Dissolved	Analysis	6020B		1	908622	CDC	EET EDI	05/12/23 02:52

Client Sample ID: MW-4
Date Collected: 05/04/23 12:09
Date Received: 05/05/23 19:00

Lab Sample ID: 460-279729-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	908063	KLB	EET EDI	05/09/23 23:48
Dissolved	Prep	3005A			908659	VAD	EET EDI	05/11/23 21:51
Dissolved	Analysis	6020B		1	908622	CDC	EET EDI	05/12/23 00:38

Client Sample ID: MW-5
Date Collected: 05/04/23 11:23
Date Received: 05/05/23 19:00

Lab Sample ID: 460-279729-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	908063	KLB	EET EDI	05/10/23 00:09
Dissolved	Prep	3005A			908659	VAD	EET EDI	05/11/23 21:51
Dissolved	Analysis	6020B		1	908622	CDC	EET EDI	05/12/23 00:43

Laboratory References:
EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Accreditation/Certification Summary

Client: RT Environmental Services, Inc. Job ID: 460-279729-1
Project/Site: Frankford Phase 2

Laboratory: Eurofins Edison

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0818	01-30-24
DE Haz. Subst. Cleanup Act (HSCA)	State	N/A	01-01-24
Georgia	State	12028 (NJ)	06-30-23
Massachusetts	State	M-NJ312	06-30-23
New Jersey	NELAP	12028	06-30-23
New York	NELAP	11452	04-01-24
Pennsylvania	NELAP	68-00522	03-01-24
Rhode Island	State	LAO00376	12-30-23
USDA	US Federal Programs	P330-20-00244	11-03-23

Method Summary

Client: RT Environmental Services, Inc.
Project/Site: Frankford Phase 2

Job ID: 460-279729-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET EDI
6020B	Metals (ICP/MS)	SW846	EET EDI
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET EDI
5030C	Purge and Trap	SW846	EET EDI

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Sample Summary

Client: RT Environmental Services, Inc.
Project/Site: Frankford Phase 2

Job ID: 460-279729-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-279729-1	MW-1	Water	05/04/23 09:47	05/05/23 19:00
460-279729-2	MW-2	Water	05/04/23 13:35	05/05/23 19:00
460-279729-3	MW-3	Water	05/04/23 14:47	05/05/23 19:00
460-279729-4	MW-4	Water	05/04/23 12:09	05/05/23 19:00
460-279729-5	MW-5	Water	05/04/23 11:23	05/05/23 19:00

Address: _____

Chain of Custody Record

619894

eurofins | Environment Testing America

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TAL-8210

Client Contact	Project Manager: Walter Hungarter	Site Contact:	Date:	COC No:
Company Name: RT Environmental Services Inc	Tel/Email: Whungarter@rtenv.com	Lab Contact:	Carrier:	_____ of _____ COCs
Address: 215 W Church Road	Analysis Turnaround Time			Sampler:
City/State/Zip: King of Prussia PA 19406	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 610-265-1570	TAT if different from Below _____			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: Frankford Phase 2	☐ 1 week			Job / SDG No.: 279729
Site: Frankford Ave Philadelphia PA	☐ 2 days			
PO # 73539-04-03	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	VOCs	Dissolved Lead	Dissolved Arsenic	Dissolved Cadmium	Dissolved Barium	Sample Specific Notes:
MW-1	5/4/23	9:47	G	GW	6			X	X	X	X	X	field filtered
MW-2		13:35			6			X	X	X	X	X	field filtered
MW-3		14:47			4			X	X	X	X	X	field filtered
MW-4		12:09			6			X	X	X	X	X	field filtered
MW-5		11:23			6			X	X	X	X	X	field filtered

460-279729 Chain of Custody

5-Day RUSH

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments:
Please send results to kcameron@rtenv.com and whungarter@rtenv.com

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ Therm ID No.: _____

	Company	Date/Time		Company	Date/Time
Relinquished by:	RTENV	5/4/23 1620	Received by:	EETN-KOP	5/4/23 1620
Relinquished by:	EETN-KOP	5/5/23	Received by:		5/5/23 1600
Relinquished by:	Company:	5/5 1900	Received in Laboratory by:	TAL	5/5/23 1900

1.0/1.0 #10

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5/12/2023

11 10 9 8 7 6 5 4 3 2 1

TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 179729

Number of Coolers: 1 IR Gun # 10

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	1.0 °C	1.0 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	°C	°C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other
1				✓											
2				✓											
3				✓											
4				✓											
5				✓											

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

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.*

Initials: SK **Date:** 5-15-23

Login Sample Receipt Checklist

Client: RT Environmental Services, Inc.

Job Number: 460-279729-1

Login Number: 279729
List Number: 1
Creator: Rivera, Kenneth

List Source: Eurofins Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
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	
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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

RT Environmental Services, Inc

Frankford Ave, PA

73539-02; PO#73539-02-03

SGS Job Number: JD56787

Sampling Dates: 12/02/22 - 12/05/22



Report to:

RT Environmental Services, Inc
215 West Church Road
King Of Prussia, PA 19406
ccharnoff@rtenv.com

ATTN: Collin Charnoff

Total number of pages in report: 60

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

David Chastain
General Manager

Client Service contact: Marie Meidhof 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA(68-00408), RI, SC, TX, UT, VA, WV

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how we can serve you better at:
EHS.US.CustomerCare@sgs.com

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Sample Summary

RT Environmental Services, Inc

Job No: JD56787

Frankford Ave, PA
Project No: 73539-02; PO#73539-02-03

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
This report contains results reported as ND = Not detected. The following applies: Organics ND = Not detected above the MDL							
JD56787-1	12/05/22	14:25	CEC	12/06/22	AIR	Soil Vapor Comp.	SV-5
JD56787-2	12/05/22	15:09	CEC	12/06/22	AIR	Soil Vapor Comp.	SV-4
JD56787-3	12/05/22	15:42	CEC	12/06/22	AIR	Soil Vapor Comp.	SV-3
JD56787-4	12/02/22	10:42	CEC	12/06/22	AIR	Soil Vapor Comp.	SV-1
JD56787-5	12/02/22	12:41	CEC	12/06/22	AIR	Soil Vapor Comp.	SV-2

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	RT Environmental Services, Inc	**Job No:**	JD56787
Site:	Frankford Ave, PA	**Report Date**	12/19/2022 12:17:50 P

On 12/06/2022, 5 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at SGS North America Inc. A SGS North America Inc. Job Number of JD56787 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Compounds qualified as out of range in the continuing calibration summary report are acceptable as per method requirements when there is a high bias but the sample result is non-detect.

MS Volatiles By Method TO-15

Matrix: AIR **Batch ID:** V6W1161

- All samples were analyzed within the recommended method holding time.
- Sample(s) JD56787-1DUP were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- RPD(s) for Duplicate for Ethanol are outside control limits for sample JD56787-1DUP. Probable cause due to sample homogeneity.

SGS North America Inc. certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS North America Inc. is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS North America Inc indicated via signature on the report cover

Summary of Hits

Job Number: JD56787
Account: RT Environmental Services, Inc
Project: Frankford Ave, PA
Collected: 12/02/22 thru 12/05/22

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JD56787-1	**SV-5**					
Acetone (2-Propanone)		9.9	0.80	0.58	ppbv	TO-15
1,3-Butadiene		2.8	0.80	0.34	ppbv	TO-15
Benzene		1.0	0.80	0.25	ppbv	TO-15
Carbon disulfide		1.2	0.80	0.18	ppbv	TO-15
Cyclohexane		0.68 J	0.80	0.44	ppbv	TO-15
Dichlorodifluoromethane		0.57 J	0.80	0.13	ppbv	TO-15
Ethanol		2.3	2.0	1.6	ppbv	TO-15
Heptane		0.99	0.80	0.37	ppbv	TO-15
Hexane		5.7	0.80	0.45	ppbv	TO-15
Isopropyl Alcohol		0.72 J	0.80	0.56	ppbv	TO-15
Methylene chloride		2.4	0.80	0.22	ppbv	TO-15
Methyl ethyl ketone		1.7	0.80	0.44	ppbv	TO-15
Propylene		23.2	2.0	0.57	ppbv	TO-15
Tertiary Butyl Alcohol		3.8	0.80	0.37	ppbv	TO-15
Toluene		0.81	0.80	0.23	ppbv	TO-15
Acetone (2-Propanone)		24	1.9	1.4	ug/m3	TO-15
1,3-Butadiene		6.2	1.8	0.75	ug/m3	TO-15
Benzene		3.2	2.6	0.80	ug/m3	TO-15
Carbon disulfide		3.7	2.5	0.56	ug/m3	TO-15
Cyclohexane		2.3 J	2.8	1.5	ug/m3	TO-15
Dichlorodifluoromethane		2.8 J	4.0	0.64	ug/m3	TO-15
Ethanol		4.3	3.8	3.0	ug/m3	TO-15
Heptane		4.1	3.3	1.5	ug/m3	TO-15
Hexane		20	2.8	1.6	ug/m3	TO-15
Isopropyl Alcohol		1.8 J	2.0	1.4	ug/m3	TO-15
Methylene chloride		8.3	2.8	0.76	ug/m3	TO-15
Methyl ethyl ketone		5.0	2.4	1.3	ug/m3	TO-15
Propylene		39.9	3.4	0.98	ug/m3	TO-15
Tertiary Butyl Alcohol		12	2.4	1.1	ug/m3	TO-15
Toluene		3.1	3.0	0.87	ug/m3	TO-15
JD56787-2	**SV-4**					
Acetone (2-Propanone)		40.9	0.80	0.58	ppbv	TO-15
Benzene		0.65 J	0.80	0.25	ppbv	TO-15
Carbon disulfide		1.0	0.80	0.18	ppbv	TO-15
Cyclohexane		1.4	0.80	0.44	ppbv	TO-15
Dichlorodifluoromethane		0.53 J	0.80	0.13	ppbv	TO-15
Ethanol		2.3	2.0	1.6	ppbv	TO-15
Ethyl Acetate		38.4	0.80	0.42	ppbv	TO-15
Heptane		3.0	0.80	0.37	ppbv	TO-15
Hexane		6.6	0.80	0.45	ppbv	TO-15
Isopropyl Alcohol		0.67 J	0.80	0.56	ppbv	TO-15

Summary of Hits

Job Number: JD56787
Account: RT Environmental Services, Inc
Project: Frankford Ave, PA
Collected: 12/02/22 thru 12/05/22

Lab Sample ID / Client Sample ID / Analyte	Result/ Qual	RL	MDL	Units	Method
Methylene chloride	2.6	0.80	0.22	ppbv	TO-15
Methyl ethyl ketone	4.4	0.80	0.44	ppbv	TO-15
Propylene	12.3	2.0	0.57	ppbv	TO-15
Tertiary Butyl Alcohol	3.0	0.80	0.37	ppbv	TO-15
Toluene	1.0	0.80	0.23	ppbv	TO-15
Trichloroethylene	0.29	0.16	0.076	ppbv	TO-15
Acetone (2-Propanone)	97.2	1.9	1.4	ug/m3	TO-15
Benzene	2.1 J	2.6	0.80	ug/m3	TO-15
Carbon disulfide	3.1	2.5	0.56	ug/m3	TO-15
Cyclohexane	4.8	2.8	1.5	ug/m3	TO-15
Dichlorodifluoromethane	2.6 J	4.0	0.64	ug/m3	TO-15
Ethanol	4.3	3.8	3.0	ug/m3	TO-15
Ethyl Acetate	138	2.9	1.5	ug/m3	TO-15
Heptane	12	3.3	1.5	ug/m3	TO-15
Hexane	23	2.8	1.6	ug/m3	TO-15
Isopropyl Alcohol	1.6 J	2.0	1.4	ug/m3	TO-15
Methylene chloride	9.0	2.8	0.76	ug/m3	TO-15
Methyl ethyl ketone	13	2.4	1.3	ug/m3	TO-15
Propylene	21.1	3.4	0.98	ug/m3	TO-15
Tertiary Butyl Alcohol	9.1	2.4	1.1	ug/m3	TO-15
Toluene	3.8	3.0	0.87	ug/m3	TO-15
Trichloroethylene	1.6	0.86	0.41	ug/m3	TO-15
JD56787-3 SV-3					
Acetone (2-Propanone)	15.4	0.80	0.58	ppbv	TO-15
Benzene	0.38 J	0.80	0.25	ppbv	TO-15
Dichlorodifluoromethane	0.49 J	0.80	0.13	ppbv	TO-15
Ethanol	1.9 J	2.0	1.6	ppbv	TO-15
Ethyl Acetate	3.1	0.80	0.42	ppbv	TO-15
Heptane	0.40 J	0.80	0.37	ppbv	TO-15
Hexane	4.5	0.80	0.45	ppbv	TO-15
Isopropyl Alcohol	0.58 J	0.80	0.56	ppbv	TO-15
Methylene chloride	2.6	0.80	0.22	ppbv	TO-15
Methyl ethyl ketone	2.3	0.80	0.44	ppbv	TO-15
Propylene	13.4	2.0	0.57	ppbv	TO-15
1,2,4-Trimethylbenzene	0.94	0.80	0.35	ppbv	TO-15
Tertiary Butyl Alcohol	2.3	0.80	0.37	ppbv	TO-15
Tetrachloroethylene	5.1	0.16	0.056	ppbv	TO-15
Toluene	0.41 J	0.80	0.23	ppbv	TO-15
Acetone (2-Propanone)	36.6	1.9	1.4	ug/m3	TO-15
Benzene	1.2 J	2.6	0.80	ug/m3	TO-15
Dichlorodifluoromethane	2.4 J	4.0	0.64	ug/m3	TO-15
Ethanol	3.6 J	3.8	3.0	ug/m3	TO-15
Ethyl Acetate	11	2.9	1.5	ug/m3	TO-15

Summary of Hits

Job Number: JD56787
Account: RT Environmental Services, Inc
Project: Frankford Ave, PA
Collected: 12/02/22 thru 12/05/22

Lab Sample ID / Client Sample ID / Analyte	Result/ Qual	RL	MDL	Units	Method
Heptane	1.6 J	3.3	1.5	ug/m3	TO-15
Hexane	16	2.8	1.6	ug/m3	TO-15
Isopropyl Alcohol	1.4 J	2.0	1.4	ug/m3	TO-15
Methylene chloride	9.0	2.8	0.76	ug/m3	TO-15
Methyl ethyl ketone	6.8	2.4	1.3	ug/m3	TO-15
Propylene	23.0	3.4	0.98	ug/m3	TO-15
1,2,4-Trimethylbenzene	4.6	3.9	1.7	ug/m3	TO-15
Tertiary Butyl Alcohol	7.0	2.4	1.1	ug/m3	TO-15
Tetrachloroethylene	35	1.1	0.38	ug/m3	TO-15
Toluene	1.5 J	3.0	0.87	ug/m3	TO-15
JD56787-4 SV-1					
Acetone (2-Propanone)	6.4	0.80	0.58	ppbv	TO-15
Carbon disulfide	0.62 J	0.80	0.18	ppbv	TO-15
Dichlorodifluoromethane	0.57 J	0.80	0.13	ppbv	TO-15
Ethanol	5.0	2.0	1.6	ppbv	TO-15
Ethyl Acetate	1.9	0.80	0.42	ppbv	TO-15
Hexane	0.53 J	0.80	0.45	ppbv	TO-15
Isopropyl Alcohol	2.8	0.80	0.56	ppbv	TO-15
Methylene chloride	1.4	0.80	0.22	ppbv	TO-15
Methyl ethyl ketone	1.3	0.80	0.44	ppbv	TO-15
Propylene	0.73 J	2.0	0.57	ppbv	TO-15
Tertiary Butyl Alcohol	1.2	0.80	0.37	ppbv	TO-15
Tetrachloroethylene	1.5	0.16	0.056	ppbv	TO-15
Trichlorofluoromethane	0.53 J	0.80	0.14	ppbv	TO-15
Acetone (2-Propanone)	15	1.9	1.4	ug/m3	TO-15
Carbon disulfide	1.9 J	2.5	0.56	ug/m3	TO-15
Dichlorodifluoromethane	2.8 J	4.0	0.64	ug/m3	TO-15
Ethanol	9.4	3.8	3.0	ug/m3	TO-15
Ethyl Acetate	6.8	2.9	1.5	ug/m3	TO-15
Hexane	1.9 J	2.8	1.6	ug/m3	TO-15
Isopropyl Alcohol	6.9	2.0	1.4	ug/m3	TO-15
Methylene chloride	4.9	2.8	0.76	ug/m3	TO-15
Methyl ethyl ketone	3.8	2.4	1.3	ug/m3	TO-15
Propylene	1.3 J	3.4	0.98	ug/m3	TO-15
Tertiary Butyl Alcohol	3.6	2.4	1.1	ug/m3	TO-15
Tetrachloroethylene	10	1.1	0.38	ug/m3	TO-15
Trichlorofluoromethane	3.0 J	4.5	0.79	ug/m3	TO-15
JD56787-5 SV-2					
Acetone (2-Propanone)	32.7	0.80	0.58	ppbv	TO-15
1,3-Butadiene	0.61 J	0.80	0.34	ppbv	TO-15
Benzene	0.58 J	0.80	0.25	ppbv	TO-15

Summary of Hits

Job Number: JD56787
Account: RT Environmental Services, Inc
Project: Frankford Ave, PA
Collected: 12/02/22 thru 12/05/22

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Carbon disulfide		0.72 J	0.80	0.18	ppbv	TO-15
Dichlorodifluoromethane		0.61 J	0.80	0.13	ppbv	TO-15
Ethanol		6.0	2.0	1.6	ppbv	TO-15
Ethyl Acetate		4.3	0.80	0.42	ppbv	TO-15
Heptane		0.39 J	0.80	0.37	ppbv	TO-15
Hexane		1.9	0.80	0.45	ppbv	TO-15
2-Hexanone		1.2	0.80	0.58	ppbv	TO-15
Isopropyl Alcohol		3.1	0.80	0.56	ppbv	TO-15
Methylene chloride		1.9	0.80	0.22	ppbv	TO-15
Methyl ethyl ketone		4.1	0.80	0.44	ppbv	TO-15
Methyl Isobutyl Ketone		0.66 J	0.80	0.29	ppbv	TO-15
Propylene		3.3	2.0	0.57	ppbv	TO-15
1,2,4-Trimethylbenzene		0.64 J	0.80	0.35	ppbv	TO-15
Tertiary Butyl Alcohol		1.3	0.80	0.37	ppbv	TO-15
Tetrachloroethylene		24.1	0.16	0.056	ppbv	TO-15
Toluene		1.3	0.80	0.23	ppbv	TO-15
m,p-Xylene		0.79 J	0.80	0.56	ppbv	TO-15
o-Xylene		0.45 J	0.80	0.31	ppbv	TO-15
Xylenes (total)		1.2	0.80	0.31	ppbv	TO-15
Acetone (2-Propanone)		77.7	1.9	1.4	ug/m3	TO-15
1,3-Butadiene		1.3 J	1.8	0.75	ug/m3	TO-15
Benzene		1.9 J	2.6	0.80	ug/m3	TO-15
Carbon disulfide		2.2 J	2.5	0.56	ug/m3	TO-15
Dichlorodifluoromethane		3.0 J	4.0	0.64	ug/m3	TO-15
Ethanol		11	3.8	3.0	ug/m3	TO-15
Ethyl Acetate		15	2.9	1.5	ug/m3	TO-15
Heptane		1.6 J	3.3	1.5	ug/m3	TO-15
Hexane		6.7	2.8	1.6	ug/m3	TO-15
2-Hexanone		4.9	3.3	2.4	ug/m3	TO-15
Isopropyl Alcohol		7.6	2.0	1.4	ug/m3	TO-15
Methylene chloride		6.6	2.8	0.76	ug/m3	TO-15
Methyl ethyl ketone		12	2.4	1.3	ug/m3	TO-15
Methyl Isobutyl Ketone		2.7 J	3.3	1.2	ug/m3	TO-15
Propylene		5.7	3.4	0.98	ug/m3	TO-15
1,2,4-Trimethylbenzene		3.1 J	3.9	1.7	ug/m3	TO-15
Tertiary Butyl Alcohol		3.9	2.4	1.1	ug/m3	TO-15
Tetrachloroethylene		163	1.1	0.38	ug/m3	TO-15
Toluene		4.9	3.0	0.87	ug/m3	TO-15
m,p-Xylene		3.4 J	3.5	2.4	ug/m3	TO-15
o-Xylene		2.0 J	3.5	1.3	ug/m3	TO-15
Xylenes (total)		5.2	3.5	1.3	ug/m3	TO-15

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	SV-5		
Lab Sample ID:	JD56787-1	**Date Sampled:**	12/05/22
Matrix:	AIR - Soil Vapor Comp. Summa ID: A2122	**Date Received:**	12/06/22
Method:	TO-15	**Percent Solids:**	n/a
Project:	Frankford Ave, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6W27598.D	1	12/10/22 21:09	TCH	n/a	n/a	V6W1161
Run #2							

	Initial Volume
Run #1	100 ml
Run #2	

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-64-1	58.08	Acetone (2-Propanone)	9.9	0.80	0.58	ppbv		24	1.9	1.4	ug/m3
106-99-0	54.09	1,3-Butadiene	2.8	0.80	0.34	ppbv		6.2	1.8	0.75	ug/m3
71-43-2	78.11	Benzene	1.0	0.80	0.25	ppbv		3.2	2.6	0.80	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.80	0.12	ppbv		ND	5.4	0.80	ug/m3
75-25-2	252.8	Bromoform	ND	0.80	0.28	ppbv		ND	8.3	2.9	ug/m3
74-83-9	94.94	Bromomethane	ND	0.80	0.28	ppbv		ND	3.1	1.1	ug/m3
593-60-2	106.9	Bromoethene	ND	0.80	0.24	ppbv		ND	3.5	1.0	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.80	0.50	ppbv		ND	4.1	2.6	ug/m3
75-15-0	76.14	Carbon disulfide	1.2	0.80	0.18	ppbv		3.7	2.5	0.56	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.80	0.30	ppbv		ND	3.7	1.4	ug/m3
75-00-3	64.52	Chloroethane	ND	0.80	0.27	ppbv		ND	2.1	0.71	ug/m3
67-66-3	119.4	Chloroform	ND	0.80	0.15	ppbv		ND	3.9	0.73	ug/m3
74-87-3	50.49	Chloromethane	ND	0.80	0.36	ppbv		ND	1.7	0.74	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.80	0.33	ppbv		ND	2.5	1.0	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.80	0.29	ppbv		ND	4.1	1.5	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.80	0.16	ppbv		ND	5.0	1.0	ug/m3
110-82-7	84.16	Cyclohexane	0.68	0.80	0.44	ppbv	J	2.3	2.8	1.5	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.80	0.23	ppbv		ND	3.2	0.93	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.80	0.24	ppbv		ND	3.2	0.95	ug/m3
106-93-4	187.9	1,2-Dibromoethane (EDB)	ND	0.80	0.39	ppbv		ND	6.1	3.0	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.80	0.28	ppbv		ND	3.2	1.1	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.80	0.25	ppbv		ND	3.7	1.2	ug/m3
123-91-1	88.12	1,4-Dioxane	ND	0.80	0.47	ppbv		ND	2.9	1.7	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.57	0.80	0.13	ppbv	J	2.8	4.0	0.64	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.80	0.21	ppbv		ND	6.8	1.8	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.80	0.28	ppbv		ND	3.2	1.1	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.80	0.31	ppbv		ND	3.2	1.2	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.80	0.25	ppbv		ND	3.6	1.1	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.80	0.16	ppbv		ND	4.8	0.96	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.80	0.62	ppbv		ND	4.8	3.7	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.80	0.76	ppbv		ND	4.8	4.6	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.80	0.40	ppbv		ND	3.6	1.8	ug/m3

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SV-5		
Lab Sample ID:	JD56787-1	**Date Sampled:**	12/05/22
Matrix:	AIR - Soil Vapor Comp. Summa ID: A2122	**Date Received:**	12/06/22
Method:	TO-15	**Percent Solids:**	n/a
Project:	Frankford Ave, PA		

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
64-17-5	46.07	Ethanol	2.3	2.0	1.6	ppbv		4.3	3.8	3.0	ug/m3
100-41-4	106.2	Ethylbenzene	ND	0.80	0.24	ppbv		ND	3.5	1.0	ug/m3
141-78-6	88	Ethyl Acetate	ND	0.80	0.42	ppbv		ND	2.9	1.5	ug/m3
622-96-8	120.19	4-Ethyltoluene	ND	0.80	0.38	ppbv		ND	3.9	1.9	ug/m3
76-13-1	187.4	Freon 113	ND	0.80	0.12	ppbv		ND	6.1	0.92	ug/m3
76-14-2	170.9	Freon 114	ND	0.80	0.20	ppbv		ND	5.6	1.4	ug/m3
142-82-5	100.2	Heptane	0.99	0.80	0.37	ppbv		4.1	3.3	1.5	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.80	0.25	ppbv		ND	8.5	2.7	ug/m3
110-54-3	86.18	Hexane	5.7	0.80	0.45	ppbv		20	2.8	1.6	ug/m3
591-78-6	100	2-Hexanone	ND	0.80	0.58	ppbv		ND	3.3	2.4	ug/m3
67-63-0	60.1	Isopropyl Alcohol	0.72	0.80	0.56	ppbv	J	1.8	2.0	1.4	ug/m3
75-09-2	84.94	Methylene chloride	2.4	0.80	0.22	ppbv		8.3	2.8	0.76	ug/m3
78-93-3	72.11	Methyl ethyl ketone	1.7	0.80	0.44	ppbv		5.0	2.4	1.3	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.80	0.29	ppbv		ND	3.3	1.2	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.80	0.32	ppbv		ND	2.9	1.2	ug/m3
80-62-6	100.12	Methylmethacrylate	ND	0.80	0.28	ppbv		ND	3.3	1.1	ug/m3
115-07-1	42	Propylene	23.2	2.0	0.57	ppbv		39.9	3.4	0.98	ug/m3
100-42-5	104.1	Styrene	ND	0.80	0.47	ppbv		ND	3.4	2.0	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.80	0.15	ppbv		ND	4.4	0.82	ug/m3
79-34-5	167.85	1,1,2,2-Tetrachloroethane	ND	0.80	0.19	ppbv		ND	5.5	1.3	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.80	0.15	ppbv		ND	4.4	0.82	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.80	0.48	ppbv		ND	5.9	3.6	ug/m3
95-63-6	120.19	1,2,4-Trimethylbenzene	ND	0.80	0.35	ppbv		ND	3.9	1.7	ug/m3
108-67-8	120.19	1,3,5-Trimethylbenzene	ND	0.80	0.32	ppbv		ND	3.9	1.6	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.80	0.38	ppbv		ND	3.7	1.8	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	3.8	0.80	0.37	ppbv		12	2.4	1.1	ug/m3
127-18-4	165.8	Tetrachloroethylene	ND	0.16	0.056	ppbv		ND	1.1	0.38	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	0.80	0.36	ppbv		ND	2.4	1.1	ug/m3
108-88-3	92.14	Toluene	0.81	0.80	0.23	ppbv		3.1	3.0	0.87	ug/m3
79-01-6	131.4	Trichloroethylene	ND	0.16	0.076	ppbv		ND	0.86	0.41	ug/m3
75-69-4	137.4	Trichlorofluoromethane	ND	0.80	0.14	ppbv		ND	4.5	0.79	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.80	0.28	ppbv		ND	2.0	0.72	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.80	0.45	ppbv		ND	2.8	1.6	ug/m3
	106.2	m,p-Xylene	ND	0.80	0.56	ppbv		ND	3.5	2.4	ug/m3
95-47-6	106.2	o-Xylene	ND	0.80	0.31	ppbv		ND	3.5	1.3	ug/m3
1330-20-7	106.2	Xylenes (total)	ND	0.80	0.31	ppbv		ND	3.5	1.3	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	105%		65-128%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SV-4		
Lab Sample ID:	JD56787-2	**Date Sampled:**	12/05/22
Matrix:	AIR - Soil Vapor Comp. Summa ID: A476	**Date Received:**	12/06/22
Method:	TO-15	**Percent Solids:**	n/a
Project:	Frankford Ave, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6W27600.D	1	12/10/22 22:15	TCH	n/a	n/a	V6W1161
Run #2							

	Initial Volume
Run #1	100 ml
Run #2	

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-64-1	58.08	Acetone (2-Propanone)	40.9	0.80	0.58	ppbv		97.2	1.9	1.4	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.80	0.34	ppbv		ND	1.8	0.75	ug/m3
71-43-2	78.11	Benzene	0.65	0.80	0.25	ppbv	J	2.1	2.6	0.80	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.80	0.12	ppbv		ND	5.4	0.80	ug/m3
75-25-2	252.8	Bromoform	ND	0.80	0.28	ppbv		ND	8.3	2.9	ug/m3
74-83-9	94.94	Bromomethane	ND	0.80	0.28	ppbv		ND	3.1	1.1	ug/m3
593-60-2	106.9	Bromoethene	ND	0.80	0.24	ppbv		ND	3.5	1.0	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.80	0.50	ppbv		ND	4.1	2.6	ug/m3
75-15-0	76.14	Carbon disulfide	1.0	0.80	0.18	ppbv		3.1	2.5	0.56	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.80	0.30	ppbv		ND	3.7	1.4	ug/m3
75-00-3	64.52	Chloroethane	ND	0.80	0.27	ppbv		ND	2.1	0.71	ug/m3
67-66-3	119.4	Chloroform	ND	0.80	0.15	ppbv		ND	3.9	0.73	ug/m3
74-87-3	50.49	Chloromethane	ND	0.80	0.36	ppbv		ND	1.7	0.74	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.80	0.33	ppbv		ND	2.5	1.0	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.80	0.29	ppbv		ND	4.1	1.5	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.80	0.16	ppbv		ND	5.0	1.0	ug/m3
110-82-7	84.16	Cyclohexane	1.4	0.80	0.44	ppbv		4.8	2.8	1.5	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.80	0.23	ppbv		ND	3.2	0.93	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.80	0.24	ppbv		ND	3.2	0.95	ug/m3
106-93-4	187.9	1,2-Dibromoethane (EDB)	ND	0.80	0.39	ppbv		ND	6.1	3.0	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.80	0.28	ppbv		ND	3.2	1.1	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.80	0.25	ppbv		ND	3.7	1.2	ug/m3
123-91-1	88.12	1,4-Dioxane	ND	0.80	0.47	ppbv		ND	2.9	1.7	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.53	0.80	0.13	ppbv	J	2.6	4.0	0.64	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.80	0.21	ppbv		ND	6.8	1.8	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.80	0.28	ppbv		ND	3.2	1.1	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.80	0.31	ppbv		ND	3.2	1.2	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.80	0.25	ppbv		ND	3.6	1.1	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.80	0.16	ppbv		ND	4.8	0.96	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.80	0.62	ppbv		ND	4.8	3.7	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.80	0.76	ppbv		ND	4.8	4.6	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.80	0.40	ppbv		ND	3.6	1.8	ug/m3

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SV-4		
Lab Sample ID:	JD56787-2	**Date Sampled:**	12/05/22
Matrix:	AIR - Soil Vapor Comp. Summa ID: A476	**Date Received:**	12/06/22
Method:	TO-15	**Percent Solids:**	n/a
Project:	Frankford Ave, PA		

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
64-17-5	46.07	Ethanol	2.3	2.0	1.6	ppbv		4.3	3.8	3.0	ug/m3
100-41-4	106.2	Ethylbenzene	ND	0.80	0.24	ppbv		ND	3.5	1.0	ug/m3
141-78-6	88	Ethyl Acetate	38.4	0.80	0.42	ppbv		138	2.9	1.5	ug/m3
622-96-8	120.19	4-Ethyltoluene	ND	0.80	0.38	ppbv		ND	3.9	1.9	ug/m3
76-13-1	187.4	Freon 113	ND	0.80	0.12	ppbv		ND	6.1	0.92	ug/m3
76-14-2	170.9	Freon 114	ND	0.80	0.20	ppbv		ND	5.6	1.4	ug/m3
142-82-5	100.2	Heptane	3.0	0.80	0.37	ppbv		12	3.3	1.5	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.80	0.25	ppbv		ND	8.5	2.7	ug/m3
110-54-3	86.18	Hexane	6.6	0.80	0.45	ppbv		23	2.8	1.6	ug/m3
591-78-6	100	2-Hexanone	ND	0.80	0.58	ppbv		ND	3.3	2.4	ug/m3
67-63-0	60.1	Isopropyl Alcohol	0.67	0.80	0.56	ppbv	J	1.6	2.0	1.4	ug/m3
75-09-2	84.94	Methylene chloride	2.6	0.80	0.22	ppbv		9.0	2.8	0.76	ug/m3
78-93-3	72.11	Methyl ethyl ketone	4.4	0.80	0.44	ppbv		13	2.4	1.3	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.80	0.29	ppbv		ND	3.3	1.2	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.80	0.32	ppbv		ND	2.9	1.2	ug/m3
80-62-6	100.12	Methylmethacrylate	ND	0.80	0.28	ppbv		ND	3.3	1.1	ug/m3
115-07-1	42	Propylene	12.3	2.0	0.57	ppbv		21.1	3.4	0.98	ug/m3
100-42-5	104.1	Styrene	ND	0.80	0.47	ppbv		ND	3.4	2.0	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.80	0.15	ppbv		ND	4.4	0.82	ug/m3
79-34-5	167.85	1,1,2,2-Tetrachloroethane	ND	0.80	0.19	ppbv		ND	5.5	1.3	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.80	0.15	ppbv		ND	4.4	0.82	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.80	0.48	ppbv		ND	5.9	3.6	ug/m3
95-63-6	120.19	1,2,4-Trimethylbenzene	ND	0.80	0.35	ppbv		ND	3.9	1.7	ug/m3
108-67-8	120.19	1,3,5-Trimethylbenzene	ND	0.80	0.32	ppbv		ND	3.9	1.6	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.80	0.38	ppbv		ND	3.7	1.8	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	3.0	0.80	0.37	ppbv		9.1	2.4	1.1	ug/m3
127-18-4	165.8	Tetrachloroethylene	ND	0.16	0.056	ppbv		ND	1.1	0.38	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	0.80	0.36	ppbv		ND	2.4	1.1	ug/m3
108-88-3	92.14	Toluene	1.0	0.80	0.23	ppbv		3.8	3.0	0.87	ug/m3
79-01-6	131.4	Trichloroethylene	0.29	0.16	0.076	ppbv		1.6	0.86	0.41	ug/m3
75-69-4	137.4	Trichlorofluoromethane	ND	0.80	0.14	ppbv		ND	4.5	0.79	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.80	0.28	ppbv		ND	2.0	0.72	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.80	0.45	ppbv		ND	2.8	1.6	ug/m3
	106.2	m,p-Xylene	ND	0.80	0.56	ppbv		ND	3.5	2.4	ug/m3
95-47-6	106.2	o-Xylene	ND	0.80	0.31	ppbv		ND	3.5	1.3	ug/m3
1330-20-7	106.2	Xylenes (total)	ND	0.80	0.31	ppbv		ND	3.5	1.3	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	98%		65-128%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SV-3		
Lab Sample ID:	JD56787-3	**Date Sampled:**	12/05/22
Matrix:	AIR - Soil Vapor Comp. Summa ID: A2128	**Date Received:**	12/06/22
Method:	TO-15	**Percent Solids:**	n/a
Project:	Frankford Ave, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6W27601.D	1	12/10/22 22:48	TCH	n/a	n/a	V6W1161
Run #2							

	Initial Volume
Run #1	100 ml
Run #2	

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-64-1	58.08	Acetone (2-Propanone)	15.4	0.80	0.58	ppbv		36.6	1.9	1.4	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.80	0.34	ppbv		ND	1.8	0.75	ug/m3
71-43-2	78.11	Benzene	0.38	0.80	0.25	ppbv	J	1.2	2.6	0.80	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.80	0.12	ppbv		ND	5.4	0.80	ug/m3
75-25-2	252.8	Bromoform	ND	0.80	0.28	ppbv		ND	8.3	2.9	ug/m3
74-83-9	94.94	Bromomethane	ND	0.80	0.28	ppbv		ND	3.1	1.1	ug/m3
593-60-2	106.9	Bromoethene	ND	0.80	0.24	ppbv		ND	3.5	1.0	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.80	0.50	ppbv		ND	4.1	2.6	ug/m3
75-15-0	76.14	Carbon disulfide	ND	0.80	0.18	ppbv		ND	2.5	0.56	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.80	0.30	ppbv		ND	3.7	1.4	ug/m3
75-00-3	64.52	Chloroethane	ND	0.80	0.27	ppbv		ND	2.1	0.71	ug/m3
67-66-3	119.4	Chloroform	ND	0.80	0.15	ppbv		ND	3.9	0.73	ug/m3
74-87-3	50.49	Chloromethane	ND	0.80	0.36	ppbv		ND	1.7	0.74	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.80	0.33	ppbv		ND	2.5	1.0	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.80	0.29	ppbv		ND	4.1	1.5	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.80	0.16	ppbv		ND	5.0	1.0	ug/m3
110-82-7	84.16	Cyclohexane	ND	0.80	0.44	ppbv		ND	2.8	1.5	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.80	0.23	ppbv		ND	3.2	0.93	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.80	0.24	ppbv		ND	3.2	0.95	ug/m3
106-93-4	187.9	1,2-Dibromoethane (EDB)	ND	0.80	0.39	ppbv		ND	6.1	3.0	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.80	0.28	ppbv		ND	3.2	1.1	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.80	0.25	ppbv		ND	3.7	1.2	ug/m3
123-91-1	88.12	1,4-Dioxane	ND	0.80	0.47	ppbv		ND	2.9	1.7	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.49	0.80	0.13	ppbv	J	2.4	4.0	0.64	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.80	0.21	ppbv		ND	6.8	1.8	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.80	0.28	ppbv		ND	3.2	1.1	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.80	0.31	ppbv		ND	3.2	1.2	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.80	0.25	ppbv		ND	3.6	1.1	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.80	0.16	ppbv		ND	4.8	0.96	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.80	0.62	ppbv		ND	4.8	3.7	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.80	0.76	ppbv		ND	4.8	4.6	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.80	0.40	ppbv		ND	3.6	1.8	ug/m3

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SV-3		
Lab Sample ID:	JD56787-3	**Date Sampled:**	12/05/22
Matrix:	AIR - Soil Vapor Comp. Summa ID: A2128	**Date Received:**	12/06/22
Method:	TO-15	**Percent Solids:**	n/a
Project:	Frankford Ave, PA		

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
64-17-5	46.07	Ethanol	1.9	2.0	1.6	ppbv	J	3.6	3.8	3.0	ug/m3
100-41-4	106.2	Ethylbenzene	ND	0.80	0.24	ppbv		ND	3.5	1.0	ug/m3
141-78-6	88	Ethyl Acetate	3.1	0.80	0.42	ppbv		11	2.9	1.5	ug/m3
622-96-8	120.19	4-Ethyltoluene	ND	0.80	0.38	ppbv		ND	3.9	1.9	ug/m3
76-13-1	187.4	Freon 113	ND	0.80	0.12	ppbv		ND	6.1	0.92	ug/m3
76-14-2	170.9	Freon 114	ND	0.80	0.20	ppbv		ND	5.6	1.4	ug/m3
142-82-5	100.2	Heptane	0.40	0.80	0.37	ppbv	J	1.6	3.3	1.5	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.80	0.25	ppbv		ND	8.5	2.7	ug/m3
110-54-3	86.18	Hexane	4.5	0.80	0.45	ppbv		16	2.8	1.6	ug/m3
591-78-6	100	2-Hexanone	ND	0.80	0.58	ppbv		ND	3.3	2.4	ug/m3
67-63-0	60.1	Isopropyl Alcohol	0.58	0.80	0.56	ppbv	J	1.4	2.0	1.4	ug/m3
75-09-2	84.94	Methylene chloride	2.6	0.80	0.22	ppbv		9.0	2.8	0.76	ug/m3
78-93-3	72.11	Methyl ethyl ketone	2.3	0.80	0.44	ppbv		6.8	2.4	1.3	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.80	0.29	ppbv		ND	3.3	1.2	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.80	0.32	ppbv		ND	2.9	1.2	ug/m3
80-62-6	100.12	Methylmethacrylate	ND	0.80	0.28	ppbv		ND	3.3	1.1	ug/m3
115-07-1	42	Propylene	13.4	2.0	0.57	ppbv		23.0	3.4	0.98	ug/m3
100-42-5	104.1	Styrene	ND	0.80	0.47	ppbv		ND	3.4	2.0	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.80	0.15	ppbv		ND	4.4	0.82	ug/m3
79-34-5	167.85	1,1,2,2-Tetrachloroethane	ND	0.80	0.19	ppbv		ND	5.5	1.3	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.80	0.15	ppbv		ND	4.4	0.82	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.80	0.48	ppbv		ND	5.9	3.6	ug/m3
95-63-6	120.19	1,2,4-Trimethylbenzene	0.94	0.80	0.35	ppbv		4.6	3.9	1.7	ug/m3
108-67-8	120.19	1,3,5-Trimethylbenzene	ND	0.80	0.32	ppbv		ND	3.9	1.6	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.80	0.38	ppbv		ND	3.7	1.8	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	2.3	0.80	0.37	ppbv		7.0	2.4	1.1	ug/m3
127-18-4	165.8	Tetrachloroethylene	5.1	0.16	0.056	ppbv		35	1.1	0.38	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	0.80	0.36	ppbv		ND	2.4	1.1	ug/m3
108-88-3	92.14	Toluene	0.41	0.80	0.23	ppbv	J	1.5	3.0	0.87	ug/m3
79-01-6	131.4	Trichloroethylene	ND	0.16	0.076	ppbv		ND	0.86	0.41	ug/m3
75-69-4	137.4	Trichlorofluoromethane	ND	0.80	0.14	ppbv		ND	4.5	0.79	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.80	0.28	ppbv		ND	2.0	0.72	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.80	0.45	ppbv		ND	2.8	1.6	ug/m3
	106.2	m,p-Xylene	ND	0.80	0.56	ppbv		ND	3.5	2.4	ug/m3
95-47-6	106.2	o-Xylene	ND	0.80	0.31	ppbv		ND	3.5	1.3	ug/m3
1330-20-7	106.2	Xylenes (total)	ND	0.80	0.31	ppbv		ND	3.5	1.3	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	95%		65-128%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SV-1		
Lab Sample ID:	JD56787-4	**Date Sampled:**	12/02/22
Matrix:	AIR - Soil Vapor Comp. Summa ID: A2123	**Date Received:**	12/06/22
Method:	TO-15	**Percent Solids:**	n/a
Project:	Frankford Ave, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6W27602.D	1	12/10/22 23:21	TCH	n/a	n/a	V6W1161
Run #2							

	Initial Volume
Run #1	100 ml
Run #2	

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-64-1	58.08	Acetone (2-Propanone)	6.4	0.80	0.58	ppbv		15	1.9	1.4	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.80	0.34	ppbv		ND	1.8	0.75	ug/m3
71-43-2	78.11	Benzene	ND	0.80	0.25	ppbv		ND	2.6	0.80	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.80	0.12	ppbv		ND	5.4	0.80	ug/m3
75-25-2	252.8	Bromoform	ND	0.80	0.28	ppbv		ND	8.3	2.9	ug/m3
74-83-9	94.94	Bromomethane	ND	0.80	0.28	ppbv		ND	3.1	1.1	ug/m3
593-60-2	106.9	Bromoethene	ND	0.80	0.24	ppbv		ND	3.5	1.0	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.80	0.50	ppbv		ND	4.1	2.6	ug/m3
75-15-0	76.14	Carbon disulfide	0.62	0.80	0.18	ppbv	J	1.9	2.5	0.56	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.80	0.30	ppbv		ND	3.7	1.4	ug/m3
75-00-3	64.52	Chloroethane	ND	0.80	0.27	ppbv		ND	2.1	0.71	ug/m3
67-66-3	119.4	Chloroform	ND	0.80	0.15	ppbv		ND	3.9	0.73	ug/m3
74-87-3	50.49	Chloromethane	ND	0.80	0.36	ppbv		ND	1.7	0.74	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.80	0.33	ppbv		ND	2.5	1.0	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.80	0.29	ppbv		ND	4.1	1.5	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.80	0.16	ppbv		ND	5.0	1.0	ug/m3
110-82-7	84.16	Cyclohexane	ND	0.80	0.44	ppbv		ND	2.8	1.5	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.80	0.23	ppbv		ND	3.2	0.93	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.80	0.24	ppbv		ND	3.2	0.95	ug/m3
106-93-4	187.9	1,2-Dibromoethane (EDB)	ND	0.80	0.39	ppbv		ND	6.1	3.0	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.80	0.28	ppbv		ND	3.2	1.1	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.80	0.25	ppbv		ND	3.7	1.2	ug/m3
123-91-1	88.12	1,4-Dioxane	ND	0.80	0.47	ppbv		ND	2.9	1.7	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.57	0.80	0.13	ppbv	J	2.8	4.0	0.64	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.80	0.21	ppbv		ND	6.8	1.8	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.80	0.28	ppbv		ND	3.2	1.1	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.80	0.31	ppbv		ND	3.2	1.2	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.80	0.25	ppbv		ND	3.6	1.1	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.80	0.16	ppbv		ND	4.8	0.96	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.80	0.62	ppbv		ND	4.8	3.7	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.80	0.76	ppbv		ND	4.8	4.6	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.80	0.40	ppbv		ND	3.6	1.8	ug/m3

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SV-1		
Lab Sample ID:	JD56787-4	**Date Sampled:**	12/02/22
Matrix:	AIR - Soil Vapor Comp. Summa ID: A2123	**Date Received:**	12/06/22
Method:	TO-15	**Percent Solids:**	n/a
Project:	Frankford Ave, PA		

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
64-17-5	46.07	Ethanol	5.0	2.0	1.6	ppbv		9.4	3.8	3.0	ug/m3
100-41-4	106.2	Ethylbenzene	ND	0.80	0.24	ppbv		ND	3.5	1.0	ug/m3
141-78-6	88	Ethyl Acetate	1.9	0.80	0.42	ppbv		6.8	2.9	1.5	ug/m3
622-96-8	120.19	4-Ethyltoluene	ND	0.80	0.38	ppbv		ND	3.9	1.9	ug/m3
76-13-1	187.4	Freon 113	ND	0.80	0.12	ppbv		ND	6.1	0.92	ug/m3
76-14-2	170.9	Freon 114	ND	0.80	0.20	ppbv		ND	5.6	1.4	ug/m3
142-82-5	100.2	Heptane	ND	0.80	0.37	ppbv		ND	3.3	1.5	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.80	0.25	ppbv		ND	8.5	2.7	ug/m3
110-54-3	86.18	Hexane	0.53	0.80	0.45	ppbv	J	1.9	2.8	1.6	ug/m3
591-78-6	100	2-Hexanone	ND	0.80	0.58	ppbv		ND	3.3	2.4	ug/m3
67-63-0	60.1	Isopropyl Alcohol	2.8	0.80	0.56	ppbv		6.9	2.0	1.4	ug/m3
75-09-2	84.94	Methylene chloride	1.4	0.80	0.22	ppbv		4.9	2.8	0.76	ug/m3
78-93-3	72.11	Methyl ethyl ketone	1.3	0.80	0.44	ppbv		3.8	2.4	1.3	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.80	0.29	ppbv		ND	3.3	1.2	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.80	0.32	ppbv		ND	2.9	1.2	ug/m3
80-62-6	100.12	Methylmethacrylate	ND	0.80	0.28	ppbv		ND	3.3	1.1	ug/m3
115-07-1	42	Propylene	0.73	2.0	0.57	ppbv	J	1.3	3.4	0.98	ug/m3
100-42-5	104.1	Styrene	ND	0.80	0.47	ppbv		ND	3.4	2.0	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.80	0.15	ppbv		ND	4.4	0.82	ug/m3
79-34-5	167.85	1,1,2,2-Tetrachloroethane	ND	0.80	0.19	ppbv		ND	5.5	1.3	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.80	0.15	ppbv		ND	4.4	0.82	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.80	0.48	ppbv		ND	5.9	3.6	ug/m3
95-63-6	120.19	1,2,4-Trimethylbenzene	ND	0.80	0.35	ppbv		ND	3.9	1.7	ug/m3
108-67-8	120.19	1,3,5-Trimethylbenzene	ND	0.80	0.32	ppbv		ND	3.9	1.6	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.80	0.38	ppbv		ND	3.7	1.8	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	1.2	0.80	0.37	ppbv		3.6	2.4	1.1	ug/m3
127-18-4	165.8	Tetrachloroethylene	1.5	0.16	0.056	ppbv		10	1.1	0.38	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	0.80	0.36	ppbv		ND	2.4	1.1	ug/m3
108-88-3	92.14	Toluene	ND	0.80	0.23	ppbv		ND	3.0	0.87	ug/m3
79-01-6	131.4	Trichloroethylene	ND	0.16	0.076	ppbv		ND	0.86	0.41	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.53	0.80	0.14	ppbv	J	3.0	4.5	0.79	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.80	0.28	ppbv		ND	2.0	0.72	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.80	0.45	ppbv		ND	2.8	1.6	ug/m3
	106.2	m,p-Xylene	ND	0.80	0.56	ppbv		ND	3.5	2.4	ug/m3
95-47-6	106.2	o-Xylene	ND	0.80	0.31	ppbv		ND	3.5	1.3	ug/m3
1330-20-7	106.2	Xylenes (total)	ND	0.80	0.31	ppbv		ND	3.5	1.3	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	95%		65-128%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SV-2		
Lab Sample ID:	JD56787-5	**Date Sampled:**	12/02/22
Matrix:	AIR - Soil Vapor Comp. Summa ID: A2124	**Date Received:**	12/06/22
Method:	TO-15	**Percent Solids:**	n/a
Project:	Frankford Ave, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6W27603.D	1	12/10/22 23:55	TCH	n/a	n/a	V6W1161
Run #2							

	Initial Volume
Run #1	100 ml
Run #2	

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-64-1	58.08	Acetone (2-Propanone)	32.7	0.80	0.58	ppbv		77.7	1.9	1.4	ug/m3
106-99-0	54.09	1,3-Butadiene	0.61	0.80	0.34	ppbv	J	1.3	1.8	0.75	ug/m3
71-43-2	78.11	Benzene	0.58	0.80	0.25	ppbv	J	1.9	2.6	0.80	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.80	0.12	ppbv		ND	5.4	0.80	ug/m3
75-25-2	252.8	Bromoform	ND	0.80	0.28	ppbv		ND	8.3	2.9	ug/m3
74-83-9	94.94	Bromomethane	ND	0.80	0.28	ppbv		ND	3.1	1.1	ug/m3
593-60-2	106.9	Bromoethene	ND	0.80	0.24	ppbv		ND	3.5	1.0	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.80	0.50	ppbv		ND	4.1	2.6	ug/m3
75-15-0	76.14	Carbon disulfide	0.72	0.80	0.18	ppbv	J	2.2	2.5	0.56	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.80	0.30	ppbv		ND	3.7	1.4	ug/m3
75-00-3	64.52	Chloroethane	ND	0.80	0.27	ppbv		ND	2.1	0.71	ug/m3
67-66-3	119.4	Chloroform	ND	0.80	0.15	ppbv		ND	3.9	0.73	ug/m3
74-87-3	50.49	Chloromethane	ND	0.80	0.36	ppbv		ND	1.7	0.74	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.80	0.33	ppbv		ND	2.5	1.0	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.80	0.29	ppbv		ND	4.1	1.5	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.80	0.16	ppbv		ND	5.0	1.0	ug/m3
110-82-7	84.16	Cyclohexane	ND	0.80	0.44	ppbv		ND	2.8	1.5	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.80	0.23	ppbv		ND	3.2	0.93	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.80	0.24	ppbv		ND	3.2	0.95	ug/m3
106-93-4	187.9	1,2-Dibromoethane (EDB)	ND	0.80	0.39	ppbv		ND	6.1	3.0	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.80	0.28	ppbv		ND	3.2	1.1	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.80	0.25	ppbv		ND	3.7	1.2	ug/m3
123-91-1	88.12	1,4-Dioxane	ND	0.80	0.47	ppbv		ND	2.9	1.7	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.61	0.80	0.13	ppbv	J	3.0	4.0	0.64	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.80	0.21	ppbv		ND	6.8	1.8	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.80	0.28	ppbv		ND	3.2	1.1	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.80	0.31	ppbv		ND	3.2	1.2	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.80	0.25	ppbv		ND	3.6	1.1	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.80	0.16	ppbv		ND	4.8	0.96	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.80	0.62	ppbv		ND	4.8	3.7	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.80	0.76	ppbv		ND	4.8	4.6	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.80	0.40	ppbv		ND	3.6	1.8	ug/m3

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SV-2		
Lab Sample ID:	JD56787-5	**Date Sampled:**	12/02/22
Matrix:	AIR - Soil Vapor Comp. Summa ID: A2124	**Date Received:**	12/06/22
Method:	TO-15	**Percent Solids:**	n/a
Project:	Frankford Ave, PA		

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
64-17-5	46.07	Ethanol	6.0	2.0	1.6	ppbv		11	3.8	3.0	ug/m3
100-41-4	106.2	Ethylbenzene	ND	0.80	0.24	ppbv		ND	3.5	1.0	ug/m3
141-78-6	88	Ethyl Acetate	4.3	0.80	0.42	ppbv		15	2.9	1.5	ug/m3
622-96-8	120.19	4-Ethyltoluene	ND	0.80	0.38	ppbv		ND	3.9	1.9	ug/m3
76-13-1	187.4	Freon 113	ND	0.80	0.12	ppbv		ND	6.1	0.92	ug/m3
76-14-2	170.9	Freon 114	ND	0.80	0.20	ppbv		ND	5.6	1.4	ug/m3
142-82-5	100.2	Heptane	0.39	0.80	0.37	ppbv	J	1.6	3.3	1.5	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.80	0.25	ppbv		ND	8.5	2.7	ug/m3
110-54-3	86.18	Hexane	1.9	0.80	0.45	ppbv		6.7	2.8	1.6	ug/m3
591-78-6	100	2-Hexanone	1.2	0.80	0.58	ppbv		4.9	3.3	2.4	ug/m3
67-63-0	60.1	Isopropyl Alcohol	3.1	0.80	0.56	ppbv		7.6	2.0	1.4	ug/m3
75-09-2	84.94	Methylene chloride	1.9	0.80	0.22	ppbv		6.6	2.8	0.76	ug/m3
78-93-3	72.11	Methyl ethyl ketone	4.1	0.80	0.44	ppbv		12	2.4	1.3	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	0.66	0.80	0.29	ppbv	J	2.7	3.3	1.2	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.80	0.32	ppbv		ND	2.9	1.2	ug/m3
80-62-6	100.12	Methylmethacrylate	ND	0.80	0.28	ppbv		ND	3.3	1.1	ug/m3
115-07-1	42	Propylene	3.3	2.0	0.57	ppbv		5.7	3.4	0.98	ug/m3
100-42-5	104.1	Styrene	ND	0.80	0.47	ppbv		ND	3.4	2.0	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.80	0.15	ppbv		ND	4.4	0.82	ug/m3
79-34-5	167.85	1,1,2,2-Tetrachloroethane	ND	0.80	0.19	ppbv		ND	5.5	1.3	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.80	0.15	ppbv		ND	4.4	0.82	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.80	0.48	ppbv		ND	5.9	3.6	ug/m3
95-63-6	120.19	1,2,4-Trimethylbenzene	0.64	0.80	0.35	ppbv	J	3.1	3.9	1.7	ug/m3
108-67-8	120.19	1,3,5-Trimethylbenzene	ND	0.80	0.32	ppbv		ND	3.9	1.6	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.80	0.38	ppbv		ND	3.7	1.8	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	1.3	0.80	0.37	ppbv		3.9	2.4	1.1	ug/m3
127-18-4	165.8	Tetrachloroethylene	24.1	0.16	0.056	ppbv		163	1.1	0.38	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	0.80	0.36	ppbv		ND	2.4	1.1	ug/m3
108-88-3	92.14	Toluene	1.3	0.80	0.23	ppbv		4.9	3.0	0.87	ug/m3
79-01-6	131.4	Trichloroethylene	ND	0.16	0.076	ppbv		ND	0.86	0.41	ug/m3
75-69-4	137.4	Trichlorofluoromethane	ND	0.80	0.14	ppbv		ND	4.5	0.79	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.80	0.28	ppbv		ND	2.0	0.72	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.80	0.45	ppbv		ND	2.8	1.6	ug/m3
	106.2	m,p-Xylene	0.79	0.80	0.56	ppbv	J	3.4	3.5	2.4	ug/m3
95-47-6	106.2	o-Xylene	0.45	0.80	0.31	ppbv	J	2.0	3.5	1.3	ug/m3
1330-20-7	106.2	Xylenes (total)	1.2	0.80	0.31	ppbv		5.2	3.5	1.3	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	96%		65-128%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Summa Canister and Flow Controller Log

SGS

AIR

CHAIN OF CUSTODY - AIR

PAGE ___ OF ___

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX 732-329-3499
www.sgs.com/ehsusa

FED-EX Tracking #: | Bottle Order Control #: PS-111122-199
SGS Quote #: | SGS Job #: JD56787

Client / Reporting Information	Project Information	Weather Parameters	Requested Analysis
Company Name: RT Environmental Services	Project Name: Frankford Phase II	Temperature (Fahrenheit) Start: 48 Maximum:	TO-15 for VOCs
Address: 215 W. Church Rd	Street: 5129 Frankford Ave	Stop: Minimum:	
City: King of Prussia State: PA Zip:	City: Philadelphia State: PA	Atmoshpheric Pressure (inches of Hg) Start: 30.25 Maximum:	
Project Contact: Collin Chernoff E-mail: cchernoff@rtenv.com	Project #: 73539-02	Stop: Minimum:	
Phone #: 610-306-6937	Client Purchase Order #: 73539-02-03	Other weather comment:	
Sampler(s) Name(s): Collin Chernoff			

Lab Sample #	Field ID / Point of Collection	Air Type: Ind (I) Soil Vap (SV) Amb (A)	Air Type: Res (R) Non-Res (NR)	Sampling Equipment Info: Canister Serial #	Sampling Equipment Info: Canister Size 6L or 1L	Sampling Equipment Info: Flow Controller Serial #	Start Sampling Information: Date	Start: Time (24hr clock)	Start: Canister Pressure ("Hg)	Start: Interior Temp (F)	Start: Sampler Init.	Stop Sampling Information: Date	Stop: Time (24hr clock)	Stop: Canister Pressure ("Hg)	Stop: Interior Temp (F)	Stop: Sampler Init.	TO-15 for VOCs
1	SV-5	SV	R	A2122	6L	FC999	12-5-22	14:07	-27	48	CEC	12-5-22	14:25	-3	48	CEC	X
2	SV-4	SV	R	A476	6L	FC934	12-5-22	14:38	-30	48	CEC	12-5-22	15:09	-5	48	CEC	X
3	SV-3	SV	R	A2128	6L	FC892	12-5-22	15:20	-26	48	CEC	12-5-22	15:42	-5	46	CEC	X
4	SV-1	SV	R	A2123	6L	FC930	12-7-22	[illegible]	-27	45	CEC	12-7-22	10:42	-2	45	CEC	X
5	SV-7	SV	R	A2124	6L	FC521	12-7-22	12:07	-27	55	CEC	12-7-22	12:41	-4	55	CEC	X
														[illegible] IC			48
														[illegible]			

Turnaround Time (Business days)
- 15 Business Days
- 10 Business Days
- 5 Business Days
- 3 Business Days *
- 2 Business Days *
- 1 Business Day *
- Other

Approved By: _____ Date: _____
* Approval needed for 1-3 Business Day TAT

Data Deliverable Information
All NJDEP TO-15 is mandatory Full T1
- Comm A
- Comm B
- Reduced T2
- Full T1
- Other:
- DKQP reporting

Comments / Remarks
SGS Courier
Sample inventory is verified upon receipt in the Laboratory

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Laboratory: 1	Date / Time: 11/7/22 11:40	Received By:	Relinquished By: 2	Date / Time: 12-6-22 7:00	Received By: 2
Relinquished by: 3	Date / Time: 12/7/22 1144	Received By: 3	Relinquished By: 4	Date / Time:	Received By: 4
Relinquished by: 5	Date / Time:	Received By: 5	Custody Seal #		

http://www.sgs.com/en/terms-and-conditions

EHSA-QAC-0022-01-FORM-Dayton-Air COC
Rev.date:1/15/2021

SGS Sample Receipt Summary

Job Number: JD56787 **Client:** RT ENVIRONMENTAL SERVICES, INC **Project:** FRANKFORD AVE, PA

Date / Time Received: 12/6/2022 **Delivery Method:** SGS **Airbill #'s:**

Cooler Temps (Raw Measured) °C:

Cooler Temps (Corrected) °C:

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☐		☐
2. Cooler temp verification:	N/A		
3. Cooler media:	N/A		
4. No. Coolers:	N/A		

Quality Control _Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☑	☐
2. Trip Blank listed on COC:	☐		☑	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☐		☐	☑

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Test Strip Lot #s: pH 1-12: 231619 pH 12+: 203117A Other: (Specify)

Comments

SM089-03
Rev. Date 12/7/17

Summa Canister and Flow Controller Log

Job Number: JD56787
Account: RTESPA RT Environmental Services, Inc
Project: Frankford Ave, PA
Received: 12/06/22

SUMMA CANISTERS

Shipping							Receiving					
Summa ID	L	Vac " Hg	Date Out	By	SCC Batch	SCC FileID	Sample Number	Date In	By	Vac " Hg	Pres psig	Final psig	Dil Fact
A2122	6	29.4	11/30/22	ML	CP11976	6W27125.D	JD56787-1	12/08/22	DG	2.5			1
A476	6	29.4	11/30/22	ML	CP11918	6W26999.D	JD56787-2	12/08/22	DG	3.5			1
A2128	6	29.4	11/30/22	ML	CP11976	6W27125.D	JD56787-3	12/08/22	DG	4			1
A2123	6	29.4	11/30/22	ML	CP11976	6W27125.D	JD56787-4	12/08/22	DG	1			1
A2124	6	29.4	11/30/22	ML	CP11976	6W27125.D	JD56787-5	12/08/22	DG	3			1

FLOW CONTROLLERS / OTHER

Shipping					Receiving				
Flow Crtl ID	Date Out	By	cc/ min	Time hrs.	Date In	By	cc/ min	Flow RPD	Equipment Type
FC521	11/30/22	ML	167	.5	12/08/22	DG	182	8.6	Flow Controller
FC892	11/30/22	ML	167	.5	12/09/22	DG	168	0.6	Flow Controller
FC930	11/30/22	ML	168	.5	12/09/22	DG	167	0.6	Flow Controller
FC934	11/30/22	ML	168	.5	12/09/22	DG	167	0.6	Flow Controller
FC999	11/30/22	ML	166	.5	12/08/22	DG	313	61.4*	Flow Controller

* Flow controller RPD > 20%

SGS Bottle Order(s):
TS-111722-199

Prep Date	Room Temp(F)	Bar Pres "Hg
11/30/22	70	29.92

MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: JD56787
Account: RTESPA RT Environmental Services, Inc
Project: Frankford Ave, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6W1161-MB	6W27591.D	1	12/10/22	TCH	n/a	n/a	V6W1161

The QC reported here applies to the following samples: **Method:** TO-15

JD56787-1, JD56787-2, JD56787-3, JD56787-4, JD56787-5

CAS No.	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
67-64-1	Acetone (2-Propanone)	ND	0.20	0.15	ppbv		ND	0.48	ug/m3
106-99-0	1,3-Butadiene	ND	0.20	0.084	ppbv		ND	0.44	ug/m3
71-43-2	Benzene	ND	0.20	0.062	ppbv		ND	0.64	ug/m3
75-27-4	Bromodichloromethane	ND	0.20	0.030	ppbv		ND	1.3	ug/m3
75-25-2	Bromoform	ND	0.20	0.071	ppbv		ND	2.1	ug/m3
74-83-9	Bromomethane	ND	0.20	0.069	ppbv		ND	0.78	ug/m3
593-60-2	Bromoethene	ND	0.20	0.061	ppbv		ND	0.87	ug/m3
100-44-7	Benzyl Chloride	ND	0.20	0.13	ppbv		ND	1.0	ug/m3
75-15-0	Carbon disulfide	ND	0.20	0.045	ppbv		ND	0.62	ug/m3
108-90-7	Chlorobenzene	ND	0.20	0.074	ppbv		ND	0.92	ug/m3
75-00-3	Chloroethane	ND	0.20	0.068	ppbv		ND	0.53	ug/m3
67-66-3	Chloroform	ND	0.20	0.037	ppbv		ND	0.98	ug/m3
74-87-3	Chloromethane	ND	0.20	0.090	ppbv		ND	0.41	ug/m3
107-05-1	3-Chloropropene	ND	0.20	0.083	ppbv		ND	0.63	ug/m3
95-49-8	2-Chlorotoluene	ND	0.20	0.072	ppbv		ND	1.0	ug/m3
56-23-5	Carbon tetrachloride	ND	0.20	0.040	ppbv		ND	1.3	ug/m3
110-82-7	Cyclohexane	ND	0.20	0.11	ppbv		ND	0.69	ug/m3
75-34-3	1,1-Dichloroethane	ND	0.20	0.057	ppbv		ND	0.81	ug/m3
75-35-4	1,1-Dichloroethylene	ND	0.20	0.059	ppbv		ND	0.79	ug/m3
106-93-4	1,2-Dibromoethane (EDB)	ND	0.20	0.097	ppbv		ND	1.5	ug/m3
107-06-2	1,2-Dichloroethane	ND	0.20	0.070	ppbv		ND	0.81	ug/m3
78-87-5	1,2-Dichloropropane	ND	0.20	0.062	ppbv		ND	0.92	ug/m3
123-91-1	1,4-Dioxane	ND	0.20	0.12	ppbv		ND	0.72	ug/m3
75-71-8	Dichlorodifluoromethane	ND	0.20	0.032	ppbv		ND	0.99	ug/m3
124-48-1	Dibromochloromethane	ND	0.20	0.052	ppbv		ND	1.7	ug/m3
156-60-5	trans-1,2-Dichloroethylene	ND	0.20	0.069	ppbv		ND	0.79	ug/m3
156-59-2	cis-1,2-Dichloroethylene	ND	0.20	0.077	ppbv		ND	0.79	ug/m3
10061-01-5	cis-1,3-Dichloropropene	ND	0.20	0.062	ppbv		ND	0.91	ug/m3
541-73-1	m-Dichlorobenzene	ND	0.20	0.040	ppbv		ND	1.2	ug/m3
95-50-1	o-Dichlorobenzene	ND	0.20	0.15	ppbv		ND	1.2	ug/m3
106-46-7	p-Dichlorobenzene	ND	0.20	0.19	ppbv		ND	1.2	ug/m3
10061-02-6	trans-1,3-Dichloropropene	ND	0.20	0.10	ppbv		ND	0.91	ug/m3
64-17-5	Ethanol	ND	0.50	0.39	ppbv		ND	0.94	ug/m3
100-41-4	Ethylbenzene	ND	0.20	0.061	ppbv		ND	0.87	ug/m3
141-78-6	Ethyl Acetate	ND	0.20	0.10	ppbv		ND	0.72	ug/m3
622-96-8	4-Ethyltoluene	ND	0.20	0.095	ppbv		ND	0.98	ug/m3

Method Blank Summary

Job Number: JD56787
Account: RTESPA RT Environmental Services, Inc
Project: Frankford Ave, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6W1161-MB	6W27591.D	1	12/10/22	TCH	n/a	n/a	V6W1161

The QC reported here applies to the following samples: **Method:** TO-15

JD56787-1, JD56787-2, JD56787-3, JD56787-4, JD56787-5

CAS No.	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
76-13-1	Freon 113	ND	0.20	0.031	ppbv		ND	1.5	ug/m3
76-14-2	Freon 114	ND	0.20	0.050	ppbv		ND	1.4	ug/m3
142-82-5	Heptane	ND	0.20	0.092	ppbv		ND	0.82	ug/m3
87-68-3	Hexachlorobutadiene	ND	0.20	0.062	ppbv		ND	2.1	ug/m3
110-54-3	Hexane	ND	0.20	0.11	ppbv		ND	0.70	ug/m3
591-78-6	2-Hexanone	ND	0.20	0.15	ppbv		ND	0.82	ug/m3
67-63-0	Isopropyl Alcohol	ND	0.20	0.14	ppbv		ND	0.49	ug/m3
75-09-2	Methylene chloride	ND	0.20	0.056	ppbv		ND	0.69	ug/m3
78-93-3	Methyl ethyl ketone	ND	0.20	0.11	ppbv		ND	0.59	ug/m3
108-10-1	Methyl Isobutyl Ketone	ND	0.20	0.073	ppbv		ND	0.82	ug/m3
1634-04-4	Methyl Tert Butyl Ether	ND	0.20	0.080	ppbv		ND	0.72	ug/m3
80-62-6	Methylmethacrylate	ND	0.20	0.070	ppbv		ND	0.82	ug/m3
115-07-1	Propylene	ND	0.50	0.14	ppbv		ND	0.86	ug/m3
100-42-5	Styrene	ND	0.20	0.12	ppbv		ND	0.85	ug/m3
71-55-6	1,1,1-Trichloroethane	ND	0.20	0.037	ppbv		ND	1.1	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.20	0.048	ppbv		ND	1.4	ug/m3
79-00-5	1,1,2-Trichloroethane	ND	0.20	0.038	ppbv		ND	1.1	ug/m3
120-82-1	1,2,4-Trichlorobenzene	ND	0.20	0.12	ppbv		ND	1.5	ug/m3
95-63-6	1,2,4-Trimethylbenzene	ND	0.20	0.087	ppbv		ND	0.98	ug/m3
108-67-8	1,3,5-Trimethylbenzene	ND	0.20	0.080	ppbv		ND	0.98	ug/m3
540-84-1	2,2,4-Trimethylpentane	ND	0.20	0.095	ppbv		ND	0.93	ug/m3
75-65-0	Tertiary Butyl Alcohol	ND	0.20	0.093	ppbv		ND	0.61	ug/m3
127-18-4	Tetrachloroethylene	ND	0.040	0.014	ppbv		ND	0.27	ug/m3
109-99-9	Tetrahydrofuran	ND	0.20	0.090	ppbv		ND	0.59	ug/m3
108-88-3	Toluene	ND	0.20	0.057	ppbv		ND	0.75	ug/m3
79-01-6	Trichloroethylene	ND	0.040	0.019	ppbv		ND	0.21	ug/m3
75-69-4	Trichlorofluoromethane	ND	0.20	0.036	ppbv		ND	1.1	ug/m3
75-01-4	Vinyl chloride	ND	0.20	0.069	ppbv		ND	0.51	ug/m3
108-05-4	Vinyl Acetate	ND	0.20	0.11	ppbv		ND	0.70	ug/m3
	m,p-Xylene	ND	0.20	0.14	ppbv		ND	0.87	ug/m3
95-47-6	o-Xylene	ND	0.20	0.077	ppbv		ND	0.87	ug/m3
1330-20-7	Xylenes (total)	ND	0.20	0.077	ppbv		ND	0.87	ug/m3

Method Blank Summary

Job Number: JD56787
Account: RTESPA RT Environmental Services, Inc
Project: Frankford Ave, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6W1161-MB	6W27591.D	1	12/10/22	TCH	n/a	n/a	V6W1161

The QC reported here applies to the following samples: **Method:** TO-15

JD56787-1, JD56787-2, JD56787-3, JD56787-4, JD56787-5

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	95%	65-128%

Method Blank Summary

Job Number: JD56787
Account: RTESPA RT Environmental Services, Inc
Project: Frankford Ave, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6W1142-MB	6W26995.D	1	11/08/22	TCH	n/a	n/a	V6W1142

The QC reported here applies to the following samples: **Method:** TO-15

V6W1142-SCC

CAS No.	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
67-64-1	Acetone (2-Propanone)	ND	0.20	0.15	ppbv		ND	0.48	ug/m3
106-99-0	1,3-Butadiene	ND	0.20	0.084	ppbv		ND	0.44	ug/m3
71-43-2	Benzene	ND	0.20	0.062	ppbv		ND	0.64	ug/m3
75-27-4	Bromodichloromethane	ND	0.20	0.030	ppbv		ND	1.3	ug/m3
75-25-2	Bromoform	ND	0.20	0.071	ppbv		ND	2.1	ug/m3
74-83-9	Bromomethane	ND	0.20	0.069	ppbv		ND	0.78	ug/m3
593-60-2	Bromoethene	ND	0.20	0.061	ppbv		ND	0.87	ug/m3
100-44-7	Benzyl Chloride	ND	0.20	0.13	ppbv		ND	1.0	ug/m3
75-15-0	Carbon disulfide	ND	0.20	0.045	ppbv		ND	0.62	ug/m3
108-90-7	Chlorobenzene	ND	0.20	0.074	ppbv		ND	0.92	ug/m3
75-00-3	Chloroethane	ND	0.20	0.068	ppbv		ND	0.53	ug/m3
67-66-3	Chloroform	ND	0.20	0.037	ppbv		ND	0.98	ug/m3
74-87-3	Chloromethane	ND	0.20	0.090	ppbv		ND	0.41	ug/m3
107-05-1	3-Chloropropene	ND	0.20	0.083	ppbv		ND	0.63	ug/m3
95-49-8	2-Chlorotoluene	ND	0.20	0.072	ppbv		ND	1.0	ug/m3
56-23-5	Carbon tetrachloride	ND	0.20	0.040	ppbv		ND	1.3	ug/m3
110-82-7	Cyclohexane	ND	0.20	0.11	ppbv		ND	0.69	ug/m3
75-34-3	1,1-Dichloroethane	ND	0.20	0.057	ppbv		ND	0.81	ug/m3
75-35-4	1,1-Dichloroethylene	ND	0.20	0.059	ppbv		ND	0.79	ug/m3
106-93-4	1,2-Dibromoethane (EDB)	ND	0.20	0.097	ppbv		ND	1.5	ug/m3
107-06-2	1,2-Dichloroethane	ND	0.20	0.070	ppbv		ND	0.81	ug/m3
78-87-5	1,2-Dichloropropane	ND	0.20	0.062	ppbv		ND	0.92	ug/m3
123-91-1	1,4-Dioxane	ND	0.20	0.12	ppbv		ND	0.72	ug/m3
75-71-8	Dichlorodifluoromethane	ND	0.20	0.032	ppbv		ND	0.99	ug/m3
124-48-1	Dibromochloromethane	ND	0.20	0.052	ppbv		ND	1.7	ug/m3
156-60-5	trans-1,2-Dichloroethylene	ND	0.20	0.069	ppbv		ND	0.79	ug/m3
156-59-2	cis-1,2-Dichloroethylene	ND	0.20	0.077	ppbv		ND	0.79	ug/m3
10061-01-5	cis-1,3-Dichloropropene	ND	0.20	0.062	ppbv		ND	0.91	ug/m3
541-73-1	m-Dichlorobenzene	ND	0.20	0.040	ppbv		ND	1.2	ug/m3
95-50-1	o-Dichlorobenzene	ND	0.20	0.15	ppbv		ND	1.2	ug/m3
106-46-7	p-Dichlorobenzene	ND	0.20	0.19	ppbv		ND	1.2	ug/m3
10061-02-6	trans-1,3-Dichloropropene	ND	0.20	0.10	ppbv		ND	0.91	ug/m3
64-17-5	Ethanol	ND	0.50	0.39	ppbv		ND	0.94	ug/m3
100-41-4	Ethylbenzene	ND	0.20	0.061	ppbv		ND	0.87	ug/m3
141-78-6	Ethyl Acetate	ND	0.20	0.10	ppbv		ND	0.72	ug/m3
622-96-8	4-Ethyltoluene	ND	0.20	0.095	ppbv		ND	0.98	ug/m3

Method Blank Summary

Job Number: JD56787
Account: RTESPA RT Environmental Services, Inc
Project: Frankford Ave, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6W1142-MB	6W26995.D	1	11/08/22	TCH	n/a	n/a	V6W1142

The QC reported here applies to the following samples: **Method:** TO-15

V6W1142-SCC

CAS No.	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
76-13-1	Freon 113	ND	0.20	0.031	ppbv		ND	1.5	ug/m3
76-14-2	Freon 114	ND	0.20	0.050	ppbv		ND	1.4	ug/m3
142-82-5	Heptane	ND	0.20	0.092	ppbv		ND	0.82	ug/m3
87-68-3	Hexachlorobutadiene	ND	0.20	0.062	ppbv		ND	2.1	ug/m3
110-54-3	Hexane	ND	0.20	0.11	ppbv		ND	0.70	ug/m3
591-78-6	2-Hexanone	ND	0.20	0.15	ppbv		ND	0.82	ug/m3
67-63-0	Isopropyl Alcohol	ND	0.20	0.14	ppbv		ND	0.49	ug/m3
75-09-2	Methylene chloride	ND	0.20	0.056	ppbv		ND	0.69	ug/m3
78-93-3	Methyl ethyl ketone	ND	0.20	0.11	ppbv		ND	0.59	ug/m3
108-10-1	Methyl Isobutyl Ketone	ND	0.20	0.073	ppbv		ND	0.82	ug/m3
1634-04-4	Methyl Tert Butyl Ether	ND	0.20	0.080	ppbv		ND	0.72	ug/m3
80-62-6	Methylmethacrylate	ND	0.20	0.070	ppbv		ND	0.82	ug/m3
115-07-1	Propylene	ND	0.50	0.14	ppbv		ND	0.86	ug/m3
100-42-5	Styrene	ND	0.20	0.12	ppbv		ND	0.85	ug/m3
71-55-6	1,1,1-Trichloroethane	ND	0.20	0.037	ppbv		ND	1.1	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.20	0.048	ppbv		ND	1.4	ug/m3
79-00-5	1,1,2-Trichloroethane	ND	0.20	0.038	ppbv		ND	1.1	ug/m3
120-82-1	1,2,4-Trichlorobenzene	ND	0.20	0.12	ppbv		ND	1.5	ug/m3
95-63-6	1,2,4-Trimethylbenzene	ND	0.20	0.087	ppbv		ND	0.98	ug/m3
108-67-8	1,3,5-Trimethylbenzene	ND	0.20	0.080	ppbv		ND	0.98	ug/m3
540-84-1	2,2,4-Trimethylpentane	ND	0.20	0.095	ppbv		ND	0.93	ug/m3
75-65-0	Tertiary Butyl Alcohol	ND	0.20	0.093	ppbv		ND	0.61	ug/m3
127-18-4	Tetrachloroethylene	ND	0.040	0.014	ppbv		ND	0.27	ug/m3
109-99-9	Tetrahydrofuran	ND	0.20	0.090	ppbv		ND	0.59	ug/m3
108-88-3	Toluene	ND	0.20	0.057	ppbv		ND	0.75	ug/m3
79-01-6	Trichloroethylene	ND	0.040	0.019	ppbv		ND	0.21	ug/m3
75-69-4	Trichlorofluoromethane	ND	0.20	0.036	ppbv		ND	1.1	ug/m3
75-01-4	Vinyl chloride	ND	0.20	0.069	ppbv		ND	0.51	ug/m3
108-05-4	Vinyl Acetate	ND	0.20	0.11	ppbv		ND	0.70	ug/m3
	m,p-Xylene	ND	0.20	0.14	ppbv		ND	0.87	ug/m3
95-47-6	o-Xylene	ND	0.20	0.077	ppbv		ND	0.87	ug/m3
1330-20-7	Xylenes (total)	ND	0.20	0.077	ppbv		ND	0.87	ug/m3

Method Blank Summary

Job Number: JD56787
Account: RTESPA RT Environmental Services, Inc
Project: Frankford Ave, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6W1142-MB	6W26995.D	1	11/08/22	TCH	n/a	n/a	V6W1142

The QC reported here applies to the following samples: **Method:** TO-15

V6W1142-SCC

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	106%	65-128%

Method Blank Summary

Job Number: JD56787
Account: RTESPA RT Environmental Services, Inc
Project: Frankford Ave, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6W1146-MB	6W27097.D	1	11/22/22	TCH	n/a	n/a	V6W1146

The QC reported here applies to the following samples: **Method:** TO-15

V6W1146-SCC

CAS No.	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
67-64-1	Acetone (2-Propanone)	ND	0.20	0.15	ppbv		ND	0.48	ug/m3
106-99-0	1,3-Butadiene	ND	0.20	0.084	ppbv		ND	0.44	ug/m3
71-43-2	Benzene	ND	0.20	0.062	ppbv		ND	0.64	ug/m3
75-27-4	Bromodichloromethane	ND	0.20	0.030	ppbv		ND	1.3	ug/m3
75-25-2	Bromoform	ND	0.20	0.071	ppbv		ND	2.1	ug/m3
74-83-9	Bromomethane	ND	0.20	0.069	ppbv		ND	0.78	ug/m3
593-60-2	Bromoethene	ND	0.20	0.061	ppbv		ND	0.87	ug/m3
100-44-7	Benzyl Chloride	ND	0.20	0.13	ppbv		ND	1.0	ug/m3
75-15-0	Carbon disulfide	ND	0.20	0.045	ppbv		ND	0.62	ug/m3
108-90-7	Chlorobenzene	ND	0.20	0.074	ppbv		ND	0.92	ug/m3
75-00-3	Chloroethane	ND	0.20	0.068	ppbv		ND	0.53	ug/m3
67-66-3	Chloroform	ND	0.20	0.037	ppbv		ND	0.98	ug/m3
74-87-3	Chloromethane	ND	0.20	0.090	ppbv		ND	0.41	ug/m3
107-05-1	3-Chloropropene	ND	0.20	0.083	ppbv		ND	0.63	ug/m3
95-49-8	2-Chlorotoluene	ND	0.20	0.072	ppbv		ND	1.0	ug/m3
56-23-5	Carbon tetrachloride	ND	0.20	0.040	ppbv		ND	1.3	ug/m3
110-82-7	Cyclohexane	ND	0.20	0.11	ppbv		ND	0.69	ug/m3
75-34-3	1,1-Dichloroethane	ND	0.20	0.057	ppbv		ND	0.81	ug/m3
75-35-4	1,1-Dichloroethylene	ND	0.20	0.059	ppbv		ND	0.79	ug/m3
106-93-4	1,2-Dibromoethane (EDB)	ND	0.20	0.097	ppbv		ND	1.5	ug/m3
107-06-2	1,2-Dichloroethane	ND	0.20	0.070	ppbv		ND	0.81	ug/m3
78-87-5	1,2-Dichloropropane	ND	0.20	0.062	ppbv		ND	0.92	ug/m3
123-91-1	1,4-Dioxane	ND	0.20	0.12	ppbv		ND	0.72	ug/m3
75-71-8	Dichlorodifluoromethane	ND	0.20	0.032	ppbv		ND	0.99	ug/m3
124-48-1	Dibromochloromethane	ND	0.20	0.052	ppbv		ND	1.7	ug/m3
156-60-5	trans-1,2-Dichloroethylene	ND	0.20	0.069	ppbv		ND	0.79	ug/m3
156-59-2	cis-1,2-Dichloroethylene	ND	0.20	0.077	ppbv		ND	0.79	ug/m3
10061-01-5	cis-1,3-Dichloropropene	ND	0.20	0.062	ppbv		ND	0.91	ug/m3
541-73-1	m-Dichlorobenzene	ND	0.20	0.040	ppbv		ND	1.2	ug/m3
95-50-1	o-Dichlorobenzene	ND	0.20	0.15	ppbv		ND	1.2	ug/m3
106-46-7	p-Dichlorobenzene	ND	0.20	0.19	ppbv		ND	1.2	ug/m3
10061-02-6	trans-1,3-Dichloropropene	ND	0.20	0.10	ppbv		ND	0.91	ug/m3
64-17-5	Ethanol	ND	0.50	0.39	ppbv		ND	0.94	ug/m3
100-41-4	Ethylbenzene	ND	0.20	0.061	ppbv		ND	0.87	ug/m3
141-78-6	Ethyl Acetate	ND	0.20	0.10	ppbv		ND	0.72	ug/m3
622-96-8	4-Ethyltoluene	ND	0.20	0.095	ppbv		ND	0.98	ug/m3

Method Blank Summary

Job Number: JD56787
Account: RTESPA RT Environmental Services, Inc
Project: Frankford Ave, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6W1146-MB	6W27097.D	1	11/22/22	TCH	n/a	n/a	V6W1146

The QC reported here applies to the following samples: **Method:** TO-15

V6W1146-SCC

CAS No.	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
76-13-1	Freon 113	ND	0.20	0.031	ppbv		ND	1.5	ug/m3
76-14-2	Freon 114	ND	0.20	0.050	ppbv		ND	1.4	ug/m3
142-82-5	Heptane	ND	0.20	0.092	ppbv		ND	0.82	ug/m3
87-68-3	Hexachlorobutadiene	ND	0.20	0.062	ppbv		ND	2.1	ug/m3
110-54-3	Hexane	ND	0.20	0.11	ppbv		ND	0.70	ug/m3
591-78-6	2-Hexanone	ND	0.20	0.15	ppbv		ND	0.82	ug/m3
67-63-0	Isopropyl Alcohol	ND	0.20	0.14	ppbv		ND	0.49	ug/m3
75-09-2	Methylene chloride	ND	0.20	0.056	ppbv		ND	0.69	ug/m3
78-93-3	Methyl ethyl ketone	ND	0.20	0.11	ppbv		ND	0.59	ug/m3
108-10-1	Methyl Isobutyl Ketone	ND	0.20	0.073	ppbv		ND	0.82	ug/m3
1634-04-4	Methyl Tert Butyl Ether	ND	0.20	0.080	ppbv		ND	0.72	ug/m3
80-62-6	Methylmethacrylate	ND	0.20	0.070	ppbv		ND	0.82	ug/m3
115-07-1	Propylene	ND	0.50	0.14	ppbv		ND	0.86	ug/m3
100-42-5	Styrene	ND	0.20	0.12	ppbv		ND	0.85	ug/m3
71-55-6	1,1,1-Trichloroethane	ND	0.20	0.037	ppbv		ND	1.1	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.20	0.048	ppbv		ND	1.4	ug/m3
79-00-5	1,1,2-Trichloroethane	ND	0.20	0.038	ppbv		ND	1.1	ug/m3
120-82-1	1,2,4-Trichlorobenzene	ND	0.20	0.12	ppbv		ND	1.5	ug/m3
95-63-6	1,2,4-Trimethylbenzene	ND	0.20	0.087	ppbv		ND	0.98	ug/m3
108-67-8	1,3,5-Trimethylbenzene	ND	0.20	0.080	ppbv		ND	0.98	ug/m3
540-84-1	2,2,4-Trimethylpentane	ND	0.20	0.095	ppbv		ND	0.93	ug/m3
75-65-0	Tertiary Butyl Alcohol	ND	0.20	0.093	ppbv		ND	0.61	ug/m3
127-18-4	Tetrachloroethylene	ND	0.040	0.014	ppbv		ND	0.27	ug/m3
109-99-9	Tetrahydrofuran	ND	0.20	0.090	ppbv		ND	0.59	ug/m3
108-88-3	Toluene	ND	0.20	0.057	ppbv		ND	0.75	ug/m3
79-01-6	Trichloroethylene	ND	0.040	0.019	ppbv		ND	0.21	ug/m3
75-69-4	Trichlorofluoromethane	ND	0.20	0.036	ppbv		ND	1.1	ug/m3
75-01-4	Vinyl chloride	ND	0.20	0.069	ppbv		ND	0.51	ug/m3
108-05-4	Vinyl Acetate	ND	0.20	0.11	ppbv		ND	0.70	ug/m3
	m,p-Xylene	ND	0.20	0.14	ppbv		ND	0.87	ug/m3
95-47-6	o-Xylene	ND	0.20	0.077	ppbv		ND	0.87	ug/m3
1330-20-7	Xylenes (total)	ND	0.20	0.077	ppbv		ND	0.87	ug/m3

Method Blank Summary

Job Number: JD56787
Account: RTESPA RT Environmental Services, Inc
Project: Frankford Ave, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6W1146-MB	6W27097.D	1	11/22/22	TCH	n/a	n/a	V6W1146

The QC reported here applies to the following samples: **Method:** TO-15

V6W1146-SCC

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	99%	65-128%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
124-38-9	Carbon dioxide	1.65	3.1	ppbv	JN
	Total TIC, Volatile		0	ppbv	

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD56787
Account: RTESPA RT Environmental Services, Inc
Project: Frankford Ave, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6W1161-BS	6W27588.D	1	12/10/22	TCH	n/a	n/a	V6W1161
V6W1161-BSD	6W27589.D	1	12/10/22	TCH	n/a	n/a	V6W1161

The QC reported here applies to the following samples: **Method:** TO-15

JD56787-1, JD56787-2, JD56787-3, JD56787-4, JD56787-5

CAS No.	Compound	Spike ppbv	BSP ppbv	BSP %	BSD ppbv	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone (2-Propanone)	10	9.4	94	9.6	96	2	70-130/30
106-99-0	1,3-Butadiene	10	11.4	114	10.6	106	7	70-130/30
71-43-2	Benzene	10	10.3	103	9.9	99	4	70-130/30
75-27-4	Bromodichloromethane	10	10.6	106	11.0	110	4	70-130/30
75-25-2	Bromoform	10	10.8	108	10.9	109	1	70-130/30
74-83-9	Bromomethane	10	10.8	108	10.6	106	2	70-130/30
593-60-2	Bromoethene	10	10.7	107	10.9	109	2	70-130/30
100-44-7	Benzyl Chloride	10	9.4	94	9.9	99	5	70-130/30
75-15-0	Carbon disulfide	10	10.5	105	11.2	112	6	70-130/30
108-90-7	Chlorobenzene	10	10.7	107	10.8	108	1	70-130/30
75-00-3	Chloroethane	10	10.8	108	11.0	110	2	70-130/30
67-66-3	Chloroform	10	10.5	105	10.5	105	0	70-130/30
74-87-3	Chloromethane	10	10.3	103	10.3	103	0	70-130/30
107-05-1	3-Chloropropene	10	10.5	105	10.8	108	3	70-130/30
95-49-8	2-Chlorotoluene	10	11.5	115	11.7	117	2	70-130/30
56-23-5	Carbon tetrachloride	10	11.1	111	10.9	109	2	70-130/30
110-82-7	Cyclohexane	10	10.5	105	10.4	104	1	70-130/30
75-34-3	1,1-Dichloroethane	10	10.2	102	10.2	102	0	70-130/30
75-35-4	1,1-Dichloroethylene	10	10.1	101	10.7	107	6	70-130/30
106-93-4	1,2-Dibromoethane (EDB)	10	10.8	108	11.1	111	3	70-130/30
107-06-2	1,2-Dichloroethane	10	11.0	110	10.6	106	4	70-130/30
78-87-5	1,2-Dichloropropane	10	10.4	104	11.0	110	6	70-130/30
123-91-1	1,4-Dioxane	10	10.9	109	11.4	114	4	70-130/30
75-71-8	Dichlorodifluoromethane	10	10.9	109	11.0	110	1	70-130/30
124-48-1	Dibromochloromethane	10	10.9	109	11.2	112	3	70-130/30
156-60-5	trans-1,2-Dichloroethylene	10	10.3	103	10.3	103	0	70-130/30
156-59-2	cis-1,2-Dichloroethylene	10	10.3	103	10.3	103	0	70-130/30
10061-01-5	cis-1,3-Dichloropropene	10	10.8	108	11.2	112	4	70-130/30
541-73-1	m-Dichlorobenzene	10	11.6	116	11.7	117	1	70-130/30
95-50-1	o-Dichlorobenzene	10	11.5	115	11.8	118	3	70-130/30
106-46-7	p-Dichlorobenzene	10	11.7	117	11.9	119	2	70-130/30
10061-02-6	trans-1,3-Dichloropropene	10	10.7	107	11.2	112	5	70-130/30
64-17-5	Ethanol	10	10.7	107	10.8	108	1	70-130/30
100-41-4	Ethylbenzene	10	9.6	96	9.8	98	2	70-130/30
141-78-6	Ethyl Acetate	10	11.0	110	11.2	112	2	70-130/30
622-96-8	4-Ethyltoluene	10	12.0	120	12.1	121	1	70-130/30

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD56787
Account: RTESPA RT Environmental Services, Inc
Project: Frankford Ave, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6W1161-BS	6W27588.D	1	12/10/22	TCH	n/a	n/a	V6W1161
V6W1161-BSD	6W27589.D	1	12/10/22	TCH	n/a	n/a	V6W1161

The QC reported here applies to the following samples: **Method:** TO-15

JD56787-1, JD56787-2, JD56787-3, JD56787-4, JD56787-5

CAS No.	Compound	Spike ppbv	BSP ppbv	BSP %	BSD ppbv	BSD %	RPD	Limits Rec/RPD
76-13-1	Freon 113	10	10.5	105	10.7	107	2	70-130/30
76-14-2	Freon 114	10	10.7	107	10.8	108	1	70-130/30
142-82-5	Heptane	10	11.0	110	11.4	114	4	70-130/30
87-68-3	Hexachlorobutadiene	10	10.8	108	11.2	112	4	70-130/30
110-54-3	Hexane	10	10.3	103	10.3	103	0	70-130/30
591-78-6	2-Hexanone	10	11.8	118	12.4	124	5	70-130/30
67-63-0	Isopropyl Alcohol	10	10.2	102	10.4	104	2	70-130/30
75-09-2	Methylene chloride	10	9.2	92	9.8	98	6	70-130/30
78-93-3	Methyl ethyl ketone	10	10.6	106	10.6	106	0	70-130/30
108-10-1	Methyl Isobutyl Ketone	10	11.4	114	11.9	119	4	70-130/30
1634-04-4	Methyl Tert Butyl Ether	10	9.6	96	10.0	100	4	70-130/30
80-62-6	Methylmethacrylate	10	11.2	112	11.7	117	4	70-130/30
115-07-1	Propylene	10	11.1	111	11.3	113	2	70-130/30
100-42-5	Styrene	10	11.8	118	11.9	119	1	70-130/30
71-55-6	1,1,1-Trichloroethane	10	10.7	107	10.5	105	2	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	10	10.9	109	11.0	110	1	70-130/30
79-00-5	1,1,2-Trichloroethane	10	10.5	105	10.9	109	4	70-130/30
120-82-1	1,2,4-Trichlorobenzene	10	11.3	113	11.5	115	2	70-130/30
95-63-6	1,2,4-Trimethylbenzene	10	11.8	118	11.8	118	0	70-130/30
108-67-8	1,3,5-Trimethylbenzene	10	12.2	122	12.3	123	1	70-130/30
540-84-1	2,2,4-Trimethylpentane	10	10.7	107	11.3	113	5	70-130/30
75-65-0	Tertiary Butyl Alcohol	10	9.9	99	10.8	108	9	70-130/30
127-18-4	Tetrachloroethylene	10	10.7	107	11.2	112	5	70-130/30
109-99-9	Tetrahydrofuran	10	10.8	108	10.9	109	1	70-130/30
108-88-3	Toluene	10	10.3	103	10.7	107	4	70-130/30
79-01-6	Trichloroethylene	10	10.4	104	10.8	108	4	70-130/30
75-69-4	Trichlorofluoromethane	10	10.8	108	10.9	109	1	70-130/30
75-01-4	Vinyl chloride	10	10.7	107	10.6	106	1	70-130/30
108-05-4	Vinyl Acetate	10	10.2	102	10.4	104	2	70-130/30
	m,p-Xylene	20	20.5	103	20.6	103	0	70-130/30
95-47-6	o-Xylene	10	10.3	103	10.4	104	1	70-130/30
1330-20-7	Xylenes (total)	30	30.8	103	31.0	103	1	70-130/30

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD56787
Account: RTESPA RT Environmental Services, Inc
Project: Frankford Ave, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6W1161-BS	6W27588.D	1	12/10/22	TCH	n/a	n/a	V6W1161
V6W1161-BSD	6W27589.D	1	12/10/22	TCH	n/a	n/a	V6W1161

The QC reported here applies to the following samples: **Method:** TO-15

JD56787-1, JD56787-2, JD56787-3, JD56787-4, JD56787-5

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
460-00-4	4-Bromofluorobenzene	101%	101%	65-128%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD56787
Account: RTESPA RT Environmental Services, Inc
Project: Frankford Ave, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6W1142-BS	6W26991.D	1	11/08/22	TCH	n/a	n/a	V6W1142
V6W1142-BSD	6W26992.D	1	11/08/22	TCH	n/a	n/a	V6W1142

The QC reported here applies to the following samples: **Method:** TO-15

V6W1142-SCC

CAS No.	Compound	Spike ppbv	BSP ppbv	BSP %	BSD ppbv	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone (2-Propanone)	10	14.8	148* [a]	14.4	144* [a]	3	70-130/30
106-99-0	1,3-Butadiene	10	14.8	148* [a]	14.2	142* [a]	4	70-130/30
71-43-2	Benzene	10	11.7	117	11.2	112	4	70-130/30
75-27-4	Bromodichloromethane	10	11.7	117	11.4	114	3	70-130/30
75-25-2	Bromoform	10	11.3	113	10.9	109	4	70-130/30
74-83-9	Bromomethane	10	14.0	140* [a]	13.3	133* [a]	5	70-130/30
593-60-2	Bromoethene	10	12.8	128	12.1	121	6	70-130/30
100-44-7	Benzyl Chloride	10	13.5	135* [a]	13.2	132* [a]	2	70-130/30
75-15-0	Carbon disulfide	10	12.7	127	12.2	122	4	70-130/30
108-90-7	Chlorobenzene	10	11.1	111	10.8	108	3	70-130/30
75-00-3	Chloroethane	10	15.1	151* [a]	14.4	144* [a]	5	70-130/30
67-66-3	Chloroform	10	12.1	121	11.6	116	4	70-130/30
74-87-3	Chloromethane	10	14.4	144* [a]	13.8	138* [a]	4	70-130/30
107-05-1	3-Chloropropene	10	13.4	134* [a]	12.8	128	5	70-130/30
95-49-8	2-Chlorotoluene	10	12.7	127	12.4	124	2	70-130/30
56-23-5	Carbon tetrachloride	10	10.9	109	10.3	103	6	70-130/30
110-82-7	Cyclohexane	10	12.2	122	11.7	117	4	70-130/30
75-34-3	1,1-Dichloroethane	10	12.9	129	12.3	123	5	70-130/30
75-35-4	1,1-Dichloroethylene	10	12.5	125	11.8	118	6	70-130/30
106-93-4	1,2-Dibromoethane (EDB)	10	9.7	97	9.5	95	2	70-130/30
107-06-2	1,2-Dichloroethane	10	12.3	123	12.0	120	2	70-130/30
78-87-5	1,2-Dichloropropane	10	12.9	129	12.6	126	2	70-130/30
123-91-1	1,4-Dioxane	10	14.4	144* [a]	12.4	124	15	70-130/30
75-71-8	Dichlorodifluoromethane	10	13.1	131* [a]	11.8	118	10	70-130/30
124-48-1	Dibromochloromethane	10	9.3	93	9.1	91	2	70-130/30
156-60-5	trans-1,2-Dichloroethylene	10	11.8	118	11.4	114	3	70-130/30
156-59-2	cis-1,2-Dichloroethylene	10	11.7	117	11.2	112	4	70-130/30
10061-01-5	cis-1,3-Dichloropropene	10	10.4	104	10.2	102	2	70-130/30
541-73-1	m-Dichlorobenzene	10	12.3	123	11.9	119	3	70-130/30
95-50-1	o-Dichlorobenzene	10	12.3	123	11.9	119	3	70-130/30
106-46-7	p-Dichlorobenzene	10	12.2	122	12.0	120	2	70-130/30
10061-02-6	trans-1,3-Dichloropropene	10	10.4	104	10.4	104	0	70-130/30
64-17-5	Ethanol	10	14.5	145* [a]	14.1	141* [a]	3	70-130/30
100-41-4	Ethylbenzene	10	10.7	107	10.4	104	3	70-130/30
141-78-6	Ethyl Acetate	10	13.1	131* [a]	12.8	128	2	70-130/30
622-96-8	4-Ethyltoluene	10	13.0	130	12.6	126	3	70-130/30

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD56787
Account: RTESPA RT Environmental Services, Inc
Project: Frankford Ave, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6W1142-BS	6W26991.D	1	11/08/22	TCH	n/a	n/a	V6W1142
V6W1142-BSD	6W26992.D	1	11/08/22	TCH	n/a	n/a	V6W1142

The QC reported here applies to the following samples: **Method:** TO-15

V6W1142-SCC

CAS No.	Compound	Spike ppbv	BSP ppbv	BSP %	BSD ppbv	BSD %	RPD	Limits Rec/RPD
76-13-1	Freon 113	10	11.2	112	10.8	108	4	70-130/30
76-14-2	Freon 114	10	13.2	132* [a]	12.6	126	5	70-130/30
142-82-5	Heptane	10	10.9	109	10.5	105	4	70-130/30
87-68-3	Hexachlorobutadiene	10	14.1	141* [a]	13.5	135* [a]	4	70-130/30
110-54-3	Hexane	10	13.0	130	12.4	124	5	70-130/30
591-78-6	2-Hexanone	10	14.1	141* [a]	13.7	137* [a]	3	70-130/30
67-63-0	Isopropyl Alcohol	10	14.1	141* [a]	13.7	137* [a]	3	70-130/30
75-09-2	Methylene chloride	10	12.1	121	11.6	116	4	70-130/30
78-93-3	Methyl ethyl ketone	10	13.0	130	12.5	125	4	70-130/30
108-10-1	Methyl Isobutyl Ketone	10	12.9	129	12.6	126	2	70-130/30
1634-04-4	Methyl Tert Butyl Ether	10	10.1	101	9.8	98	3	70-130/30
80-62-6	Methylmethacrylate	10	13.1	131* [a]	10.8	108	19	70-130/30
115-07-1	Propylene	10	11.0	110	10.7	107	3	70-130/30
100-42-5	Styrene	10	11.9	119	11.7	117	2	70-130/30
71-55-6	1,1,1-Trichloroethane	10	11.4	114	11.0	110	4	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	10	12.8	128	12.5	125	2	70-130/30
79-00-5	1,1,2-Trichloroethane	10	10.5	105	10.3	103	2	70-130/30
120-82-1	1,2,4-Trichlorobenzene	10	14.1	141* [a]	13.7	137* [a]	3	70-130/30
95-63-6	1,2,4-Trimethylbenzene	10	13.0	130	12.7	127	2	70-130/30
108-67-8	1,3,5-Trimethylbenzene	10	12.7	127	12.4	124	2	70-130/30
540-84-1	2,2,4-Trimethylpentane	10	13.4	134* [a]	10.4	104	25	70-130/30
75-65-0	Tertiary Butyl Alcohol	10	11.6	116	11.4	114	2	70-130/30
127-18-4	Tetrachloroethylene	10	10.1	101	10	100	1	70-130/30
109-99-9	Tetrahydrofuran	10	13.3	133* [a]	12.7	127	5	70-130/30
108-88-3	Toluene	10	9.4	94	9.2	92	2	70-130/30
79-01-6	Trichloroethylene	10	11.4	114	10.8	108	5	70-130/30
75-69-4	Trichlorofluoromethane	10	12.2	122	11.7	117	4	70-130/30
75-01-4	Vinyl chloride	10	14.5	145* [a]	13.9	139* [a]	4	70-130/30
108-05-4	Vinyl Acetate	10	13.1	131* [a]	12.6	126	4	70-130/30
	m,p-Xylene	20	22.1	111	21.5	108	3	70-130/30
95-47-6	o-Xylene	10	11.3	113	11.0	110	3	70-130/30
1330-20-7	Xylenes (total)	30	33.4	111	32.4	108	3	70-130/30

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD56787
Account: RTESPA RT Environmental Services, Inc
Project: Frankford Ave, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6W1142-BS	6W26991.D	1	11/08/22	TCH	n/a	n/a	V6W1142
V6W1142-BSD	6W26992.D	1	11/08/22	TCH	n/a	n/a	V6W1142

The QC reported here applies to the following samples: **Method:** TO-15

V6W1142-SCC

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
460-00-4	4-Bromofluorobenzene	110%	111%	65-128%

(a) High percent recovery and no associated positive reported in the QC batch.

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD56787
Account: RTESPA RT Environmental Services, Inc
Project: Frankford Ave, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6W1146-BS	6W27094.D	1	11/22/22	TCH	n/a	n/a	V6W1146
V6W1146-BSD	6W27095.D	1	11/22/22	TCH	n/a	n/a	V6W1146

The QC reported here applies to the following samples: **Method:** TO-15

V6W1146-SCC

CAS No.	Compound	Spike ppbv	BSP ppbv	BSP %	BSD ppbv	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone (2-Propanone)	10	10.8	108	10.4	104	4	70-130/30
106-99-0	1,3-Butadiene	10	11.5	115	11.1	111	4	70-130/30
71-43-2	Benzene	10	9.8	98	9.4	94	4	70-130/30
75-27-4	Bromodichloromethane	10	9.7	97	9.4	94	3	70-130/30
75-25-2	Bromoform	10	11.0	110	10.6	106	4	70-130/30
74-83-9	Bromomethane	10	11.9	119	11.6	116	3	70-130/30
593-60-2	Bromoethene	10	11.7	117	11.0	110	6	70-130/30
100-44-7	Benzyl Chloride	10	12.0	120	11.8	118	2	70-130/30
75-15-0	Carbon disulfide	10	10.5	105	10.1	101	4	70-130/30
108-90-7	Chlorobenzene	10	10.3	103	9.9	99	4	70-130/30
75-00-3	Chloroethane	10	11.9	119	11.1	111	7	70-130/30
67-66-3	Chloroform	10	10.2	102	9.8	98	4	70-130/30
74-87-3	Chloromethane	10	10.6	106	10.1	101	5	70-130/30
107-05-1	3-Chloropropene	10	10.7	107	10.3	103	4	70-130/30
95-49-8	2-Chlorotoluene	10	11.2	112	10.8	108	4	70-130/30
56-23-5	Carbon tetrachloride	10	9.4	94	9.1	91	3	70-130/30
110-82-7	Cyclohexane	10	10.2	102	9.9	99	3	70-130/30
75-34-3	1,1-Dichloroethane	10	10.2	102	9.8	98	4	70-130/30
75-35-4	1,1-Dichloroethylene	10	11.0	110	10.5	105	5	70-130/30
106-93-4	1,2-Dibromoethane (EDB)	10	9.9	99	9.8	98	1	70-130/30
107-06-2	1,2-Dichloroethane	10	9.3	93	9.0	90	3	70-130/30
78-87-5	1,2-Dichloropropane	10	10.2	102	9.9	99	3	70-130/30
123-91-1	1,4-Dioxane	10	12.7	127	12.3	123	3	70-130/30
75-71-8	Dichlorodifluoromethane	10	12.7	127	12.1	121	5	70-130/30
124-48-1	Dibromochloromethane	10	9.5	95	9.5	95	0	70-130/30
156-60-5	trans-1,2-Dichloroethylene	10	10.6	106	10.3	103	3	70-130/30
156-59-2	cis-1,2-Dichloroethylene	10	10.4	104	10	100	4	70-130/30
10061-01-5	cis-1,3-Dichloropropene	10	9.4	94	9.3	93	1	70-130/30
541-73-1	m-Dichlorobenzene	10	11.5	115	11.2	112	3	70-130/30
95-50-1	o-Dichlorobenzene	10	11.5	115	11.1	111	4	70-130/30
106-46-7	p-Dichlorobenzene	10	11.7	117	11.4	114	3	70-130/30
10061-02-6	trans-1,3-Dichloropropene	10	9.4	94	9.4	94	0	70-130/30
64-17-5	Ethanol	10	11.0	110	10.6	106	4	70-130/30
100-41-4	Ethylbenzene	10	9.4	94	9.0	90	4	70-130/30
141-78-6	Ethyl Acetate	10	11.0	110	10.5	105	5	70-130/30
622-96-8	4-Ethyltoluene	10	11.8	118	11.4	114	3	70-130/30

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD56787
Account: RTESPA RT Environmental Services, Inc
Project: Frankford Ave, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6W1146-BS	6W27094.D	1	11/22/22	TCH	n/a	n/a	V6W1146
V6W1146-BSD	6W27095.D	1	11/22/22	TCH	n/a	n/a	V6W1146

The QC reported here applies to the following samples: **Method:** TO-15

V6W1146-SCC

CAS No.	Compound	Spike ppbv	BSP ppbv	BSP %	BSD ppbv	BSD %	RPD	Limits Rec/RPD
76-13-1	Freon 113	10	10.5	105	10.2	102	3	70-130/30
76-14-2	Freon 114	10	10.7	107	10.1	101	6	70-130/30
142-82-5	Heptane	10	9.6	96	9.4	94	2	70-130/30
87-68-3	Hexachlorobutadiene	10	13.0	130	12.5	125	4	70-130/30
110-54-3	Hexane	10	10.3	103	9.9	99	4	70-130/30
591-78-6	2-Hexanone	10	13.7	137* [a]	13.6	136* [a]	1	70-130/30
67-63-0	Isopropyl Alcohol	10	10.6	106	10.2	102	4	70-130/30
75-09-2	Methylene chloride	10	10.2	102	9.9	99	3	70-130/30
78-93-3	Methyl ethyl ketone	10	10.9	109	10.4	104	5	70-130/30
108-10-1	Methyl Isobutyl Ketone	10	12.0	120	11.9	119	1	70-130/30
1634-04-4	Methyl Tert Butyl Ether	10	8.4	84	8.2	82	2	70-130/30
80-62-6	Methylmethacrylate	10	10.3	103	10.2	102	1	70-130/30
115-07-1	Propylene	10	9.5	95	9.2	92	3	70-130/30
100-42-5	Styrene	10	11.4	114	11.0	110	4	70-130/30
71-55-6	1,1,1-Trichloroethane	10	9.6	96	9.3	93	3	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	10	11.2	112	10.8	108	4	70-130/30
79-00-5	1,1,2-Trichloroethane	10	10	100	9.7	97	3	70-130/30
120-82-1	1,2,4-Trichlorobenzene	10	14.0	140* [b]	13.3	133* [b]	5	70-130/30
95-63-6	1,2,4-Trimethylbenzene	10	11.7	117	11.2	112	4	70-130/30
108-67-8	1,3,5-Trimethylbenzene	10	11.5	115	11.1	111	4	70-130/30
540-84-1	2,2,4-Trimethylpentane	10	10.4	104	9.7	97	7	70-130/30
75-65-0	Tertiary Butyl Alcohol	10	9.5	95	9.3	93	2	70-130/30
127-18-4	Tetrachloroethylene	10	10.0	100	10.0	100	0	70-130/30
109-99-9	Tetrahydrofuran	10	11.1	111	10.7	107	4	70-130/30
108-88-3	Toluene	10	9.0	90	8.9	89	1	70-130/30
79-01-6	Trichloroethylene	10	9.8	98	9.6	96	2	70-130/30
75-69-4	Trichlorofluoromethane	10	10.4	104	9.9	99	5	70-130/30
75-01-4	Vinyl chloride	10	10.9	109	10.4	104	5	70-130/30
108-05-4	Vinyl Acetate	10	11.2	112	10.9	109	3	70-130/30
	m,p-Xylene	20	19.2	96	18.6	93	3	70-130/30
95-47-6	o-Xylene	10	9.8	98	9.5	95	3	70-130/30
1330-20-7	Xylenes (total)	30	29.0	97	28.1	94	3	70-130/30

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD56787
Account: RTESPA RT Environmental Services, Inc
Project: Frankford Ave, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6W1146-BS	6W27094.D	1	11/22/22	TCH	n/a	n/a	V6W1146
V6W1146-BSD	6W27095.D	1	11/22/22	TCH	n/a	n/a	V6W1146

The QC reported here applies to the following samples: **Method:** TO-15

V6W1146-SCC

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
460-00-4	4-Bromofluorobenzene	104%	103%	65-128%

(a) Outside in house control limits.
(b) High percent recovery and no associated positive reported in the QC batch.

* = Outside of Control Limits.

Duplicate Summary

Job Number: JD56787
Account: RTESPA RT Environmental Services, Inc
Project: Frankford Ave, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD56787-1DUP	6W27599.D	1	12/10/22	TCH	n/a	n/a	V6W1161
JD56787-1	6W27598.D	1	12/10/22	TCH	n/a	n/a	V6W1161

The QC reported here applies to the following samples: **Method:** TO-15

JD56787-1, JD56787-2, JD56787-3, JD56787-4, JD56787-5

CAS No.	Compound	JD56787-1 ppbv	Q	DUP ppbv	Q	RPD	Limits
67-64-1	Acetone (2-Propanone)	9.9		10.1		2	25
106-99-0	1,3-Butadiene	2.8		2.7		4	25
71-43-2	Benzene	1.0		1.0		0	25
75-27-4	Bromodichloromethane	ND		ND		nc	25
75-25-2	Bromoform	ND		ND		nc	25
74-83-9	Bromomethane	ND		ND		nc	25
593-60-2	Bromoethene	ND		ND		nc	25
100-44-7	Benzyl Chloride	ND		ND		nc	25
75-15-0	Carbon disulfide	1.2		1.3		8	25
108-90-7	Chlorobenzene	ND		ND		nc	25
75-00-3	Chloroethane	ND		ND		nc	25
67-66-3	Chloroform	ND		ND		nc	25
74-87-3	Chloromethane	ND		ND		nc	25
107-05-1	3-Chloropropene	ND		ND		nc	25
95-49-8	2-Chlorotoluene	ND		ND		nc	25
56-23-5	Carbon tetrachloride	ND		ND		nc	25
110-82-7	Cyclohexane	0.68	J	0.74	J	8	25
75-34-3	1,1-Dichloroethane	ND		ND		nc	25
75-35-4	1,1-Dichloroethylene	ND		ND		nc	25
106-93-4	1,2-Dibromoethane (EDB)	ND		ND		nc	25
107-06-2	1,2-Dichloroethane	ND		ND		nc	25
78-87-5	1,2-Dichloropropane	ND		ND		nc	25
123-91-1	1,4-Dioxane	ND		ND		nc	25
75-71-8	Dichlorodifluoromethane	0.57	J	0.55	J	4	25
124-48-1	Dibromochloromethane	ND		ND		nc	25
156-60-5	trans-1,2-Dichloroethylene	ND		ND		nc	25
156-59-2	cis-1,2-Dichloroethylene	ND		ND		nc	25
10061-01-5	cis-1,3-Dichloropropene	ND		ND		nc	25
541-73-1	m-Dichlorobenzene	ND		ND		nc	25
95-50-1	o-Dichlorobenzene	ND		ND		nc	25
106-46-7	p-Dichlorobenzene	ND		ND		nc	25
10061-02-6	trans-1,3-Dichloropropene	ND		ND		nc	25
64-17-5	Ethanol	2.3		1.7	J	30* [a]	25
100-41-4	Ethylbenzene	ND		ND		nc	25
141-78-6	Ethyl Acetate	ND		ND		nc	25
622-96-8	4-Ethyltoluene	ND		ND		nc	25

* = Outside of Control Limits.

Duplicate Summary

Job Number: JD56787
Account: RTESPA RT Environmental Services, Inc
Project: Frankford Ave, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD56787-1DUP	6W27599.D	1	12/10/22	TCH	n/a	n/a	V6W1161
JD56787-1	6W27598.D	1	12/10/22	TCH	n/a	n/a	V6W1161

The QC reported here applies to the following samples: **Method:** TO-15

JD56787-1, JD56787-2, JD56787-3, JD56787-4, JD56787-5

CAS No.	Compound	JD56787-1 ppbv	Q	DUP ppbv	Q	RPD	Limits
76-13-1	Freon 113	ND		ND		nc	25
76-14-2	Freon 114	ND		ND		nc	25
142-82-5	Heptane	0.99		0.94		5	25
87-68-3	Hexachlorobutadiene	ND		ND		nc	25
110-54-3	Hexane	5.7		5.7		0	25
591-78-6	2-Hexanone	ND		ND		nc	25
67-63-0	Isopropyl Alcohol	0.72	J	0.59	J	20	25
75-09-2	Methylene chloride	2.4		2.4		0	25
78-93-3	Methyl ethyl ketone	1.7		1.8		6	25
108-10-1	Methyl Isobutyl Ketone	ND		ND		nc	25
1634-04-4	Methyl Tert Butyl Ether	ND		ND		nc	25
80-62-6	Methylmethacrylate	ND		ND		nc	25
115-07-1	Propylene	23.2		24.2		4	25
100-42-5	Styrene	ND		ND		nc	25
71-55-6	1,1,1-Trichloroethane	ND		ND		nc	25
79-34-5	1,1,2,2-Tetrachloroethane	ND		ND		nc	25
79-00-5	1,1,2-Trichloroethane	ND		ND		nc	25
120-82-1	1,2,4-Trichlorobenzene	ND		ND		nc	25
95-63-6	1,2,4-Trimethylbenzene	ND		ND		nc	25
108-67-8	1,3,5-Trimethylbenzene	ND		ND		nc	25
540-84-1	2,2,4-Trimethylpentane	ND		ND		nc	25
75-65-0	Tertiary Butyl Alcohol	3.8		4.4		15	25
127-18-4	Tetrachloroethylene	ND		ND		nc	25
109-99-9	Tetrahydrofuran	ND		ND		nc	25
108-88-3	Toluene	0.81		0.77	J	5	25
79-01-6	Trichloroethylene	ND		ND		nc	25
75-69-4	Trichlorofluoromethane	ND		ND		nc	25
75-01-4	Vinyl chloride	ND		ND		nc	25
108-05-4	Vinyl Acetate	ND		ND		nc	25
	m,p-Xylene	ND		ND		nc	25
95-47-6	o-Xylene	ND		ND		nc	25
1330-20-7	Xylenes (total)	ND		ND		nc	25

* = Outside of Control Limits.

Duplicate Summary

Job Number: JD56787
Account: RTESPA RT Environmental Services, Inc
Project: Frankford Ave, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD56787-1DUP	6W27599.D	1	12/10/22	TCH	n/a	n/a	V6W1161
JD56787-1	6W27598.D	1	12/10/22	TCH	n/a	n/a	V6W1161

The QC reported here applies to the following samples: **Method:** TO-15

JD56787-1, JD56787-2, JD56787-3, JD56787-4, JD56787-5

CAS No.	Surrogate Recoveries	DUP	JD56787-1	Limits
460-00-4	4-Bromofluorobenzene	103%	105%	65-128%

(a) Outside in house control limits.

* = Outside of Control Limits.

Summa Cleaning Certification

Job Number: JD56787
Account: RTESPA RT Environmental Services, Inc
Project: Frankford Ave, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6W1142-SCC	6W26999.D	1	11/08/22	TCH	n/a	n/a	V6W1142

The QC reported here (Summa M214) applies to the following samples: **Method:** TO-15

Batch CP11918 cleaned 10/26/22: JD56787-2(A476)

CAS No.	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
67-64-1	Acetone (2-Propanone)	ND	0.20	0.15	ppbv		ND	0.48	ug/m3
106-99-0	1,3-Butadiene	ND	0.20	0.084	ppbv		ND	0.44	ug/m3
71-43-2	Benzene	ND	0.20	0.062	ppbv		ND	0.64	ug/m3
75-27-4	Bromodichloromethane	ND	0.20	0.030	ppbv		ND	1.3	ug/m3
75-25-2	Bromoform	ND	0.20	0.071	ppbv		ND	2.1	ug/m3
74-83-9	Bromomethane	ND	0.20	0.069	ppbv		ND	0.78	ug/m3
593-60-2	Bromoethene	ND	0.20	0.061	ppbv		ND	0.87	ug/m3
100-44-7	Benzyl Chloride	ND	0.20	0.13	ppbv		ND	1.0	ug/m3
75-15-0	Carbon disulfide	ND	0.20	0.045	ppbv		ND	0.62	ug/m3
108-90-7	Chlorobenzene	ND	0.20	0.074	ppbv		ND	0.92	ug/m3
75-00-3	Chloroethane	ND	0.20	0.068	ppbv		ND	0.53	ug/m3
67-66-3	Chloroform	ND	0.20	0.037	ppbv		ND	0.98	ug/m3
74-87-3	Chloromethane	ND	0.20	0.090	ppbv		ND	0.41	ug/m3
107-05-1	3-Chloropropene	ND	0.20	0.083	ppbv		ND	0.63	ug/m3
95-49-8	2-Chlorotoluene	ND	0.20	0.072	ppbv		ND	1.0	ug/m3
56-23-5	Carbon tetrachloride	ND	0.20	0.040	ppbv		ND	1.3	ug/m3
110-82-7	Cyclohexane	ND	0.20	0.11	ppbv		ND	0.69	ug/m3
75-34-3	1,1-Dichloroethane	ND	0.20	0.057	ppbv		ND	0.81	ug/m3
75-35-4	1,1-Dichloroethylene	ND	0.20	0.059	ppbv		ND	0.79	ug/m3
106-93-4	1,2-Dibromoethane (EDB)	ND	0.20	0.097	ppbv		ND	1.5	ug/m3
107-06-2	1,2-Dichloroethane	ND	0.20	0.070	ppbv		ND	0.81	ug/m3
78-87-5	1,2-Dichloropropane	ND	0.20	0.062	ppbv		ND	0.92	ug/m3
123-91-1	1,4-Dioxane	ND	0.20	0.12	ppbv		ND	0.72	ug/m3
75-71-8	Dichlorodifluoromethane	ND	0.20	0.032	ppbv		ND	0.99	ug/m3
124-48-1	Dibromochloromethane	ND	0.20	0.052	ppbv		ND	1.7	ug/m3
156-60-5	trans-1,2-Dichloroethylene	ND	0.20	0.069	ppbv		ND	0.79	ug/m3
156-59-2	cis-1,2-Dichloroethylene	ND	0.20	0.077	ppbv		ND	0.79	ug/m3
10061-01-5	cis-1,3-Dichloropropene	ND	0.20	0.062	ppbv		ND	0.91	ug/m3
541-73-1	m-Dichlorobenzene	ND	0.20	0.040	ppbv		ND	1.2	ug/m3
95-50-1	o-Dichlorobenzene	ND	0.20	0.15	ppbv		ND	1.2	ug/m3
106-46-7	p-Dichlorobenzene	ND	0.20	0.19	ppbv		ND	1.2	ug/m3
10061-02-6	trans-1,3-Dichloropropene	ND	0.20	0.10	ppbv		ND	0.91	ug/m3
64-17-5	Ethanol	ND	0.50	0.39	ppbv		ND	0.94	ug/m3
100-41-4	Ethylbenzene	ND	0.20	0.061	ppbv		ND	0.87	ug/m3
141-78-6	Ethyl Acetate	ND	0.20	0.10	ppbv		ND	0.72	ug/m3
622-96-8	4-Ethyltoluene	ND	0.20	0.095	ppbv		ND	0.98	ug/m3

Summa Cleaning Certification

Job Number: JD56787
Account: RTESPA RT Environmental Services, Inc
Project: Frankford Ave, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6W1142-SCC	6W26999.D	1	11/08/22	TCH	n/a	n/a	V6W1142

The QC reported here (Summa M214) applies to the following samples: **Method:** TO-15

Batch CP11918 cleaned 10/26/22: JD56787-2(A476)

CAS No.	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
76-13-1	Freon 113	ND	0.20	0.031	ppbv		ND	1.5	ug/m3
76-14-2	Freon 114	ND	0.20	0.050	ppbv		ND	1.4	ug/m3
142-82-5	Heptane	ND	0.20	0.092	ppbv		ND	0.82	ug/m3
87-68-3	Hexachlorobutadiene	ND	0.20	0.062	ppbv		ND	2.1	ug/m3
110-54-3	Hexane	ND	0.20	0.11	ppbv		ND	0.70	ug/m3
591-78-6	2-Hexanone	ND	0.20	0.15	ppbv		ND	0.82	ug/m3
67-63-0	Isopropyl Alcohol	ND	0.20	0.14	ppbv		ND	0.49	ug/m3
75-09-2	Methylene chloride	ND	0.20	0.056	ppbv		ND	0.69	ug/m3
78-93-3	Methyl ethyl ketone	ND	0.20	0.11	ppbv		ND	0.59	ug/m3
108-10-1	Methyl Isobutyl Ketone	ND	0.20	0.073	ppbv		ND	0.82	ug/m3
1634-04-4	Methyl Tert Butyl Ether	ND	0.20	0.080	ppbv		ND	0.72	ug/m3
80-62-6	Methylmethacrylate	ND	0.20	0.070	ppbv		ND	0.82	ug/m3
115-07-1	Propylene	ND	0.50	0.14	ppbv		ND	0.86	ug/m3
100-42-5	Styrene	ND	0.20	0.12	ppbv		ND	0.85	ug/m3
71-55-6	1,1,1-Trichloroethane	ND	0.20	0.037	ppbv		ND	1.1	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.20	0.048	ppbv		ND	1.4	ug/m3
79-00-5	1,1,2-Trichloroethane	ND	0.20	0.038	ppbv		ND	1.1	ug/m3
120-82-1	1,2,4-Trichlorobenzene	ND	0.20	0.12	ppbv		ND	1.5	ug/m3
95-63-6	1,2,4-Trimethylbenzene	ND	0.20	0.087	ppbv		ND	0.98	ug/m3
108-67-8	1,3,5-Trimethylbenzene	ND	0.20	0.080	ppbv		ND	0.98	ug/m3
540-84-1	2,2,4-Trimethylpentane	ND	0.20	0.095	ppbv		ND	0.93	ug/m3
75-65-0	Tertiary Butyl Alcohol	ND	0.20	0.093	ppbv		ND	0.61	ug/m3
127-18-4	Tetrachloroethylene	ND	0.040	0.014	ppbv		ND	0.27	ug/m3
109-99-9	Tetrahydrofuran	ND	0.20	0.090	ppbv		ND	0.59	ug/m3
108-88-3	Toluene	ND	0.20	0.057	ppbv		ND	0.75	ug/m3
79-01-6	Trichloroethylene	ND	0.040	0.019	ppbv		ND	0.21	ug/m3
75-69-4	Trichlorofluoromethane	ND	0.20	0.036	ppbv		ND	1.1	ug/m3
75-01-4	Vinyl chloride	ND	0.20	0.069	ppbv		ND	0.51	ug/m3
108-05-4	Vinyl Acetate	ND	0.20	0.11	ppbv		ND	0.70	ug/m3
	m,p-Xylene	ND	0.20	0.14	ppbv		ND	0.87	ug/m3
95-47-6	o-Xylene	ND	0.20	0.077	ppbv		ND	0.87	ug/m3
1330-20-7	Xylenes (total)	ND	0.20	0.077	ppbv		ND	0.87	ug/m3

Summa Cleaning Certification

Job Number: JD56787
Account: RTESPA RT Environmental Services, Inc
Project: Frankford Ave, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6W1142-SCC	6W26999.D	1	11/08/22	TCH	n/a	n/a	V6W1142

The QC reported here (Summa M214) applies to the following samples: **Method:** TO-15

Batch CP11918 cleaned 10/26/22: JD56787-2(A476)

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	105%	65-128%

Summa Cleaning Certification

Job Number: JD56787
Account: RTESPA RT Environmental Services, Inc
Project: Frankford Ave, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6W1146-SCC	6W27125.D	1	11/23/22	TCH	n/a	n/a	V6W1146

The QC reported here (Summa A2130) applies to the following samples: **Method:** TO-15

Batch CP11976 cleaned 11/17/22: JD56787-1(A2122), JD56787-3(A2128), JD56787-4(A2123), JD56787-5(A2124)

CAS No.	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
67-64-1	Acetone (2-Propanone)	ND	0.20	0.15	ppbv		ND	0.48	ug/m3
106-99-0	1,3-Butadiene	ND	0.20	0.084	ppbv		ND	0.44	ug/m3
71-43-2	Benzene	ND	0.20	0.062	ppbv		ND	0.64	ug/m3
75-27-4	Bromodichloromethane	ND	0.20	0.030	ppbv		ND	1.3	ug/m3
75-25-2	Bromoform	ND	0.20	0.071	ppbv		ND	2.1	ug/m3
74-83-9	Bromomethane	ND	0.20	0.069	ppbv		ND	0.78	ug/m3
593-60-2	Bromoethene	ND	0.20	0.061	ppbv		ND	0.87	ug/m3
100-44-7	Benzyl Chloride	ND	0.20	0.13	ppbv		ND	1.0	ug/m3
75-15-0	Carbon disulfide	ND	0.20	0.045	ppbv		ND	0.62	ug/m3
108-90-7	Chlorobenzene	ND	0.20	0.074	ppbv		ND	0.92	ug/m3
75-00-3	Chloroethane	ND	0.20	0.068	ppbv		ND	0.53	ug/m3
67-66-3	Chloroform	ND	0.20	0.037	ppbv		ND	0.98	ug/m3
74-87-3	Chloromethane	ND	0.20	0.090	ppbv		ND	0.41	ug/m3
107-05-1	3-Chloropropene	ND	0.20	0.083	ppbv		ND	0.63	ug/m3
95-49-8	2-Chlorotoluene	ND	0.20	0.072	ppbv		ND	1.0	ug/m3
56-23-5	Carbon tetrachloride	ND	0.20	0.040	ppbv		ND	1.3	ug/m3
110-82-7	Cyclohexane	ND	0.20	0.11	ppbv		ND	0.69	ug/m3
75-34-3	1,1-Dichloroethane	ND	0.20	0.057	ppbv		ND	0.81	ug/m3
75-35-4	1,1-Dichloroethylene	ND	0.20	0.059	ppbv		ND	0.79	ug/m3
106-93-4	1,2-Dibromoethane (EDB)	ND	0.20	0.097	ppbv		ND	1.5	ug/m3
107-06-2	1,2-Dichloroethane	ND	0.20	0.070	ppbv		ND	0.81	ug/m3
78-87-5	1,2-Dichloropropane	ND	0.20	0.062	ppbv		ND	0.92	ug/m3
123-91-1	1,4-Dioxane	ND	0.20	0.12	ppbv		ND	0.72	ug/m3
75-71-8	Dichlorodifluoromethane	ND	0.20	0.032	ppbv		ND	0.99	ug/m3
124-48-1	Dibromochloromethane	ND	0.20	0.052	ppbv		ND	1.7	ug/m3
156-60-5	trans-1,2-Dichloroethylene	ND	0.20	0.069	ppbv		ND	0.79	ug/m3
156-59-2	cis-1,2-Dichloroethylene	ND	0.20	0.077	ppbv		ND	0.79	ug/m3
10061-01-5	cis-1,3-Dichloropropene	ND	0.20	0.062	ppbv		ND	0.91	ug/m3
541-73-1	m-Dichlorobenzene	ND	0.20	0.040	ppbv		ND	1.2	ug/m3
95-50-1	o-Dichlorobenzene	ND	0.20	0.15	ppbv		ND	1.2	ug/m3
106-46-7	p-Dichlorobenzene	ND	0.20	0.19	ppbv		ND	1.2	ug/m3
10061-02-6	trans-1,3-Dichloropropene	ND	0.20	0.10	ppbv		ND	0.91	ug/m3
64-17-5	Ethanol	ND	0.50	0.39	ppbv		ND	0.94	ug/m3
100-41-4	Ethylbenzene	ND	0.20	0.061	ppbv		ND	0.87	ug/m3
141-78-6	Ethyl Acetate	ND	0.20	0.10	ppbv		ND	0.72	ug/m3
622-96-8	4-Ethyltoluene	ND	0.20	0.095	ppbv		ND	0.98	ug/m3

Summa Cleaning Certification

Job Number: JD56787
Account: RTESPA RT Environmental Services, Inc
Project: Frankford Ave, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6W1146-SCC	6W27125.D	1	11/23/22	TCH	n/a	n/a	V6W1146

The QC reported here (Summa A2130) applies to the following samples: **Method:** TO-15

Batch CP11976 cleaned 11/17/22: JD56787-1(A2122), JD56787-3(A2128), JD56787-4(A2123), JD56787-5(A2124)

CAS No.	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
76-13-1	Freon 113	ND	0.20	0.031	ppbv		ND	1.5	ug/m3
76-14-2	Freon 114	ND	0.20	0.050	ppbv		ND	1.4	ug/m3
142-82-5	Heptane	ND	0.20	0.092	ppbv		ND	0.82	ug/m3
87-68-3	Hexachlorobutadiene	ND	0.20	0.062	ppbv		ND	2.1	ug/m3
110-54-3	Hexane	ND	0.20	0.11	ppbv		ND	0.70	ug/m3
591-78-6	2-Hexanone	ND	0.20	0.15	ppbv		ND	0.82	ug/m3
67-63-0	Isopropyl Alcohol	ND	0.20	0.14	ppbv		ND	0.49	ug/m3
75-09-2	Methylene chloride	ND	0.20	0.056	ppbv		ND	0.69	ug/m3
78-93-3	Methyl ethyl ketone	ND	0.20	0.11	ppbv		ND	0.59	ug/m3
108-10-1	Methyl Isobutyl Ketone	ND	0.20	0.073	ppbv		ND	0.82	ug/m3
1634-04-4	Methyl Tert Butyl Ether	ND	0.20	0.080	ppbv		ND	0.72	ug/m3
80-62-6	Methylmethacrylate	ND	0.20	0.070	ppbv		ND	0.82	ug/m3
115-07-1	Propylene	ND	0.50	0.14	ppbv		ND	0.86	ug/m3
100-42-5	Styrene	ND	0.20	0.12	ppbv		ND	0.85	ug/m3
71-55-6	1,1,1-Trichloroethane	ND	0.20	0.037	ppbv		ND	1.1	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.20	0.048	ppbv		ND	1.4	ug/m3
79-00-5	1,1,2-Trichloroethane	ND	0.20	0.038	ppbv		ND	1.1	ug/m3
120-82-1	1,2,4-Trichlorobenzene	ND	0.20	0.12	ppbv		ND	1.5	ug/m3
95-63-6	1,2,4-Trimethylbenzene	ND	0.20	0.087	ppbv		ND	0.98	ug/m3
108-67-8	1,3,5-Trimethylbenzene	ND	0.20	0.080	ppbv		ND	0.98	ug/m3
540-84-1	2,2,4-Trimethylpentane	ND	0.20	0.095	ppbv		ND	0.93	ug/m3
75-65-0	Tertiary Butyl Alcohol	ND	0.20	0.093	ppbv		ND	0.61	ug/m3
127-18-4	Tetrachloroethylene	ND	0.040	0.014	ppbv		ND	0.27	ug/m3
109-99-9	Tetrahydrofuran	ND	0.20	0.090	ppbv		ND	0.59	ug/m3
108-88-3	Toluene	ND	0.20	0.057	ppbv		ND	0.75	ug/m3
79-01-6	Trichloroethylene	ND	0.040	0.019	ppbv		ND	0.21	ug/m3
75-69-4	Trichlorofluoromethane	ND	0.20	0.036	ppbv		ND	1.1	ug/m3
75-01-4	Vinyl chloride	ND	0.20	0.069	ppbv		ND	0.51	ug/m3
108-05-4	Vinyl Acetate	ND	0.20	0.11	ppbv		ND	0.70	ug/m3
	m,p-Xylene	ND	0.20	0.14	ppbv		ND	0.87	ug/m3
95-47-6	o-Xylene	ND	0.20	0.077	ppbv		ND	0.87	ug/m3
1330-20-7	Xylenes (total)	ND	0.20	0.077	ppbv		ND	0.87	ug/m3

Summa Cleaning Certification

Job Number: JD56787
Account: RTESPA RT Environmental Services, Inc
Project: Frankford Ave, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6W1146-SCC	6W27125.D	1	11/23/22	TCH	n/a	n/a	V6W1146

The QC reported here (Summa A2130) applies to the following samples: **Method:** TO-15

Batch CP11976 cleaned 11/17/22: JD56787-1(A2122), JD56787-3(A2128), JD56787-4(A2123), JD56787-5(A2124)

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	97%	65-128%

Instrument Performance Check (BFB)

Job Number: JD56787
Account: RTESPA RT Environmental Services, Inc
Project: Frankford Ave, PA

Sample:	V6W1125-BFB	**Injection Date:**	10/19/22
Lab File ID:	6W26446.D	**Injection Time:**	17:44
Instrument ID:	GCMS6W		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	8.0 - 40.0% of mass 95	11894	25.6		Pass
75	30.0 - 66.0% of mass 95	23544	50.6		Pass
95	Base peak, 100% relative abundance	46541	100.0		Pass
96	5.0 - 9.0% of mass 95	3244	6.97		Pass
173	Less than 2.0% of mass 174	352	0.76	(0.98) [a]	Pass
174	50.0 - 120.0% of mass 95	35928	77.2		Pass
175	4.0 - 9.01% of mass 174	2432	5.23	(6.77) [a]	Pass
176	93.0 - 101.0% of mass 174	34165	73.4	(95.1) [a]	Pass
177	5.0 - 9.0% of mass 176	2442	5.25	(7.15) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V6W1125-IC1125	6W26448.D	10/19/22	19:10	01:26	Initial cal 0.04
V6W1125-IC1125	6W26449.D	10/19/22	19:43	01:59	Initial cal 0.1
V6W1125-IC1125	6W26450.D	10/19/22	20:15	02:31	Initial cal 0.2
V6W1125-IC1125	6W26451.D	10/19/22	20:47	03:03	Initial cal 0.5
V6W1125-IC1125	6W26453.D	10/19/22	21:52	04:08	Initial cal 5
V6W1125-ICC1125	6W26454.D	10/19/22	22:25	04:41	Initial cal 10
V6W1125-IC1125	6W26455.D	10/19/22	22:57	05:13	Initial cal 20
V6W1125-IC1125	6W26456.D	10/19/22	23:29	05:45	Initial cal 40
V6W1125-IC1125	6W26457.D	10/20/22	00:03	06:19	Initial cal 50
V6W1125-ICV1125	6W26462.D	10/20/22	09:08	15:24	Initial cal verification 10

Instrument Performance Check (BFB)

Job Number: JD56787
Account: RTESPA RT Environmental Services, Inc
Project: Frankford Ave, PA

Sample:	V6W1142-BFB	**Injection Date:**	11/08/22
Lab File ID:	6W26988.D	**Injection Time:**	11:50
Instrument ID:	GCMS6W		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	8.0 - 40.0% of mass 95	10078	26.6		Pass
75	30.0 - 66.0% of mass 95	20464	54.0		Pass
95	Base peak, 100% relative abundance	37915	100.0		Pass
96	5.0 - 9.0% of mass 95	2397	6.32		Pass
173	Less than 2.0% of mass 174	238	0.63	(0.80) [a]	Pass
174	50.0 - 120.0% of mass 95	29728	78.4		Pass
175	4.0 - 9.01% of mass 174	2169	5.72	(7.30) [a]	Pass
176	93.0 - 101.0% of mass 174	29152	76.9	(98.1) [a]	Pass
177	5.0 - 9.0% of mass 176	1948	5.14	(6.68) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V6W1142-CC1125	6W26990.D	11/08/22	13:46	01:56	Continuing cal 10
V6W1142-BS	6W26991.D	11/08/22	14:43	02:53	Blank Spike
V6W1142-BSD	6W26992.D	11/08/22	15:14	03:24	Blank Spike Duplicate
V6W1142-MB	6W26995.D	11/08/22	17:27	05:37	Method Blank
V6W1142-SCC	6W26997.D	11/08/22	19:33	07:43	Summa Cleaning Certification
V6W1142-SCC	6W26998.D	11/08/22	20:05	08:15	Summa Cleaning Certification
V6W1142-SCC	6W26999.D	11/08/22	20:37	08:47	Summa Cleaning Certification
V6W1142-SCC	6W27000.D	11/08/22	21:11	09:21	Summa Cleaning Certification
V6W1142-SCC	6W27001.D	11/08/22	21:44	09:54	Summa Cleaning Certification
V6W1142-SCC	6W27002.D	11/08/22	22:17	10:27	Summa Cleaning Certification
V6W1142-SCC	6W27003.D	11/08/22	22:50	11:00	Summa Cleaning Certification
V6W1142-SCC	6W27004.D	11/08/22	23:22	11:32	Summa Cleaning Certification
V6W1142-SCC	6W27005.D	11/08/22	23:55	12:05	Summa Cleaning Certification
V6W1142-SCC	6W27006.D	11/09/22	00:29	12:39	Summa Cleaning Certification
V6W1142-SCC	6W27008.D	11/09/22	01:34	13:44	Summa Cleaning Certification
V6W1142-SCC	6W27009.D	11/09/22	02:07	14:17	Summa Cleaning Certification
V6W1142-SCC	6W27010.D	11/09/22	02:40	14:50	Summa Cleaning Certification
V6W1142-SCC	6W27011.D	11/09/22	03:12	15:22	Summa Cleaning Certification
V6W1142-SCC	6W27013.D	11/09/22	04:20	16:30	Summa Cleaning Certification
V6W1142-SCC	6W27014.D	11/09/22	04:52	17:02	Summa Cleaning Certification
V6W1142-SCC	6W27015.D	11/09/22	05:25	17:35	Summa Cleaning Certification
V6W1142-SCC	6W27016.D	11/09/22	05:58	18:08	Summa Cleaning Certification
V6W1142-SCC	6W27017.D	11/09/22	06:31	18:41	Summa Cleaning Certification
V6W1142-SCC	6W27018.D	11/09/22	07:03	19:13	Summa Cleaning Certification

Instrument Performance Check (BFB)

Job Number: JD56787
Account: RTESPA RT Environmental Services, Inc
Project: Frankford Ave, PA

Sample:	V6W1142-BFB	**Injection Date:**	11/08/22
Lab File ID:	6W26988.D	**Injection Time:**	11:50
Instrument ID:	GCMS6W		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V6W1142-SCC	6W27021.D	11/09/22	08:43	20:53	Summa Cleaning Certification

Instrument Performance Check (BFB)

Job Number: JD56787
Account: RTESPA RT Environmental Services, Inc
Project: Frankford Ave, PA

Sample:	V6W1146-BFB	**Injection Date:**	11/22/22
Lab File ID:	6W27092.D	**Injection Time:**	08:39
Instrument ID:	GCMS6W		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	8.0 - 40.0% of mass 95	13793	24.6		Pass
75	30.0 - 66.0% of mass 95	27269	48.7		Pass
95	Base peak, 100% relative abundance	56024	100.0		Pass
96	5.0 - 9.0% of mass 95	3767	6.72		Pass
173	Less than 2.0% of mass 174	348	0.62	(0.75) [a]	Pass
174	50.0 - 120.0% of mass 95	46229	82.5		Pass
175	4.0 - 9.01% of mass 174	3274	5.84	(7.08) [a]	Pass
176	93.0 - 101.0% of mass 174	43128	77.0	(93.3) [a]	Pass
177	5.0 - 9.0% of mass 176	2590	4.62	(6.01) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V6W1146-CC1125	6W27093.D	11/22/22	09:12	00:33	Continuing cal 10
V6W1146-BS	6W27094.D	11/22/22	10:08	01:29	Blank Spike
V6W1146-BSD	6W27095.D	11/22/22	10:40	02:01	Blank Spike Duplicate
V6W1146-MB	6W27097.D	11/22/22	12:29	03:50	Method Blank
ZZZZZZ	6W27098.D	11/22/22	13:32	04:53	(unrelated sample)
ZZZZZZ	6W27099.D	11/22/22	14:16	05:37	(unrelated sample)
JD55460-10	6W27100.D	11/22/22	14:49	06:10	(used for QC only; not part of job JD56787)
JD55460-10DUP	6W27101.D	11/22/22	15:23	06:44	Duplicate
ZZZZZZ	6W27102.D	11/22/22	15:55	07:16	(unrelated sample)
ZZZZZZ	6W27103.D	11/22/22	16:29	07:50	(unrelated sample)
ZZZZZZ	6W27104.D	11/22/22	17:03	08:24	(unrelated sample)
ZZZZZZ	6W27105.D	11/22/22	17:36	08:57	(unrelated sample)
ZZZZZZ	6W27106.D	11/22/22	18:09	09:30	(unrelated sample)
ZZZZZZ	6W27107.D	11/22/22	18:42	10:03	(unrelated sample)
ZZZZZZ	6W27108.D	11/22/22	19:15	10:36	(unrelated sample)
ZZZZZZ	6W27109.D	11/22/22	19:48	11:09	(unrelated sample)
ZZZZZZ	6W27110.D	11/22/22	20:22	11:43	(unrelated sample)
ZZZZZZ	6W27111.D	11/22/22	20:55	12:16	(unrelated sample)
ZZZZZZ	6W27112.D	11/22/22	21:30	12:51	(unrelated sample)
ZZZZZZ	6W27113.D	11/22/22	22:03	13:24	(unrelated sample)
ZZZZZZ	6W27114.D	11/22/22	22:38	13:59	(unrelated sample)
ZZZZZZ	6W27115.D	11/22/22	23:10	14:31	(unrelated sample)
ZZZZZZ	6W27116.D	11/22/22	23:43	15:04	(unrelated sample)
ZZZZZZ	6W27117.D	11/23/22	00:17	15:38	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: JD56787
Account: RTESPA RT Environmental Services, Inc
Project: Frankford Ave, PA

Sample:	V6W1146-BFB	**Injection Date:**	11/22/22
Lab File ID:	6W27092.D	**Injection Time:**	08:39
Instrument ID:	GCMS6W		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	6W27118.D	11/23/22	00:50	16:11	(unrelated sample)
V6W1146-SCC	6W27121.D	11/23/22	02:30	17:51	Summa Cleaning Certification
V6W1146-SCC	6W27122.D	11/23/22	03:02	18:23	Summa Cleaning Certification
V6W1146-SCC	6W27123.D	11/23/22	03:36	18:57	Summa Cleaning Certification
V6W1146-SCC	6W27124.D	11/23/22	04:09	19:30	Summa Cleaning Certification
V6W1146-SCC	6W27125.D	11/23/22	04:42	20:03	Summa Cleaning Certification
V6W1146-SCC	6W27127.D	11/23/22	05:50	21:11	Summa Cleaning Certification
V6W1146-SCC	6W27128.D	11/23/22	06:23	21:44	Summa Cleaning Certification

Instrument Performance Check (BFB)

Job Number: JD56787
Account: RTESPA RT Environmental Services, Inc
Project: Frankford Ave, PA

Sample:	V6W1158-BFB	**Injection Date:**	12/05/22
Lab File ID:	6W27499.D	**Injection Time:**	21:18
Instrument ID:	GCMS6W		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	8.0 - 40.0% of mass 95	13227	24.7		Pass
75	30.0 - 66.0% of mass 95	26331	49.2		Pass
95	Base peak, 100% relative abundance	53568	100.0		Pass
96	5.0 - 9.0% of mass 95	3417	6.38		Pass
173	Less than 2.0% of mass 174	420	0.78	(0.97) [a]	Pass
174	50.0 - 120.0% of mass 95	43253	80.7		Pass
175	4.0 - 9.01% of mass 174	3129	5.84	(7.23) [a]	Pass
176	93.0 - 101.0% of mass 174	41891	78.2	(96.9) [a]	Pass
177	5.0 - 9.0% of mass 176	2804	5.23	(6.69) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V6W1158-IC1158	6W27500.D	12/05/22	21:51	00:33	Initial cal 0.04
V6W1158-IC1158	6W27501.D	12/05/22	22:24	01:06	Initial cal 0.1
V6W1158-IC1158	6W27502.D	12/05/22	22:57	01:39	Initial cal 0.2
V6W1158-IC1158	6W27503.D	12/05/22	23:30	02:12	Initial cal 0.5
V6W1158-IC1158	6W27505.D	12/06/22	00:35	03:17	Initial cal 5
V6W1158-ICC1158	6W27506.D	12/06/22	01:07	03:49	Initial cal 10
V6W1158-IC1158	6W27507.D	12/06/22	01:39	04:21	Initial cal 20
V6W1158-IC1158	6W27508.D	12/06/22	02:12	04:54	Initial cal 40
V6W1158-IC1158	6W27509.D	12/06/22	02:47	05:29	Initial cal 50

Instrument Performance Check (BFB)

Job Number: JD56787
Account: RTESPA RT Environmental Services, Inc
Project: Frankford Ave, PA

Sample:	V6W1158-BFB	**Injection Date:**	12/07/22
Lab File ID:	6W27516.D	**Injection Time:**	13:49
Instrument ID:	GCMS6W		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	8.0 - 40.0% of mass 95	14161	24.6		Pass
75	30.0 - 66.0% of mass 95	27760	48.3		Pass
95	Base peak, 100% relative abundance	57517	100.0		Pass
96	5.0 - 9.0% of mass 95	3939	6.85		Pass
173	Less than 2.0% of mass 174	345	0.60	(0.75) [a]	Pass
174	50.0 - 120.0% of mass 95	46243	80.4		Pass
175	4.0 - 9.01% of mass 174	3399	5.91	(7.35) [a]	Pass
176	93.0 - 101.0% of mass 174	43488	75.6	(94.0) [a]	Pass
177	5.0 - 9.0% of mass 176	2778	4.83	(6.39) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V6W1158-ICV1158	6W27517.D	12/07/22	14:22	00:33	Initial cal verification 10

Instrument Performance Check (BFB)

Job Number: JD56787
Account: RTESPA RT Environmental Services, Inc
Project: Frankford Ave, PA

Sample:	V6W1161-BFB	**Injection Date:**	12/10/22
Lab File ID:	6W27586.D	**Injection Time:**	14:57
Instrument ID:	GCMS6W		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	8.0 - 40.0% of mass 95	11918	23.7		Pass
75	30.0 - 66.0% of mass 95	23941	47.7		Pass
95	Base peak, 100% relative abundance	50200	100.0		Pass
96	5.0 - 9.0% of mass 95	3144	6.26		Pass
173	Less than 2.0% of mass 174	328	0.65	(0.81) [a]	Pass
174	50.0 - 120.0% of mass 95	40741	81.2		Pass
175	4.0 - 9.01% of mass 174	2886	5.75	(7.08) [a]	Pass
176	93.0 - 101.0% of mass 174	39051	77.8	(95.9) [a]	Pass
177	5.0 - 9.0% of mass 176	2437	4.85	(6.24) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V6W1161-CC1158	6W27587.D	12/10/22	15:30	00:33	Continuing cal 10
V6W1161-BS	6W27588.D	12/10/22	16:03	01:06	Blank Spike
V6W1161-BSD	6W27589.D	12/10/22	16:36	01:39	Blank Spike Duplicate
V6W1161-MB	6W27591.D	12/10/22	17:43	02:46	Method Blank
V6W1161-SCC	6W27593.D	12/10/22	18:49	03:52	Summa Cleaning Certification
V6W1161-SCC	6W27595.D	12/10/22	19:56	04:59	Summa Cleaning Certification
JD56787-1	6W27598.D	12/10/22	21:09	06:12	SV-5
JD56787-1DUP	6W27599.D	12/10/22	21:42	06:45	Duplicate
JD56787-2	6W27600.D	12/10/22	22:15	07:18	SV-4
JD56787-3	6W27601.D	12/10/22	22:48	07:51	SV-3
JD56787-4	6W27602.D	12/10/22	23:21	08:24	SV-1
JD56787-5	6W27603.D	12/10/22	23:55	08:58	SV-2
ZZZZZZ	6W27604.D	12/11/22	00:28	09:31	(unrelated sample)
ZZZZZZ	6W27605.D	12/11/22	01:01	10:04	(unrelated sample)
ZZZZZZ	6W27606.D	12/11/22	01:34	10:37	(unrelated sample)
ZZZZZZ	6W27607.D	12/11/22	12:50	21:53	(unrelated sample)
ZZZZZZ	6W27608.D	12/11/22	13:22	22:25	(unrelated sample)
ZZZZZZ	6W27609.D	12/11/22	13:54	22:57	(unrelated sample)

Surrogate Recovery Summary

Job Number: JD56787
Account: RTESPA RT Environmental Services, Inc
Project: Frankford Ave, PA

Method: TO-15 **Matrix:** AIR

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1
JD56787-1	6W27598.D	105
JD56787-2	6W27600.D	98
JD56787-3	6W27601.D	95
JD56787-4	6W27602.D	95
JD56787-5	6W27603.D	96
JD56787-1DUP	6W27599.D	103
V6W1142-SCC	6W26999.D	105
V6W1146-SCC	6W27125.D	97
V6W1161-BS	6W27588.D	101
V6W1161-BSD	6W27589.D	101
V6W1161-MB	6W27591.D	95
V6W1142-BS	6W26991.D	110
V6W1142-BSD	6W26992.D	111
V6W1142-MB	6W26995.D	106
V6W1146-BS	6W27094.D	104
V6W1146-BSD	6W27095.D	103
V6W1146-MB	6W27097.D	99

Surrogate Compounds	Recovery Limits
S1 = 4-Bromofluorobenzene	65-128%

Appendix D
Monitoring Well Logs

Project No: 00L629-B

Borehole # MW-2A

Project: 5129-5135 Frankford Avenue

Client: Rite Aid Corporation — Philadelphia, Pennsylvania

Location: 5129-5135 Frankford Avenue — **Geologist:** JRT

Depth	Description	Symbol	Moisture	Odors	Well Diagram	Remarks
0	Ground Surface					
	0-0.5' MACADAM/FILL Macadam and fill material (gravel, cobbles, brick fragments, etc.)		Slight	None		0' Flushmount manhole in concrete
5	***0.5-5' SILTY SAND*** Black SILTY SAND with fine to medium Gravel		Slight	None		0.5-3' Hydrated bentonite 0.5-4' 2" diam PVC riser
	5-22' SILTY SAND Moderate to dark brown SILTY SAND with fine to medium Gravel		None	None		3-24' No. 1 Morie sandpack 4-24' 2" diam PVC screen 11' Initial Water Depth
15			Slight	None		
20			Some	None		
	22-24' WEATHERED BEDROCK Weathered SCHIST bedrock; auger refusal @ 24'		Some	None		24' 2" diam PVC cap
25	End of Borehole					
30						
35						
40						

Driller: Eichelbergers, Inc.

Drill Method: Hollow-Stem Auger

Drill Date: 08/25/08

BL Companies
213 Market Street, 6th Floor
Harrisburg, PA 17101

Hole Size: 6.25-inch

Datum:

Sheet: 1 of 1

Project No: 00L629-B

Borehole # MW-4

Project: 5129-5135 Frankford Avenue

Client: Rite Aid Corporation

Philadelphia, Pennsylvania

Location: 5129-5135 Frankford Avenue

Geologist: JRT

Depth	Description	Symbol	Moisture	Odors	Well Diagram	Remarks
0	Ground Surface					
	0-0.5' MACADAM/FILL Macadam and fill material (gravel, cobbles, brick fragments, etc.)		Slight	None		0' Flushmount manhole in concrete
						0.5-4' Hydrated bentonite
5	***0.5-5' SILTY SAND*** Black SILTY SAND with fine to medium Gravel		Slight	None		0.5-5' 2" diam PVC riser
						4-30' No. 1 Morie sandpack
	5-30' SILTY SAND Moderate to dark brown SILTY SAND with fine to medium Gravel					5-30' 2" diam PVC screen
10			None	None		10.5' Initial Water Depth
15			Slight	None		
20			Some	None		
25			Some	None		
30			Some	None		30' 2" diam PVC cap
	End of Borehole					
35						
40						

Driller: Eichelbergers, Inc.

Drill Method: Hollow-Stem Auger

Drill Date: 08/25/08

BL Companies
213 Market Street, 6th Floor
Harrisburg, PA 17101

Hole Size: 6.25-inch

Datum:

Sheet: 1 of 1

Appendix E
Septa Bus Garage File Review

Mr. Jess Anderson, P.G., LEED AP
Project Manager
Michael Baker International, Inc.
1818 Market Street, Suite 3100
Philadelphia, PA 19103

April 10, 2024

Ms. Olivia Budnovitch
Geoscientist Pennsylvania Department of Environmental Protection (PADEP)
Southeast Regional Office
Environmental Cleanup Program – Storage Tank Section
2 East Main Street
Norristown, PA 19401-4915

Re: SEPTA Frankford Transportation Center (FTC)
Frankford Avenue & Pratt Street, Philadelphia, PA
Remedial Action Progress Report (August 2022 – October 2022)
Facility ID No. 51-07480

Dear Ms. Budnovitch:

This Remedial Action Progress Report (RAPR) for the Southeastern Pennsylvania Transportation Authority (SEPTA) Frankford Transportation Center (FTC) Site (the Site) documents the operation and maintenance (O&M) activities performed on-site between August 1, 2022 and October 31, 2022 (the 3rd Quarter 2022) by Michael Baker International, Inc. (Michael Baker). This RAPR is the 50th report in a series required by the Pennsylvania Department of Environmental Protection (PADEP) letter dated December 4, 2009. This letter established the PADEP's approval of the FTC Site Characterization Report (SCR), with modifications, and the Remedial Action Plan (RAP), prepared by AECOM, in accordance with 25 PA Code Section 245.311(b)(1). The approval letter is included in **Attachment A**. Also included in **Attachment A** are DEP correspondence from 2011, 2012, and 2019. In 2012, DEP approved a request to decrease sample frequency from quarterly to semi-annually. Once the free product is mitigated, quarterly sampling will resume to demonstrate attainment of applicable standards. In August 2019, Michael Baker submitted a revised RAP detailing additional remedial actions anticipated to mitigate the residual free product. A site plan depicting the location of monitoring wells is provided as **Figure 1**.

Background

Manual and automatic product recovery system methods continue to be employed at the Site to recover floating product from groundwater. The automated system consists of a floating product and groundwater recovery system. The automated groundwater recovery system has been historically deployed with pneumatic groundwater recovery pumps installed in two on-site six-inch diameter recovery wells (REC-1 and REC-2). Pumping at REC-1 was discontinued, because free product was no longer observed in the well. Additional monitoring wells are also utilized for automated product recovery using pneumatic floating product recovery pumps or

total fluids pumps. Currently, total fluids recovery pumps are installed in wells MW-11 and REC-2. To supplement the automated recovery system, manual product recovery is conducted at additional wells with measurable floating product. Recovered product and groundwater are treated utilizing an on-site oil-water separator and discharged to the sanitary sewer under an existing Philadelphia Water Department (PWD) authorization.

Summary of Operations and Maintenance Activities

Continued on-site O&M activities include Light Non-Aqueous Phase Liquid (LNAPL) removal, biweekly monitoring well gauging, and semi-annual groundwater sampling. These remedial activities were prescribed in the approved 2009 RAP. Additional remedial actions including remedial injections and enhanced product recovery events were proposed in the 2019 revised RAP. Michael Baker completed these activities during the 3rd and 4th Quarter 2019 reporting periods. During the 4th Quarter 2021, system maintenance was conducted to optimize the groundwater and floating product recovery operation.

A QED AP4+ total fluids pump is installed in REC-2 and a QED AP2T total fluids pump is installed in MW-11 to enhance groundwater and floating product recovery and eliminate the need for separate groundwater recovery and floating product recovery pumps. The combined recovered groundwater is pumped to the on-site oil-water separator. Additionally, Michael Baker field teams conducted manual well bailing, peristaltic pumping, and/or temporary sock placement to recover product at wells with measurable floating product or sheen during each O&M visit. Product removed via bailer or pump was placed into the on-site oil-water separator. The groundwater recovery pumps operated intermittently during this reporting period. Further details can be found below.

Historical Groundwater Conditions

Historic groundwater and product elevation data are presented in **Attachment B**. The greatest product thicknesses have historically been observed in MW-5, MW-6, MW-7, MW-8, MW-9, MW-11, REC-1 and REC-2. Recovery wells REC-1 and REC-2 were pumped to increase the flow of product into these wells. The greatest amounts of product were measured in on-site wells in 2003 and 2004, when wells MW-5, MW-6, MW-8, MW-9 and REC-1 had product thicknesses in excess of a foot during multiple visits. Over the past six-months, the product thicknesses have been greatest at MW-8 (0 to 0.08 feet). The product thickness trends are depicted on a trend chart in **Attachment B** and are described below.

- Measurable product had been absent in **MW-1** (a compliance downgradient well to the south-southwest) from August 2012 through October 2021 except for July 30, 2014, August 29, 2014, September 4, 2015, April 11, 2018, May 8, 2018, August 1, 2018, January 16, 2020, and January 28, 2020 during which measurable product was detected at no more than 0.10 feet thick. No measurable product or sheen has been observed since July 2020.
- Monitoring well **MW-4** exhibited up to one foot of product between 2009 and 2010; between 2011 and June 2014, less than 0.17 feet of product was consistently observed except for March 17 and 31, 2014 where product reached 0.41 and 0.25 feet, respectively; since July 2014, less than 0.06 feet of product was observed, 0.02 feet or less since January 2019, and no more than a sheen since January 2021.

- Less than 0.50 feet of product has been consistently observed in **MW-5** since November 2008 and 0.04 feet or less between September 2017 and September 2019. Since October 2019, product thicknesses of less than 0.10 feet have been observed periodically.
- Less than 0.03 feet of product has been periodically measured at **MW-6** from June 2008 to the present and no more than a sheen since December 2013, with the exception of November 19, 2020 (0.11 feet).
- Product in **MW-7** measured 0.75 feet or less since April 2014, less than 0.30 feet since August 2016, and 0.05 feet or less since November 2018.
- Less than 0.50 feet of product had been consistently measured at **MW-8** since July 2008, less than 0.25 feet since April 2014, and less than 0.10 feet since March 2019.
- Less than 0.50 feet of product had been consistently detected at **MW-9** since October 2010, 0.10 feet or less since April 2016, and no more than 0.01 feet since December 2019.
- Product has not observed at **MW-10**, **MW-13**, or **MW-15** since late 2008, except for January 5, 2017, when a product thickness of 0.20 feet was measured at **MW-13**.
- **MW-11** measured 0.20 feet or less of product periodically from July 2014 through October 2019. From November 2019 through January 2020, product thicknesses of 0.36 feet or less were observed periodically, however no measurable product has been observed since then.
- **REC-1** has not had observed product since November 2010.
- **REC-2** had periodically measured 1.00 feet or less of product from December 2011 to December 2016 except for July 26, 2013 and December 21, 2016, when product thickness reached 1.85 and 1.07 feet, respectively. From January 2017 through May 2019, product thicknesses were less than 0.50 feet. Since June 2019, product thicknesses have been 0.10 feet or less. No measurable product or sheen has been observed since January 2021, except for July 12, 2022 (0.005' Sheen) and October 6, 2022 (0.005' Sheen).
- **MW-C** has not had observed product since February 2009.
- **WSW-1** has never recorded product except for January 16, 2020, during which a sheen was detected.
- **MW-16**, **MW-17**, and the on-site French drain **SUMP** (downgradient to the southeast) have never recorded product.

A product thickness time trend chart provided in **Attachment B** shows a general reduction or stability of product thickness over time at the Site. This is interpreted to show that the current groundwater recovery systems, and skimming operations and maintenance have been effective in reducing the thickness of the free-phase hydrocarbons, however minimal product remains in the site monitoring wells.

Starting in February 2009, SEPTA completed five quarterly groundwater monitoring events (February 2009, April 2009, June 2010, October 2010 and February 2011) in accordance with the provisions contained in the PADEP's conditional approval of the FTC SCR and RAP dated December 4, 2009. Additionally, on-going semi-annual groundwater monitoring events have occurred in 2011 (May and November), 2012 (May), 2013 (July and November), 2014 (May and October), 2015 (June and December), 2016 (May and November), 2017 (May and November), 2018 (May and December), 2019 (May), 2020 (January, May, and November), 2021 (May and November) and 2022 (May). A summary of historical groundwater analytical results is presented in **Attachment C**.

- Well **MW-4** has had concentrations of three polynuclear aromatic hydrocarbons (PAHs), benzo(a)anthracene, benzo(a)pyrene and benzo(b)fluoranthene slightly above the Residential Used Aquifer SWHS MSC (GWru) during at least one event between 2014 and 2016 and again in 2021. The well was not sampled in 2017 through 2020 and during the November 2021 event, due to the presence of free product.
- Concentrations of methyl tert-butyl ether (MTBE) were periodically detected in well **MW-6** at concentrations above the GWru of 20 micrograms per liter (µg/L) between 2009 and 2020. The well was not sampled for six consecutive sampling events from November 2017 to May 2020, due to the presence of free product. MTBE concentrations trends appear stable in MW-6.
- In well **MW-15**, concentrations of benzo(a)anthracene, benzo(a)pyrene and benzo(b)fluoranthene were above their GWru, in 2009 and/or 2011, but have been below the GWru since then. PAH concentrations trends appear stable in MW-15.
- Dissolved lead was detected at a concentration exceeding the GWru during the May 2014 sampling event in well **WSW-1**. Dissolved lead has not been detected since the May 2014 sampling event.
- No other constituents of concern (COCs) have exceeded the GWru in any well during sampling events conducted from 2010 to 2021, consistently showing that concentrations of COCs do not exceed MSCs in historical samples obtained from on-site wells, other than the four organic compounds mentioned above, plus lead.

Graphs showing concentrations over time for the organic COCs in MW-4, MW-6 and MW-15 are included in **Attachment C**. Despite the presence of measurable floating product in some site monitoring wells, historical exceedances of dissolved concentrations of organic compounds in groundwater have been limited to MW-4 (PAHs), MW-6 (MTBE) and MW-15 (PAHs).

Groundwater Conditions –August 2022 through October 2022

Site-wide monitoring wells were gauged by Michael Baker on August 11 and 24, 2022, and September 7, and 22, 2022, and October 6 and 20, 2022. A summary of groundwater and product elevation measurements are provided in **Table 1**. Groundwater contour maps created for one gauging event per month (**Figure 2A** through **2C**) indicate that groundwater flow under pumping conditions was generally toward the current total fluid pumping well (REC-2) during the 3rd Quarter 2022, which is consistent with historic contour maps with the pumps turned on. Based on historic contour maps, groundwater flow was observed towards the south and southwest when the pumps were turned off. The total fluid pumps operated continuously during this reporting period. Gauging data for individual gauging events are provided in **Attachment D**.

Although the presence and thickness of floating product fluctuates over time, wells MW-5 (September 7th and October 6th, 2022) and MW-8 (August 11th) contained measurable floating product during one gauging event in the 3rd Quarter 2022. MW-4, MW-5, MW-7, MW-8, MW-9, and REC-2 contained a sheen during at least one gauging event in the 3rd Quarter 2022. No measurable product or sheen was observed in MW-1, MW-6, MW-10, MW-13, MW-15, MW-16, MW-17, REC-1, MW-C, WSW-1, or SUMP.

The total volume of water recovered from MW-11 during this reporting period was estimated at approximately 4,389 gallons with the last reading taken on 9/22/22. The system was turned off on 10/6/22 until the drain is fixed. The total volume of emulsified product and water recovered from REC-2 during the reporting period was estimated at approximately 196,727 gallons with the last reading taken on 9/22/22. The system was turned off on 10/6/22 until the drain is fixed. All recovered groundwater is treated using an on-site oil-water separator and discharged to the PWD sanitary sewer under an existing discharge authorization. Remedial site operations will continue to be evaluated to optimize containment and product recovery. Such measures include adjusting the elevations of the pumps.

Groundwater Analytical Results

No semi-annual groundwater sampling was completed during this August – October 2022 (3rd Quarter 2022) reporting period. The next scheduled sampling event was completed in November 2022. Analytical results of the November 2022 sampling event will be included in the November – January 2023 (4th Quarter 2022) RAPR.

Historic Vapor Intrusion Assessment

As reported in a previous RAPR, and in accordance with a requirement contained in the PADEP's SCR approval letter dated December 4, 2009, indoor air quality samples were collected from the basement of the Passenger Terminus Building in December 2010 and May 2011. Toluene was the only compound detected, and its concentration did not exceed the EPA/PADEP Industrial Indoor Air standards. Based on the results of two rounds of indoor air samples which indicated no complete vapor intrusion pathway, AECOM recommended no further vapor intrusion (VI) assessment and requested the PADEP approval of this recommendation. In an e-mail addressed to Susan LaBrake of AECOM dated August 16, 2011, the PADEP concurred with this recommendation based on the findings of the VI assessment (**Attachment A**). The free product levels have decreased further since 2011, so the no further action recommendation continues to be appropriate.

Future Actions and Schedule

In accordance with the PADEP's letter to SEPTA dated March 1, 2012 (**Attachment A**), SEPTA plans to continue to gauge site-monitoring wells and submit RAPRs on a quarterly basis to the PADEP that document the gauging events and ongoing O&M activities. A revised RAP was submitted to PADEP in September 2022 and was subsequently approved in November 2022. The details and schedule of this RAP will be covered in the next quarterly RAPR. In addition, SEPTA will collect groundwater samples at site wells that do not contain floating product to continue to assess site groundwater quality conditions while remediation is ongoing.

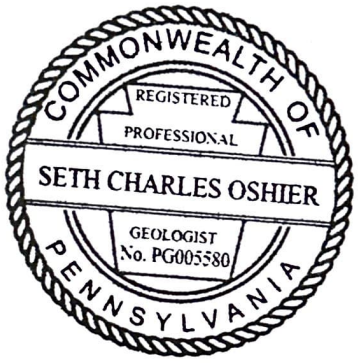
The next RAPR will discuss activities conducted at the Site from November to January 2022. The next semi-annual sampling event was performed in November 2022 and will be reported in the November 2022 – January 2023 RAPR.

Sincerely,
MICHAEL BAKER INTERNATIONAL, INC.

Jess D. Anderson, P.G., LEED AP
Project Manager

Seth Oshier, P.G.
Professional Geologist #5580

Cc: Bree Cantiello (SEPTA)

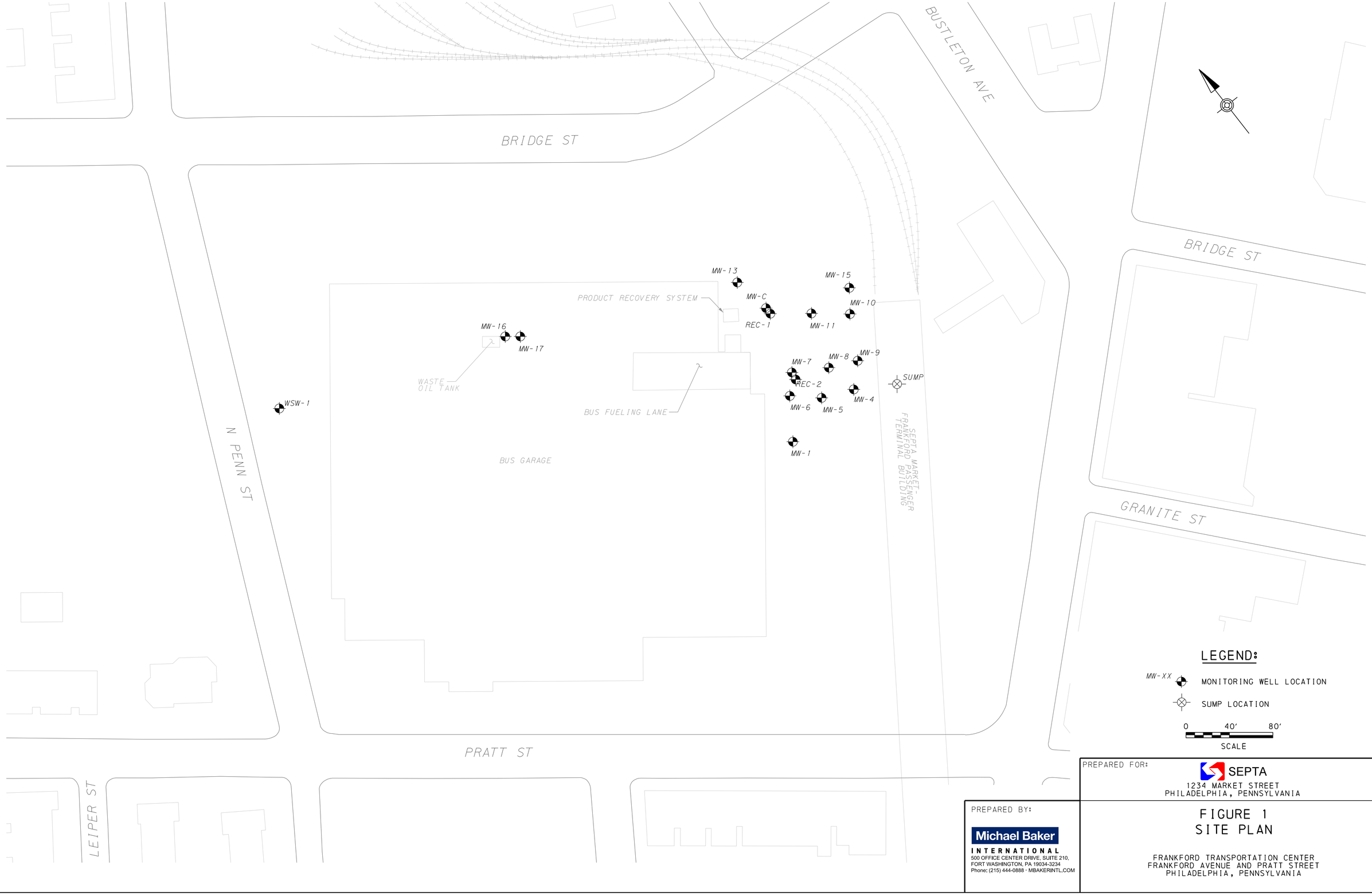


Michael Baker
INTERNATIONAL

Figures

05-FEB-2019

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LEGEND:

MW-XX — MONITORING WELL LOCATION

SUMP LOCATION

0 40′ 80′

SCALE

PREPARED FOR:

SEPTA

1234 MARKET STREET
PHILADELPHIA, PENNSYLVANIA

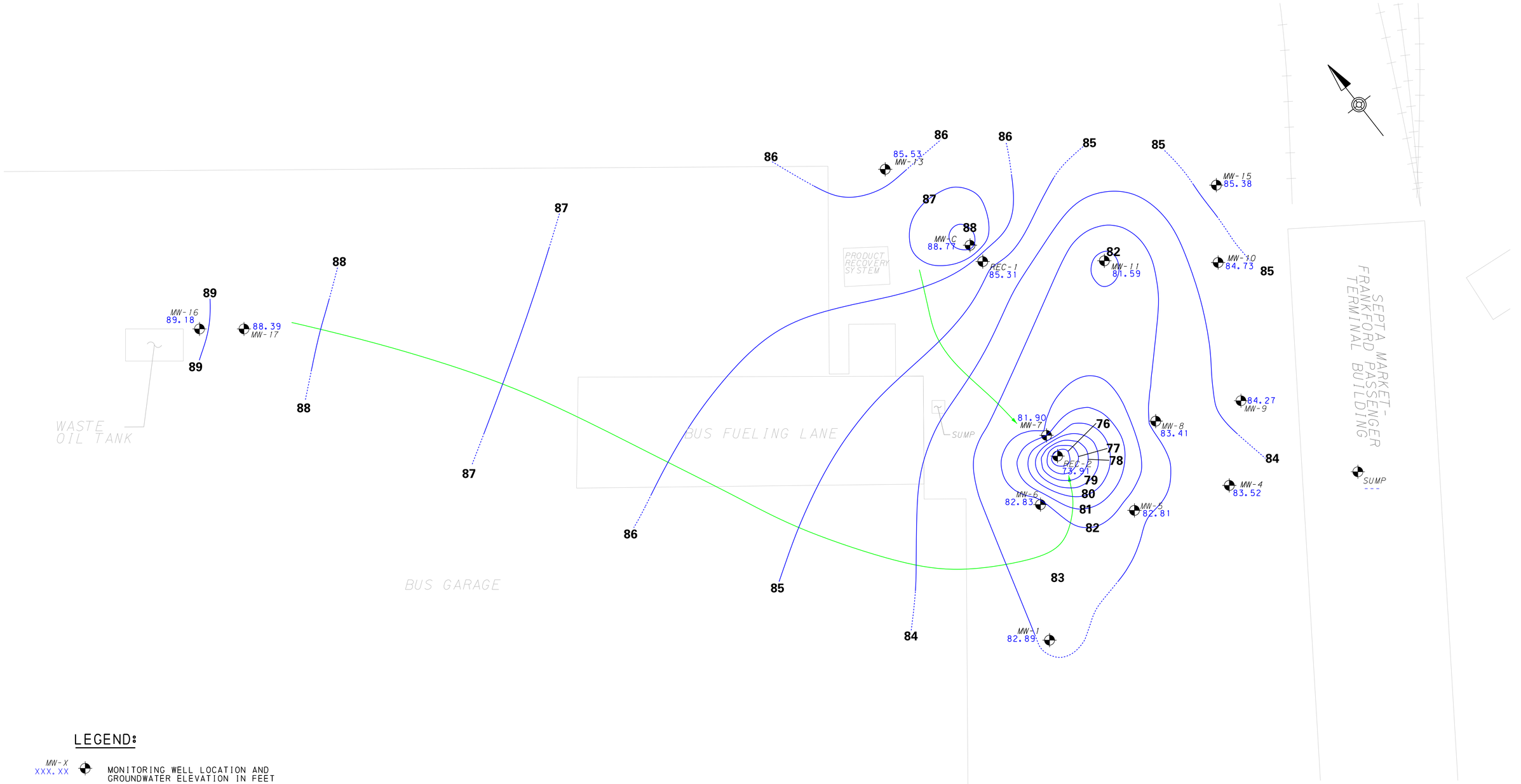
PREPARED BY:

Michael Baker INTERNATIONAL
500 OFFICE CENTER DRIVE, SUITE 210,
FORT WASHINGTON, PA 19034-3234
Phone: (215) 444-0888 · MBAKERINTL.COM

FIGURE 1
SITE PLAN

FRANKFORD TRANSPORTATION CENTER
FRANKFORD AVENUE AND PRATT STREET
PHILADELPHIA, PENNSYLVANIA

28-AUG-2023



LEGEND:

- MW-X XXX.XX — MONITORING WELL LOCATION AND GROUNDWATER ELEVATION IN FEET
- SUMP --- — SUMP LOCATION (NO ELEVATION AVAILABLE)
- GROUNDWATER CONTOUR (DASHED WHERE INFERRED)
- REC-X XXX.XX — PRODUCT DETECTED. CORRECTED GROUNDWATER ELEVATION SHOWN
- * — ELEVATION NOT USED FOR CONTOURING
- NM — NOT MEASURED
- GROUNDWATER FLOW DIRECTION

0 15' 30'
SCALE

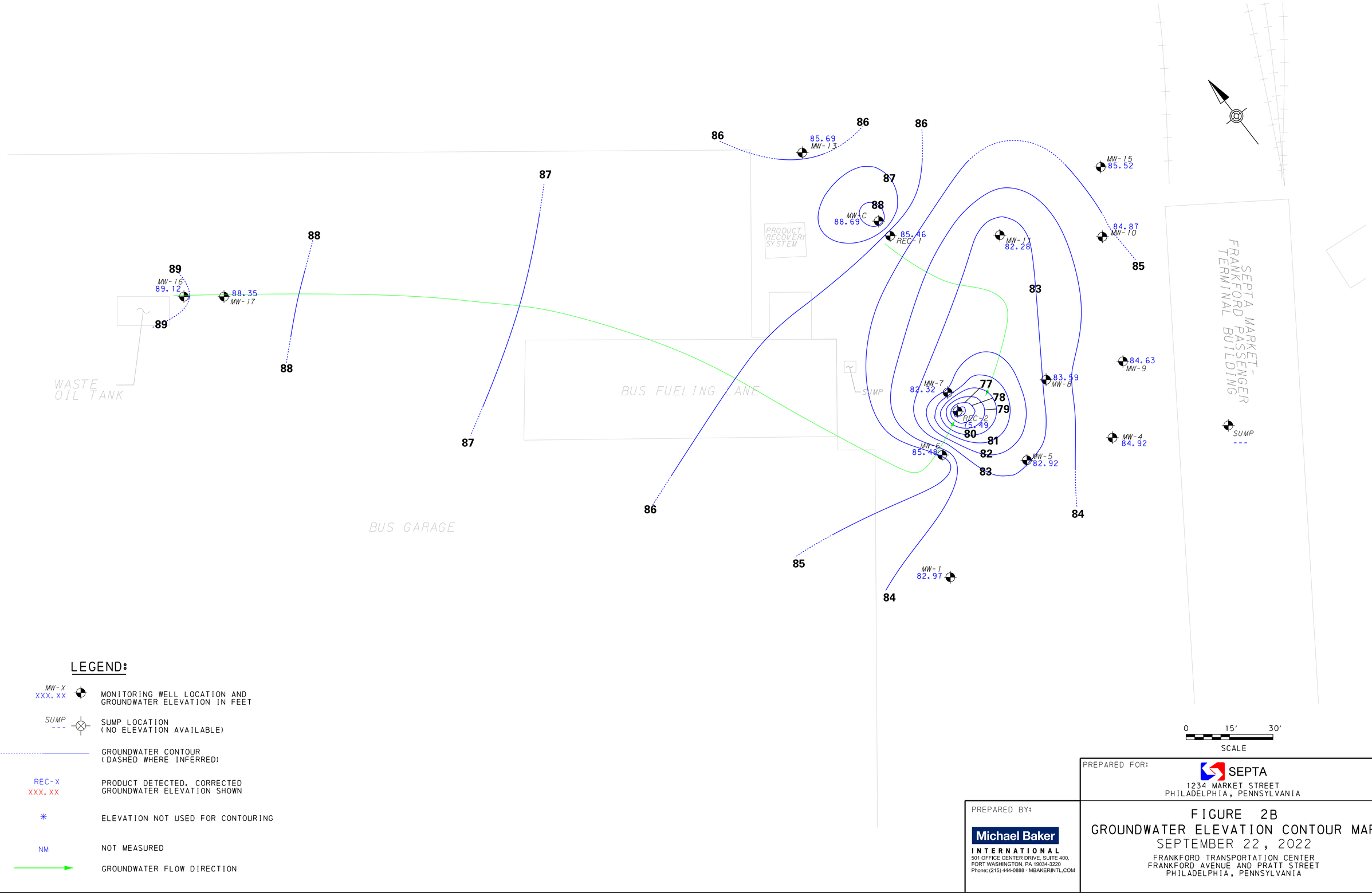
PREPARED FOR:
SEPTA
1234 MARKET STREET
PHILADELPHIA, PENNSYLVANIA

PREPARED BY:
Michael Baker INTERNATIONAL
501 OFFICE CENTER DRIVE, SUITE 400,
FORT WASHINGTON, PA 19034-3220
Phone: (215) 444-0888 · MBAKERINTL.COM

FIGURE 2A
GROUNDWATER ELEVATION CONTOUR MAP
AUGUST 24, 2022
FRANKFORD TRANSPORTATION CENTER
FRANKFORD AVENUE AND PRATT STREET
PHILADELPHIA, PENNSYLVANIA

E:\SEPTA\SEPTA Wells CEE\158288_FrankfordVPlot\2022Q3\Fig2A-FTC_August24.dgn

28-AUG-2023



LEGEND:

MW-X XXX.XX	MONITORING WELL LOCATION AND GROUNDWATER ELEVATION IN FEET
SUMP ---	SUMP LOCATION (NO ELEVATION AVAILABLE)
	GROUNDWATER CONTOUR (DASHED WHERE INFERRED)
REC-X XXX.XX	PRODUCT DETECTED. CORRECTED GROUNDWATER ELEVATION SHOWN
*	ELEVATION NOT USED FOR CONTOURING
NM	NOT MEASURED
	GROUNDWATER FLOW DIRECTION

0 15' 30'
SCALE

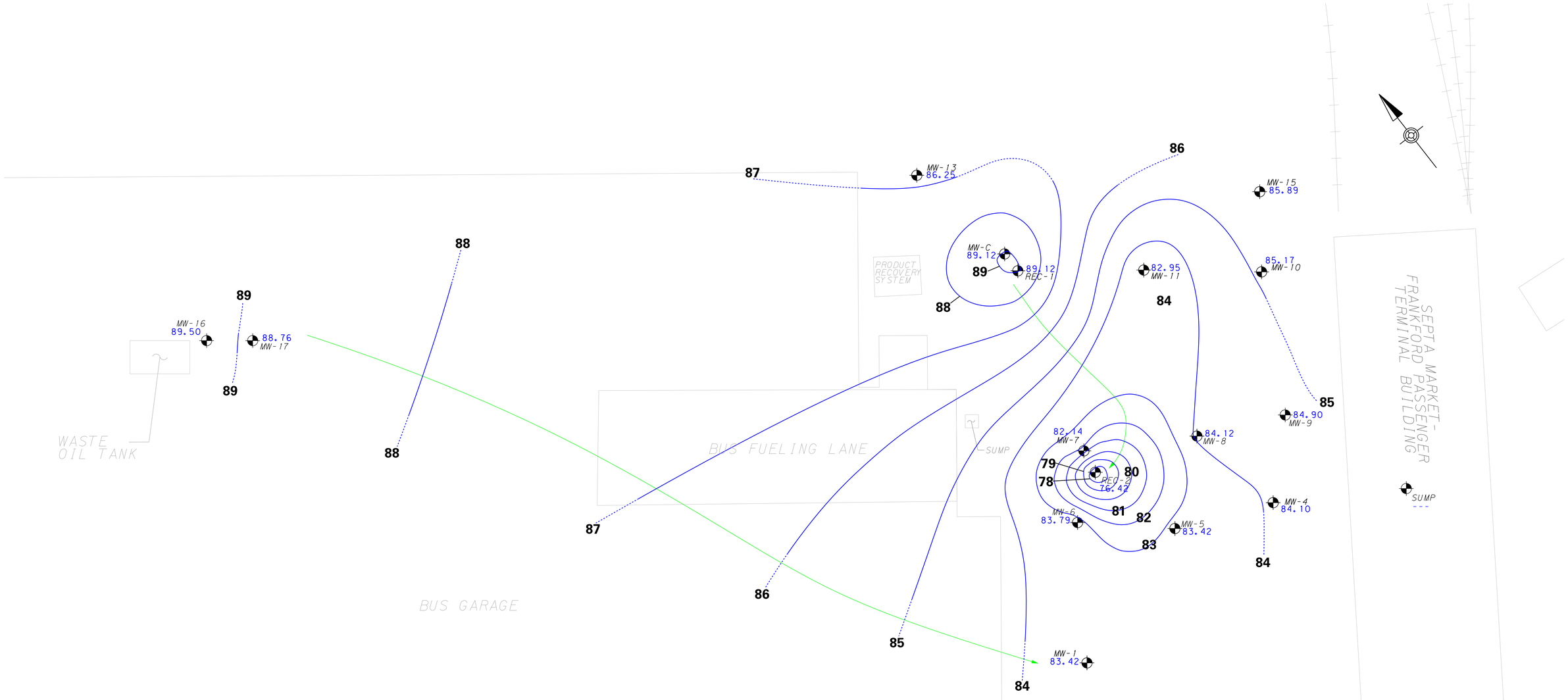
PREPARED FOR:
SEPTA
1234 MARKET STREET
PHILADELPHIA, PENNSYLVANIA

PREPARED BY:
Michael Baker INTERNATIONAL
501 OFFICE CENTER DRIVE, SUITE 400,
FORT WASHINGTON, PA 19034-3220
Phone: (215) 444-0888 · MBAKERINTL.COM

FIGURE 2B
GROUNDWATER ELEVATION CONTOUR MAP
SEPTEMBER 22, 2022
FRANKFORD TRANSPORTATION CENTER
FRANKFORD AVENUE AND PRATT STREET
PHILADELPHIA, PENNSYLVANIA

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28-AUG-2023



LEGEND:

MW-X XXX.XX	MONITORING WELL LOCATION AND GROUNDWATER ELEVATION IN FEET
SUMP ---	SUMP LOCATION (NO ELEVATION AVAILABLE)
	GROUNDWATER CONTOUR (DASHED WHERE INFERRED)
REC-X XXX.XX	PRODUCT DETECTED. CORRECTED GROUNDWATER ELEVATION SHOWN
*	ELEVATION NOT USED FOR CONTOURING
NM	NOT MEASURED
	GROUNDWATER FLOW DIRECTION

PREPARED FOR:
SEPTA
1234 MARKET STREET
PHILADELPHIA, PENNSYLVANIA

PREPARED BY:
Michael Baker
INTERNATIONAL
501 OFFICE CENTER DRIVE, SUITE 400,
FORT WASHINGTON, PA 19034-3220
Phone: (215) 444-0888 · MBAKERINTL.COM

FIGURE 2C
GROUNDWATER ELEVATION CONTOUR MAP
OCTOBER 20, 2022

FRANKFORD TRANSPORTATION CENTER
FRANKFORD AVENUE AND PRATT STREET
PHILADELPHIA, PENNSYLVANIA

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Michael Baker
INTERNATIONAL

Tables

SEPTA Frankford **TABLE 1:**

Frankford Transportation Center **Summary of 3rd Quarter 2022 Elevation Change**

Well ID	TOC Elevation	Date	DEPTH TO PRODUCT (ft below TOC)	DEPTH TO WATER (ft below TOC)	APPARENT PRODUCT THICKNESS (ft)	PRODUCT ELEVATION (ft)	GROUNDWATER ELEVATION (ft)
MW-1	96.06	8/11/2022	NP	13.08	---	---	82.98
		8/24/2022	NP	13.17	---	---	82.89
		9/7/2022	NP	13.04	---	---	83.02
		9/22/2022	NP	13.09	---	---	82.97
		10/6/2022	NP	12.26	---	---	83.80
		10/20/2022	NP	12.64	---	---	83.42
MW-4	95.01	8/11/2022	NP	11.35	---	---	83.66
		8/24/2022	NP	11.49	---	---	83.52
		9/7/2022	NP	11.27	---	---	83.74
		9/22/2022	NP	10.09	---	---	84.92
		10/6/2022	NMP	10.35	Sheen	---	84.66
		10/20/2022	NP	10.91	---	---	84.10
MW-5	95.53	8/11/2022	NMP	12.15	Sheen	---	83.38
		8/24/2022	NP	12.72	---	---	*82.81*
		9/7/2022	12.10	12.11	0.01	---	83.42
		9/22/2022	NP	12.61	---	---	82.92
		10/6/2022	11.31	11.32	0.01	---	84.21
		10/20/2022	NP	12.11	---	---	83.42
MW-6	96.29	8/11/2022	NP	13.32	---	---	82.97
		8/24/2022	NP	13.46	---	---	82.83
		9/7/2022	NP	12.63	---	---	83.66
		9/22/2022	NP	10.81	---	---	85.48
		10/6/2022	NP	11.31	---	---	84.98
		10/20/2022	NP	12.50	---	---	83.79
MW-7	94.47	8/11/2022	NP	11.44	---	---	83.03
		8/24/2022	NMP	12.57	Sheen	---	81.90
		9/7/2022	NP	12.59	---	---	81.88
		9/22/2022	NMP	12.15	Sheen	---	82.32
		10/6/2022	NMP	11.16	Sheen	---	83.31
		10/20/2022	NP	12.33	---	---	82.14
MW-8	95.60	8/11/2022	12.09	12.10	0.01	---	83.50
		8/24/2022	NMP	12.19	Sheen	---	83.41
		9/7/2022	NMP	11.98	Sheen	---	83.62
		9/22/2022	NMP	12.01	Sheen	---	83.59
		10/6/2022	NP	11.20	---	---	84.40
		10/20/2022	NP	11.48	---	---	84.12
MW-9	95.04	8/11/2022	NP	10.59	---	---	84.45
		8/24/2022	NP	10.77	---	---	84.27
		9/7/2022	NP	10.55	---	---	84.49
		9/22/2022	NP	10.41	---	---	84.63
		10/6/2022	NMP	9.43	Sheen	---	85.61
		10/20/2022	NP	10.14	---	---	84.90
MW-10	95.80	8/11/2022	NP	10.97	---	---	84.83
		8/24/2022	NP	11.07	---	---	84.73
		9/7/2022	NP	10.92	---	---	84.88
		9/22/2022	NP	10.93	---	---	84.87
		10/6/2022	NP	10.36	---	---	85.44
		10/20/2022	NP	10.63	---	---	85.17

SEPTA Frankford **TABLE 1:**

Frankford Transportation Center **Summary of 3rd Quarter 2022 Elevation Change**

Well ID	TOC Elevation	Date	DEPTH TO PRODUCT (ft below TOC)	DEPTH TO WATER (ft below TOC)	APPARENT PRODUCT THICKNESS (ft)	PRODUCT ELEVATION (ft)	GROUNDWATER ELEVATION (ft)
MW-11	95.17	8/11/2022	NP	12.93	---	---	82.24
		8/24/2022	NP	13.58	---	---	81.59
		9/7/2022	NP	13.09	---	---	82.08
		9/22/2022	NP	12.89	---	---	82.28
		10/6/2022	NP	18.38	---	---	76.79
		10/20/2022	NP	12.22	---	---	82.95
MW-13	98.34	8/11/2022	NP	12.64	---	---	85.70
		8/24/2022	NP	12.81	---	---	85.53
		9/7/2022	NP	12.63	---	---	85.71
		9/22/2022	NP	12.65	---	---	85.69
		10/6/2022	NP	11.94	---	---	86.40
		10/20/2022	NP	12.09	---	---	86.25
MW-15	95.81	8/11/2022	NP	10.35	---	---	85.46
		8/24/2022	NP	10.43	---	---	85.38
		9/7/2022	NP	10.29	---	---	85.52
		9/22/2022	NP	10.29	---	---	85.52
		10/6/2022	NP	9.53	---	---	86.28
		10/20/2022	NP	9.92	---	---	85.89
MW-16	100.83	8/11/2022	NP	11.58	---	---	89.25
		8/24/2022	NP	11.65	---	---	89.18
		9/7/2022	NP	11.57	---	---	89.26
		9/22/2022	NP	11.71	---	---	89.12
		10/6/2022	NP	11.04	---	---	89.79
		10/20/2022	NP	11.33	---	---	89.50
MW-17	100.42	8/11/2022	NP	12.00	---	---	88.42
		8/24/2022	NP	12.03	---	---	88.39
		9/7/2022	NP	12.00	---	---	88.42
		9/22/2022	NP	12.07	---	---	88.35
		10/6/2022	NP	11.46	---	---	88.96
		10/20/2022	NP	11.66	---	---	88.76
REC-1	96.17	8/11/2022	NP	10.77	---	---	85.40
		8/24/2022	NP	10.86	---	---	85.31
		9/7/2022	NP	10.76	---	---	85.41
		9/22/2022	NP	10.71	---	---	85.46
		10/6/2022	NP	7.00	---	---	89.17
		10/20/2022	NP	7.05	---	---	89.12
REC-2	94.85	8/11/2022	NP	17.85	---	---	77.00
		8/24/2022	NP	20.94	---	---	73.91
		9/7/2022	NP	21.96	---	---	72.89
		9/22/2022	NP	19.36	---	---	75.49
		10/6/2022	NMP	10.93	Sheen	---	83.92
		10/20/2022	NP	18.43	---	---	76.42
MW-C	97.90	8/11/2022	NP	9.08	---	---	88.82
		8/24/2022	NP	9.13	---	---	88.77
		9/7/2022	NP	9.11	---	---	88.79
		9/22/2022	NP	9.21	---	---	88.69
		10/6/2022	NP	8.73	---	---	89.17
		10/20/2022	NP	8.78	---	---	89.12

SEPTA Frankford **TABLE 1:**

Frankford Transportation Center **Summary of 3rd Quarter 2022 Elevation Change**

Well ID	TOC Elevation	Date	DEPTH TO PRODUCT (ft below TOC)	DEPTH TO WATER (ft below TOC)	APPARENT PRODUCT THICKNESS (ft)	PRODUCT ELEVATION (ft)	GROUNDWATER ELEVATION (ft)
WSW-1	---	8/11/2022	NP	17.95	---	---	---
		8/24/2022	NP	18.00	---	---	---
		9/7/2022	NP	17.92	---	---	---
		9/22/2022	NP	18.08	---	---	---
		10/6/2022	NP	17.45	---	---	---
		10/20/2022	NP	17.58	---	---	---
SUMP	---	8/11/2022	NP	9.85	---	---	---
		8/24/2022	N/G	N/G	---	---	---
		9/7/2022	NP	9.80	---	---	---
		9/22/2022	N/G	N/G	---	---	---
		10/6/2022	NP	9.29	---	---	---
		10/20/2022	NP	9.79	---	---	---

KEY:

NP	No Product
NMP	No Measurable Product
N/G	Not Guaged
---	Not Applicable
102.61	Corrected groundwater elevation = Uncorrected groundwater elevation + (Product Thickness * Product Density/Density of Water). Product density is estimated at 0.86 kg/L.

Michael Baker
INTERNATIONAL

Attachment A

PADEP Approval Letters

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION
SOUTHEAST REGIONAL OFFICE

March 1, 2012

Mr. Martin Brunges
SEPTA
1234 Market Street
Philadelphia, PA 19107-3780

Re: Storage Tank Program
Quarterly Groundwater Sampling
SEPTA Frankford Bus Garage
Facility ID No. 51-07480
Incident Nos. 29605 and 37537
5235 Penn Street
City of Philadelphia
Philadelphia County

Dear Mr. Brunges:

The Department of Environmental Protection (Department) has completed its review of the sampling data submitted for the above-referenced facility. The request within the Remedial Action Progress Report was received on September 30, 2011, additional historic data was sent via e-mail on January 16, 2012. The Department accepts your request to reduce the frequency of groundwater sampling from quarterly to semiannual basis. However, once the free product is mitigated, SEPTA will resume quarterly groundwater sampling of all monitoring wells to demonstrate attainment of a standard. When the Remedial Action Completion Report is submitted, please include a copy of this determination letter.

Please note the Uniform Environmental Covenants Act (Act 68 of 2007), Title 27, Pa.C.S. Chapter 65 (UECA), became effective on February 19, 2008. On November 20, 2010, Chapter 253, regulations for the administration of the Act became effective. The law and regulations provide a standardized process for creating, documenting, and assuring the enforceability of activity and use limitations on contaminated sites involving most engineering and institutional controls used to achieve Act 2 standards. The Department must approve the language in these covenants and strongly recommends that the draft covenant(s) be submitted for review prior to the submittal of the Remedial Action Completion Report.

A nonrefundable fee of $500 shall be submitted to the Department with each environmental covenant appropriately signed by all parties other than the Department. Further information about UECA may be found on the Department's website address located in the first page footer (under the keyword "Land Recycling").

Thank you for your cooperation in working with the Department toward the remediation of this site. If you need additional information or have any questions, please call Ms. Jessica Kasmari at 484.250.5724.

Sincerely,

Jessica Kasmari
Geologic Specialist
Environmental Cleanup and Brownfields

Susan Kennedy, P.G.
Professional Geologist Manager
Environmental Cleanup and Brownfields

cc: Ms. Kennedy, P.G.
Mr. Jones
Ms. LaBrake - AECOM
City of Philadelphia Department of Public Health
Re 30 (joh12ecb)060-16

LaBrake, Susan

From: Kasmari, Jessica [jkasmari@pa.gov]
Sent: Tuesday, August 16, 2011 2:00 PM
To: LaBrake, Susan
Cc: Brunges, Martin L; Walden-Turek, Daniel E; Velez, Victor; Kennedy, Susan (DEP)
Subject: SEPTA FTC Indoor air samples

Susan,

Thank you for the email. I also looked at the EPA vapor intrusion numbers. At this time I agree with your assessment. If anything changes regarding our regulations and technical guidance manual, I will let you know.

Jessica Kasmari | Geologic Specialist
Environmental Cleanup Program
Department of Environmental Protection
Southeast Regional Office
2 East Main Street | Norristown, PA 19401
Phone: 484.250.5724 | Fax: 484.250.5961
www.depweb.state.pa.us

*Notice: On **Friday, July 29th**, the commonwealth will be adding @pa.gov as the primary email domain for all state employees. For example: jkasmari@state.pa.us will now be jkasmari@pa.gov. The email addresses ending in @state.pa.us will continue to function so that emails will never be interrupted. We appreciate your cooperation as we take a small step to increase the usability and consistency of the commonwealth's online communications.*

From: LaBrake, Susan [mailto:Susan.LaBrake@aecom.com]
Sent: Friday, August 12, 2011 3:32 PM
To: Kasmari, Jessica
Cc: Brunges, Martin L; Walden-Turek, Daniel E; Velez, Victor
Subject:

Jessica,

As presented in the Remedial Action Progress Reports dated April 4 and July 4, 2011, indoor air samples were collected in the basement of SEPTA's Frankford Transportation Center (FTC) Passenger Terminus Building on 12/2/10 and 5/2/10 in accordance with the Pennsylvania Department of Environmental Protection's (PADEP) Site Characterization Report (SCR) and RAP approval letter dated 12/9/09. The indoor air sampling results, presented in the RAPRs, were compared to PADEP screening levels. However, as we discussed during our meeting on July 28, 2011, the PADEP requires that indoor air sampling results be compared to the EPA Indoor Air and Soil Vapor standards for sites that will close using the PADEP Site Specific Standard.

Therefore, AECOM reviewed the indoor air sampling results for the referenced samples using the EPA standards provided by the PADEP during last week's meeting. The only compound detected, toluene, did not exceed the EPA/PADEP Industrial Indoor Air standards. A revised table of indoor air sampling results for both events incorporating the EPA standards is attached.

Based on these results, SEPTA maintains the recommendation presented in the July 4, 2011 RAPR that PADEP approve no further action with respect to vapor sampling at FTC. As stated in the July 4 RAPR, SEPTA requests that PADEP provide a letter to SEPTA confirming their approval.

If you have any questions or require further information, please do not hesitate to contact me.

Thank you,

Susan

Susan K. F. LaBrake, PG
Senior Manager
Environment
D 215.244.7159
susan.labrake@aecom.com

AECOM
4 Neshaminy Interplex, Suite 300
Trevose, PA 19053
T 215.244.7100 F 215.244.7179
www.aecom.com

Pennsylvania Department of Environmental Protection

2 East Main Street
Norristown, PA 19401
December 4, 2009

Southeast Regional Office

Phone: 484-250-5960
Fax: 484-250-5961

Mr. Martin Brunges
SEPTA
1234 Market Street
Philadelphia, PA 19107-3780

Re: Storage Tank Program
Site Characterization Report (SS) Approval with Modifications and Remedial Action Plan Approval
SEPTA Frankford Bus Garage
Facility ID No. 51-07480
Incident Nos. 29605 and 37537
5235 Penn Street
City of Philadelphia
Philadelphia County

Dear Mr. Burnges:

Your Site Characterization Report (SCR) and Remedial Action Plan (RAP) submitted by Weston Solutions dated August 26, 2009, for the above-referenced facility, is hereby approved **with modifications**, as provided for in Chapter 245, Section 245.310(c)(2) of the Department of Environmental Protection's (Department) Corrective Action Regulations. Modifications to the report are listed below:

1. Sample indoor air in the basement of the passenger terminus building basement.

2. Sample all available wells on-site and clearly indicate in a table all wells that are sampled, not sampled, and which wells contain free product.

Your initial Remedial Action Progress Report, conforming to the requirements of Section 245.312(c) of the Department's Corrective Action Regulations, is due 120 days from the date of this letter. Subsequent progress reports should be submitted to the Department for review every 90 days thereafter.

In addition to requirements set forth in Section 245.312(c), each Remedial Action Progress Report shall incorporate the following items:

- Current and historical field and/or laboratory analyses for all affected media shall be presented in a tabular form.

Thank you for your cooperation in working with the Department toward the remediation of this site. If you need additional information or have any questions, please call Ms. Jessica Kasmari at 484-250-5724.

Sincerely,

Jessica Kasmari
Geologic Specialist
Environmental Cleanup

Sarah L. Pantelidou, P.G.
Licensed Professional Geologist
Environmental Cleanup

cc: Mr. Miceli, USTIF
City of Philadelphia
Philadelphia Health Department
Mr. Scheinfeld - Weston Solutions, Inc.
Mr. Velez - AECOM
Ms. Warren
Ms. Sepsy
Ms. Kasmari
Re 30 (GJS09ECP)338-63

From: Kasmari, Jessica
To: Mullen, Simon
Cc: Anderson, Jess D
Subject: RE: EXTERNAL: RE: [External] SEPTA FTC RAP/Injections
Date: Monday, September 30, 2019 2:38:35 PM

Simon,
Thank you for the information. You do not need to resubmit the report. Please include the tables in futures reports, even if it is on a cd.

Jessica Kasmari, P.G. | Licensed Professional Geologist
Department of Environmental Protection | Southeast Regional Office
2 East Main Street | Norristown, PA 19401
Phone: 484.250.5724 | Fax: 484.250.5961
www.dep.pa.gov

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From: Mullen, Simon <Simon.Mullen@mbakerintl.com>
Sent: Friday, September 27, 2019 11:58 AM
To: Kasmari, Jessica <jkasmari@pa.gov>
Cc: Anderson, Jess D <Jess.Anderson@mbakerintl.com>
Subject: RE: EXTERNAL: RE: [External] SEPTA FTC RAP/Injections

Jessica,

Sorry for the delayed response. Please see the attached updated HASP. My plan is to collect liquid level readings from the monitoring wells within the treatment area periodically throughout the injections. We're hoping that the final day of injections will be Friday 10/4. We could certainly come back on Monday 10/7 to gauge again, however we also would have our biweekly O&M event during the week of 10/7, and could probably skew that event towards the beginning of the week.

Regarding the data tables, do you want me to resend the PDF of the report with the data tables embedded? I'm attaching them here as well.

Thanks,

Simon Mullen | Project Geologist | Michael Baker International
500 Office Center Drive, Suite 210 | Fort Washington, PA 19034 |[O] 215-442-5331 | [M] 484-574-3609
simon.mullen@mbakerintl.com | www.mbakerintl.com



From: Kasmari, Jessica <jkasmari@pa.gov>
Sent: Friday, September 27, 2019 11:35 AM
To: Mullen, Simon <Simon.Mullen@mbakerintl.com>
Cc: Anderson, Jess D <Jess.Anderson@mbakerintl.com>
Subject: RE: EXTERNAL: RE: [External] SEPTA FTC RAP/Injections

HI Simon and Jess,

I have not seen anything yet, regarding my concerns. Will you be addressing my questions?

Thank you

Jessica Kasmari, P.G. | Licensed Professional Geologist
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From: Kasmari, Jessica
Sent: Tuesday, September 24, 2019 7:58 AM
To: Mullen, Simon <Simon.Mullen@mbakerintl.com>
Cc: Anderson, Jess D <Jess.Anderson@mbakerintl.com>
Subject: RE: EXTERNAL: RE: [External] SEPTA FTC RAP/Injections

Hi Simon,

I reviewed the RAP and I have a few questions.

On page 3, the report states each injection point will be monitored to ensure…and to prevent fracturing. What is the length of time you will be monitoring each location? Only that day or will you be going back the following days. (I ask because I had a site that fractured and the release occurred after the consultant left the site). Same question with the second treatment.

The report states a new health and safety plan will be generated, do you have a copy of the HASP?

Can you please provide data tables when you are reports to DEP. Including the wells with free product and the concentrations in other wells. As I may know site, the report can be handed off to another person who does not know the site as well.

Please let me know if you want to discuss any of my comments. Give you want to start injections on the 30th, can you please respond to me by the Sept 27th.

Thank you.

Jessica Kasmari, P.G. | Licensed Professional Geologist
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2 East Main Street | Norristown, PA 19401
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From: Mullen, Simon <Simon.Mullen@mbakerintl.com>
Sent: Wednesday, September 18, 2019 2:55 PM
To: Kasmari, Jessica <jkasmari@pa.gov>
Cc: Anderson, Jess D <Jess.Anderson@mbakerintl.com>
Subject: RE: EXTERNAL: RE: [External] SEPTA FTC RAP/Injections

OK, thanks for the status update Jessica. In speaking with Jess, I understand that we can move forward with the injections even if we haven't received the RAP approval. Therefore, we'll keep the current schedule in place for initiating the injections.

Thanks,

Simon Mullen | Project Geologist | Michael Baker International
500 Office Center Drive, Suite 210 | Fort Washington, PA 19034 |[O] 215-442-5331 | [M] 484-574-3609
simon.mullen@mbakerintl.com | www.mbakerintl.com

From: Kasmari, Jessica <jkasmari@pa.gov>
Sent: Wednesday, September 18, 2019 7:48 AM
To: Mullen, Simon <Simon.Mullen@mbakerintl.com>
Subject: EXTERNAL: RE: [External] SEPTA FTC RAP/Injections

I did not review it yet. My review deadline is Oct 26th. I cannot make any promises I will complete my review before Sept 30th.

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From: Mullen, Simon <Simon.Mullen@mbakerintl.com>
Sent: Tuesday, September 17, 2019 4:59 PM
To: Kasmari, Jessica <jkasmari@pa.gov>
Subject: [External] SEPTA FTC RAP/Injections

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Jessica,

I wanted to touch base about the status of the updated FTC RAP. Did you issue the approval for that yet? I believe the only thing we were waiting on for that was the UIC approval, correct? We are also scheduled with our driller currently to begin the first injection event on 9/30. Please let me know if you have any questions regarding this.

Thanks,

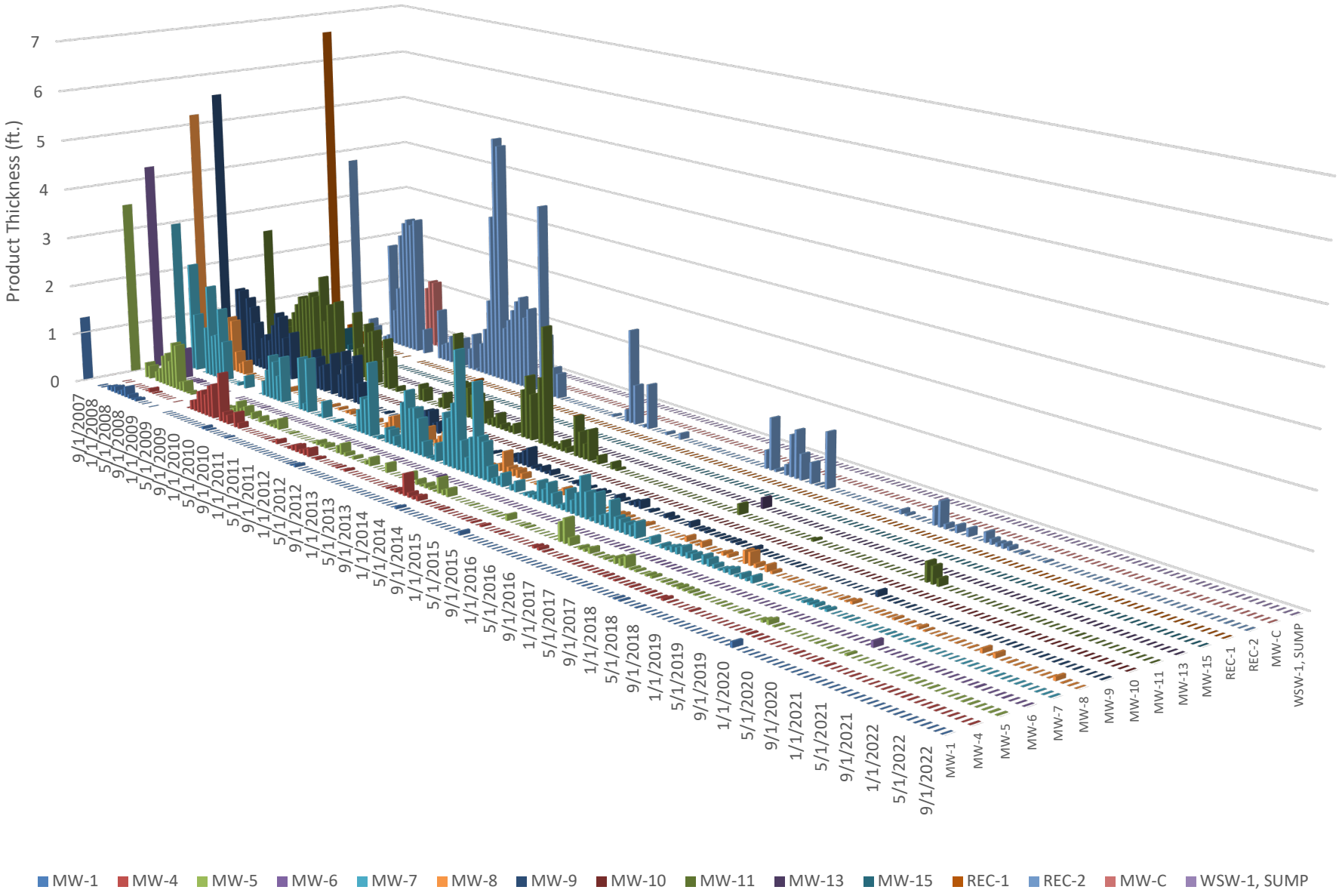
Simon Mullen | Project Geologist | Michael Baker International
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simon.mullen@mbakerintl.com | www.mbakerintl.com

Michael Baker
INTERNATIONAL

Attachment B

Historic Groundwater Conditions

Attachment B
Product Thickness Over Time



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Attachment C

Historic Analytical Results

Regulated Substance	SWHS MSC (Used Aquifers TDS Residential	Sample ID	MW-1													
		Date Collected	3/26/2002	6/29/2010	10/25/2010	2/15/2011	5/5/2011	11/21/2011	7/18/2013	11/21/2013	5/29/2014	10/28/2014	6/4/2015	12/17/2015	5/17/2016	11/16/2016
		CASRN														
Volatile Organic Compounds																
Benzene	5	71-43-2	5.0 U	1.0 U	0.50 U	0.05 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane (EDB)	0.05	106-93-4	N/A	0.05 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,2-Dichloroethane	5	107-06-2	N/A	1.0 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ethylbenzene	700	100-41-4	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzene (Cumene)	840	98-82-8	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	***1.2***	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl-tert-butyl ether (MTBE)	20	1634-04-4	N/A	***2.56***	***2.1***	***1.1***	***1.3***	***1.2***	***1.2***	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Naphthalene	100	91-20-3	5.0 U	5.0 U	1.0 U	5.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Toluene	1,000	108-88-3	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trimethylbenzene (1,2,4-TMB)	130	95-63-6	N/A	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	***2.20***	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3,5-Trimethylbenzene (1,3,5-TMB)	130	108-67-8	N/A	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, Total	10,000	1330-20-7	N/A	3.0 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Semi-Volatile Organic Compounds																
Anthracene	66	120-12-7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benzo[a]anthracene	0.30	56-55-3	N/A	0.10 U	0.021 U	***0.15***	***0.022***	***0.13***	0.11 U	0.10 U	0.060 U	0.060 U	0.061 U	0.061 U	0.062 U	0.061 U
Benzo[a]pyrene	0.20	50-32-8	N/A	0.10 U	***0.042***	***0.12***	0.021 U	***0.13***	0.11 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Benzo[b]fluoranthene	0.18	205-99-2	N/A	0.10 U	***0.052***	***0.13***	0.021 U	***0.12***	0.11 U	0.10 U	0.080 U	0.10 U	0.081 U	0.082 U	0.083 U	***0.11***
Benzo[g,h,i]perylene	0.26	191-24-2	N/A	0.10 U	***0.031***	***0.071***	0.021 U	0.11 U	0.11 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Benzo[k]fluoranthene	0.18	207-08-9	N/A	0.10 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chrysene	1.8	218-01-9	N/A	0.10 U	0.021 U	***0.061***	0.021 U	0.11 U	0.11 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Fluorene	1,400	86-73-7	10 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Indeno[1,2,3-cd]pyrene	0.18	193-39-5	N/A	0.10 U	***0.021***	***0.1***	0.021 U	0.11 U	0.11 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Phenanthrene	1,100	85-01-8	10 U	2.0 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pyrene	130	129-00-0	N/A	2.0 U	***0.44***	***0.58***	***0.17***	***0.54***	0.11 U	***0.20***	0.10 U	***0.11***	***0.10***	***0.17***	0.10 U	***0.22***
Metals																
Lead, Dissolved	5	7439-92-1	N/A	***2.0***	5.0 U	2.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

Notes & Qualifiers:

	All concentrations in µg/L
SWHS	Statewide Health Standard
MSC	Medium Specific Concentration (2021 update)
CASRN	Chemical Abstracts Service Registry Number
U	Indicates analysis was performed for the compound but it was not detected. The sample reporting limit is reported.
N/A	Not Analyzed
ND	Not Detected. Detection limit not provided.
Bold Italic	Compound was detected
	Concentration exceeds Residential MSC

Regulated Substance	SWHS MSC (Used Aquifers TDS Residential	Sample ID	MW-1 (continued)										MW-2	MW-3	MW-4	
		Date Collected	5/9/2017	1/8/2020	1/8/2020	5/20/2020	11/5/2020	5/19/2021	11/22/2021	11/22/2021	5/16/2022	5/16/2022	3/26/2002	3/26/2002	3/26/2002	2/16/2009
		CASRN			(Duplicate)							(Duplicate)				
Volatile Organic Compounds																
Benzene	5	71-43-2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5.0 U	5.0 U	5.0 U	N/A
1,2-Dibromoethane (EDB)	0.05	106-93-4	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	N/A	N/A	N/A	N/A
1,2-Dichloroethane	5	107-06-2	0.5 U	0.5 U	0.5 U	0.64 U	0.5 U	0.64 U	0.64 U	0.64 U	0.66 U	0.66 U	N/A	N/A	N/A	N/A
Ethylbenzene	700	100-41-4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	***5.0 J***	N/A
Isopropylbenzene (Cumene)	840	98-82-8	1.0 U	***2.5***	***2.1***	1.0 U	1.0 U	***1.4***	***1.1***	***1.1***	1.0 U	1.0 U	5.0 U	5.0 U	***8.0***	ND
Methyl-tert-butyl ether (MTBE)	20	1634-04-4	***2.5***	***3.8***	***3.3***	0.5 U	0.5 U	***0.84***	***2.7***	***2.6***	0.87 U	0.87 U	N/A	N/A	N/A	***0.63***
Naphthalene	100	91-20-3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	***4.0 J***	N/A
Toluene	1,000	108-88-3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	ND
1,2,4-Trimethylbenzene (1,2,4-TMB)	130	95-63-6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	N/A	N/A	N/A	N/A
1,3,5-Trimethylbenzene (1,3,5-TMB)	130	108-67-8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	N/A	N/A	N/A	N/A
Xylenes, Total	10,000	1330-20-7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	N/A	N/A	N/A	N/A
Semi-Volatile Organic Compounds																
Anthracene	66	120-12-7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	***0.14***
Benzo[a]anthracene	0.30	56-55-3	2.0 U	***0.023***	0.02 U	0.02 U	***0.021***	0.02 U	0.021 U	0.022 U	0.020 U	0.020 U	N/A	N/A	N/A	ND
Benzo[a]pyrene	0.20	50-32-8	2.0 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.021 U	0.022 U	0.020 U	0.020 U	N/A	N/A	N/A	ND
Benzo[b]fluoranthene	0.18	205-99-2	2.0 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.021 U	0.022 U	0.020 U	0.020 U	N/A	N/A	N/A	ND
Benzo[g,h,i]perylene	0.26	191-24-2	2.0 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.021 U	0.022 U	0.020 U	0.020 U	N/A	N/A	N/A	ND
Benzo[k]fluoranthene	0.18	207-08-9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ND
Chrysene	1.8	218-01-9	2.0 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.021 U	0.022 U	0.020 U	0.020 U	N/A	N/A	N/A	ND
Fluorene	1,400	86-73-7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	10 U	10 U	10 U	***0.63***
Indeno[1,2,3-cd]pyrene	0.18	193-39-5	2.0 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.021 U	0.022 U	0.020 U	0.020 U	N/A	N/A	N/A	ND
Phenanthrene	1,100	85-01-8	N/A	***0.11***	***0.13***	0.02 U	0.02 U	0.02 U	0.021 U	0.022 U	***0.030***	***0.036***	10 U	10 U	10 U	***0.20***
Pyrene	130	129-00-0	2.0 U	***0.14***	***0.10***	***0.13***	***0.19***	***0.11***	***0.08***	***0.096***	***0.13***	***0.12***	N/A	N/A	N/A	***0.34***
Metals																
Lead, Dissolved	5	7439-92-1	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	N/A	N/A	N/A	ND

Notes & Qualifiers:

	All concentrations in µg/L
SWHS	Statewide Health Standard
MSC	Medium Specific Concentration (2021 update)
CASRN	Chemical Abstracts Service Registry Number
U	Indicates analysis was performed for the compound but it was not detected. The sample reporting limit is reported.
N/A	Not Analyzed
ND	Not Detected. Detection limit not provided.
Bold Italic	Compound was detected
	Concentration exceeds Residential MSC

Regulated Substance	SWHS MSC (Used Aquifers TDS Residential	Sample ID	MW-4 (continued)					MW-5								
		Date Collected	4/6/2009	10/29/2014	12/17/2015	5/18/2016	5/20/2021	3/26/2002	6/29/2010	10/25/2010	5/5/2011	7/18/2013	11/21/2013	10/28/2014	12/16/2015	5/17/2016
		CASRN														
Volatile Organic Compounds																
Benzene	5	71-43-2	N/A	1.0 U	1.0 U	1.0 U	0.5 U	5.0 U	1.0 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane (EDB)	0.05	106-93-4	N/A	N/A	N/A	N/A	0.014 U	N/A	0.05 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,2-Dichloroethane	5	107-06-2	N/A	N/A	N/A	N/A	0.64 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ethylbenzene	700	100-41-4	N/A	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzene (Cumene)	840	98-82-8	***1.5***	***2.4***	***2.2***	***2.5***	***2.5***	***2.0 J***	1.0 U	1.0 U	***1.8***	***5.5***	1.0 U	1.0 U	1.0 U	1.0 U
Methyl-tert-butyl ether (MTBE)	20	1634-04-4	***0.54***	1.0 U	1.0 U	1.0 U	0.5 U	N/A	***2.33***	***3.6***	***3.2***	***1.1***	1.0 U	1.0 U	1.0 U	1.0 U
Naphthalene	100	91-20-3	N/A	2.0 U	2.0 U	2.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Toluene	1,000	108-88-3	ND	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trimethylbenzene (1,2,4-TMB)	130	95-63-6	N/A	1.0 U	1.0 U	1.0 U	1.0 U	N/A	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3,5-Trimethylbenzene (1,3,5-TMB)	130	108-67-8	N/A	1.0 U	1.0 U	1.0 U	1.0 U	N/A	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, Total	10,000	1330-20-7	N/A	N/A	N/A	N/A	1.0 U	N/A	3.0 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Semi-Volatile Organic Compounds																
Anthracene	66	120-12-7	***0.13***	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benzo[a]anthracene	0.30	56-55-3	***0.060***	***0.18***	***0.33***	***0.32***	***0.058***	N/A	0.10 U	0.021 U	***0.11***	0.10 U	0.10 U	0.060 U	0.061 U	0.061 U
Benzo[a]pyrene	0.20	50-32-8	ND	***0.15***	***0.23***	***0.27***	***0.18***	N/A	0.10 U	***0.062***	***0.11***	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Benzo[b]fluoranthene	0.18	205-99-2	***0.020***	***0.21***	***0.20***	***0.53***	***0.22***	N/A	0.10 U	***0.072***	***0.11***	0.10 U	0.10 U	0.080 U	0.082 U	0.082 U
Benzo[g,h,i]perylene	0.26	191-24-2	ND	0.10 U	0.10 U	***0.13***	***0.16***	N/A	0.10 U	***0.041***	***0.045***	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Benzo[k]fluoranthene	0.18	207-08-9	N/A	N/A	N/A	N/A	N/A	N/A	0.10 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chrysene	1.8	218-01-9	ND	***0.15***	***0.20***	***0.25***	***0.091***	N/A	0.10 U	0.021 U	***0.039***	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Fluorene	1,400	86-73-7	***1.1***	N/A	N/A	N/A	N/A	10 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Indeno[1,2,3-cd]pyrene	0.18	193-39-5	ND	0.10 U	0.10 U	***0.12***	***0.12***	N/A	0.10 U	***0.041***	***0.041***	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Phenanthrene	1,100	85-01-8	***0.12***	N/A	N/A	N/A	***0.35***	10 U	2.0 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pyrene	130	129-00-0	***0.38***	***1.3***	***2.0***	***1.6***	***0.50***	N/A	2.0 U	***0.29***	***0.35***	0.10 U	***0.20***	***0.19***	***0.27***	***0.11***
Metals																
Lead, Dissolved	5	7439-92-1	ND	5.0 U	5.0 U	5.0 U	3.0 U	N/A	2.0 U	5.0 U	4.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U

Notes & Qualifiers:

All concentrations in µg/L

SWHS	Statewide Health Standard
MSC	Medium Specific Concentration (2021 update)
CASRN	Chemical Abstracts Service Registry Number
U	Indicates analysis was performed for the compound but it was not detected. The sample reporting limit is reported.
N/A	Not Analyzed
ND	Not Detected. Detection limit not provided.
Bold Italic	Compound was detected
	Concentration exceeds Residential MSC

Regulated Substance	SWHS MSC (Used Aquifers TDS Residential	Sample ID	MW-5 (continued)					MW-6								
		Date Collected	11/17/2016	1/8/2020	5/20/2021	11/22/2021	5/17/2022	3/26/2002	2/16/2009	4/6/2009	6/29/2010	10/25/2010	2/15/2011	5/5/2011	11/21/2011	5/24/2012
		CASRN														
Volatile Organic Compounds																
Benzene	5	71-43-2	1.0 U	1.0 U	0.5 U	0.5 U	0.5 U	5.0 U	N/A	N/A	1.0 U	***0.61***	0.050 U	0.50 U	1.0 U	1.0 U
1,2-Dibromoethane (EDB)	0.05	106-93-4	N/A	N/A	0.014 U	0.014 U	0.014 U	N/A	N/A	N/A	0.05 U	N/A	N/A	N/A	N/A	N/A
1,2-Dichloroethane	5	107-06-2	N/A	N/A	0.64 U	0.64 U	0.66	N/A	N/A	N/A	1.0 U	N/A	N/A	N/A	N/A	N/A
Ethylbenzene	700	100-41-4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	N/A	N/A	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzene (Cumene)	840	98-82-8	1.0 U	***3.7***	***3.0***	***3.4***	***3.0***	5.0 U	***4.6***	***3.8***	1.0 U	1.0 U	1.0 U	***2.5***	1.0 U	1.0 U
Methyl-tert-butyl ether (MTBE)	20	1634-04-4	1.0 U	***0.54***	0.5 U	0.5 U	0.87 U	N/A	***120***	***38***	***18.51***	***31***	***28***	***150***	***11***	***6.9***
Naphthalene	100	91-20-3	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	5.0 U	N/A	N/A	5.0 U	1.0 U	5.0 U	1.0 U	2.0 U	2.0 U
Toluene	1,000	108-88-3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	ND	ND	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trimethylbenzene (1,2,4-TMB)	130	95-63-6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	N/A	N/A	N/A	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3,5-Trimethylbenzene (1,3,5-TMB)	130	108-67-8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	N/A	N/A	N/A	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, Total	10,000	1330-20-7	N/A	N/A	1.0 U	1.0 U	1.0 U	N/A	N/A	N/A	3.0 U	N/A	N/A	N/A	N/A	N/A
Semi-Volatile Organic Compounds																
Anthracene	66	120-12-7	N/A	N/A	N/A	N/A	N/A	N/A	***0.080***	***0.16***	N/A	N/A	N/A	N/A	N/A	N/A
Benzo[a]anthracene	0.30	56-55-3	0.06 U	***0.043***	0.02 U	0.021 U	***0.096***	N/A	ND	***0.074***	0.10 U	0.021 U	***0.010***	***0.18***	***0.14***	0.10 U
Benzo[a]pyrene	0.20	50-32-8	0.10 U	0.02 U	***0.023***	0.021 U	***0.072***	N/A	ND	***0.032***	0.10 U	0.021 U	***0.041***	***0.16***	0.11 U	0.10 U
Benzo[b]fluoranthene	0.18	205-99-2	***0.11***	0.02 U	***0.024***	0.021 U	***0.091***	N/A	ND	***0.032***	0.10 U	***0.021***	***0.051***	***0.17***	0.11 U	0.10 U
Benzo[g,h,i]perylene	0.26	191-24-2	0.10 U	0.02 U	0.02 U	0.021 U	***0.078***	N/A	ND	ND	0.10 U	0.021 U	0.10 U	***0.056***	0.11 U	0.10 U
Benzo[k]fluoranthene	0.18	207-08-9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.10 U	N/A	N/A	N/A	N/A	N/A
Chrysene	1.8	218-01-9	0.10 U	0.02 U	0.02 U	0.021 U	***0.062***	N/A	ND	ND	0.10 U	0.021 U	0.10 U	***0.098***	0.11 U	0.10 U
Fluorene	1,400	86-73-7	N/A	N/A	N/A	N/A	N/A	10 U	***1.2***	***1.4***	N/A	N/A	N/A	N/A	N/A	N/A
Indeno[1,2,3-cd]pyrene	0.18	193-39-5	0.10 U	0.02 U	0.02 U	0.021 U	***0.058***	N/A	ND	ND	0.10 U	0.021 U	0.10 U	***0.066***	0.11 U	0.10 U
Phenanthrene	1,100	85-01-8	N/A	***0.27***	***0.20***	***0.12***	***0.07***	10 U	***0.22***	***0.36***	2.0 U	N/A	N/A	N/A	N/A	N/A
Pyrene	130	129-00-0	***0.19***	***0.27***	***0.17***	***0.16***	***0.50***	N/A	***0.090***	***0.21***	2.0 U	***0.21***	2.0 U	***0.6***	0.11 U	***0.16***
Metals																
Lead, Dissolved	5	7439-92-1	5.0 U	5.0 U	3.0 U	3.0 U	3.0 U	N/A	ND	ND	***3.0***	5.0 U	***3.0***	4.0 U	5.0 U	5.0 U

Notes & Qualifiers:

	All concentrations in µg/L
SWHS	Statewide Health Standard
MSC	Medium Specific Concentration (2021 update)
CASRN	Chemical Abstracts Service Registry Number
U	Indicates analysis was performed for the compound but it was not detected. The sample reporting limit is reported.
N/A	Not Analyzed
ND	Not Detected. Detection limit not provided.
Bold Italic	Compound was detected
	Concentration exceeds Residential MSC

Regulated Substance	SWHS MSC (Used Aquifers TDS Residential)	Sample ID	MW-6 (continued)													
		Date Collected	7/18/2013	5/29/2014	10/29/2014	6/4/2015	12/16/2015	5/17/2016	11/16/2016	5/9/2017	11/5/2020	11/5/2020 (Duplicate)	5/19/2021	5/19/2021 (Duplicate)	11/22/2021	5/16/2022
		CASRN														
Volatile Organic Compounds																
Benzene	5	71-43-2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.5 U	***1.0***	***1.1***	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dibromoethane (EDB)	0.05	106-93-4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U
1,2-Dichloroethane	5	107-06-2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.5 U	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	0.66
Ethylbenzene	700	100-41-4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzene (Cumene)	840	98-82-8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	***1.4***	***1.6***	1.0 U	1.0 U	1.0 U	1.0 U
Methyl-tert-butyl ether (MTBE)	20	1634-04-4	***43***	***8.9***	***6.9***	***3.4***	***31***	1.0 U	***35***	***32***	***34***	***34***	***10***	***11***	***19***	***1.2***
Naphthalene	100	91-20-3	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	1,000	108-88-3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trimethylbenzene (1,2,4-TMB)	130	95-63-6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3,5-Trimethylbenzene (1,3,5-TMB)	130	108-67-8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, Total	10,000	1330-20-7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Semi-Volatile Organic Compounds																
Anthracene	66	120-12-7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benzo[a]anthracene	0.30	56-55-3	0.10 U	***0.075***	***0.075***	0.061 U	***0.066***	0.061 U	0.061 U	2.0 U	***0.086***	***0.097***	***0.031***	***0.023***	***0.043***	0.020 U
Benzo[a]pyrene	0.20	50-32-8	0.10 U	***0.12***	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	2.0 U	***0.12***	***0.11***	0.02 U	0.02 U	***0.053***	0.022
Benzo[b]fluoranthene	0.18	205-99-2	0.10 U	***0.12***	***0.12***	0.081 U	0.081 U	***0.13***	0.081 U	2.0 U	***0.14***	***0.13***	0.02 U	0.02 U	***0.057***	***0.036***
Benzo[g,h,i]perylene	0.26	191-24-2	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	2.0 U	***0.070***	***0.062***	0.02 U	0.02 U	***0.044***	***0.022***
Benzo[k]fluoranthene	0.18	207-08-9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chrysene	1.8	218-01-9	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	2.0 U	***0.051***	***0.051***	0.02 U	0.02 U	0.021 U	0.020 U
Fluorene	1,400	86-73-7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Indeno[1,2,3-cd]pyrene	0.18	193-39-5	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	2.0 U	***0.056***	***0.05***	0.02 U	0.02 U	0.021 U	0.020 U
Phenanthrene	1,100	85-01-8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	***0.074***	***0.048***	0.02 U	0.02 U	0.021 U	0.020 U
Pyrene	130	129-00-0	***0.31***	***0.54***	***0.57***	***0.19***	***0.49***	***0.35***	***0.20***	2.0 U	***0.58***	***0.55***	***0.22***	***0.21***	***0.24***	0.020 U
Metals																
Lead, Dissolved	5	7439-92-1	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U

Notes & Qualifiers:

	All concentrations in µg/L
SWHS	Statewide Health Standard
MSC	Medium Specific Concentration (2021 update)
CASRN	Chemical Abstracts Service Registry Number
U	Indicates analysis was performed for the compound but it was not detected. The sample reporting limit is reported.
N/A	Not Analyzed
ND	Not Detected. Detection limit not provided.
Bold Italic	Compound was detected
	Concentration exceeds Residential MSC

Regulated Substance	SWHS MSC (Used Aquifers TDS Residential	Sample ID	MW-7			MW-8									MW-9	
		Date Collected	2/12/2015	1/8/2020	11/23/2021	2/16/2009	4/6/2009	5/5/2011	2/12/2015	12/17/2015	5/18/2016	11/17/2016	5/20/2021	5/17/2022	2/12/2015	12/17/2015
		CASRN														
Volatile Organic Compounds																
Benzene	5	71-43-2	1.0 U	0.5 U	0.5 U	N/A	N/A	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U
1,2-Dibromoethane (EDB)	0.05	106-93-4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.014 U	0.014 U	N/A	N/A
1,2-Dichloroethane	5	107-06-2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.64 U	0.66	N/A	N/A
Ethylbenzene	700	100-41-4	1.0 U	1.0 U	1.0 U	N/A	N/A	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzene (Cumene)	840	98-82-8	***5.7***	***2.4***	***2.4***	***9.6***	***13***	***9.0***	***9.4***	1.0 U	1.0 U	***7.5***	***5.3***	***4.8***	***12.0***	***12.0***
Methyl-tert-butyl ether (MTBE)	20	1634-04-4	***4.4***	***1.8***	***0.68***	***5***	***4.6***	***1.7***	***1.6***	***1.3***	1.0 U	1.0 U	***0.71***	1.0 U	***1.7***	***1.7***
Naphthalene	100	91-20-3	***5.0***	***3.1***	1.0 U	N/A	N/A	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U	1.0 U	2.0 U	2.0 U
Toluene	1,000	108-88-3	1.0 U	1.0 U	1.0 U	ND	ND	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trimethylbenzene (1,2,4-TMB)	130	95-63-6	1.0 U	***1.3***	1.0 U	N/A	N/A	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3,5-Trimethylbenzene (1,3,5-TMB)	130	108-67-8	1.0 U	1.0 U	1.0 U	N/A	N/A	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, Total	10,000	1330-20-7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.0 U	1.0 U	N/A	N/A
Semi-Volatile Organic Compounds																
Anthracene	66	120-12-7	N/A	N/A	N/A	ND	ND	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benzo[a]anthracene	0.30	56-55-3	***0.11***	0.02 U	0.02 U	ND	***0.056***	0.021 U	0.064 U	0.061 U	0.061 U	0.06 U	0.02 U	***0.021***	***0.1***	0.061 U
Benzo[a]pyrene	0.20	50-32-8	0.11 U	0.02 U	0.02 U	ND	ND	0.021 U	0.11 U	0.10 U	0.10 U	0.10 U	0.02 U	0.020 U	0.11 U	0.10 U
Benzo[b]fluoranthene	0.18	205-99-2	***0.10***	0.02 U	0.02 U	ND	***0.022***	0.021 U	0.085 U	0.082 U	0.082 U	0.08 U	0.02 U	***0.031***	***0.17***	0.082 U
Benzo[g,h,i]perylene	0.26	191-24-2	0.11 U	0.02 U	0.02 U	ND	ND	0.021 U	0.11 U	0.10 U	0.10 U	0.10 U	0.02 U	***0.023***	0.11 U	0.10 U
Benzo[k]fluoranthene	0.18	207-08-9	N/A	N/A	N/A	ND	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chrysene	1.8	218-01-9	0.11 U	0.02 U	0.02 U	ND	ND	0.021 U	0.11 U	0.10 U	0.10 U	0.10 U	0.02 U	0.020 U	***0.14***	0.10 U
Fluorene	1,400	86-73-7	N/A	N/A	N/A	***3.1***	***3.8***	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Indeno[1,2,3-cd]pyrene	0.18	193-39-5	0.11 U	0.02 U	0.02 U	ND	ND	0.021 U	0.11 U	0.10 U	0.10 U	0.10 U	0.02 U	0.020 U	0.11 U	0.11 U
Phenanthrene	1,100	85-01-8	N/A	N/A	***0.084***	***1.6***	***2.5***	N/A	N/A	N/A	N/A	N/A	***0.83***	***0.51***	N/A	N/A
Pyrene	130	129-00-0	***0.40***	***0.20***	***0.061***	***0.060***	***0.17***	***0.12***	***0.21***	***0.17***	0.10 U	0.10 U	***0.066***	***0.14***	***1.3***	***1.3***
Metals																
Lead, Dissolved	5	7439-92-1	5.0 U PS	3.0 U	3.0 U	ND	ND	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	3.0 U	3.0 U	5.0 U	5.0 U

Notes & Qualifiers:

	All concentrations in µg/L
SWHS	Statewide Health Standard
MSC	Medium Specific Concentration (2021 update)
CASRN	Chemical Abstracts Service Registry Number
U	Indicates analysis was performed for the compound but it was not detected. The sample reporting limit is reported.
N/A	Not Analyzed
ND	Not Detected. Detection limit not provided.
Bold Italic	Compound was detected
	Concentration exceeds Residential MSC

Regulated Substance	SWHS MSC (Used Aquifers TDS Residential	Sample ID	MW-9 (continued)					MW-10								
		Date Collected	5/18/2016	11/5/2020	5/20/2021	11/22/2021	5/16/2022	3/27/2002	2/16/2009	4/6/2009	6/29/2010	10/25/2010	2/15/2011	5/5/2011	11/21/2011	5/24/2012
		CASRN														
Volatile Organic Compounds																
Benzene	5	71-43-2	1.0 U	0.5 U	0.5 U	0.5 U	0.5 U	5.0 U	N/A	N/A	1.0 U	0.50 U	0.050 U	0.50 U	1.0 U	1.0 U
1,2-Dibromoethane (EDB)	0.05	106-93-4	N/A	0.014 U	0.014 U	0.014 U	0.014 U	N/A	N/A	N/A	0.05 U	N/A	N/A	N/A	N/A	N/A
1,2-Dichloroethane	5	107-06-2	N/A	0.64 U	0.64 U	0.64 U	0.66	N/A	N/A	N/A	1.0 U	N/A	N/A	N/A	N/A	N/A
Ethylbenzene	700	100-41-4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	N/A	N/A	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzene (Cumene)	840	98-82-8	***9.0***	***7.3***	***6.6***	***3.7***	***3.8***	5.0 U	ND	ND	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl-tert-butyl ether (MTBE)	20	1634-04-4	***1.3***	0.5 U	0.5 U	0.5 U	1.0 U	N/A	ND	ND	1.0 U	***0.60***	0.050 U	0.50 U	1.0 U	1.0 U
Naphthalene	100	91-20-3	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	N/A	N/A	5.0 U	1.0 U	5.0 U	1.0 U	2.0 U	2.0 U
Toluene	1,000	108-88-3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	ND	ND	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trimethylbenzene (1,2,4-TMB)	130	95-63-6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	N/A	N/A	N/A	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3,5-Trimethylbenzene (1,3,5-TMB)	130	108-67-8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	N/A	N/A	N/A	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, Total	10,000	1330-20-7	N/A	1.0 U	1.0 U	1.0 U	1.0 U	N/A	N/A	N/A	3.0 U	N/A	N/A	N/A	N/A	N/A
Semi-Volatile Organic Compounds																
Anthracene	66	120-12-7	N/A	N/A	N/A	N/A	N/A	N/A	ND	ND	N/A	N/A	N/A	N/A	N/A	N/A
Benzo[a]anthracene	0.30	56-55-3	0.061 U	0.02 U	0.02 U	0.021 U	0.020 U	N/A	ND	***0.030***	0.10 U	0.020 U	0.10 U	0.021 U	0.11 U	0.11 U
Benzo[a]pyrene	0.20	50-32-8	0.10 U	0.02 U	0.02 U	0.021 U	0.020 U	N/A	ND	ND	0.10 U	0.020 U	0.10 U	0.021 U	0.11 U	0.11 U
Benzo[b]fluoranthene	0.18	205-99-2	0.082 U	0.02 U	0.02 U	0.021 U	0.020 U	N/A	ND	ND	0.10 U	0.020 U	0.10 U	0.021 U	0.11 U	0.11 U
Benzo[g,h,i]perylene	0.26	191-24-2	0.10 U	0.02 U	0.02 U	0.021 U	0.020 U	N/A	ND	ND	0.10 U	0.020 U	0.10 U	0.021 U	0.11 U	0.11 U
Benzo[k]fluoranthene	0.18	207-08-9	N/A	N/A	N/A	N/A	N/A	N/A	ND	N/A	0.10 U	N/A	N/A	N/A	N/A	N/A
Chrysene	1.8	218-01-9	0.10 U	0.02 U	0.02 U	0.021 U	0.020 U	N/A	ND	ND	0.10 U	0.020 U	0.10 U	0.021 U	0.11 U	0.11 U
Fluorene	1,400	86-73-7	N/A	N/A	N/A	N/A	N/A	10 U	ND	***0.020***	N/A	N/A	N/A	N/A	N/A	N/A
Indeno[1,2,3-cd]pyrene	0.18	193-39-5	0.11 U	0.02 U	0.02 U	0.021 U	0.020 U	N/A	ND	ND	0.10 U	0.020 U	0.10 U	0.021 U	0.11 U	0.11 U
Phenanthrene	1,100	85-01-8	N/A	***1.7***	***1.1***	***1.3***	***0.43***	10 U	ND	ND	2.0 U	N/A	N/A	N/A	N/A	N/A
Pyrene	130	129-00-0	***0.58***	***0.22***	***0.13***	***0.021***	***0.13***	N/A	ND	***0.030***	2.0 U	0.020 U	2.0 U	***0.032***	0.11 U	0.11 U
Metals																
Lead, Dissolved	5	7439-92-1	5.0 U	3.0 U	3.0 U	3.0 U	3.0 U	N/A	ND	ND	2.0 U	5.0 U	2.0 U	4.0 U	5.0 U	5.0 U

Notes & Qualifiers:

	All concentrations in µg/L
SWHS	Statewide Health Standard
MSC	Medium Specific Concentration (2021 update)
CASRN	Chemical Abstracts Service Registry Number
U	Indicates analysis was performed for the compound but it was not detected. The sample reporting limit is reported.
N/A	Not Analyzed
ND	Not Detected. Detection limit not provided.
Bold Italic	Compound was detected
	Concentration exceeds Residential MSC

Regulated Substance	SWHS MSC (Used Aquifers TDS Residential	Sample ID	MW-10 (continued)													
		Date Collected	7/18/2013	11/21/2013	5/28/2014	10/29/2014	6/3/2015	12/16/2015	5/18/2016	11/17/2016	5/8/2017	11/7/2017	5/9/2018	12/12/2018	5/9/2019	1/8/2020
		CASRN														
Volatile Organic Compounds																
Benzene	5	71-43-2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dibromoethane (EDB)	0.05	106-93-4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U
1,2-Dichloroethane	5	107-06-2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.5 U	N/A	N/A	N/A	0.5 U	0.5 U
Ethylbenzene	700	100-41-4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzene (Cumene)	840	98-82-8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl-tert-butyl ether (MTBE)	20	1634-04-4	1.0 U	1.0 U	1.0 U	1.0 U	***1.1***	***1.1***	1.0 U	1.0 U	***0.99***	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Naphthalene	100	91-20-3	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	1,000	108-88-3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trimethylbenzene (1,2,4-TMB)	130	95-63-6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3,5-Trimethylbenzene (1,3,5-TMB)	130	108-67-8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, Total	10,000	1330-20-7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Semi-Volatile Organic Compounds																
Anthracene	66	120-12-7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benzo[a]anthracene	0.30	56-55-3	0.10 U	0.10 U	0.063 U	0.060 U	0.061 U	0.061 U	0.061 U	0.06 U	2.0 U	2.0 U	0.02 U	0.02 U	0.02 U	0.02 U
Benzo[a]pyrene	0.20	50-32-8	0.10 U	0.10 U	0.11 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	2.0 U	2.0 U	0.02 U	0.02 U	0.02 U	0.02 U
Benzo[b]fluoranthene	0.18	205-99-2	0.10 U	0.10 U	0.084 U	0.080 U	0.081 U	0.081 U	0.081 U	0.08 U	2.0 U	2.0 U	0.02 U	0.02 U	0.02 U	0.02 U
Benzo[g,h,i]perylene	0.26	191-24-2	0.10 U	0.10 U	0.11 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	1.2 U	2.0 U	0.02 U	0.02 U	0.02 U	0.02 U
Benzo[k]fluoranthene	0.18	207-08-9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chrysene	1.8	218-01-9	0.10 U	0.10 U	0.11 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	2.0 U	2.0 U	0.02 U	0.02 U	0.02 U	0.02 U
Fluorene	1,400	86-73-7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Indeno[1,2,3-cd]pyrene	0.18	193-39-5	0.10 U	0.10 U	0.11 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	2.0 U	2.0 U	0.02 U	0.02 U	0.02 U	0.02 U
Phenanthrene	1,100	85-01-8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.0 U	***0.038***	***0.048***	0.02 U	0.02 U
Pyrene	130	129-00-0	0.10 U	0.10 U	0.11 U	0.10 U	0.10 U	***0.1***	0.10 U	0.10 U	2.0 U	2.0 U	***0.029***	0.02 U	0.02 U	0.02 U
Metals																
Lead, Dissolved	5	7439-92-1	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U

Notes & Qualifiers:

	All concentrations in µg/L
SWHS	Statewide Health Standard
MSC	Medium Specific Concentration (2021 update)
CASRN	Chemical Abstracts Service Registry Number
U	Indicates analysis was performed for the compound but it was not detected. The sample reporting limit is reported.
N/A	Not Analyzed
ND	Not Detected. Detection limit not provided.
Bold Italic	Compound was detected
	Concentration exceeds Residential MSC

Regulated Substance	SWHS MSC (Used Aquifers TDS Residential	Sample ID	MW-10 (continued)					MW-11							
		Date Collected	5/20/2020	11/5/2020	5/19/2021	11/22/2021	5/16/2022	2/12/2015	5/8/2017	11/6/2017	5/9/2018	12/12/2018	5/9/2019	5/20/2020	5/19/2021
		CASRN													
Volatile Organic Compounds															
Benzene	5	71-43-2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dibromoethane (EDB)	0.05	106-93-4	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	N/A	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U
1,2-Dichloroethane	5	107-06-2	0.5 U	0.64 U	0.64 U	0.64 U	0.66	N/A	0.5 U	N/A	N/A	N/A	0.5 U	0.5 U	0.64 U
Ethylbenzene	700	100-41-4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzene (Cumene)	840	98-82-8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl-tert-butyl ether (MTBE)	20	1634-04-4	0.5 U	0.5 U	0.5 U	0.5 U	0.87 U	1.0 U	***0.57***	***0.76***	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Naphthalene	100	91-20-3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	1,000	108-88-3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trimethylbenzene (1,2,4-TMB)	130	95-63-6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3,5-Trimethylbenzene (1,3,5-TMB)	130	108-67-8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, Total	10,000	1330-20-7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	N/A	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Semi-Volatile Organic Compounds															
Anthracene	66	120-12-7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benzo[a]anthracene	0.30	56-55-3	0.02 U	0.02 U	0.02 U	0.021 U	0.020 U	0.062 U	2.0 U	2.0 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Benzo[a]pyrene	0.20	50-32-8	0.02 U	0.02 U	0.02 U	0.021 U	0.020 U	0.10 U	2.0 U	2.0 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Benzo[b]fluoranthene	0.18	205-99-2	0.02 U	0.02 U	0.02 U	0.021 U	0.020 U	0.082 U	2.0 U	2.0 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Benzo[g,h,i]perylene	0.26	191-24-2	0.02 U	0.02 U	0.02 U	0.021 U	0.020 U	0.10 U	1.2 U	2.0 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Benzo[k]fluoranthene	0.18	207-08-9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chrysene	1.8	218-01-9	0.02 U	0.02 U	0.02 U	0.021 U	0.020 U	0.10 U	2.0 U	2.0 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Fluorene	1,400	86-73-7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Indeno[1,2,3-cd]pyrene	0.18	193-39-5	0.02 U	0.02 U	0.02 U	0.021 U	0.020 U	0.10 U	2.0 U	2.0 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Phenanthrene	1,100	85-01-8	0.02 U	0.02 U	0.02 U	0.021 U	0.020 U	N/A	N/A	2.0 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Pyrene	130	129-00-0	0.02 U	0.02 U	0.02 U	0.021 U	0.020 U	0.10 U	2.0 U	2.0 U	***0.058***	***0.02***	0.02 U	0.02 U	0.02 U
Metals															
Lead, Dissolved	5	7439-92-1	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	5.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U

Notes & Qualifiers:

	All concentrations in µg/L
SWHS	Statewide Health Standard
MSC	Medium Specific Concentration (2021 update)
CASRN	Chemical Abstracts Service Registry Number
U	Indicates analysis was performed for the compound but it was not detected. The sample reporting limit is reported.
N/A	Not Analyzed
ND	Not Detected. Detection limit not provided.
Bold Italic	Compound was detected
	Concentration exceeds Residential MSC

Regulated Substance	SWHS MSC (Used Aquifers TDS Residential	Sample ID	MW-11 (continued)		MW-13											
		Date Collected	11/22/2021	5/16/2022	3/26/2002	2/16/2009	4/6/2009	6/29/2010	10/25/2010	2/15/2011	5/5/2011	11/21/2011	5/24/2012	7/18/2013	11/21/2013	5/28/2014
		CASRN														
Volatile Organic Compounds																
Benzene	5	71-43-2	0.5 U	0.5 U	5.0 U	N/A	N/A	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane (EDB)	0.05	106-93-4	0.014 U	0.014 U	N/A	N/A	N/A	0.050 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,2-Dichloroethane	5	107-06-2	0.64 U	0.66	N/A	N/A	N/A	1.0 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ethylbenzene	700	100-41-4	1.0 U	1.0 U	5.0 U	N/A	N/A	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzene (Cumene)	840	98-82-8	1.0 U	1.0 U	5.0 U	ND	ND	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl-tert-butyl ether (MTBE)	20	1634-04-4	0.5 U	0.87 U	N/A	***4.1***	***7.3***	***2.93***	***0.84***	***0.60***	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Naphthalene	100	91-20-3	1.0 U	1.0 U	5.0 U	N/A	N/A	5.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Toluene	1,000	108-88-3	1.0 U	1.0 U	5.0 U	ND	ND	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trimethylbenzene (1,2,4-TMB)	130	95-63-6	1.0 U	1.0 U	N/A	N/A	N/A	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3,5-Trimethylbenzene (1,3,5-TMB)	130	108-67-8	1.0 U	1.0 U	N/A	N/A	N/A	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, Total	10,000	1330-20-7	1.0 U	1.0 U	N/A	N/A	N/A	3.0 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Semi-Volatile Organic Compounds																
Anthracene	66	120-12-7	N/A	N/A	N/A	ND	ND	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benzo[a]anthracene	0.30	56-55-3	0.021 U	0.020 U	N/A	ND	ND	0.10 U	0.021 U	0.020 U	0.021 U	0.11 U	0.11 U	0.10 U	0.11 U	0.060 U
Benzo[a]pyrene	0.20	50-32-8	0.021 U	0.020 U	N/A	ND	ND	0.10 U	0.021 U	0.020 U	0.021 U	0.11 U	0.11 U	0.10 U	0.11 U	0.10 U
Benzo[b]fluoranthene	0.18	205-99-2	0.021 U	0.020 U	N/A	ND	ND	0.10 U	0.021 U	0.020 U	0.021 U	0.11 U	0.11 U	0.10 U	0.11 U	0.060 U
Benzo[g,h,i]perylene	0.26	191-24-2	0.021 U	0.020 U	N/A	ND	ND	0.10 U	0.021 U	0.020 U	0.021 U	0.11 U	0.11 U	0.10 U	0.11 U	0.10 U
Benzo[k]fluoranthene	0.18	207-08-9	N/A	N/A	N/A	ND	N/A	0.10 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chrysene	1.8	218-01-9	0.021 U	0.020 U	N/A	ND	ND	0.10 U	0.021 U	0.020 U	0.021 U	0.11 U	0.11 U	0.10 U	0.11 U	0.10 U
Fluorene	1,400	86-73-7	N/A	N/A	10 U	***0.09***	***0.14***	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Indeno[1,2,3-cd]pyrene	0.18	193-39-5	0.021 U	0.020 U	N/A	ND	ND	0.10 U	0.021 U	0.020 U	0.021 U	0.11 U	0.11 U	0.10 U	0.11 U	0.10 U
Phenanthrene	1,100	85-01-8	0.021 U	0.020 U	10 U	***0.05***	ND	2.0 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pyrene	130	129-00-0	0.021 U	***0.034***	N/A	ND	ND	2.0 U	0.021 U	***0.02***	***0.023***	0.11 U	0.11 U	0.10 U	0.11 U	0.10 U
Metals																
Lead, Dissolved	5	7439-92-1	3.0 U	3.0 U	N/A	ND	ND	2.0 U	5.0 U	4.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

Notes & Qualifiers:

	All concentrations in µg/L
SWHS	Statewide Health Standard
MSC	Medium Specific Concentration (2021 update)
CASRN	Chemical Abstracts Service Registry Number
U	Indicates analysis was performed for the compound but it was not detected. The sample reporting limit is reported.
N/A	Not Analyzed
ND	Not Detected. Detection limit not provided.
Bold Italic	Compound was detected
	Concentration exceeds Residential MSC

Regulated Substance	SWHS MSC (Used Aquifers TDS Residential)	Sample ID	MW-13 (continued)													
		Date Collected	10/28/2014	6/3/2015	12/16/2015	5/18/2016	11/16/2016	5/8/2017	11/6/2017	5/9/2018	12/12/2018	5/9/2019	1/8/2020	5/20/2020	11/5/2020	5/19/2021
		CASRN														
Volatile Organic Compounds																
Benzene	5	71-43-2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dibromoethane (EDB)	0.05	106-93-4	N/A	N/A	N/A	N/A	N/A	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U
1,2-Dichloroethane	5	107-06-2	N/A	N/A	N/A	N/A	N/A	0.5 U	N/A	N/A	N/A	0.5 U	0.5 U	0.5 U	0.64 U	0.64 U
Ethylbenzene	700	100-41-4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzene (Cumene)	840	98-82-8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl-tert-butyl ether (MTBE)	20	1634-04-4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Naphthalene	100	91-20-3	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	1,000	108-88-3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trimethylbenzene (1,2,4-TMB)	130	95-63-6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3,5-Trimethylbenzene (1,3,5-TMB)	130	108-67-8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, Total	10,000	1330-20-7	N/A	N/A	N/A	N/A	N/A	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Semi-Volatile Organic Compounds																
Anthracene	66	120-12-7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benzo[a]anthracene	0.30	56-55-3	0.060 U	0.060 U	0.061 U	0.061 U	0.061 U	2.0 U	2.0 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Benzo[a]pyrene	0.20	50-32-8	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	2.0 U	2.0 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Benzo[b]fluoranthene	0.18	205-99-2	0.080 U	0.080 U	0.081 U	0.081 U	0.081 U	2.0 U	2.0 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Benzo[g,h,i]perylene	0.26	191-24-2	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	1.2 U	2.0 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Benzo[k]fluoranthene	0.18	207-08-9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chrysene	1.8	218-01-9	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	2.0 U	2.0 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Fluorene	1,400	86-73-7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Indeno[1,2,3-cd]pyrene	0.18	193-39-5	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	2.0 U	2.0 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Phenanthrene	1,100	85-01-8	N/A	N/A	N/A	N/A	N/A	N/A	2.0 U	0.02 U	***0.025***	0.02 U	***0.024***	0.02 U	0.02 U	***0.024***
Pyrene	130	129-00-0	0.10 U	0.10 U	***0.17***	0.10 U	0.10 U	2.0 U	2.0 U	***0.031***	***0.021***	0.02 U	***0.034***	***0.028***	***0.030***	***0.036***
Metals																
Lead, Dissolved	5	7439-92-1	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U

Notes & Qualifiers:

	All concentrations in µg/L
SWHS	Statewide Health Standard
MSC	Medium Specific Concentration (2021 update)
CASRN	Chemical Abstracts Service Registry Number
U	Indicates analysis was performed for the compound but it was not detected. The sample reporting limit is reported.
N/A	Not Analyzed
ND	Not Detected. Detection limit not provided.
Bold Italic	Compound was detected
	Concentration exceeds Residential MSC

Regulated Substance	SWHS MSC (Used Aquifers TDS Residential	Sample ID	MW-13 (continued)		MW-14	MW-15										
		Date Collected	11/22/2021	5/16/2022	3/26/2002	2/16/2009	4/6/2009	6/29/2010	10/25/2010	2/15/2011	5/5/2011	11/21/2011	5/24/2012	7/18/2013	11/21/2013	5/28/2014
		CASRN														
Volatile Organic Compounds																
Benzene	5	71-43-2	0.5 U	0.5 U	5.0 U	N/A	N/A	1.0 U	0.50 U	0.05 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane (EDB)	0.05	106-93-4	0.014 U	0.014 U	N/A	N/A	N/A	0.05 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,2-Dichloroethane	5	107-06-2	0.64 U	0.66	N/A	N/A	N/A	1.0 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ethylbenzene	700	100-41-4	1.0 U	1.0 U	5.0 U	N/A	N/A	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzene (Cumene)	840	98-82-8	1.0 U	1.0 U	5.0 U	ND	***1.4***	1.0 U	***1.4***	1.0 U	1.0 U	1.0 U	***1.5***	1.0 U	1.0 U	1.0 U
Methyl-tert-butyl ether (MTBE)	20	1634-04-4	0.5 U	0.87 U	N/A	ND	ND	1.0 U	0.50 U	0.05 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Naphthalene	100	91-20-3	1.0 U	1.0 U	5.0 U	N/A	N/A	5.0 U	1.0 U	5.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Toluene	1,000	108-88-3	1.0 U	1.0 U	5.0 U	ND	ND	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trimethylbenzene (1,2,4-TMB)	130	95-63-6	1.0 U	1.0 U	N/A	N/A	N/A	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3,5-Trimethylbenzene (1,3,5-TMB)	130	108-67-8	1.0 U	1.0 U	N/A	N/A	N/A	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, Total	10,000	1330-20-7	1.0 U	1.0 U	N/A	N/A	N/A	3.0 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Semi-Volatile Organic Compounds																
Anthracene	66	120-12-7	N/A	N/A	N/A	ND	***0.20***	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benzo[a]anthracene	0.30	56-55-3	0.021 U	0.020 U	N/A	***0.07***	***0.34***	0.10 U	0.021 U	***0.04***	***0.25***	0.10 U	0.11 U	0.10 U	0.11 U	0.064 U
Benzo[a]pyrene	0.20	50-32-8	0.021 U	0.020 U	N/A	***0.02***	***0.28***	0.10 U	***0.041***	***0.28***	***0.23***	0.10 U	0.11 U	0.10 U	0.11 U	0.11 U
Benzo[b]fluoranthene	0.18	205-99-2	0.021 U	0.020 U	N/A	***0.03***	***0.30***	0.10 U	***0.041***	***0.31***	***0.24***	0.10 U	0.11 U	0.10 U	0.11 U	0.085 U
Benzo[g,h,i]perylene	0.26	191-24-2	0.021 U	0.020 U	N/A	ND	***0.19***	0.10 U	***0.031***	***0.16***	***0.13***	0.10 U	0.11 U	0.10 U	0.11 U	0.11 U
Benzo[k]fluoranthene	0.18	207-08-9	N/A	N/A	N/A	N/A	N/A	0.10 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chrysene	1.8	218-01-9	0.021 U	0.020 U	N/A	ND	***0.20***	0.10 U	0.021 U	***0.15***	***0.17***	0.10 U	0.11 U	0.10 U	0.11 U	0.11 U
Fluorene	1,400	86-73-7	N/A	N/A	10 U	***0.67***	***2.8***	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Indeno[1,2,3-cd]pyrene	0.18	193-39-5	0.021 U	0.020 U	N/A	ND	***0.13***	0.10 U	***0.021***	***0.15***	***0.092***	0.10 U	0.11 U	0.10 U	0.11 U	0.11 U
Phenanthrene	1,100	85-01-8	0.021 U	0.020 U	10 U	ND	***0.36***	2.0 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pyrene	130	129-00-0	0.021 U	***0.026***	N/A	***0.19***	***1.0***	2.0 U	***0.27***	***1.3***	***0.91***	***0.28***	***0.17***	***0.10***	***0.16***	***0.12***
Metals																
Lead, Dissolved	5	7439-92-1	3.0 U	3.0 U	N/A	ND	ND	2.0 U	10 U	2.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

Notes & Qualifiers:

All concentrations in µg/L

SWHS	Statewide Health Standard
MSC	Medium Specific Concentration (2021 update)
CASRN	Chemical Abstracts Service Registry Number
U	Indicates analysis was performed for the compound but it was not detected. The sample reporting limit is reported.
N/A	Not Analyzed
ND	Not Detected. Detection limit not provided.
Bold Italic	Compound was detected
	Concentration exceeds Residential MSC

Regulated Substance	SWHS MSC (Used Aquifers TDS Residential	Sample ID	MW-15 (continued)													
		Date Collected	10/29/2014	6/3/2015	12/16/2015	5/18/2016	11/17/2016	5/8/2017	11/7/2017	5/9/2018	12/12/2018	5/9/2019	1/8/2020	5/20/2020	11/5/2020	5/19/2021
		CASRN														
Volatile Organic Compounds																
Benzene	5	71-43-2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dibromoethane (EDB)	0.05	106-93-4	N/A	N/A	N/A	N/A	N/A	0.014 U	0.014U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U
1,2-Dichloroethane	5	107-06-2	N/A	N/A	N/A	N/A	N/A	0.5 U	N/A	N/A	N/A	0.5 U	N/A	0.5 U	0.64 U	0.64 U
Ethylbenzene	700	100-41-4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzene (Cumene)	840	98-82-8	1.0 U	1.0 U	***1.1***	***1.1***	***1.0***	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl-tert-butyl ether (MTBE)	20	1634-04-4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Naphthalene	100	91-20-3	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	1,000	108-88-3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trimethylbenzene (1,2,4-TMB)	130	95-63-6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3,5-Trimethylbenzene (1,3,5-TMB)	130	108-67-8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, Total	10,000	1330-20-7	N/A	N/A	N/A	N/A	N/A	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Semi-Volatile Organic Compounds																
Anthracene	66	120-12-7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benzo[a]anthracene	0.30	56-55-3	0.060 U	0.061 U	0.060 U	0.061 U	0.06 U	2.0 U	2.0 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Benzo[a]pyrene	0.20	50-32-8	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	2.0 U	2.0 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Benzo[b]fluoranthene	0.18	205-99-2	0.080 U	0.081 U	0.080 U	0.082 U	0.08 U	2.0 U	2.0 U	0.02 U	0.02 U	***0.024***	0.02 U	0.02 U	0.02 U	0.02 U
Benzo[g,h,i]perylene	0.26	191-24-2	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	1.2 U	2.0 U	0.02 U	0.02 U	***0.022***	0.02 U	0.02 U	0.02 U	0.02 U
Benzo[k]fluoranthene	0.18	207-08-9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chrysene	1.8	218-01-9	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	2.0 U	2.0 U	0.02 U	0.02 U	***0.021***	0.02 U	0.02 U	0.02 U	0.02 U
Fluorene	1,400	86-73-7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Indeno[1,2,3-cd]pyrene	0.18	193-39-5	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	2.0 U	2.0 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Phenanthrene	1,100	85-01-8	N/A	N/A	N/A	N/A	N/A	N/A	2.0 U	***0.024***	0.02 U	***0.024***	***0.025***	***0.024***	0.02 U	***0.076***
Pyrene	130	129-00-0	***0.12***	***0.11***	***0.16***	0.10 U	***0.12***	2.0 U	2.0 U	***0.062***	***0.031***	***0.051***	***0.072***	***0.084***	***0.080***	***0.074***
Metals																
Lead, Dissolved	5	7439-92-1	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U

Notes & Qualifiers:

	All concentrations in µg/L
SWHS	Statewide Health Standard
MSC	Medium Specific Concentration (2021 update)
CASRN	Chemical Abstracts Service Registry Number
U	Indicates analysis was performed for the compound but it was not detected. The sample reporting limit is reported.
N/A	Not Analyzed
ND	Not Detected. Detection limit not provided.
Bold Italic	Compound was detected
	Concentration exceeds Residential MSC

Regulated Substance	SWHS MSC (Used Aquifers TDS Residential	Sample ID	MW-15 (continued)		MW-16								MW-17			
		Date Collected	11/22/2021	5/16/2022	12/12/2018	5/9/2019	1/8/2020	5/20/2020	11/5/2020	5/19/2021	11/23/2021	5/17/2022	12/12/2018	5/9/2019	1/8/2020	5/20/2020
		CASRN														
Volatile Organic Compounds																
Benzene	5	71-43-2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dibromoethane (EDB)	0.05	106-93-4	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U
1,2-Dichloroethane	5	107-06-2	0.64 U	0.66	N/A	0.5 U	0.5 U	0.5 U	0.64 U	0.64 U	0.5 U	0.66	N/A	0.5 U	0.5 U	0.5 U
Ethylbenzene	700	100-41-4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzene (Cumene)	840	98-82-8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl-tert-butyl ether (MTBE)	20	1634-04-4	0.5 U	0.87 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.87 U	0.5 U	0.5 U	0.5 U	0.5 U
Naphthalene	100	91-20-3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	1,000	108-88-3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trimethylbenzene (1,2,4-TMB)	130	95-63-6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3,5-Trimethylbenzene (1,3,5-TMB)	130	108-67-8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, Total	10,000	1330-20-7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Semi-Volatile Organic Compounds																
Anthracene	66	120-12-7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benzo[a]anthracene	0.30	56-55-3	0.021 U	0.020 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U	0.02 U	0.02 U	0.02 U	0.02 U
Benzo[a]pyrene	0.20	50-32-8	0.021 U	0.020 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U	0.02 U	0.02 U	0.02 U	0.02 U
Benzo[b]fluoranthene	0.18	205-99-2	0.021 U	0.020 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U	0.02 U	0.02 U	0.02 U	0.02 U
Benzo[g,h,i]perylene	0.26	191-24-2	0.021 U	0.020 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U	0.02 U	0.02 U	0.02 U	0.02 U
Benzo[k]fluoranthene	0.18	207-08-9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chrysene	1.8	218-01-9	0.021 U	0.020 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U	0.02 U	0.02 U	0.02 U	0.02 U
Fluorene	1,400	86-73-7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Indeno[1,2,3-cd]pyrene	0.18	193-39-5	0.021 U	0.020 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U	0.02 U	0.02 U	0.02 U	0.02 U
Phenanthrene	1,100	85-01-8	0.021 U	0.020 U	0.02 U	0.02 U	0.02 U	***0.027***	***0.054***	***0.022***	0.02 U	0.020 U	0.02 U	0.02 U	0.02 U	0.02 U
Pyrene	130	129-00-0	***0.088***	***0.069***	0.02 U	0.02 U	0.02 U	0.02 U	***0.022***	0.02 U	0.02 U	0.020 U	0.02 U	0.02 U	0.02 U	0.02 U
Metals																
Lead, Dissolved	5	7439-92-1	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U

Notes & Qualifiers:

	All concentrations in µg/L
SWHS	Statewide Health Standard
MSC	Medium Specific Concentration (2021 update)
CASRN	Chemical Abstracts Service Registry Number
U	Indicates analysis was performed for the compound but it was not detected. The sample reporting limit is reported.
N/A	Not Analyzed
ND	Not Detected. Detection limit not provided.
Bold Italic	Compound was detected
	Concentration exceeds Residential MSC

Regulated Substance	SWHS MSC (Used Aquifers TDS Residential	Sample ID	MW-17 (continued)				REC-1									
		Date Collected	11/5/2020	5/19/2021	11/23/2021	5/17/2022	11/21/2013	5/29/2014	10/28/2014	6/3/2015	12/16/2015	5/17/2016	11/16/2016	5/8/2017	11/6/2017	5/9/2018
		CASRN														
Volatile Organic Compounds																
Benzene	5	71-43-2	0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.5 U	0.5 U	0.5 U
1,2-Dibromoethane (EDB)	0.05	106-93-4	0.014 U	0.014 U	0.014 U	0.014 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.014 U	0.014 U	0.014 U
1,2-Dichloroethane	5	107-06-2	0.64 U	0.64 U	0.5 U	0.66	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.5 U	1.0 U	N/A
Ethylbenzene	700	100-41-4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzene (Cumene)	840	98-82-8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl-tert-butyl ether (MTBE)	20	1634-04-4	0.5 U	0.5 U	0.5 U	0.87 U	***1.7***	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.5 U	0.5 U	0.5 U
Naphthalene	100	91-20-3	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
Toluene	1,000	108-88-3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trimethylbenzene (1,2,4-TMB)	130	95-63-6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3,5-Trimethylbenzene (1,3,5-TMB)	130	108-67-8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, Total	10,000	1330-20-7	1.0 U	1.0 U	1.0 U	1.0 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.0 U	1.0 U	1.0 U
Semi-Volatile Organic Compounds																
Anthracene	66	120-12-7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benzo[a]anthracene	0.30	56-55-3	0.02 U	0.02 U	0.02 U	0.020 U	0.11 U	0.064 U	0.060 U	***0.071***	0.060 U	0.061 U	0.061 U	2.0 U	2.0 U	0.02 U
Benzo[a]pyrene	0.20	50-32-8	0.02 U	0.02 U	0.02 U	0.020 U	0.11 U	0.11 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	2.0 U	2.0 U	0.02 U
Benzo[b]fluoranthene	0.18	205-99-2	0.02 U	0.02 U	0.02 U	0.020 U	0.11 U	0.085 U	0.080 U	***0.10***	0.080 U	0.081 U	0.081 U	2.0 U	2.0 U	0.02 U
Benzo[g,h,i]perylene	0.26	191-24-2	0.02 U	0.02 U	0.02 U	0.020 U	0.11 U	0.11 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	1.2 U	2.0 U	0.02 U
Benzo[k]fluoranthene	0.18	207-08-9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chrysene	1.8	218-01-9	0.02 U	0.02 U	0.02 U	0.020 U	0.11 U	0.11 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	2.0 U	2.0 U	0.02 U
Fluorene	1,400	86-73-7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Indeno[1,2,3-cd]pyrene	0.18	193-39-5	0.02 U	0.02 U	0.02 U	0.020 U	0.11 U	0.11 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	2.0 U	2.0 U	0.02 U
Phenanthrene	1,100	85-01-8	0.02 U	0.02 U	***0.13***	0.020 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.0 U	0.02 U
Pyrene	130	129-00-0	0.02 U	0.02 U	0.02 U	0.020 U	***0.28***	***0.17***	***0.36***	***0.36***	***0.15***	0.10 U	0.10 U	2.0 U	2.0 U	***0.023***
Metals																
Lead, Dissolved	5	7439-92-1	3.0 U	3.0 U	3.0 U	3.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	3.0 U	3.0 U	3.0 U

Notes & Qualifiers:

	All concentrations in µg/L
SWHS	Statewide Health Standard
MSC	Medium Specific Concentration (2021 update)
CASRN	Chemical Abstracts Service Registry Number
U	Indicates analysis was performed for the compound but it was not detected. The sample reporting limit is reported.
N/A	Not Analyzed
ND	Not Detected. Detection limit not provided.
Bold Italic	Compound was detected
	Concentration exceeds Residential MSC

Regulated Substance	SWHS MSC (Used Aquifers TDS Residential	Sample ID	REC-2													
		Date Collected	12/12/2018	5/9/2019	5/9/2019	1/8/2020	5/20/2020	11/5/2020	5/19/2021	11/22/2021	5/16/2022	2/12/2015	5/9/2017	1/8/2020	5/20/2020	5/20/2020
		CASRN			(Duplicate)											(Duplicate)
Volatile Organic Compounds																
Benzene	5	71-43-2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dibromoethane (EDB)	0.05	106-93-4	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	N/A	0.014 U	0.014 U	0.014 U	0.014 U
1,2-Dichloroethane	5	107-06-2	N/A	0.5 U	0.5 U	0.5 U	0.5 U	0.64 U	0.64 U	0.64 U	0.66	N/A	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	700	100-41-4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzene (Cumene)	840	98-82-8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl-tert-butyl ether (MTBE)	20	1634-04-4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.87 U	***5.4***	***6***	***1.4***	0.5 U	***4.6***
Naphthalene	100	91-20-3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	1,000	108-88-3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trimethylbenzene (1,2,4-TMB)	130	95-63-6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3,5-Trimethylbenzene (1,3,5-TMB)	130	108-67-8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, Total	10,000	1330-20-7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	N/A	1.0 U	1.0 U	1.0 U	1.0 U
Semi-Volatile Organic Compounds																
Anthracene	66	120-12-7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benzo[a]anthracene	0.30	56-55-3	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U	0.063 U	2.0 U	0.02 U	0.02 U	***0.035***
Benzo[a]pyrene	0.20	50-32-8	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U	0.11 U	2.0 U	0.02 U	0.02 U	0.02 U
Benzo[b]fluoranthene	0.18	205-99-2	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U	0.084 U	2.0 U	0.02 U	***0.027***	0.02 U
Benzo[g,h,i]perylene	0.26	191-24-2	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U	0.11 U	2.0 U	0.02 U	0.02 U	0.02 U
Benzo[k]fluoranthene	0.18	207-08-9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chrysene	1.8	218-01-9	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U	0.11 U	2.0 U	0.02 U	0.02 U	***0.022***
Fluorene	1,400	86-73-7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Indeno[1,2,3-cd]pyrene	0.18	193-39-5	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U	0.11 U	2.0 U	0.02 U	0.02 U	0.02 U
Phenanthrene	1,100	85-01-8	***0.14***	***0.054***	***0.047***	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U	N/A	N/A	***0.021***	***0.071***	***0.25***
Pyrene	130	129-00-0	***0.038***	***0.024***	***0.023***	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U	***0.13***	2.0 U	***0.097***	***0.21***	***0.20***
Metals																
Lead, Dissolved	5	7439-92-1	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	5.0 U	3.0 U	3.0 U	3.0 U	3.0 U

Notes & Qualifiers:

	All concentrations in µg/L
SWHS	Statewide Health Standard
MSC	Medium Specific Concentration (2021 update)
CASRN	Chemical Abstracts Service Registry Number
U	Indicates analysis was performed for the compound but it was not detected. The sample reporting limit is reported.
N/A	Not Analyzed
ND	Not Detected. Detection limit not provided.
Bold Italic	Compound was detected
	Concentration exceeds Residential MSC

Regulated Substance	SWHS MSC (Used Aquifers TDS Residential	Sample ID	REC-2 (continued)				MW-C									
		Date Collected	11/5/2020	5/19/2021	11/23/2021	5/16/2022	6/29/2010	10/25/2010	2/15/2011	5/5/2011	5/24/2012	7/18/2013	11/21/2013	5/28/2014	10/28/2014	12/16/2015
		CASRN														
Volatile Organic Compounds																
Benzene	5	71-43-2	0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	0.50 U	0.05 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane (EDB)	0.05	106-93-4	0.014 U	0.014 U	0.014 U	0.014 U	0.05 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,2-Dichloroethane	5	107-06-2	0.64 U	0.64 U	0.64 U	0.66	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ethylbenzene	700	100-41-4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzene (Cumene)	840	98-82-8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl-tert-butyl ether (MTBE)	20	1634-04-4	***4.5***	***4.6***	***3***	***3.7***	***1.27***	***1.1***	***0.71***	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Naphthalene	100	91-20-3	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	5.0 U	***1.7***	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Toluene	1,000	108-88-3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trimethylbenzene (1,2,4-TMB)	130	95-63-6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3,5-Trimethylbenzene (1,3,5-TMB)	130	108-67-8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, Total	10,000	1330-20-7	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Semi-Volatile Organic Compounds																
Anthracene	66	120-12-7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benzo[a]anthracene	0.30	56-55-3	0.02 U	0.02 U	0.02 U	***0.030***	0.10 U	0.020 U	0.10 U	0.021 U	0.11 U	0.10 U	0.11 U	0.067 U	0.060 U	0.060 U
Benzo[a]pyrene	0.20	50-32-8	0.02 U	0.02 U	0.02 U	0.020 U	0.10 U	***0.020***	0.10 U	0.021 U	0.11 U	0.10 U	0.11 U	0.11 U	0.10 U	0.10 U
Benzo[b]fluoranthene	0.18	205-99-2	0.02 U	0.02 U	0.02 U	0.020 U	0.10 U	***0.031***	0.10 U	0.021 U	0.11 U	0.10 U	0.11 U	0.089 U	0.080 U	0.080 U
Benzo[g,h,i]perylene	0.26	191-24-2	0.02 U	0.02 U	0.02 U	0.020 U	0.10 U	***0.031***	0.10 U	0.021 U	0.11 U	0.10 U	0.11 U	0.11 U	0.10 U	0.10 U
Benzo[k]fluoranthene	0.18	207-08-9	N/A	N/A	N/A	N/A	0.10 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chrysene	1.8	218-01-9	0.02 U	0.02 U	0.02 U	***0.025***	0.10 U	0.020 U	0.10 U	0.021 U	0.11 U	0.10 U	0.11 U	0.11 U	0.10 U	0.10 U
Fluorene	1,400	86-73-7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Indeno[1,2,3-cd]pyrene	0.18	193-39-5	0.02 U	0.02 U	0.02 U	0.020 U	0.10 U	***0.020***	0.10 U	0.021 U	0.11 U	0.10 U	0.11 U	0.11 U	0.10 U	0.10 U
Phenanthrene	1,100	85-01-8	***0.088***	***0.13***	***0.13***	***0.039***	2.0 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pyrene	130	129-00-0	***0.14***	***0.098***	***0.098***	***0.22***	2.0 U	0.020 U	***0.15***	***0.14***	***0.19***	***0.13***	0.11 U	***0.19***	***0.14***	***0.16***
Metals																
Lead, Dissolved	5	7439-92-1	3.0 U	3.0 U	3.0 U	3.0 U	***3.0***	5.0 U	2.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

Notes & Qualifiers:

	All concentrations in µg/L
SWHS	Statewide Health Standard
MSC	Medium Specific Concentration (2021 update)
CASRN	Chemical Abstracts Service Registry Number
U	Indicates analysis was performed for the compound but it was not detected. The sample reporting limit is reported.
N/A	Not Analyzed
ND	Not Detected. Detection limit not provided.
Bold Italic	Compound was detected
	Concentration exceeds Residential MSC

Regulated Substance	SWHS MSC (Used Aquifers TDS Residential	Sample ID	MW-C (continued)													
		Date Collected	6/3/2015	5/17/2016	11/16/2016	5/8/2017	11/6/2017	5/9/2018	12/12/2018	5/9/2019	1/8/2020	5/20/2020	11/5/2020	5/19/2021	11/22/2021	5/16/2022
		CASRN														
Volatile Organic Compounds																
Benzene	5	71-43-2	1.0 U	1.0 U	1.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dibromoethane (EDB)	0.05	106-93-4	N/A	N/A	N/A	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U
1,2-Dichloroethane	5	107-06-2	N/A	N/A	N/A	0.5 U	1.0 U	N/A	N/A	0.5 U	0.5 U	0.5 U	0.64 U	0.64 U	0.64 U	0.66 U
Ethylbenzene	700	100-41-4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzene (Cumene)	840	98-82-8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl-tert-butyl ether (MTBE)	20	1634-04-4	1.0 U	1.0 U	1.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.87 U
Naphthalene	100	91-20-3	2.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	1,000	108-88-3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trimethylbenzene (1,2,4-TMB)	130	95-63-6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3,5-Trimethylbenzene (1,3,5-TMB)	130	108-67-8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, Total	10,000	1330-20-7	N/A	N/A	N/A	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Semi-Volatile Organic Compounds																
Anthracene	66	120-12-7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benzo[a]anthracene	0.30	56-55-3	0.060 U	0.061 U	0.061 U	2.0 U	2.0 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Benzo[a]pyrene	0.20	50-32-8	0.10 U	0.10 U	0.10 U	2.0 U	2.0 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Benzo[b]fluoranthene	0.18	205-99-2	0.080 U	0.082 U	0.081 U	2.0 U	2.0 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Benzo[g,h,i]perylene	0.26	191-24-2	0.10 U	0.10 U	0.10 U	1.2 U	2.0 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Benzo[k]fluoranthene	0.18	207-08-9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chrysene	1.8	218-01-9	0.10 U	0.10 U	0.10 U	2.0 U	2.0 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Fluorene	1,400	86-73-7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Indeno[1,2,3-cd]pyrene	0.18	193-39-5	0.10 U	0.10 U	0.10 U	2.0 U	2.0 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Phenanthrene	1,100	85-01-8	N/A	N/A	N/A	N/A	2.0 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Pyrene	130	129-00-0	***0.54***	0.10 U	***0.13***	2.0 U	2.0 U	***0.073***	***0.081***	***0.058***	***0.064***	***0.12***	***0.14***	***0.059***	***0.065***	***0.066***
Metals																
Lead, Dissolved	5	7439-92-1	5.0 U	5.0 U	5.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U

Notes & Qualifiers:

	All concentrations in µg/L
SWHS	Statewide Health Standard
MSC	Medium Specific Concentration (2021 update)
CASRN	Chemical Abstracts Service Registry Number
U	Indicates analysis was performed for the compound but it was not detected. The sample reporting limit is reported.
N/A	Not Analyzed
ND	Not Detected. Detection limit not provided.
Bold Italic	Compound was detected
	Concentration exceeds Residential MSC

Regulated Substance	SWHS MSC (Used Aquifers TDS Residential	Sample ID	WSW-1													
		Date Collected	2/16/2009	6/29/2010	10/25/2010	2/15/2011	5/5/2011	11/21/2011	5/24/2012	7/18/2013	11/21/2013	5/29/2014	10/28/2014	6/4/2015	12/17/2015	5/17/2016
		CASRN														
Volatile Organic Compounds																
Benzene	5	71-43-2	N/A	1.0 U	0.50 U	0.05 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane (EDB)	0.05	106-93-4	N/A	0.05 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,2-Dichloroethane	5	107-06-2	N/A	1.0 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ethylbenzene	700	100-41-4	N/A	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzene (Cumene)	840	98-82-8	ND	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl-tert-butyl ether (MTBE)	20	1634-04-4	ND	1.0 U	0.50 U	0.05 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Naphthalene	100	91-20-3	N/A	5.0 U	1.0 U	5.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U
Toluene	1,000	108-88-3	ND	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trimethylbenzene (1,2,4-TMB)	130	95-63-6	N/A	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3,5-Trimethylbenzene (1,3,5-TMB)	130	108-67-8	N/A	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	***3.10***	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, Total	10,000	1330-20-7	N/A	3.0 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Semi-Volatile Organic Compounds																
Anthracene	66	120-12-7	ND	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benzo[a]anthracene	0.30	56-55-3	ND	0.10 U	0.020 U	0.10 U	0.021 U	0.10 U	0.11 U	0.10 U	0.10 U	0.064 U	0.062 U	0.060 U	0.061 U	0.061 U
Benzo[a]pyrene	0.20	50-32-8	ND	0.10 U	0.020 U	0.10 U	0.021 U	0.10 U	0.11 U	0.10 U	0.10 U	0.11 U	0.10 U	0.10 U	0.10 U	0.10 U
Benzo[b]fluoranthene	0.18	205-99-2	ND	0.10 U	0.020 U	***0.044***	0.021 U	0.10 U	0.11 U	0.10 U	0.10 U	***0.14***	0.083 U	0.080 U	0.081 U	0.082 U
Benzo[g,h,i]perylene	0.26	191-24-2	ND	0.10 U	0.020 U	***0.099***	0.021 U	0.10 U	0.11 U	0.10 U	0.10 U	***0.20***	0.10 U	0.10 U	0.10 U	0.10 U
Benzo[k]fluoranthene	0.18	207-08-9	N/A	0.10 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chrysene	1.8	218-01-9	ND	0.10 U	0.020 U	0.10 U	0.021 U	0.10 U	0.11 U	0.10 U	0.10 U	***0.15***	0.10 U	0.10 U	0.10 U	0.10 U
Fluorene	1,400	86-73-7	ND	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Indeno[1,2,3-cd]pyrene	0.18	193-39-5	ND	0.10 U	0.020 U	0.10 U	0.021 U	0.10 U	0.11 U	0.10 U	0.10 U	0.11 U	0.10 U	0.10 U	0.10 U	0.10 U
Phenanthrene	1,100	85-01-8	ND	2.0 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pyrene	130	129-00-0	ND	2.0 U	0.020 U	2.0 U	0.021 U	0.10 U	0.11 U	0.10 U	0.10 U	***0.36***	0.10 U	0.10 U	0.10 U	0.10 U
Metals																
Lead, Dissolved	5	7439-92-1	ND	***2.0***	5.0 U	***2.0***	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	***7.4***	5.0 U	5.0 U	5.0 U	5.0 U

Notes & Qualifiers:

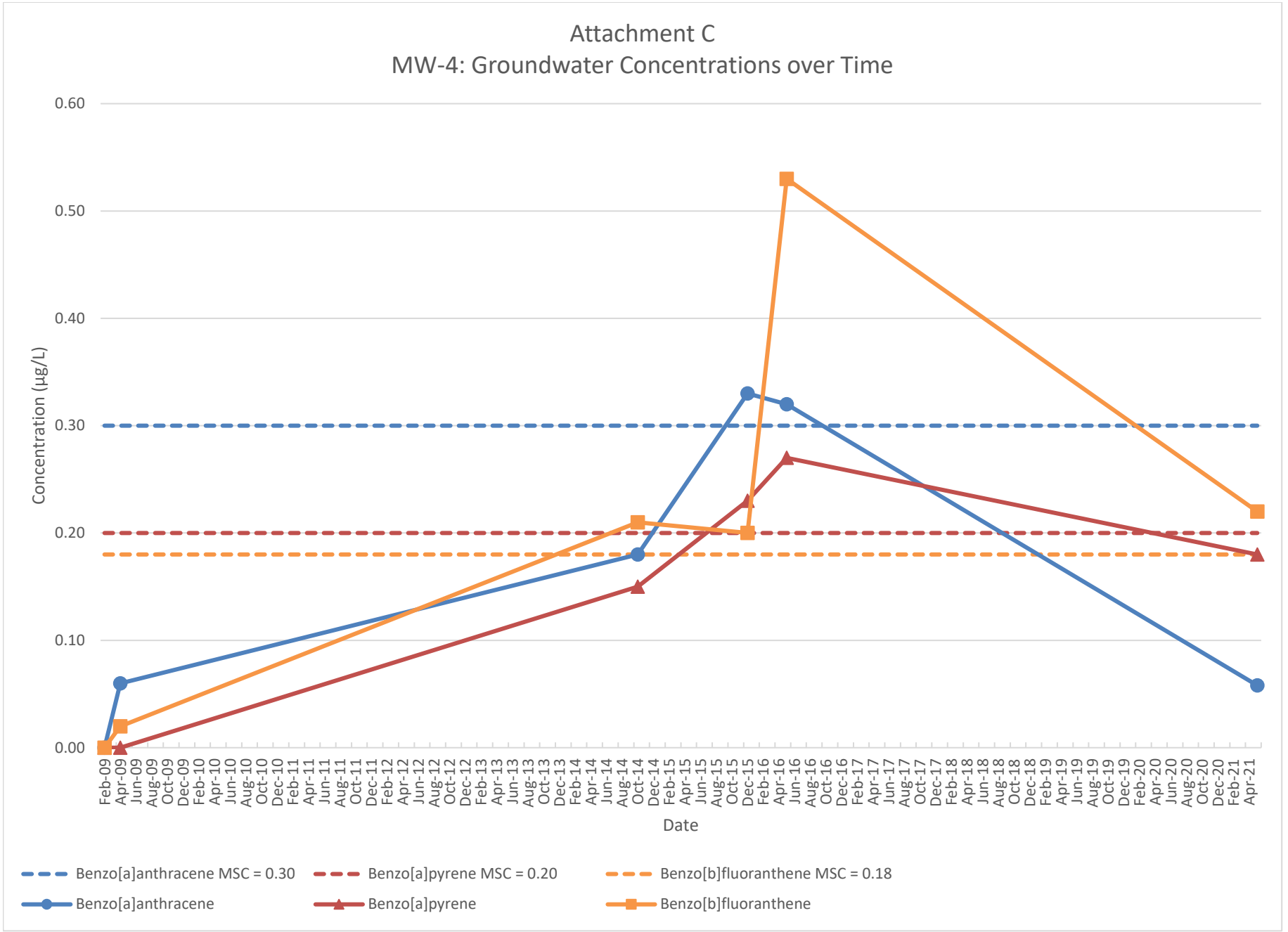
	All concentrations in µg/L
SWHS	Statewide Health Standard
MSC	Medium Specific Concentration (2021 update)
CASRN	Chemical Abstracts Service Registry Number
U	Indicates analysis was performed for the compound but it was not detected. The sample reporting limit is reported.
N/A	Not Analyzed
ND	Not Detected. Detection limit not provided.
Bold Italic	Compound was detected
	Concentration exceeds Residential MSC

Regulated Substance	SWHS MSC (Used Aquifers TDS Residential	Sample ID	WSW-1 (continued)												
		Date Collected	11/16/2016	5/8/2017	11/6/2017	5/9/2018	5/9/2018	12/12/2018	5/8/2019	1/8/2020	5/20/2020	11/4/2020	5/19/2021	11/22/2021	5/16/2022
		CASRN					(Duplicate)								
Volatile Organic Compounds															
Benzene	5	71-43-2	1.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dibromoethane (EDB)	0.05	106-93-4	N/A	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U
1,2-Dichloroethane	5	107-06-2	N/A	0.5 U	N/A	N/A	N/A	N/A	0.5 U	0.5 U	0.5 U	0.64 U	0.64 U	0.64 U	0.66
Ethylbenzene	700	100-41-4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzene (Cumene)	840	98-82-8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl-tert-butyl ether (MTBE)	20	1634-04-4	1.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.87 U
Naphthalene	100	91-20-3	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	1,000	108-88-3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trimethylbenzene (1,2,4-TMB)	130	95-63-6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3,5-Trimethylbenzene (1,3,5-TMB)	130	108-67-8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, Total	10,000	1330-20-7	N/A	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Semi-Volatile Organic Compounds															
Anthracene	66	120-12-7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benzo[a]anthracene	0.30	56-55-3	0.061 U	2.0 U	2.0 U	0.02 U	0.02 U	***0.052***	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U
Benzo[a]pyrene	0.20	50-32-8	0.10 U	2.0 U	2.0 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U
Benzo[b]fluoranthene	0.18	205-99-2	0.082 U	2.0 U	2.0 U	0.02 U	0.02 U	***0.027***	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U
Benzo[g,h,i]perylene	0.26	191-24-2	0.10 U	2.0 U	2.0 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U
Benzo[k]fluoranthene	0.18	207-08-9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chrysene	1.8	218-01-9	0.10 U	2.0 U	2.0 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U
Fluorene	1,400	86-73-7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Indeno[1,2,3-cd]pyrene	0.18	193-39-5	0.10 U	2.0 U	2.0 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U
Phenanthrene	1,100	85-01-8	N/A	N/A	2.0 U	***0.036***	***0.039***	***0.23***	***0.054***	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.020 U
Pyrene	130	129-00-0	0.10 U	2.0 U	2.0 U	***0.021***	***0.058***	***0.13***	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	***0.046***	0.020 U
Metals															
Lead, Dissolved	5	7439-92-1	5.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U

Notes & Qualifiers:

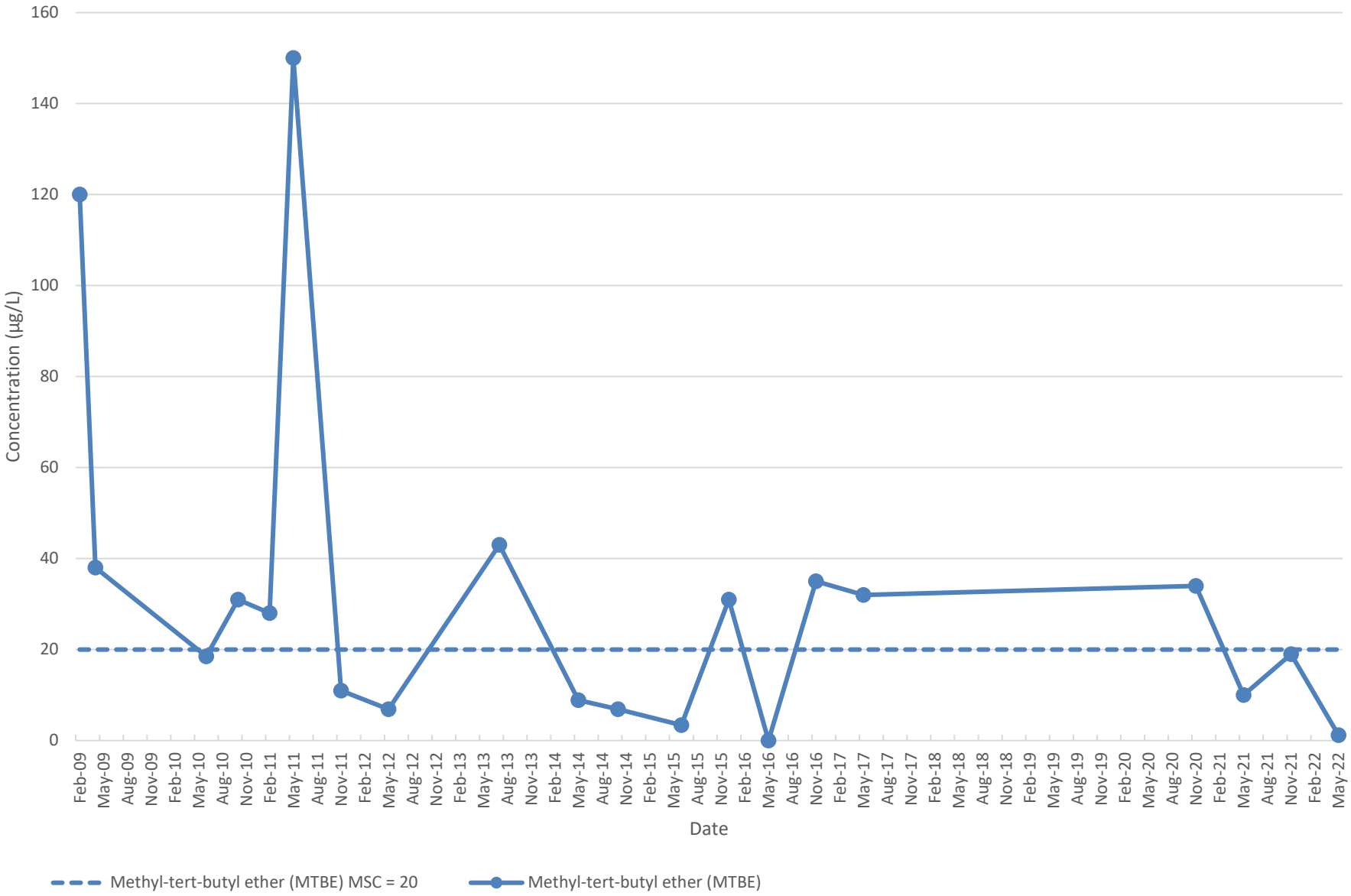
All concentrations in µg/L

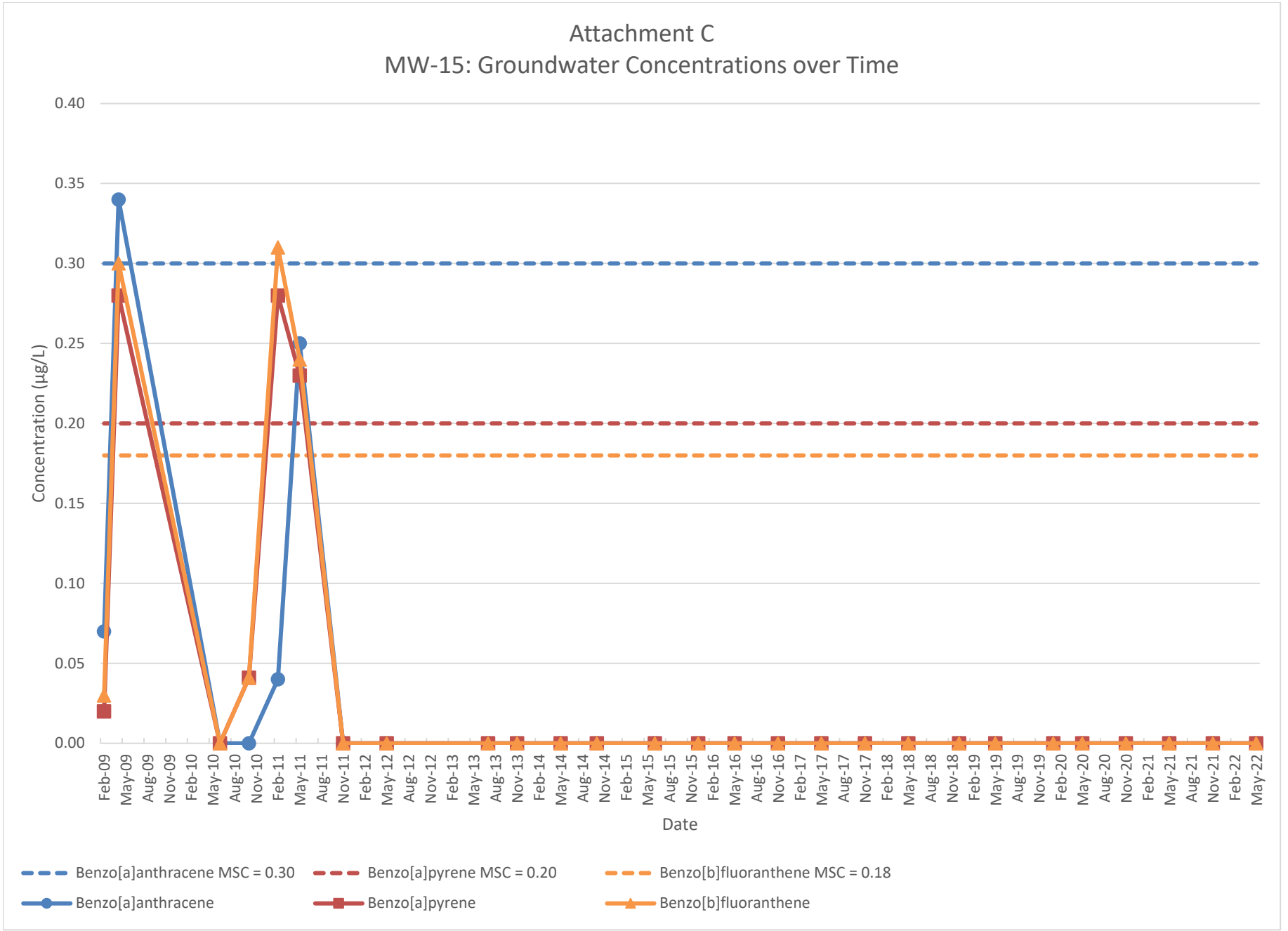
SWHS	Statewide Health Standard
MSC	Medium Specific Concentration (2021 update)
CASRN	Chemical Abstracts Service Registry Number
U	Indicates analysis was performed for the compound but it was not detected. The sample reporting limit is reported.
N/A	Not Analyzed
ND	Not Detected. Detection limit not provided.
Bold Italic	Compound was detected
	Concentration exceeds Residential MSC


Attachment C
MW-4: Groundwater Concentrations over Time
0.60
0.50
0.40
0.30
0.20
0.10
0.00
Concentration (µg/L)
Feb-09
Apr-09
Jun-09
Aug-09
Oct-09
Dec-09
Feb-10
Apr-10
Jun-10
Aug-10
Oct-10
Dec-10
Feb-11
Apr-11
Jun-11
Aug-11
Oct-11
Dec-11
Feb-12
Apr-12
Jun-12
Aug-12
Oct-12
Dec-12
Feb-13
Apr-13
Jun-13
Aug-13
Oct-13
Dec-13
Feb-14
Apr-14
Jun-14
Aug-14
Oct-14
Dec-14
Feb-15
Apr-15
Jun-15
Aug-15
Oct-15
Dec-15
Feb-16
Apr-16
Jun-16
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Aug-18
Oct-18
Dec-18
Feb-19
Apr-19
Jun-19
Aug-19
Oct-19
Dec-19
Feb-20
Apr-20
Jun-20
Aug-20
Oct-20
Dec-20
Feb-21
Apr-21
Date
Benzo[a]anthracene MSC = 0.30
Benzo[a]pyrene MSC = 0.20
Benzo[b]fluoranthene MSC = 0.18
Benzo[a]anthracene
Benzo[a]pyrene
Benzo[b]fluoranthene

Attachment C

MW-6: Groundwater Concentrations over Time




Attachment C
MW-15: Groundwater Concentrations over Time
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
Concentration (µg/L)
Feb-09
May-09
Aug-09
Nov-09
Feb-10
May-10
Aug-10
Nov-10
Feb-11
May-11
Aug-11
Nov-11
Feb-12
May-12
Aug-12
Nov-12
Feb-13
May-13
Aug-13
Nov-13
Feb-14
May-14
Aug-14
Nov-14
Feb-15
May-15
Aug-15
Nov-15
Feb-16
May-16
Aug-16
Nov-16
Feb-17
May-17
Aug-17
Nov-17
Feb-18
May-18
Aug-18
Nov-18
Feb-19
May-19
Aug-19
Nov-19
Feb-20
May-20
Aug-20
Nov-20
Feb-21
May-21
Aug-21
Nov-21
Feb-22
May-22
Date
Benzo[a]anthracene MSC = 0.30
Benzo[a]pyrene MSC = 0.20
Benzo[b]fluoranthene MSC = 0.18
Benzo[a]anthracene
Benzo[a]pyrene
Benzo[b]fluoranthene

Appendix F
Groundwater Model

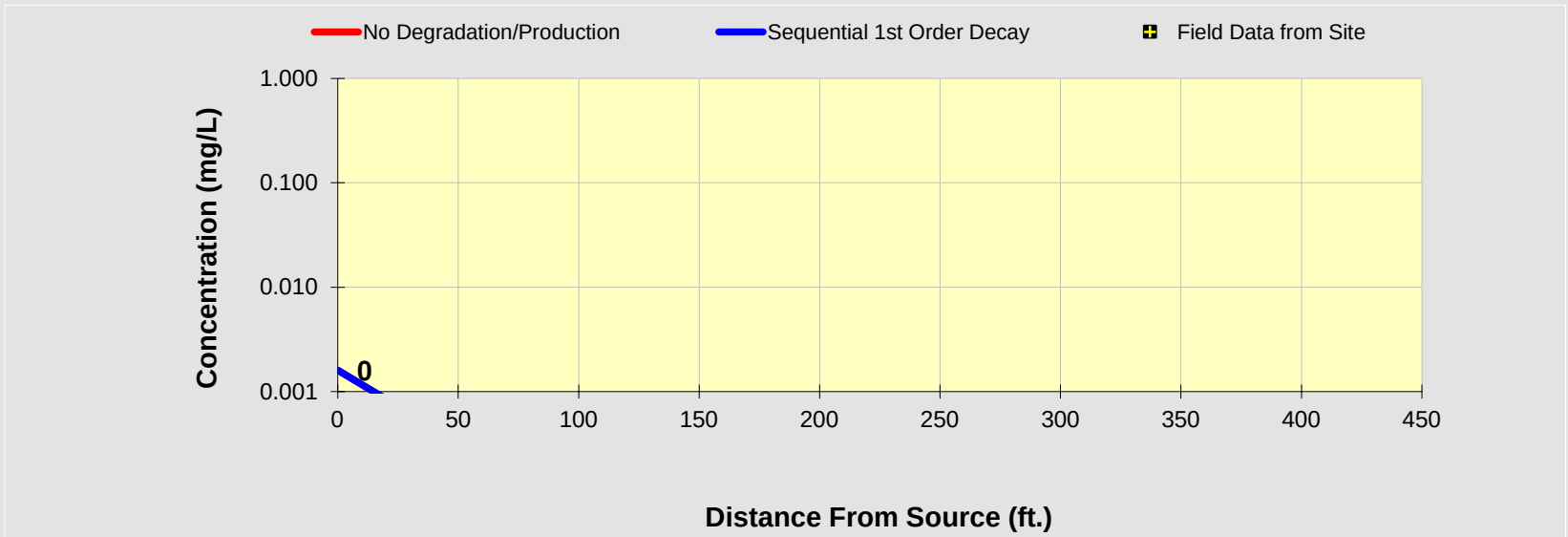
DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

Distance from Source (ft)

DCE	0	40	80	120	160	200	240	280	320	360	400
No Degradation	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Biotransformation	0.0016	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Monitoring Well Locations (ft)

	90	120									
Field Data from Site	0.001	0.000									



See PCE

See TCE

See DCE

See VC

See ETH

Replay

Time:

3.0 Years

Log ⟺ Linear

Return to Input

To All

To Array

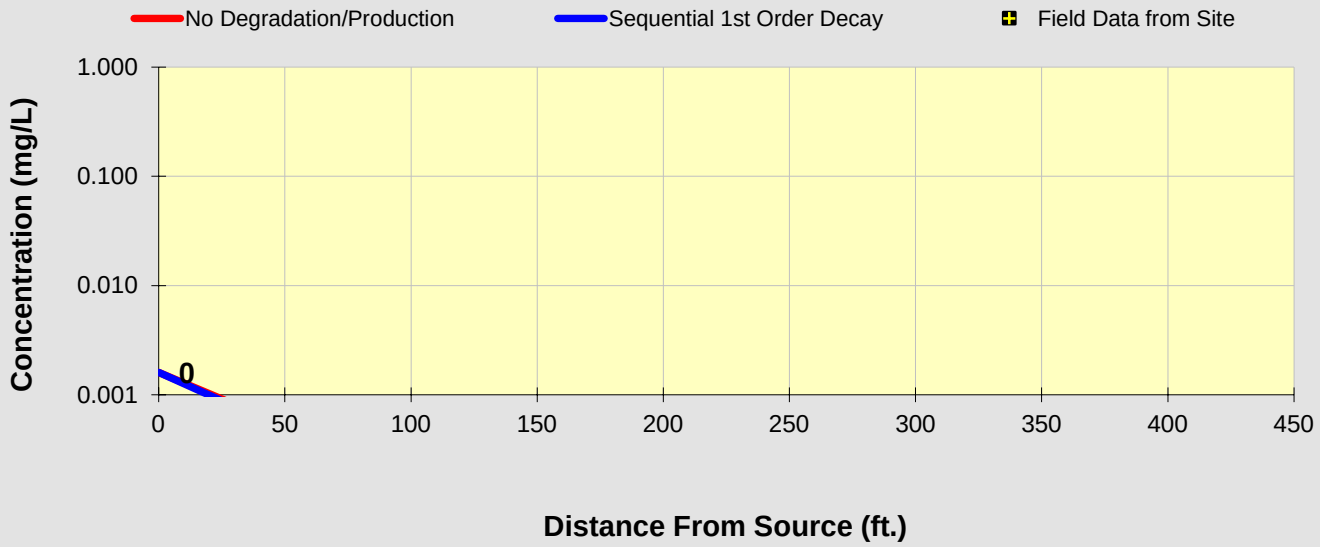
DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

Distance from Source (ft)

DCE	0	40	80	120	160	200	240	280	320	360	400
No Degradation	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Biotransformation	0.0016	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Monitoring Well Locations (ft)

	90	120									
Field Data from Site	0.001	0.000									



See PCE

See TCE

See DCE

See VC

See ETH

Replay

Time:

6.0 Years

Log ⟺ Linear

Return to Input

To All

To Array

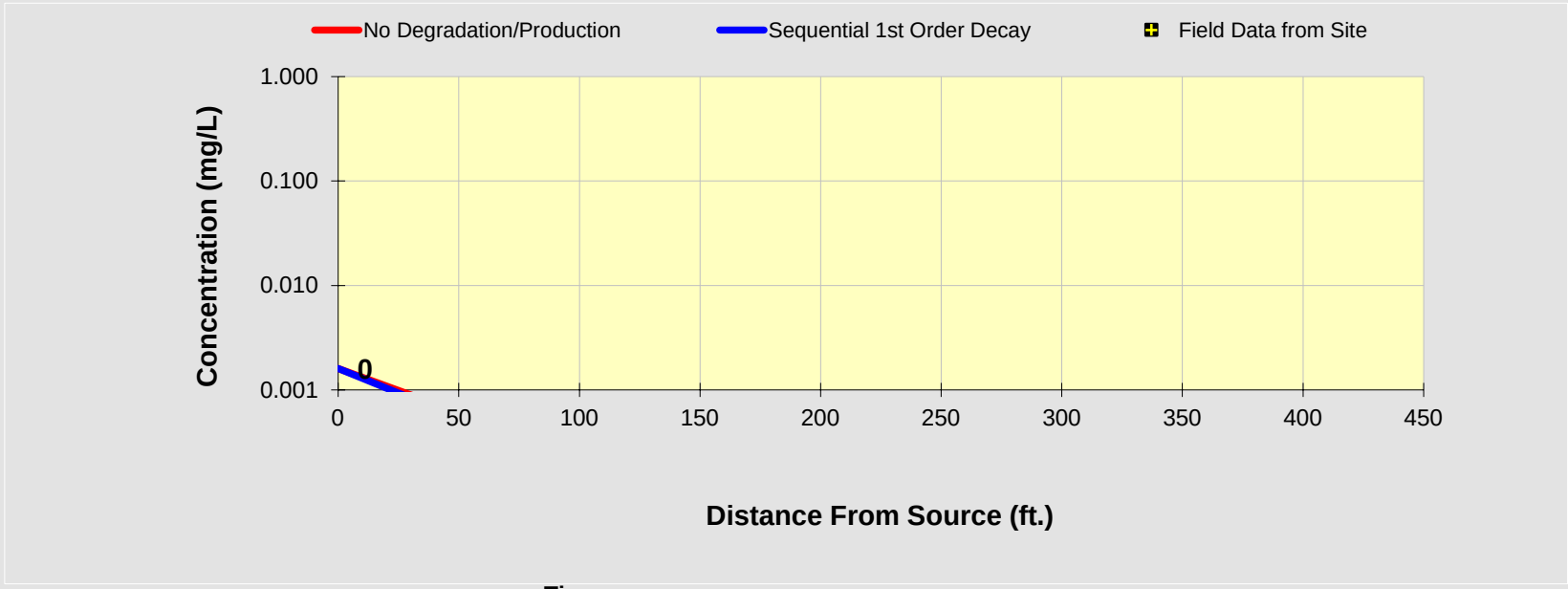
DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

Distance from Source (ft)

DCE	0	40	80	120	160	200	240	280	320	360	400
No Degradation	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Biotransformation	0.0016	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Monitoring Well Locations (ft)

	90	120									
Field Data from Site	0.001	0.000									



See PCE

See TCE

See DCE

See VC

See ETH

Replay

Time:

9.0 Years

Log ⟺ Linear

Return to Input

To All

To Array

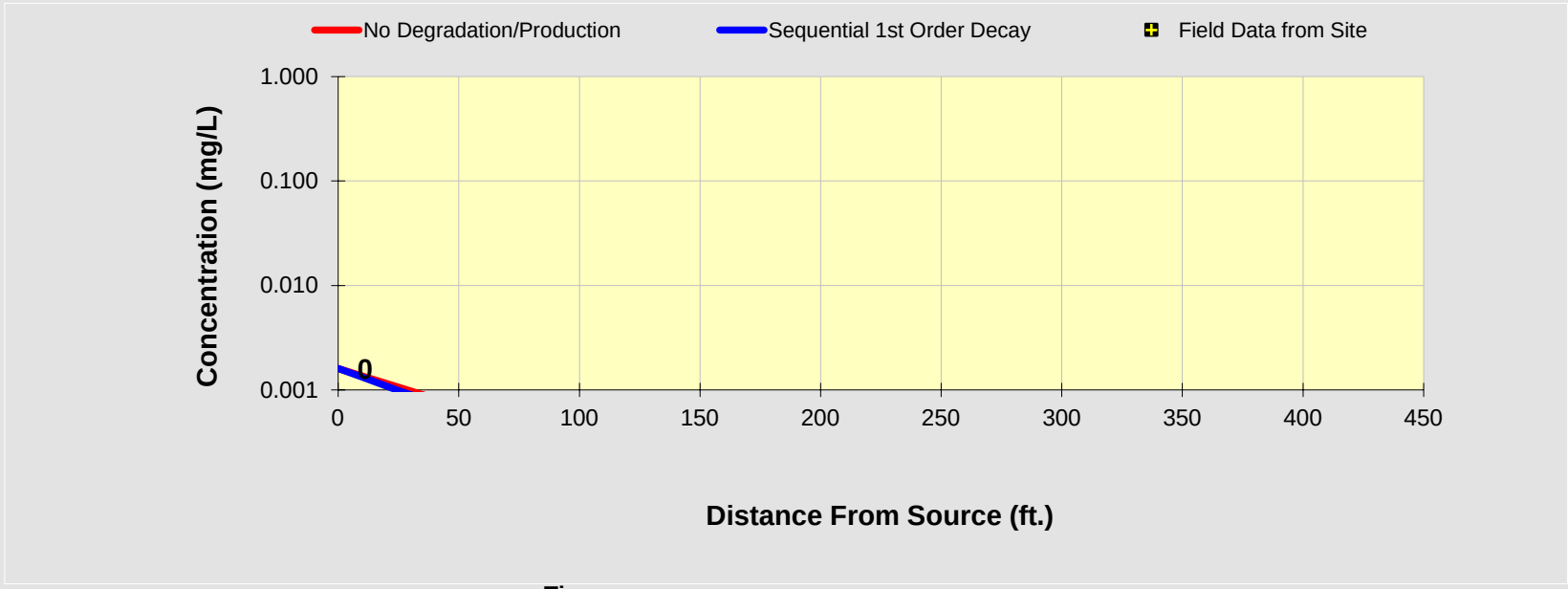
DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

Distance from Source (ft)

DCE	0	40	80	120	160	200	240	280	320	360	400
No Degradation	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Biotransformation	0.0016	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Monitoring Well Locations (ft)

	90	120									
Field Data from Site	0.001	0.000									



See PCE

See TCE

See DCE

See VC

See ETH

Replay

Time:

30.0 Years

Log ⟺ Linear

Return to Input

To All

To Array

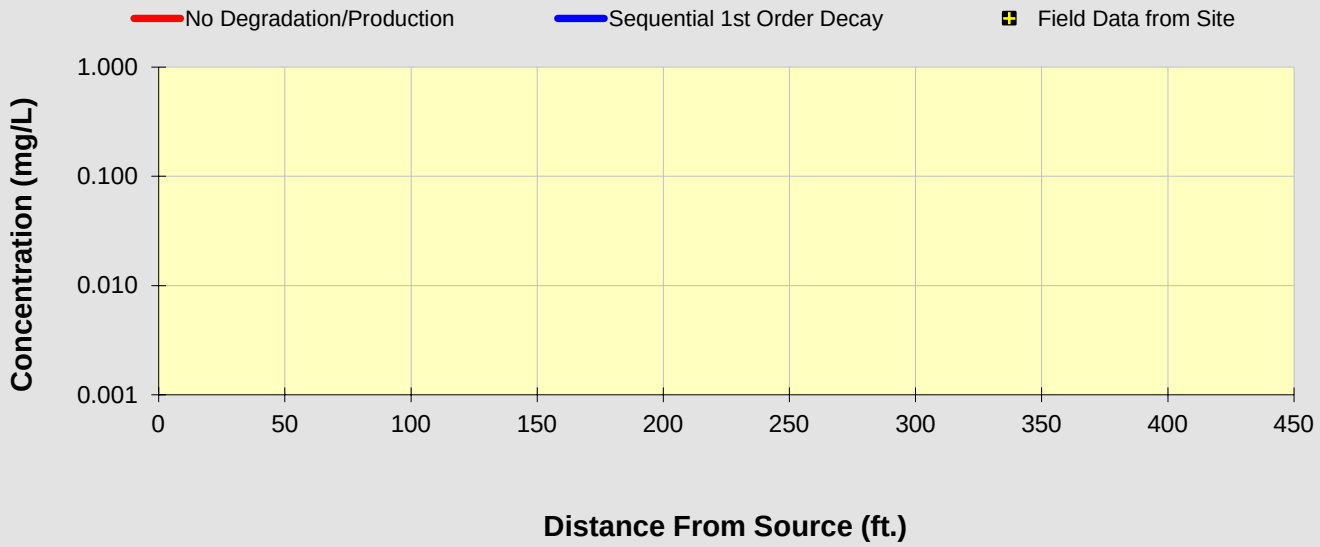
DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

Distance from Source (ft)

VC	0	40	80	120	160	200	240	280	320	360	400
No Degradation	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Biotransformation	0.0004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Monitoring Well Locations (ft)

	90	120									
Field Data from Site	0.000	0.000									



See PCE

See TCE

See DCE

See VC

See ETH

Replay

Time:

3.0 Years

Log ⟺ Linear

Return to Input

To All

To Array

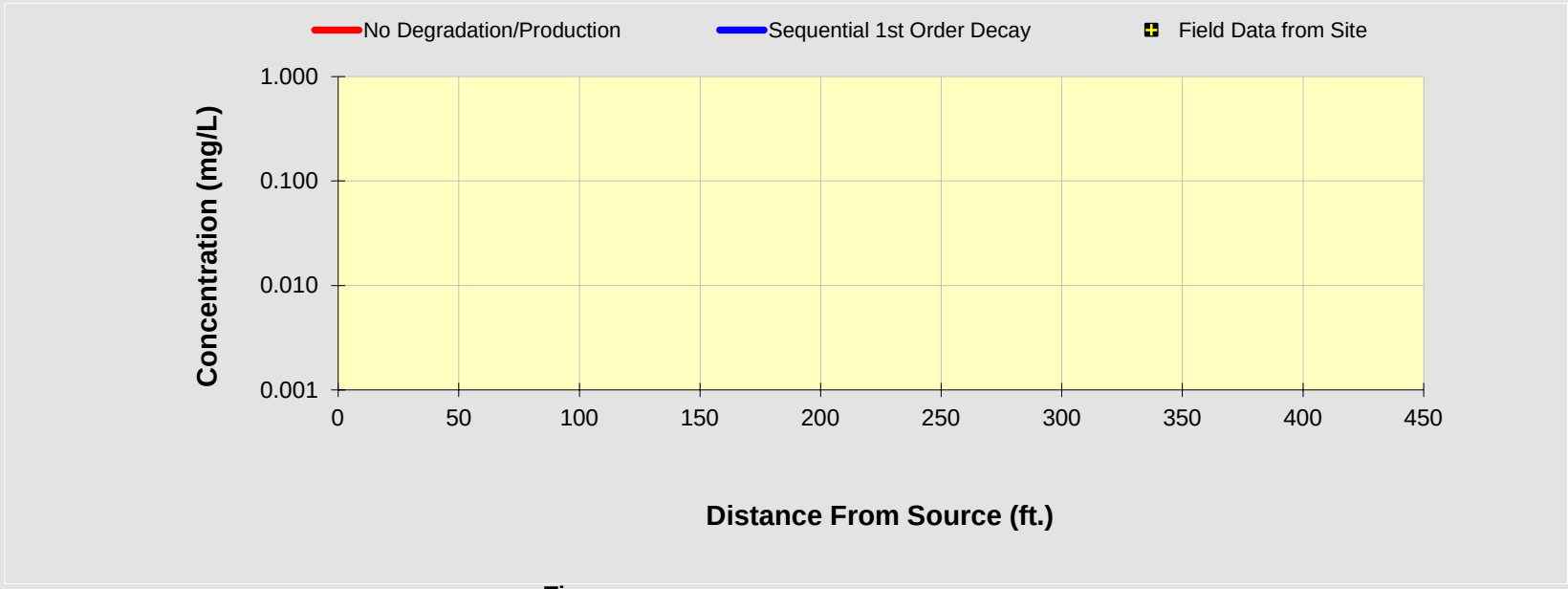
DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

Distance from Source (ft)

VC	0	40	80	120	160	200	240	280	320	360	400
No Degradation	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Biotransformation	0.0004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Monitoring Well Locations (ft)

	90	120									
Field Data from Site	0.000	0.000									



See PCE

See TCE

See DCE

See VC

See ETH

Replay

Time:

6.0 Years

Log ⟺ Linear

Return to Input

To All

To Array

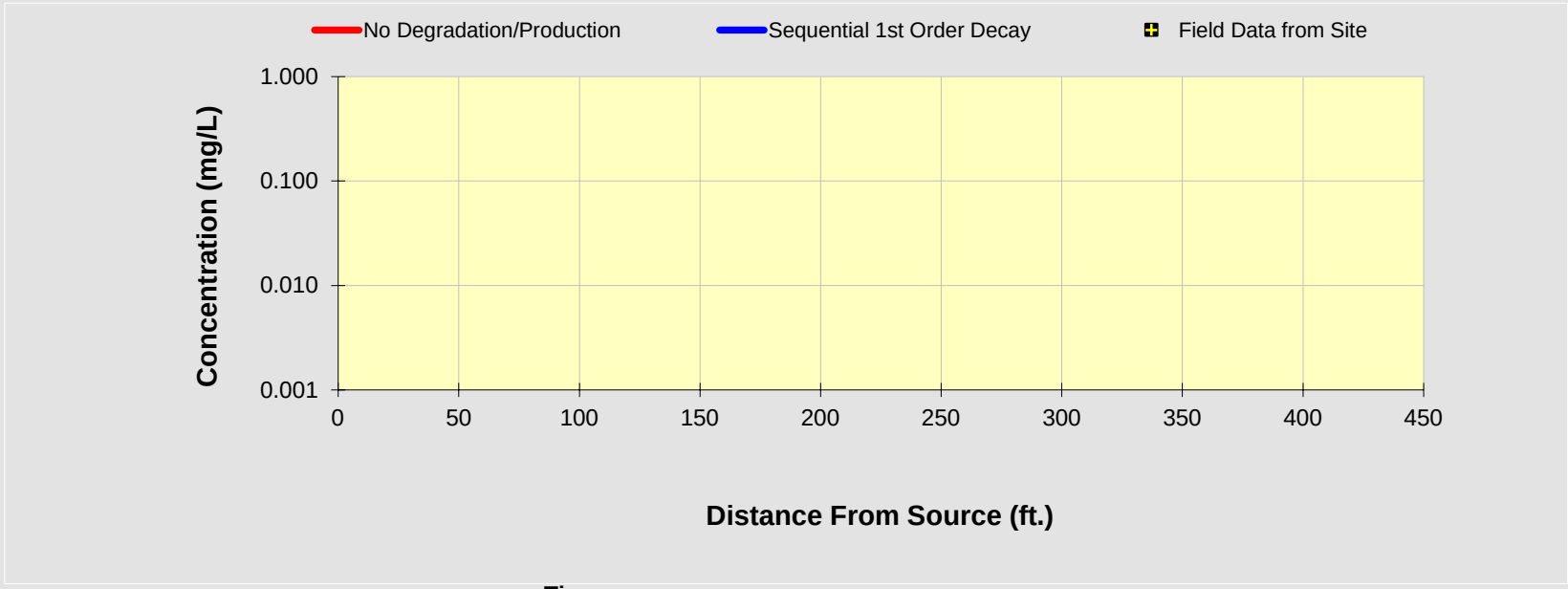
DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

Distance from Source (ft)

VC	0	40	80	120	160	200	240	280	320	360	400
No Degradation	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Biotransformation	0.0004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Monitoring Well Locations (ft)

	90	120									
Field Data from Site	0.000	0.000									



See PCE

See TCE

See DCE

See VC

See ETH

Replay

Time:

9.0 Years

Log ⟺ Linear

Return to Input

To All

To Array

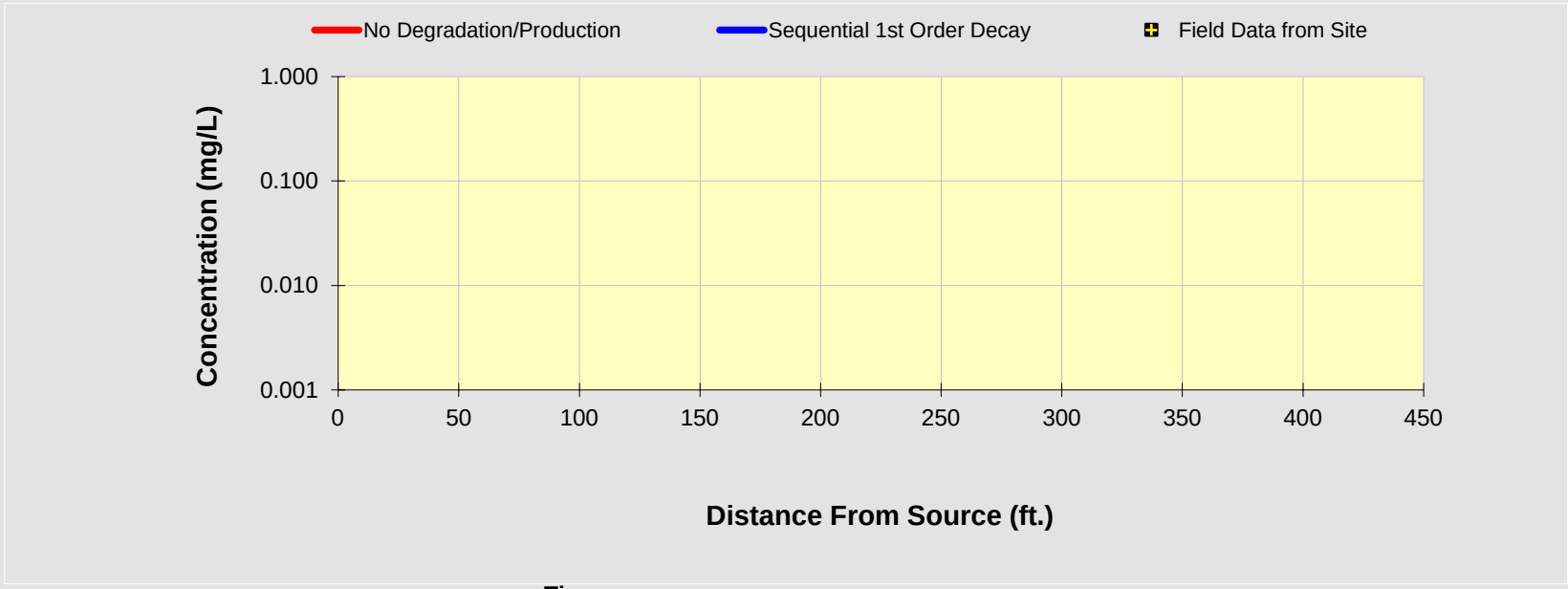
DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

Distance from Source (ft)

VC	0	40	80	120	160	200	240	280	320	360	400
No Degradation	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Biotransformation	0.0004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Monitoring Well Locations (ft)

	90	120									
Field Data from Site	0.000	0.000									



See PCE

See TCE

See DCE

See VC

See ETH

Replay

Time:

30.0 Years

Log ⟺ Linear

Return to Input

To All

To Array

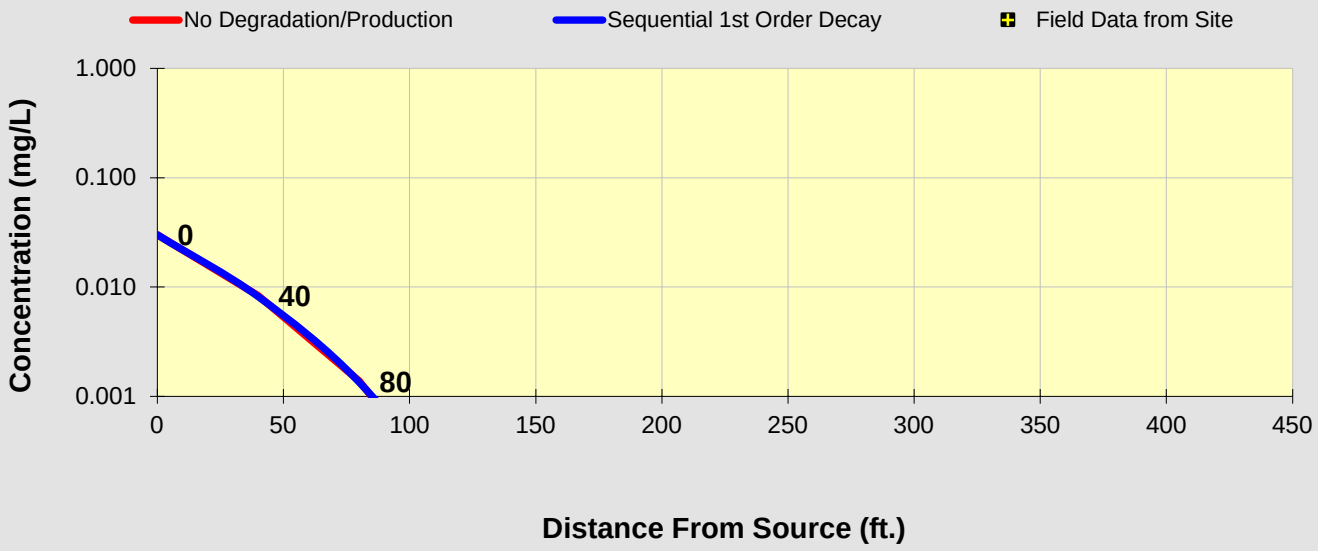
DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

Distance from Source (ft)

PCE	0	40	80	120	160	200	240	280	320	360	400
No Degradation	0.030	0.008	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Biotransformation	0.0300	0.008	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Monitoring Well Locations (ft)

	90	120									
Field Data from Site	0.001	0.000									



See PCE

See TCE

See DCE

See VC

See ETH

Replay

Time:

3.0 Years

Log ⟺ Linear

Return to Input

To All

To Array

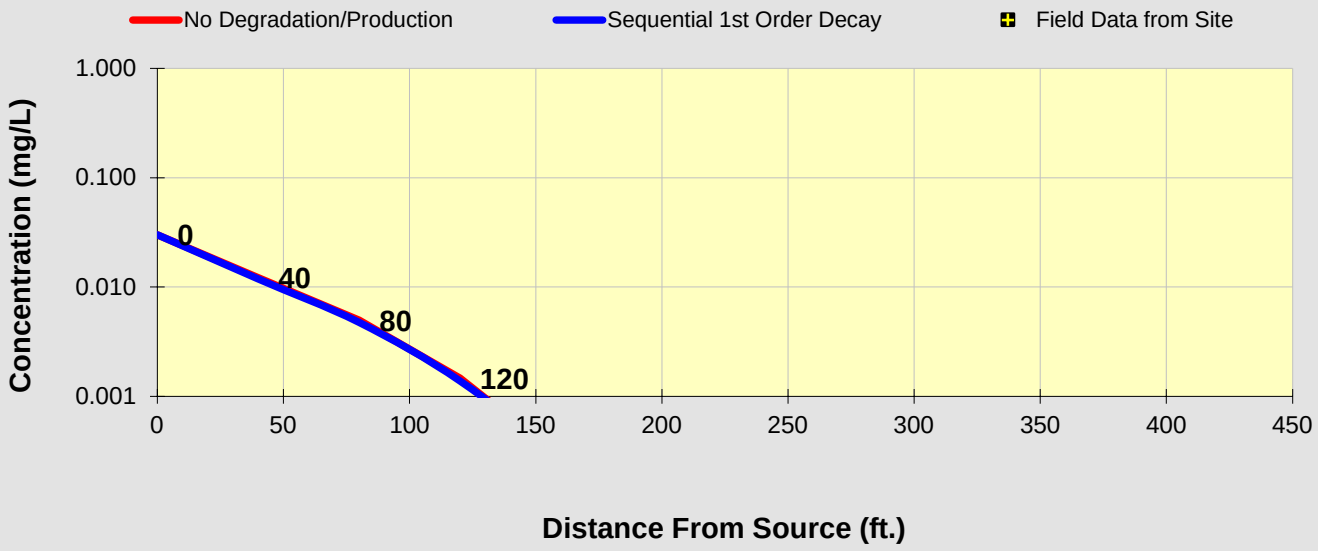
DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

Distance from Source (ft)

PCE	0	40	80	120	160	200	240	280	320	360	400
No Degradation	0.030	0.012	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Biotransformation	0.0300	0.012	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Monitoring Well Locations (ft)

	90	120									
Field Data from Site	0.001	0.000									



See PCE

See TCE

See DCE

See VC

See ETH

Replay

Time:

6.0 Years

Log ⟺ Linear

Return to Input

To All

To Array

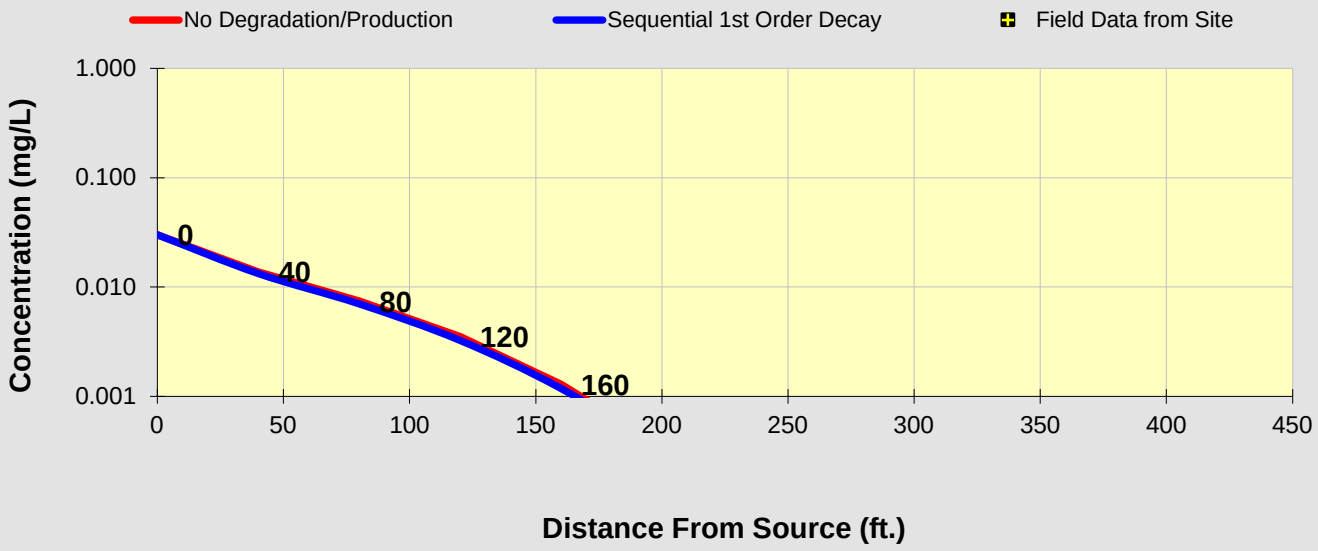
DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

Distance from Source (ft)

PCE	0	40	80	120	160	200	240	280	320	360	400
No Degradation	0.030	0.014	0.007	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000
Biotransformation	0.0300	0.013	0.007	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000

Monitoring Well Locations (ft)

	90	120									
Field Data from Site	0.001	0.000									



See PCE

See TCE

See DCE

See VC

See ETH

Replay

Time:

9.0 Years

Log ⟺ Linear

Return to Input

To All

To Array

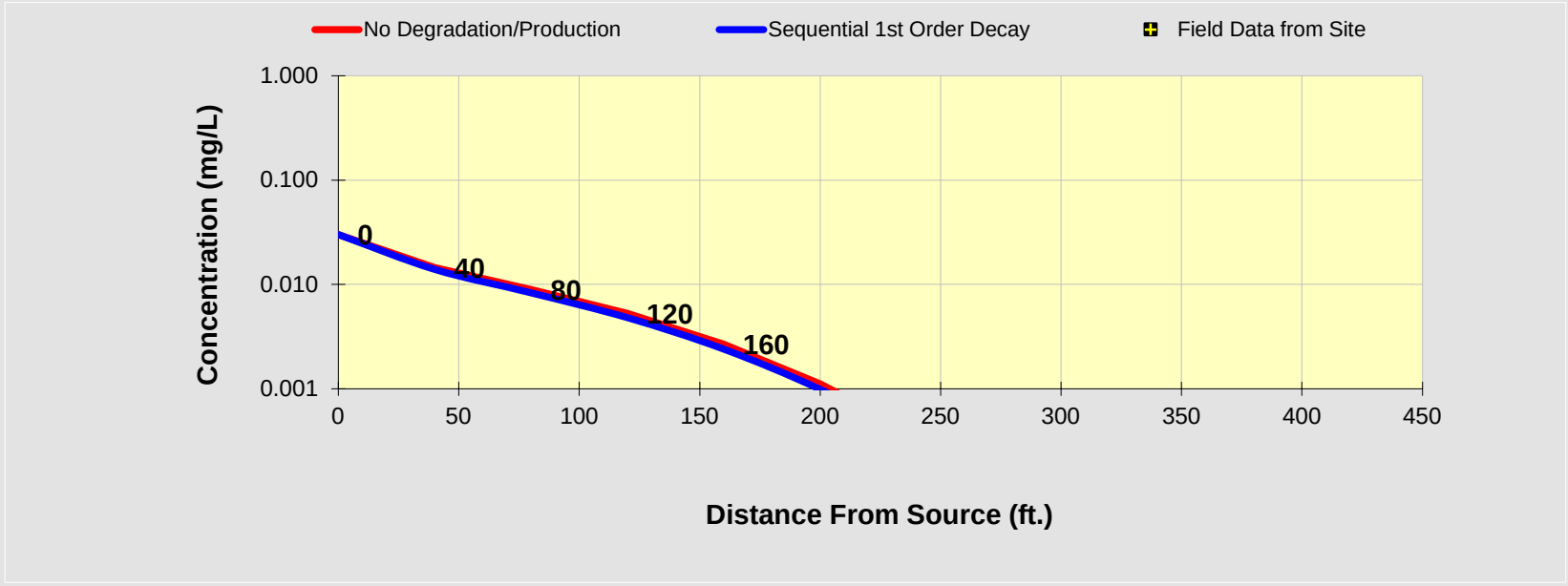
DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

Distance from Source (ft)

PCE	0	40	80	120	160	200	240	280	320	360	400
No Degradation	0.030	0.015	0.009	0.005	0.003	0.001	0.000	0.000	0.000	0.000	0.000
Biotransformation	0.0300	0.014	0.008	0.005	0.002	0.001	0.000	0.000	0.000	0.000	0.000

Monitoring Well Locations (ft)

	90	120									
Field Data from Site	0.001	0.000									



See PCE

See TCE

See DCE

See VC

See ETH

Replay

Time:

12.0 Years

Log ⟺ Linear

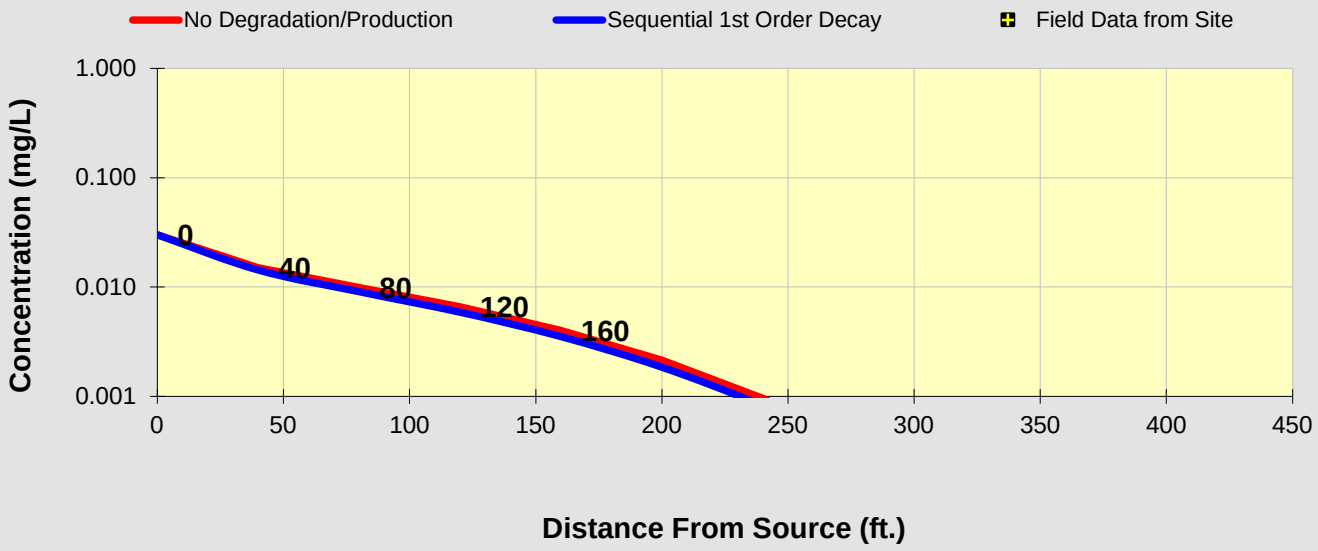
Return to Input

To All

To Array

DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

PCE	Distance from Source (ft)										
	0	40	80	120	160	200	240	280	320	360	400
No Degradation	0.030	0.015	0.010	0.007	0.004	0.002	0.001	0.000	0.000	0.000	0.000
Biotransformation	0.0300	0.014	0.009	0.006	0.004	0.002	0.001	0.000	0.000	0.000	0.000
	Monitoring Well Locations (ft)										
	90	120									
Field Data from Site	0.001	0.000									



See PCE

See TCE

See DCE

See VC

See ETH

Replay

Time:

15.0 Years

Log ⟺ Linear

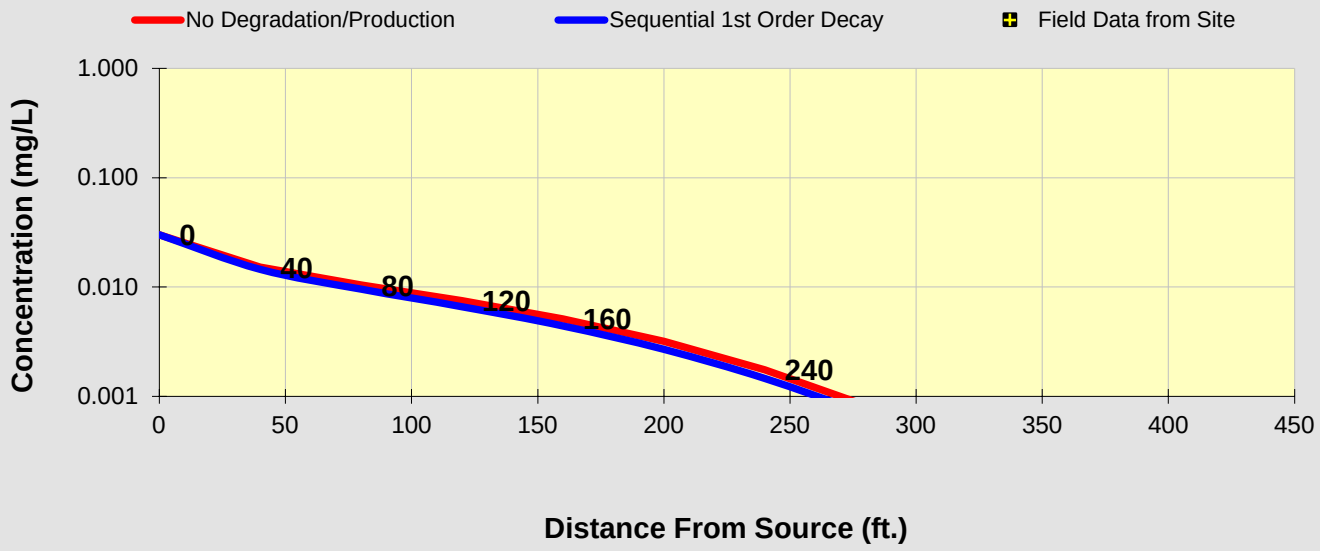
Return to Input

To All

To Array

DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

PCE	Distance from Source (ft)										
	0	40	80	120	160	200	240	280	320	360	400
No Degradation	0.030	0.015	0.010	0.007	0.005	0.003	0.002	0.001	0.000	0.000	0.000
Biotransformation	0.0300	0.014	0.010	0.007	0.004	0.003	0.001	0.001	0.000	0.000	0.000
	Monitoring Well Locations (ft)										
	90	120									
Field Data from Site	0.001	0.000									



See PCE

See TCE

See DCE

See VC

See ETH

Replay

Time:

18.0 Years

Log ⟺ Linear

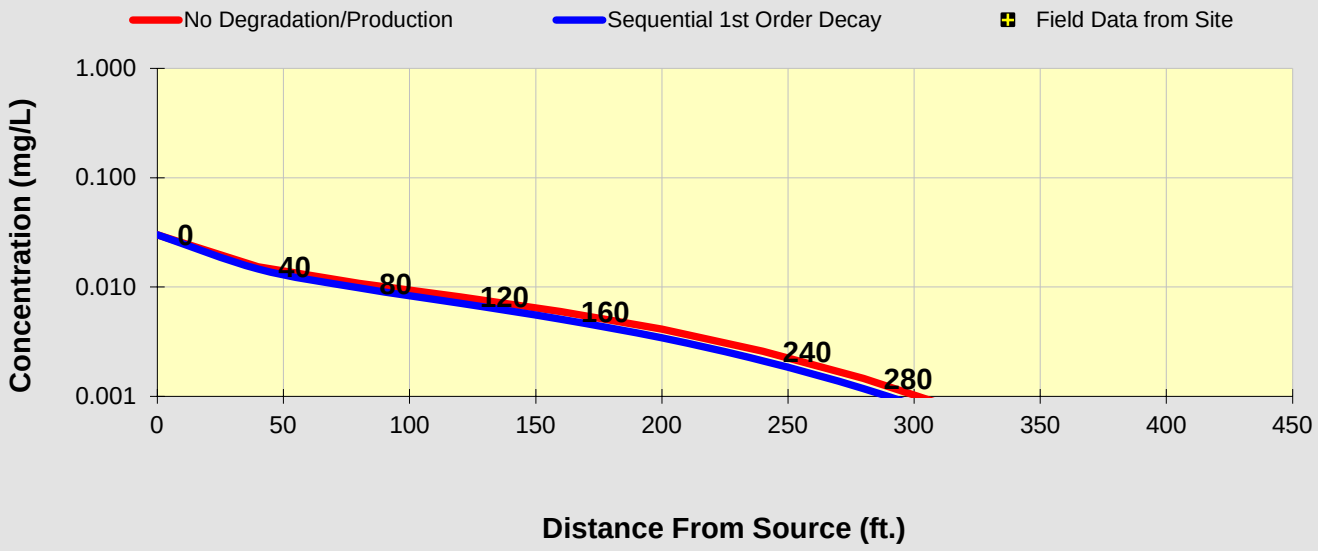
Return to Input

To All

To Array

DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

PCE	Distance from Source (ft)										
	0	40	80	120	160	200	240	280	320	360	400
No Degradation	0.030	0.015	0.011	0.008	0.006	0.004	0.003	0.001	0.001	0.000	0.000
Biotransformation	0.0300	0.015	0.010	0.007	0.005	0.003	0.002	0.001	0.001	0.000	0.000
	Monitoring Well Locations (ft)										
	90	120									
Field Data from Site	0.001	0.000									



See PCE

See TCE

See DCE

See VC

See ETH

Replay

Time:

21.0 Years

Log ⟺ Linear

Return to Input

To All

To Array

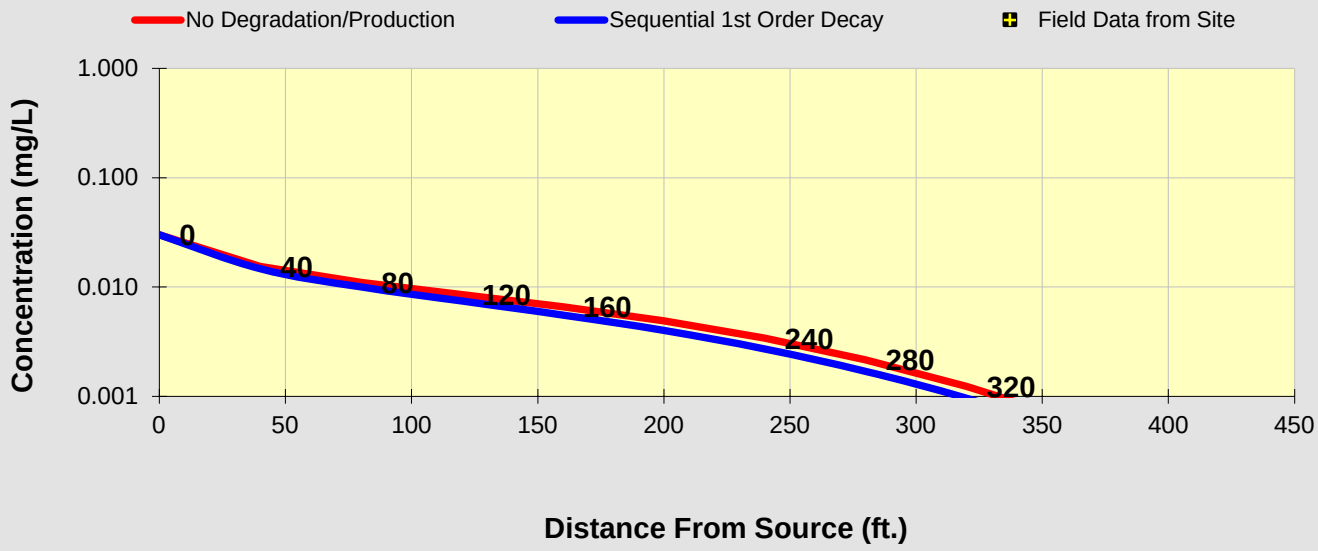
DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

Distance from Source (ft)

PCE	0	40	80	120	160	200	240	280	320	360	400
No Degradation	0.030	0.015	0.011	0.009	0.007	0.005	0.003	0.002	0.001	0.001	0.000
Biotransformation	0.0300	0.015	0.010	0.007	0.006	0.004	0.003	0.002	0.001	0.000	0.000

Monitoring Well Locations (ft)

	90	120									
Field Data from Site	0.001	0.000									



See PCE

See TCE

See DCE

See VC

See ETH

Replay

Time:

24.0 Years

Log ⟺ Linear

Return to Input

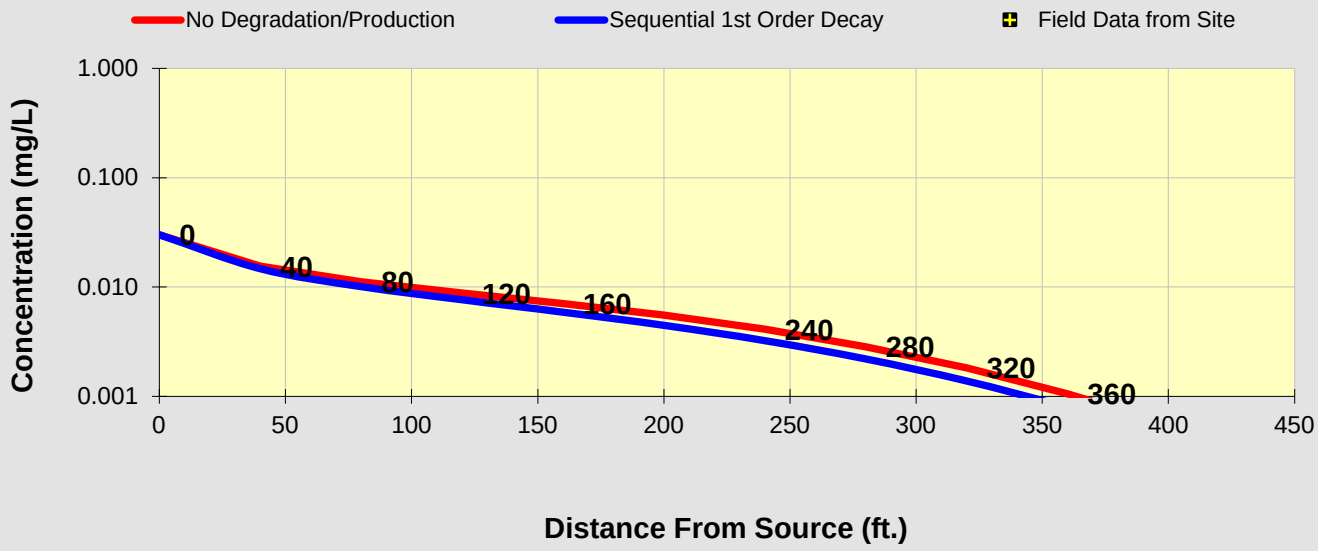
To All

To Array

DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

PCE	Distance from Source (ft)										
	0	40	80	120	160	200	240	280	320	360	400
No Degradation	0.030	0.016	0.011	0.009	0.007	0.006	0.004	0.003	0.002	0.001	0.001
Biotransformation	0.0300	0.015	0.010	0.008	0.006	0.004	0.003	0.002	0.001	0.001	0.000

	Monitoring Well Locations (ft)										
	90	120									
Field Data from Site	0.001	0.000									



See PCE

See TCE

See DCE

See VC

See ETH

Replay

Time:

27.0 Years

Log ⟺ Linear

Return to Input

To All

To Array

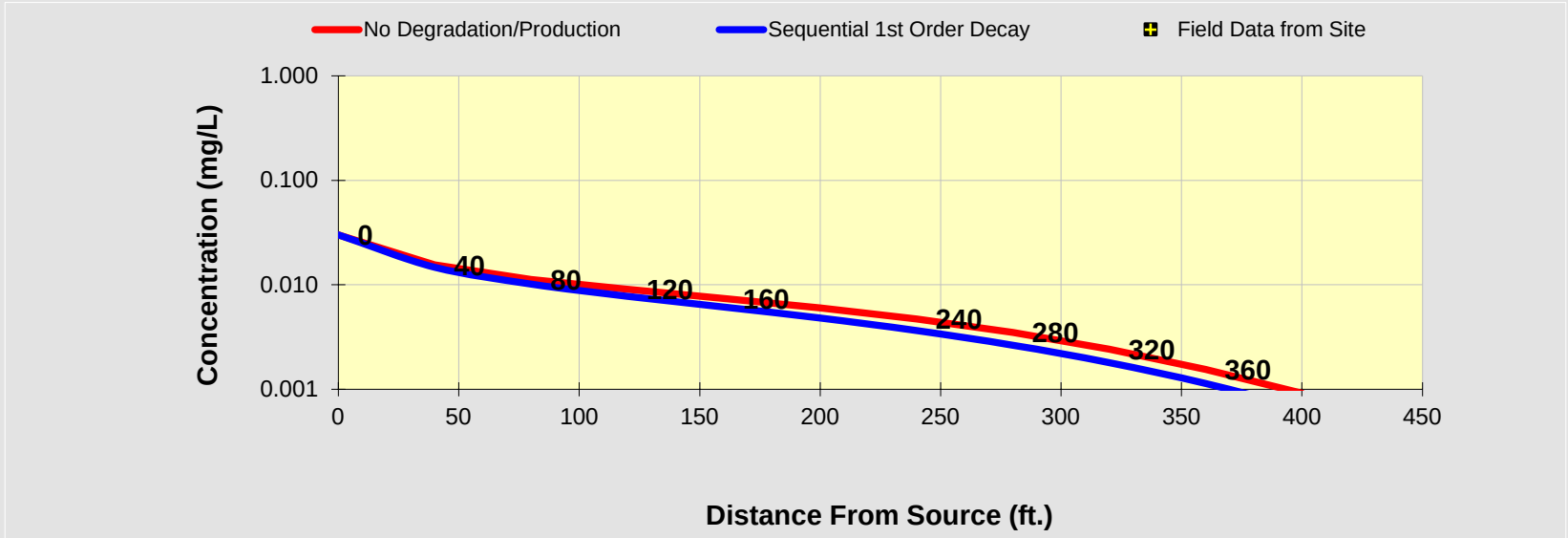
DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

Distance from Source (ft)

PCE	0	40	80	120	160	200	240	280	320	360	400
No Degradation	0.030	0.016	0.011	0.009	0.007	0.006	0.005	0.003	0.002	0.002	0.001
Biotransformation	0.0300	0.015	0.010	0.008	0.006	0.005	0.004	0.003	0.002	0.001	0.001

Monitoring Well Locations (ft)

	90	120									
Field Data from Site	0.001	0.000									



See PCE

See TCE

See DCE

See VC

See ETH

Replay

Time:

30.0 Years

Log ⟺ Linear

Return to Input

To All

To Array

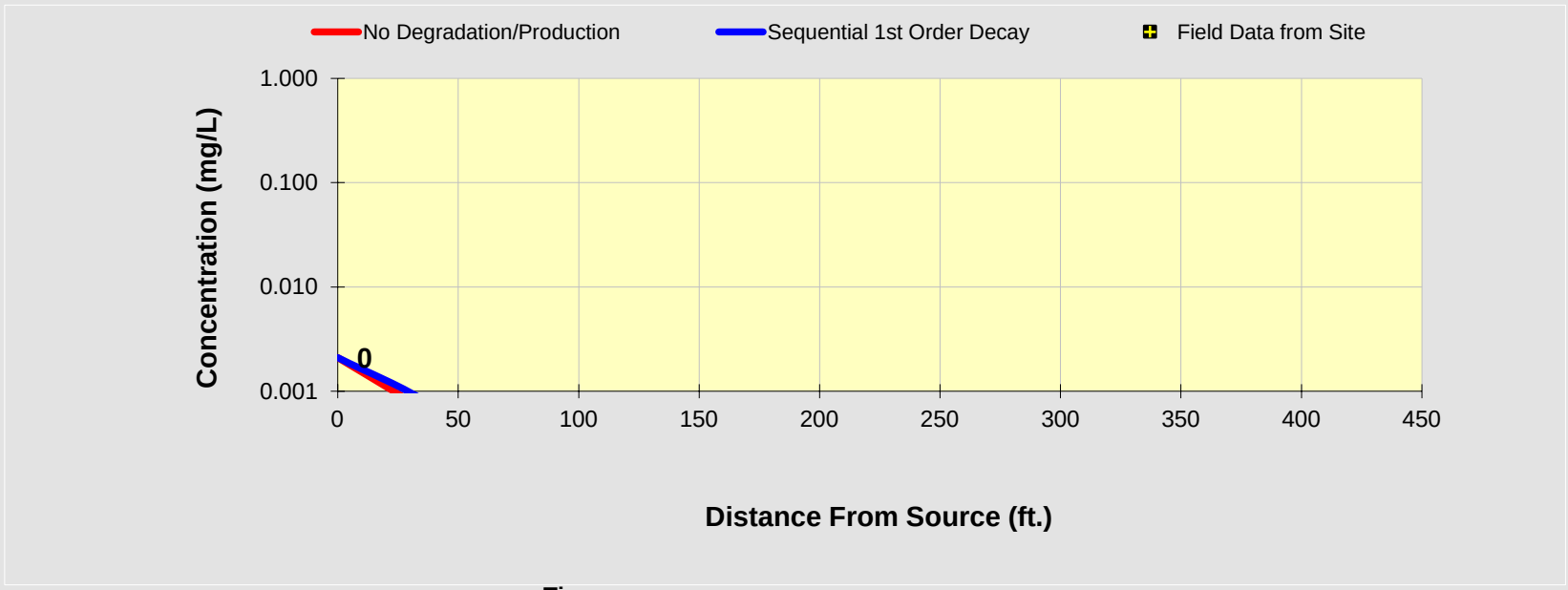
DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

Distance from Source (ft)

TCE	0	40	80	120	160	200	240	280	320	360	400
No Degradation	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Biotransformation	0.0021	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Monitoring Well Locations (ft)

	90	120									
Field Data from Site	0.000	0.000									



See PCE

See TCE

See DCE

See VC

See ETH

Replay

Time:

3.0 Years

Log ⟺ Linear

Return to Input

To All

To Array

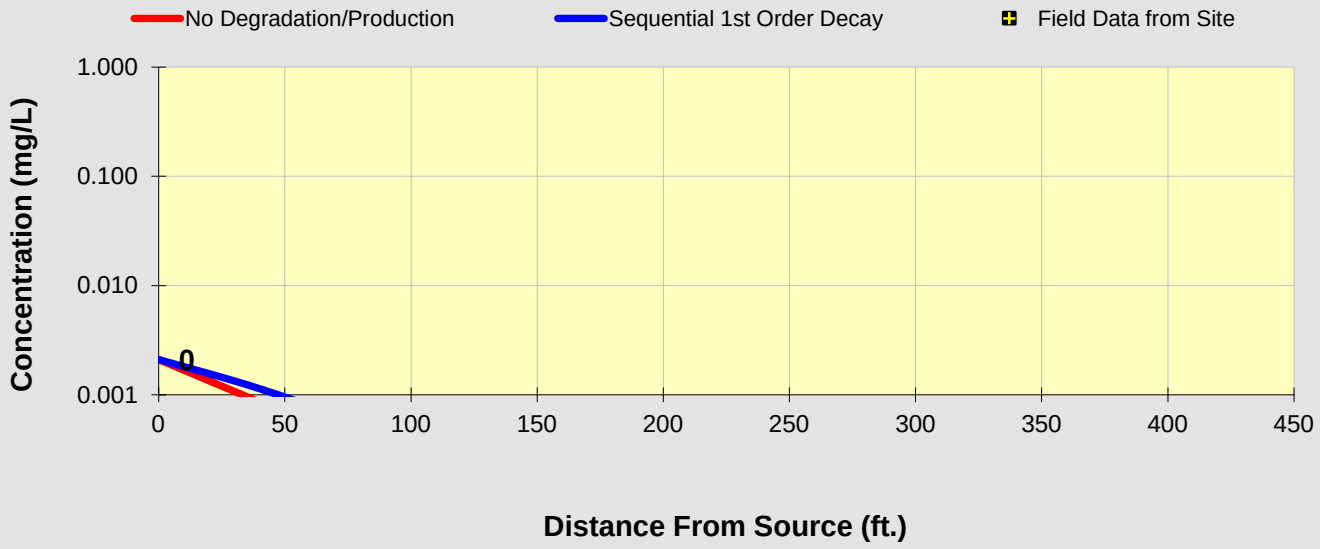
DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

Distance from Source (ft)

TCE	0	40	80	120	160	200	240	280	320	360	400
No Degradation	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Biotransformation	0.0021	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Monitoring Well Locations (ft)

	90	120									
Field Data from Site	0.000	0.000									



See PCE

See TCE

See DCE

See VC

See ETH

Replay

Time:

6.0 Years

Log ⟺ Linear

Return to Input

To All

To Array

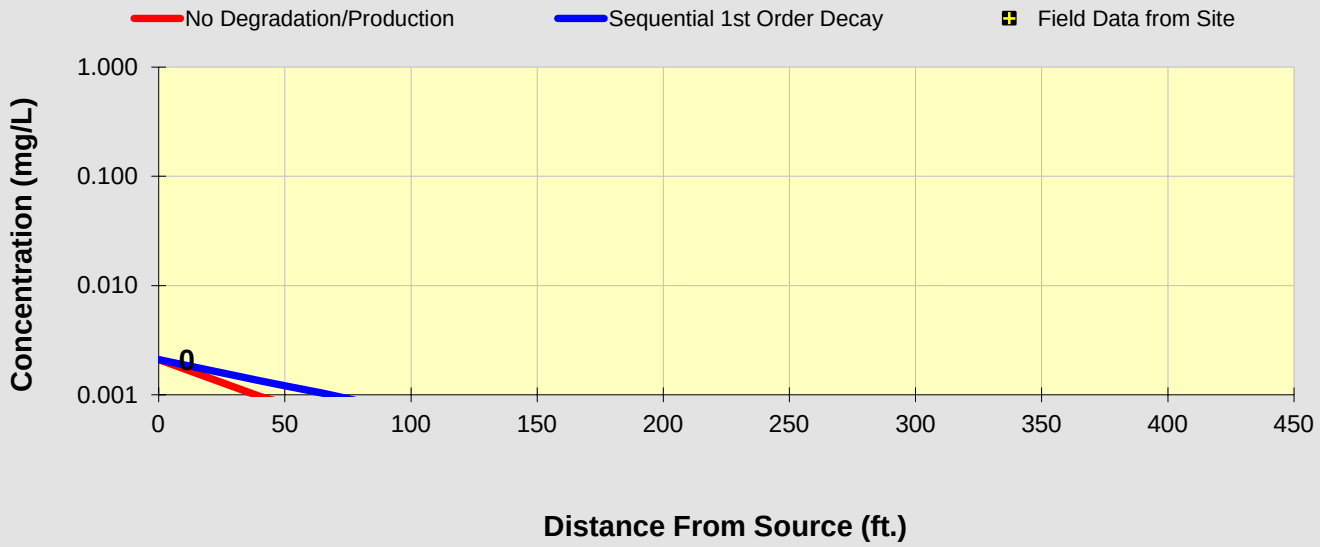
DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

Distance from Source (ft)

TCE	0	40	80	120	160	200	240	280	320	360	400
No Degradation	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Biotransformation	0.0021	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Monitoring Well Locations (ft)

	90	120									
Field Data from Site	0.000	0.000									



See PCE

See TCE

See DCE

See VC

See ETH

Replay

Time:

9.0 Years

Log ⟺ Linear

Return to Input

To All

To Array

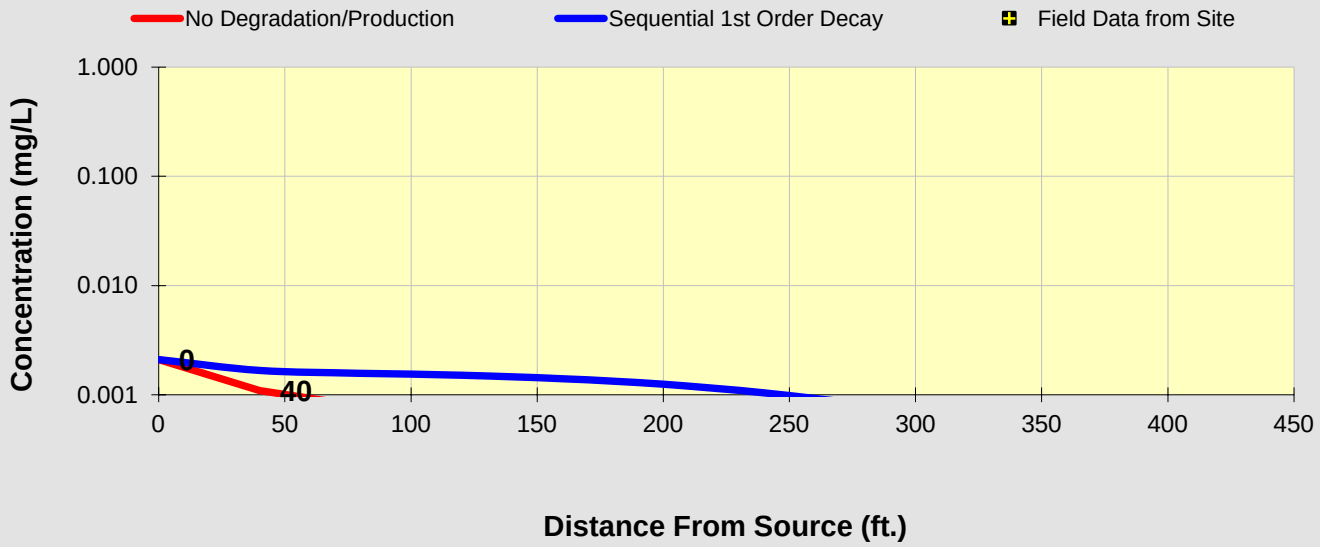
DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

Distance from Source (ft)

TCE	0	40	80	120	160	200	240	280	320	360	400
No Degradation	0.002	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000
Biotransformation	0.0021	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.000	0.000

Monitoring Well Locations (ft)

	90	120									
Field Data from Site	0.000	0.000									



See PCE

See TCE

See DCE

See VC

See ETH

Replay

Time:

30.0 Years

Log ⟺ Linear

Return to Input

To All

To Array

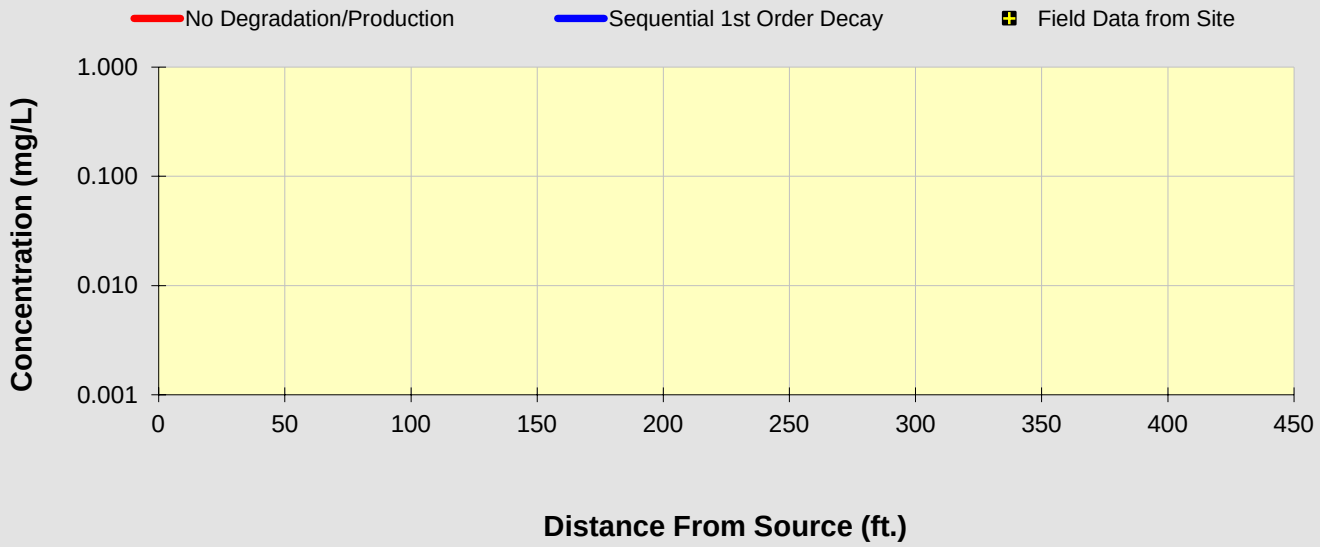
DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

Distance from Source (ft)

VC	0	40	80	120	160	200	240	280	320	360	400
No Degradation	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Biotransformation	0.0004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Monitoring Well Locations (ft)

	90	120									
Field Data from Site	0.000	0.000									



See PCE

See TCE

See DCE

See VC

See ETH

Replay

Time:

3.0 Years

Log ⟺ Linear

Return to Input

To All

To Array

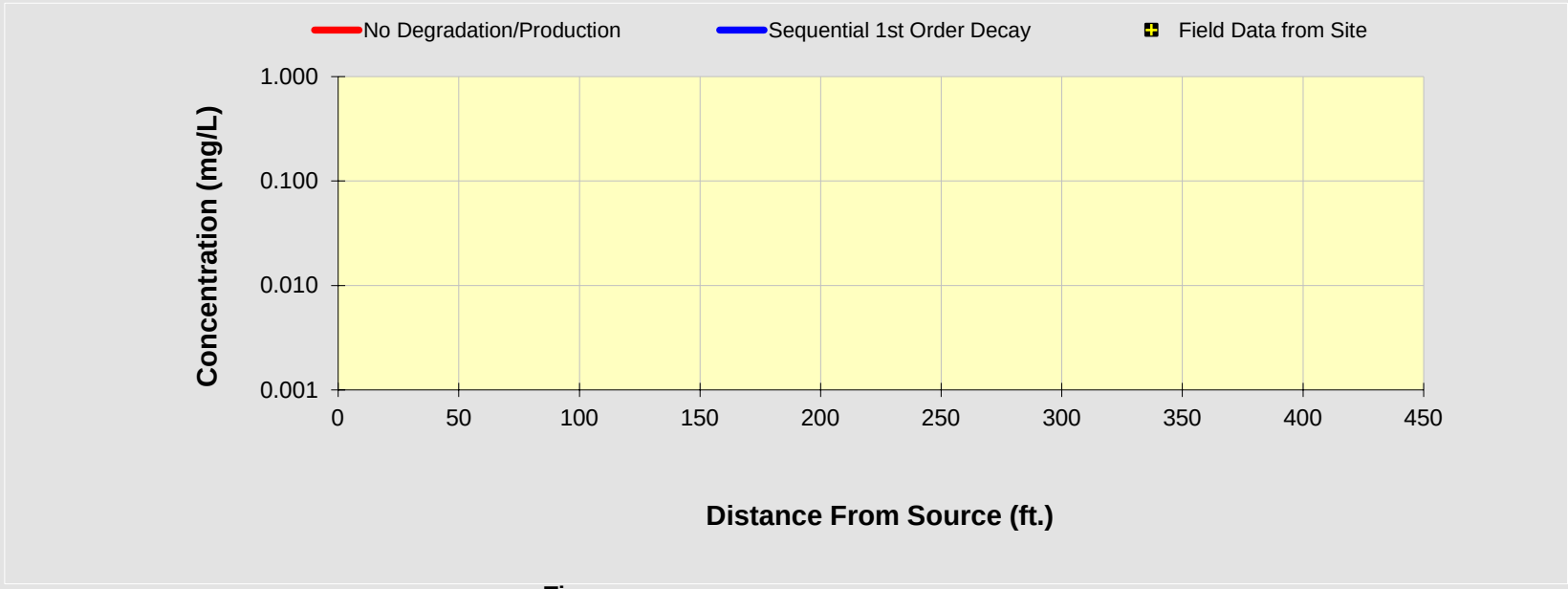
DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

Distance from Source (ft)

VC	0	40	80	120	160	200	240	280	320	360	400
No Degradation	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Biotransformation	0.0004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Monitoring Well Locations (ft)

	90	120									
Field Data from Site	0.000	0.000									



See PCE

See TCE

See DCE

See VC

See ETH

Replay

Time:

6.0 Years

Log ⟺ Linear

Return to Input

To All

To Array

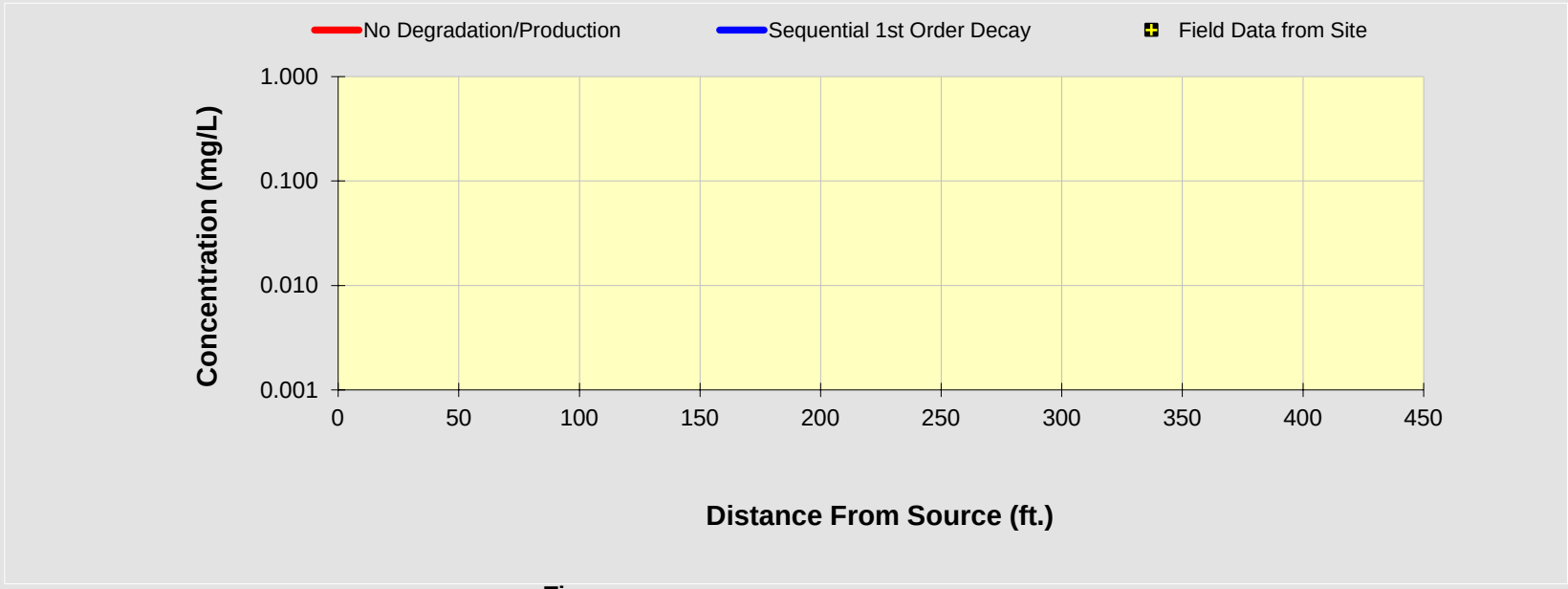
DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

Distance from Source (ft)

VC	0	40	80	120	160	200	240	280	320	360	400
No Degradation	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Biotransformation	0.0004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Monitoring Well Locations (ft)

	90	120									
Field Data from Site	0.000	0.000									



See PCE

See TCE

See DCE

See VC

See ETH

Replay

Time:

9.0 Years

Log ⟺ Linear

Return to Input

To All

To Array

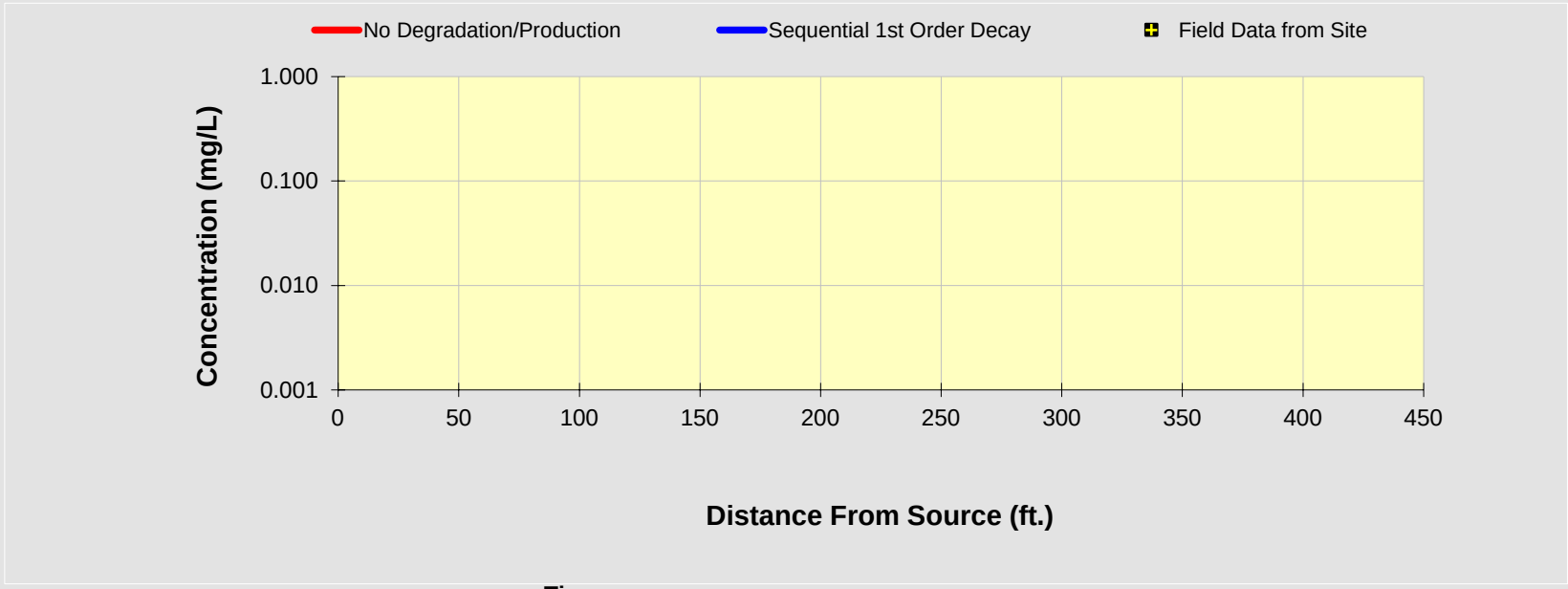
DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

Distance from Source (ft)

VC	0	40	80	120	160	200	240	280	320	360	400
No Degradation	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Biotransformation	0.0004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Monitoring Well Locations (ft)

	90	120									
Field Data from Site	0.000	0.000									



See PCE

See TCE

See DCE

See VC

See ETH

Replay

Time:

30.0 Years

Log ⟺ Linear

Return to Input

To All

To Array

Appendix G
PNDI Receipt

1. PROJECT INFORMATION

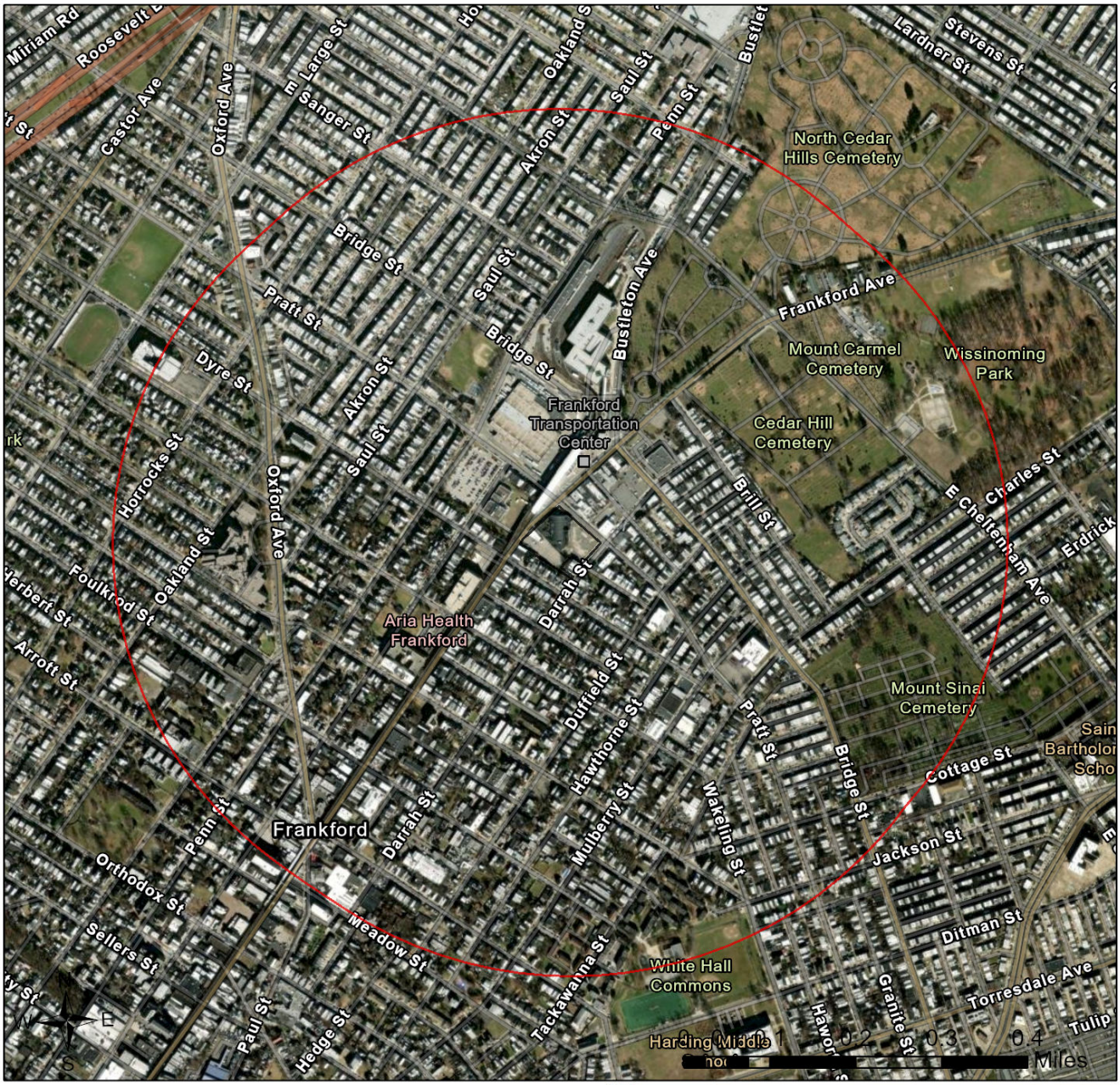
Project Name: **5129-35 Frankford Ave, Philadelphia, PA**
Date of Review: **1/21/2025 11:27:55 AM**
Project Category: **Hazardous Waste Clean-up, Site Remediation, and Reclamation, Voluntary cleanup (Act 2 and Chapter 250)**
Project Area: **2.44 acres**
County(s): **Philadelphia**
Township/Municipality(s): **Philadelphia City**
ZIP Code:
Quadrangle Name(s): **FRANKFORD**
Watersheds HUC 8: **Lower Delaware**
Watersheds HUC 12: **Pompeston Creek-Delaware River**
Decimal Degrees: **40.021672, -75.078165**
Degrees Minutes Seconds: **40° 1' 18.190" N, 75° 4' 41.3926" W**

2. SEARCH RESULTS

Agency	Results	Response
PA Game Commission	No Known Impact	No Further Review Required
PA Department of Conservation and Natural Resources	No Known Impact	No Further Review Required
PA Fish and Boat Commission	No Known Impact	No Further Review Required
U.S. Fish and Wildlife Service	No Known Impact	No Further Review Required

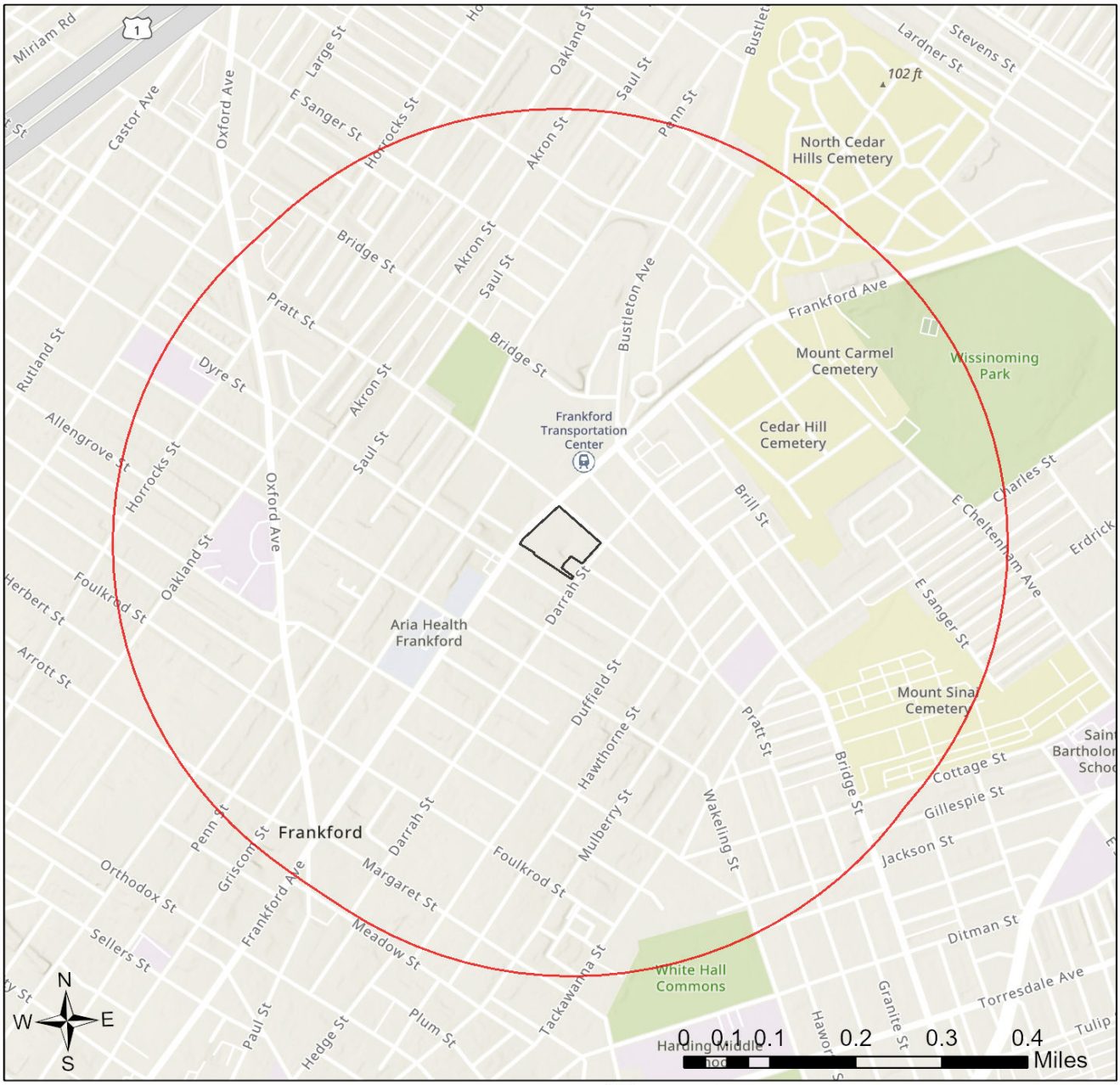
As summarized above, Pennsylvania Natural Diversity Inventory (PNDI) records indicate no known impacts to threatened and endangered species and/or special concern species and resources within the project area. Therefore, based on the information you provided, no further coordination is required with the jurisdictional agencies. This response does not reflect potential agency concerns regarding impacts to other ecological resources, such as wetlands.

5129-35 Frankford Ave, Philadelphia, PA



Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community

5129-35 Frankford Ave, Philadelphia, PA



Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community

3. AGENCY COMMENTS

Regardless of whether a DEP permit is necessary for this proposed project, any potential impacts to threatened and endangered species and/or special concern species and resources must be resolved with the appropriate jurisdictional agency. In some cases, a permit or authorization from the jurisdictional agency may be needed if adverse impacts to these species and habitats cannot be avoided.

These agency determinations and responses are **valid for two years** (from the date of the review), and are based on the project information that was provided, including the exact project location; the project type, description, and features; and any responses to questions that were generated during this search. If any of the following change: 1) project location, 2) project size or configuration, 3) project type, or 4) responses to the questions that were asked during the online review, the results of this review are not valid, and the review must be searched again via the PNDI Environmental Review Tool and resubmitted to the jurisdictional agencies. The PNDI tool is a primary screening tool, and a desktop review may reveal more or fewer impacts than what is listed on this PNDI receipt. The jursidictional agencies **strongly advise against** conducting surveys for the species listed on the receipt prior to consultation with the agencies.

PA Game Commission

RESPONSE:

No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

PA Department of Conservation and Natural Resources

RESPONSE:

No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

PA Fish and Boat Commission

RESPONSE:

No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

U.S. Fish and Wildlife Service

RESPONSE:

No impacts to **federally** listed or proposed species are anticipated. Therefore, no further consultation/coordination under the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq. is required. Because no take of federally listed species is anticipated, none is authorized. This response does not reflect potential Fish and Wildlife Service concerns under the Fish and Wildlife Coordination Act or other authorities.

4. DEP INFORMATION

The Pa Department of Environmental Protection (DEP) requires that a signed copy of this receipt, along with any required documentation from jurisdictional agencies concerning resolution of potential impacts, be submitted with applications for permits requiring PNDI review. Two review options are available to permit applicants for handling PNDI coordination in conjunction with DEP's permit review process involving either T&E Species or species of special concern. Under sequential review, the permit applicant performs a PNDI screening and completes all coordination with the appropriate jurisdictional agencies prior to submitting the permit application. The applicant will include with its application, both a PNDI receipt and/or a clearance letter from the jurisdictional agency if the PNDI Receipt shows a Potential Impact to a species or the applicant chooses to obtain letters directly from the jurisdictional agencies. Under concurrent review, DEP, where feasible, will allow technical review of the permit to occur concurrently with the T&E species consultation with the jurisdictional agency. The applicant must still supply a copy of the PNDI Receipt with its permit application. The PNDI Receipt should also be submitted to the appropriate agency according to directions on the PNDI Receipt. The applicant and the jurisdictional agency will work together to resolve the potential impact(s). See the DEP PNDI policy at https://conservationexplorer.dcnr.pa.gov/content/resources.

5. ADDITIONAL INFORMATION

The PNDI environmental review website is a preliminary screening tool. There are often delays in updating species status classifications. Because the proposed status represents the best available information regarding the conservation status of the species, state jurisdictional agency staff give the proposed statuses at least the same consideration as the current legal status. If surveys or further information reveal that a threatened and endangered and/or special concern species and resources exist in your project area, contact the appropriate jurisdictional agency/agencies immediately to identify and resolve any impacts.

For a list of species known to occur in the county where your project is located, please see the species lists by county found on the PA Natural Heritage Program (PNHP) home page (www.naturalheritage.state.pa.us). Also note that the PNDI Environmental Review Tool only contains information about species occurrences that have actually been reported to the PNHP.

6. AGENCY CONTACT INFORMATION

PA Department of Conservation and Natural Resources
Bureau of Forestry, Ecological Services Section
400 Market Street, PO Box 8552
Harrisburg, PA 17105-8552
Email: RA-HeritageReview@pa.gov

U.S. Fish and Wildlife Service
Pennsylvania Field Office
Endangered Species Section
110 Radnor Rd; Suite 101
State College, PA 16801
Email: IR1_ESPenn@fws.gov
NO Faxes Please

PA Fish and Boat Commission
Division of Environmental Services
595 E. Rolling Ridge Dr., Bellefonte, PA 16823
Email: RA-FBPACENOTIFY@pa.gov

PA Game Commission
Bureau of Wildlife Management
Division of Environmental Review
2001 Elmerton Avenue, Harrisburg, PA 17110-9797
Email: RA-PGC_PNDI@pa.gov
NO Faxes Please

7. PROJECT CONTACT INFORMATION

Name: NEIL LAIRD
Company/Business Name: RT ENVIRONMENTAL SERVICES, INC
Address: 215 W. CHURCH RD
City, State, Zip: KING OF PRUSSIA, PA
Phone: (610) 265-1516 X247 Fax: ( )
Email: nlaird@rtenv.com

8. CERTIFICATION

I certify that ALL of the project information contained in this receipt (including project location, project size/configuration, project type, answers to questions) is true, accurate and complete. In addition, if the project type, location, size or configuration changes, or if the answers to any questions that were asked during this online review change, I agree to re-do the online environmental review.

Neil Laird — 1/21/25

applicant/project proponent signature — date

Appendix H
Notice of Intent to Remediate Documentation

Pennsylvania
Department of Environmental Protection

September 9, 2024

Kimberley Washington, Esq.
Frankford Community Development Corporation
4667-69 Paul Street, 2nd Floor
Philadelphia, PA 19124

Re: Receipt of Notice of Intent to Remediate
Background/Statewide Health/Site-Specific Standards
FCDC 5129-35 Frankford Avenue Site/a.k.a. Holiday Thriftway Supermarket Building
eFACTS PF No. 878054
eFACTS Activity Nos. 60448 and 60449
5129-35 Frankford Avenue
City and County of Philadelphia

Dear Ms. Washington:

This letter acknowledges receipt of your Notice of Intent to Remediate (NIR) on August 8, 2024, pertaining to the subject property and submitted in accordance with the Land Recycling and Environmental Remediation Standards Act (Act 2). The procedures set forth in Act 2 must be followed in order for this site to qualify for the liability protection provided by the Act. The Department of Environmental Protection (DEP) will not accept plans and reports until after the 30-day comment period following submission of the NIR ends.

The 30-day comment period following submission of the NIR allows the municipality the opportunity to request to be involved in the development of remediation and reuse plans for the property. If the municipality requests a public involvement plan, any comments and responses must be included in any subsequent Site-Specific Standard reports. Remedial investigation reports, risk assessment reports, cleanup plans, and final reports submitted to DEP under the site-specific standard need to be accompanied by the required fees and documentation verifying compliance with the public notification requirements.

Additional technical and program information can be found at www.dep.pa.gov (Business>Land>Land Recycling). Also, please refer to the Land Recycling checklists which are helpful in assuring reports are complete before submittal. DEP uses the checklists to perform administrative and technical completeness reviews when plans and/or reports are submitted. It is strongly encouraged to include the appropriate completed checklist with your Final Report submission. Land Recycling checklists can also be found at the website under 'Forms, Checklists & Notifications' link.

Please refer to the Standard Attachment for considerations of other programs which may be applicable to this property.

Mr. Dustin Lipik is the project officer assigned to your project and will be working with you towards the remediation of this property. Frequent contact is encouraged between your representatives and our staff. If you have any questions or need further clarifications of our procedures, please contact the project officer by e-mail at dlipik@pa.gov or by telephone at 484.250.5795.

Sincerely,

C. David Brown, P.G.
Professional Geologist Manager
Environmental Cleanup and Brownfields

Enclosure: Standard Attachment

cc: City of Philadelphia
Mr. Hungarter, III, P.E. – RT Environmental Services, Inc.
Mr. Lipik, P.G.
Re 30 (GJS24ECB)878054-09042024-BG SHS SSS

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF ENVIRONMENTAL CLEANUP AND BROWNFIELDS

NOTICE OF INTENT TO REMEDIATE

For DEP Use Only
PF # ____
Rem ID # ____

Date: _____ NIR Status: ☒ New ☐ Revised

Act 1995-2 requires four general information items to be included in the NIR: the general location, listing of contaminants, intended use of property, and proposed remediation measures. In addition, indicate the standard(s) to be obtained and attach a scaled site map (if available). Certain project amendments or changes will require submission of a revised NIR, a new public notice, and a new notification to the municipality. Changes to information marked by (**) or (††) indicate when a new NIR and new public and municipal notices are needed. DEP should also be notified of any significant changes to the initial NIR submission, including the change of future use of the property, contaminants added or removed, change of standards from site-specific to background or Statewide health, any change in the media being investigated, or change of any contact information.

Property Name FCDC- 5129-35 Frankford Avenue Site

Former Name(s)/AKA Holiday Thriftway Supermarket Building

Address/Location 5129-35 Frankford Avenue

City Philadlephia Zip Code 19124

**Municipality(s) CIty of Philadelphia County(ies) Philadelphia

Tax Parcel ID# (if known) 882096000

Latitude N 40 º (deg). 01 ‘ (min) 18.7 “ (sec)

Longitude W 75 º (deg). 04 ‘ (min) 43.4 “ (sec)

Horizontal Collection Method Google Earth

Horizontal Reference Datum NAD83 Reference Point Center of Property

☐ **Wish to participate in the DEP/EPA One Cleanup Program.

Contact the Land Recycling Program Manager for details at landrecycling@pa.gov.

EPA ID#, if known _____

DEP ID#(s), if known 716772

(i.e., eFACTs primary facility ID#, storage tank facility ID#, water quality permit #, etc.)

Date Release Occurred (if known) _____

Date each municipality was notified of any plan or report submitted under any remediation standard
July 12, 2024

Place the newspaper name and date that your notice of your plan/report submission was published
The Star-July 24, 2024

** A change in municipality, the addition of a new municipality, or deciding to participate in the DEP/EPA One Cleanup Program requires a new NIR to be submitted with new public and municipal notifications.

Contamination, Land Usage, and Proposed Remediation Section

Provide a brief description of the site contamination, to the extent known, in plain language (e.g., fuel oil spill, historical chemical industrial area, etc.), the current and intended future use of the property in the box below.

Based on a review of the site history, potential sources of environmental impacts including auto repair operations, former auto filling station operations, offsite dry cleaners, a heating oil storage tank, and historic fill materials were identified and investigated at the property. During these investigations NAPL, CVOCs, PAHs, and metals impacts to soil and groundwater from these historic operations were identified at the property. Due to these impacts, the property was previously entered into the PADEP Act 2 Land Recycling Program and attained nonresidential Site Specific (SSS) or Statewide Health Stadards in June 2016. An Environmental Covenant was filed which included activity and use limitations used to attain the SSS.

Recent investigations completed to evaluate the current conditions of the site have identified that metals impacts above residential SHS in soils, NAPL, and CVOC impacts to groundwater above residential SHS remain at the property. Vapor samples collected during recent investigations determined that vapor intrusion was not a concern for the planned redevlopment.

The property is currently occupied by vacant commercial buildings. The planned future use of the property will be for a combination of commercial and residential purposes.

Provide a general description of proposed remediation measures.

SInce the property will be used for a combination of commercial and residential purposes, the previous environmental covenant and nonresidential SSS will be updated to address the change in property use. A soil excavation will be completed in the area near the former heating oil UST where NAPL was detected to remove NAPL impacted soils. The metals and PAH impacted soils at the site appear to be related to historic fill and these areas will be capped by asphalt or concrete as part of the planned redevelopment to eliminate the exposure pathways. Groundwater at the site will not be used for potable purposes. The CVOCs present in groundwater will be addressed by either a residential SSS through pathway elmination or a background standard based on potential offsite CVOC sources. The PAHs and lead in groundwater will be addressed through Residential SSS based on pathway elimination or attainment of Residential SHS. An environmental covenant will be established to restrict groundwater use and to maintain the cap to ensure any potential residiential exposure pathways are incomplete.

Standards Selection Section

Check all the boxes that apply for the appropriate contaminant groups according to the standard(s) and media of the remediation to be performed.

NOTE: Either the site-specific standard or a special industrial area requires a 30-day public and municipal comment period.

Contaminant Groups	Background		Statewide Health–Residential		Statewide Health–Non-Residential		††Site-Specific Standard		††Special Industrial Area	
	Soil	GW	Soil	GW	Soil	GW	Soil	GW	Soil	GW
Aviation Gasoline	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Diesel Fuel	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Fuel Oil No. 1	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Fuel Oil No. 2	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Fuel Oil No. 4	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Fuel Oil No. 5	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Fuel Oil No. 6	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Kerosene	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Jet Fuel	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Leaded Gasoline	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
New Motor Oil	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Unleaded Gasoline	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Used Motor Oil	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Chlorinated Solvents	☐	☒	☐	☐	☐	☐	☐	☒	☐	☐
Inorganics	☐	☐	☒	☐	☐	☐	☒	☐	☐	☐
Lead	☐	☐	☒	☒	☐	☐	☒	☒	☐	☐
MTBE	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Other Organics	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
PAHs	☐	☐	☒	☒	☐	☐	☒	☒	☐	☐
PCBs	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Pesticides	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
PFAS	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

GW: groundwater

†† Changing the selected standard from either background or Statewide health to the site-specific standard, changing to a combination of standards that includes the site-specific standard, or choosing the special industrial area designation requires a new NIR submission with new public and municipal notifications.

Please list individual contaminants here, by environmental medium and cleanup standard (optional):

Lead, arsenic, barium, cadmium, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and dibenzo(a,h)anthracene in soil by Residential SSS or SHS. Tetrachloroethene in groundwater by Residential SSS or Background Standard. Benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(g,h,i)perylene, and disolved lead in groundwater by Residential SSS or SHS.

Property Owner, Remediator/Participant, and Consultant

Complete the form below for each recipient obtaining a release of liability upon approval of the final report. Attach additional sheets as necessary.

Property Owner

Contact Person/Title Kimberley Washington, Esq., Executive Director eFACTs Client ID(If Known) .

Phone Number 215-743-6580 Email Address kwashington.fcdc@gmail.com

Company Name Frankford Community Development Corporation EIN or Federal ID #

Address (street, city, state, zip) 4667-69 Paul Street, 2nd Floor, Philadelphia, PA, 19124

Client Type (choose from list below) Association/Organization

Client Types:

Association/Organization		
Authority	Limited Liability Partnership	Partnership-General
County	Municipality	Partnership-Limited
Estate/Trust	Non-Pennsylvania	Pennsylvania Corporation
Federal Agency	Government	School District
Individual	Other (Government)	Sole Proprietorship
Limited Liability company	Other (Non-Government)	State Agency

Consultant

Contact Person/Title Walter H. Hungarter, III PE, VP Email Address whungarter@rtenv.com

Phone Number 610-265-1510 Ext 238 Company Name RT Environmental Services, Inc

Address (street, city, state, zip) 215 West Church Road, King of Prussia, PA, 19406

Other Participant (Remediator)

Contact Person/Title Kimberley Washington, Esq., Executive Director

Relationship to Site Owner

(e.g. remediator, participant in cleanup if other than owner, etc.)

Phone Number 215-743-6580 Email Address kwashington.fcdc@gmail.com

Company Name Frankford Community Development Corporation EIN or Federal ID #

Address (street, city, state, zip)

Preparer of Notice of Intent to Remediate

Name Neil Laird Title Senior Project Manager

Phone Number 610-265-1510 Ext 247 Email Address nlaird@rtenv.com

Company Name RT Environmental Services, Inc.

Address (street, city, state, zip) 215 West Church Road, King of Prussia, PA, 19406

RT Environmental Services, Inc.

VIA CERTIFIED MAIL – 7018 0680 0000 8540 2063
Return Receipt Requested

July 12, 2024

Ms. Leigh Anne Rainford
Philadelphia Department of Public Health
Environmental Health Services
7801 Essington Avenue
Philadelphia, PA 19153
LeighAnne.Rainford@Phila.gov

RE: NOTICE OF SUBMITTAL OF NIR
FCDC-5129-35 FRANKFORD AVENUE SITE
AKA:HOLIDAY THRIFTWAY SUPERMARKET BUILDING
EFACTS NO. 716772
5129-5135 FRANKFORD AVENUE
CiTY OF PHILADELPHIA, PHILADELPHIA COUNTY
RT PROJECT: 73539-04

Dear Ms. Rainford:

On behalf of Frankford Community Development Corporation (Owner/Remediator), RT Environmental Services, Inc. (RT) is pleased to submit this Notice of Intent to Remediate (NIR) submittal for the above-referenced site.

The Land Recycling and Environmental Remediation Standards Act (Act 2) requires that a Notice of Intent to Remediate (NIR) be provided to the municipality in which the site is located. In accordance with this provision of Act 2, we are formally notifying you of our intent to remediate the subject site. A copy of the Notice of Intent to Remediate, which has been sent to the Department of Environmental Protection (DEP), is enclosed. This notice will also be published in the Pennsylvania Bulletin, and a summary of the notice will be placed in a local newspaper.

Notice is hereby given that Frankford Community Development Corporation (the remediator/owner) has submitted a Notice of Intent to Remediate to the Pennsylvania Department of Environmental Protection, Southeast Regional Office for a site located at 5129-5135 Frankford Avenue, Philadelphia, PA (the Site). This NIR, which states that the site is a former commercial facility that has been found to be contaminated with metals, polycyclic aromatic hydrocarbons (PAHs), and tetrachloroethene. The owner has indicated that the proposed remediation measures will be excavation, pathway elimination, and the attainment of a Site-Specific Standard for metals and PAHs in soil, the attainment of a Site-Specific Standard or Statewide Health Standard for PAHs and metals in groundwater, and the attainment of a Background Standard or Site-Specific Standard for tetrachloroethene in in groundwater. The future use of the property will be a combination of commercial and residential uses.

The Act provides for a 30-day public comment period for site-specific standard remediations. The 30-day comment period is initiated with the publication of this notice. The City of Philadelphia may submit a request to Frankford Community Development Corporation to develop and implement a public involvement plan involving the municipality in the development of the remediation and reuse plans for the site within this 30-day period. Copies of these requests and of any comments should also be submitted to the PADEP Southeast Regional Office at 2 East Main Street in Norristown, PA 19401, c/o C. David Brown.

This notice is made under the provision of the Land Recycling and Environmental Remediation Standards Act, the Act of May 19, 1995, P.L. #4, No. 2.

Please feel free to contact me if you have any questions at 610-265-1510 ext. 247.

Sincerely,

RT ENVIRONMENTAL SERVICES, INC.

Neil Laird
Senior Project Manager

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Three + Bedrooms for Rent

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Room for Rent

ROOM for Rent $575-$600 Senior preferred 215-425-5678



Legal Notices

NOTICE OF INTENT TO REMEDIATE

Notice is hereby given that Frankford Community Development Corporation (the remediator/owner) has submitted a Notice of Intent to Remediate to the Pennsylvania Department of Environmental Protection, Southeast Regional Office for a site located at 5129-5135 Frankford Avenue, Philadelphia, PA (the Site). This NIR, which states that the site is a former commercial facility that has been found to be contaminated with metals, polycyclic aromatic hydrocarbons (PAHs), and tetrachloroethene. The owner has indicated that the proposed remediation measures will be excavation, pathway elimination, and the attainment of a Site-Specific Standard for metals and PAHs in soil, the attainment of a Site-Specific Standard or Statewide Health Standard for PAHs and metals in groundwater, and the attainment of a Background Standard or Site-Specific Standard for tetrachloroethene in in groundwater. The future use of the property will be a combination of commercial and residential uses.

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c/o C. David Brown.

This notice is made under the provision of the Land Recycling and Environmental Remediation
Standards Act, the Act of May 19, 1995, P.L. #4, No. 2.

Legal Notices

Notice of Intent to Remediate to Statewide Health Standards and Notice of Act 2 Final Report Pursuant to the Land Recycling and Environmental Remediation Standards Act, the act of May 19, 1995 (35 P.S. Sections 6026.101 – 6026.909) ("Act 2"), notice is hereby given that Liguori Academy will be submitting to the Pennsylvania Department of Environmental Protection ("PADEP") a Notice of Intent to Remediate for the 2343 East Tucker Street property located in the City of Philadelphia, Philadelphia County, Pennsylvania. Notice is also hereby given that Liguori Academy will submit an Act 2 Final Report to the PADEP Southeastern Regional Office on or after July 25, 2024. This public notice represents Liguori Academy's intent to request cleanup liability protection available under Act 2 using residential statewide health standards for the remediation of petroleum-impacted soil.



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FAQs

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1. Article Addressed to:

Leigh Anne Rainford
Philadelphia Department of Public Health
Environmental Health Services
7801 Essington Avenue
Philadelphia, PA 19153

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X ☐ Agent ☐ Addressee

B. Received by (Printed Name) C. Date of Delivery 8/1/24

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3. Service Type
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☐ Insured Mail ☐ C.O.D.

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PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

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RT Environmental Services, Inc.
215 West Church Road
King of Prussia, PA 19406-3207

73539-04

Submission Details

Details have been submitted successfully. Please review and print the Transaction Receipt for your records.

Reference :	**251876**
Form Name :	LAND RECYCLING NOTICE OF INTENT TO REMEDIATE
Submitter Name :	Neil Laird
Submitter Organization :	RT Environmental Services, Inc.
Submitter Email :	nlaird@rtenv.com
Phone Number :	(610) 265-1510
Submitted To :	Southeast Regional Office
Date Submitted :	08/08/2024

Print Confirmation

Need help? Contact Us (https://greenport.pa.gov/gpl/GpLogin/ContactUs)

Pennsylvania Department of Environmental Protection

Rachel Carson Building | 400 Market Street | Harrisburg, PA 17101

CITY OF PHILADELPHIA

DEPARTMENT OF PUBLIC HEALTH
1101 Market Street, 13th Floor
Philadelphia, PA 19107

FRANK A. FRANKLIN, PhD, JD, MPH, FCPP
Interim Health Commissioner

SARA ENES, MBA, MSW
Chief of Staff

August 19, 2024

Neil Laird
RT Environmental Services, Inc.
215 West Church Road
King of Prussia, PA 19406

Dear Mr. Laird:

Recently, the City of Philadelphia Department of Public Health, Environmental Engineering Unit received a Notice of Intent to Remediate (NIR) from your firm, under the provisions of the Pennsylvania Land Recycling and Environmental Remediation Standards Act (Act 2) regarding the property located at **5129 – 5135 Frankford Avenue**, Philadelphia, Pennsylvania (19124).

Through the Notice of Intent (NIR) provisions of Act 2, the City of Philadelphia hereby requests that you develop a Public Involvement Plan (PIP) for this site. This request is made in accordance with the internal procedures first developed by the City in 2003 for this purpose. These procedures recommend our municipality request a PIP if the project is in close proximity or adjacent to residential, educational (schools/daycare), medical, religious, recreational and park properties. Since this property is in close proximity to residential properties, we are obligated to request a PIP. In addition to the reason above, members of the interdepartmental review team which reviews NIRs submitted to the City have recommended a PIP in this instance.

The venue for this PIP will be an appropriately publicized meeting of interested parties (impacted community and businesses) you will host to discuss this site, to be held at a suitable location and time, allowing interested parties to attend. An approximate 30 days advance notice of the meeting must be provided, during which time all relevant sampling and background investigation material should be made available for public inspection at a suitable location, such as the nearest school or public library.

The meeting would focus on the following:

- Identity, location and concentration of contaminants and hazardous substances found in sampling events at the site;
- Any potential health effects of those contaminants, based on locations and concentrations noted;
- Measures to be taken to protect the community, workers and recreation areas from possible exposure;
- Further definition of the remediation methodology to be employed;
- Discussion of specific procedures, such as dust control, sedimentation, and erosion control.

Following the meeting, all supplemental material, which will include presentation materials, attendance list, and questions and answers will append the material provided earlier, which will be given to PA DEP, with a copy to the City.

Please notify the Department of Public Health in writing of the date, time and location of the public meeting, and the location of the document depository as noted above.

Please note that this PIP request has nothing to do with the perceived value and need of this development for the community and the City. We assume that you have already had several meetings with the community, elected officials, and others on the benefits of this development. This PIP request is specifically concerned with final questions regarding the proposed remediation to be employed on the site in its current condition. Accordingly, your presentation can be geared specifically to the remediation strategy, and the questions noted above.

Should you have any questions, please contact Leigh Anne Rainford of our Department's Environmental Engineering section at 215-685-7497 or at LeighAnne.Rainford@Phila.gov.

Best regards,



Frank A. Franklin, PhD, JD, MPH, FCPP
Interim Health Commissioner

cc: C. David Brown, PA DEP
Dawn Kiesewetter, Director, Environmental Health Services
India McGhee, Deputy City Solicitor, Regulatory Law Unit