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DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION
REMEDIATION DIVISION
LEAKING UNDERGROUND STORAGE TANK COORDINATION PROGRAM
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Part I: Program Type (Select either Remediation or LUST as your Primary Program Type)

☒ Remediation	☐ LUST
Primary Program: Voluntary Remediation Program	UST Facility ID: (if applicable)
*Rem ID: 12390 (required)	Spill Case Number: (if known)

Part II: Site Information

Site Name: Former Rockville Manufactured Gas Plant
Site Address: 13 Maple Street
City/Town: Rockville, Vernon State: CT Zip Code: 06066

Secondary Programs (complete as many as applicable for this document):

Program: Significant Environmental Hazard Program	Project ID: 13641
Program: Select Secondary Program	Project ID:
Program: Select Secondary Program	Project ID:
Program: Select Secondary Program	Project ID:

Provide Project ID for each secondary program if it is known.
Each program has a unique ID (i.e. Rem ID, Spill Case #, UST Facility ID, PCB File #, etc.)

Part III: Document Information

Remediation - Annual Report
Date of Document: 12/31/2018

Part IV: Submitter Information

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Additional Information for LUST Filings

Select one of the following abbreviations for use in File name

Report	Abbreviation
Tank Closure Assessment Report/UST Closure Report	CR
Investigation - Site Characterization Report	ESA
Investigation - Subsurface Investigation Report	ESA
Investigation - Phase I Site Assessment Report	ESA
Investigation - Phase II Investigation Report	ESA
Investigation - Phase III Investigation Report	ESA
Investigation - Receptor Survey	SRS
Investigation - Environment Site Assessment	ESA
Investigation - Supplemental Phase I Site Assessment Report	ESA
Investigation - Supplemental Phase II Investigation Report	ESA
Investigation - Supplemental Phase III Investigation Report	ESA
Investigation - Well Receptor Survey	SRS
Remediation - Corrective Action Plan	CAP
Remediation - Corrective Actions Report	CAR
Remediation - 20 Day Spill Report	CAR
Remediation - 45 Day Spill Report	CAR
Remediation - Soil Excavation Report	CAR
Remediation - Free Product Removal Report	CAR
Remediation - Remedial Action Plan	RAP
Remediation - Operation & Maintenance Plan	RAR
Remediation - Remedial Action Report	RAR
Remediation - Remedial Design Report	RAR
Monitoring Reports - Ground Water Monitoring Report	GWMR
Monitoring Reports - Site Status Report	SSR
Schedule	SCH
Scope of Work	SOW



Former Rockville Manufactured Gas Plant
13 Maple Street
Rockville, Vernon, CT

2018 Voluntary Remediation Program Annual Report

Prepared For:

Eversource Energy

December 2018

Tighe&Bond
Engineers | Environmental Specialists

14-0755-044
December 31, 2018

Mr. Robert Robinson, District Supervisor
Remediation Division
Bureau of Water Protection and Land Reuse
Connecticut Department of Energy and Environmental Protection
79 Elm Street
Hartford, CT 06106-5127

Re: **2018 Annual Report**
Former Rockville Manufactured Gas Plant
Rockville, Vernon, Connecticut
REM ID No. 12390

Dear Mr. Robinson:

Tighe & Bond, Inc. (Tighe & Bond), on behalf of The Connecticut Light and Power Company (CL&P) dba Eversource Energy (Eversource), submits the 2018 Annual Report for the investigation and remediation at the Former Manufactured Gas Plant (MGP) located in the Rockville section of Vernon, Connecticut. Site location is provided in Figure 1. This letter provides the annual update for the Voluntary Remediation Program (VRP) activities for the Rockville Former MGP site that were completed during the 2018 Calendar Year.

Significant progress was made to assess the nature and extent of the former Rockville MGP site impacts during 2018. Site activities completed in 2018 included the implementation of a Phase III ESA field program at on-site and off-site properties, groundwater gauging and sampling and completion of follow-up water supply well receptor survey findings.

The following 2018 Annual Report includes a brief summary of site background, activities completed during 2018, summary of Phase III ESA data, water supply well receptor survey findings, summary of Phase III ESA data gaps, and an updated VRP schedule.

If you have any questions or comments, please contact Jim Olsen, LEP at 860-704-4761 or at JTOlsen@tighebond.com or Lynn Willey, LEP at 860-852-5214 or at LEWilley@tighebond.com.

Very truly yours,

TIGHE & BOND, INC.

James T. Olsen, PG, LEP
Vice President

Lynn E. Willey, PG, LEP
Senior Environmental Scientist

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Tighe&Bond

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Section 1
Background

Eversource entered the Voluntary Remediation Program (VRP), pursuant to Connecticut General Statutes (CGS) 22a-133x, on September 2, 2015 by submitting an Environmental Condition Assessment Form (ECAF) and fee to the Connecticut Department of Energy and Environmental Protection (CTDEEP). The site is designated a Licensed Environmental Professional (LEP)-lead site.

Eversource has assigned the LEP verification of the Rockville Manufactured Gas Plant (MGP) site to Tighe & Bond of Middletown, Connecticut. The following will be the LEP for this project:

James T. Olsen, LEP (#178)
Tighe & Bond, Inc.,
213 Court Street, Suite 1100
Middletown, CT 06457

1.1 Site History and Description

The MGP operated from 1863 until the mid-1930s when gas production ceased. The site was acquired by The Connecticut Light & Power (CL&P) in 1935 and later converted to exclusive use as an electrical substation, as it remains today.

The site is 3.43 acres in size and is bounded by the St. Joseph Church parking lot and residential properties to the north, Maple Street and residential properties to the east, West Main Street to the south, and residential properties with frontage on West Street (Route 527) to the west. Site location is provided in Figure 1 (Appendix A). The Hockanum River transverses the southern portion of the site from the southeastern corner intersection at West Main Street westward to West Street. A tributary to the Hockanum River flows from westward from two outfalls at Maple Street.

The site is currently developed as Eversource Substation 14W enclosed by a gated and locked fence limiting access to authorized personnel. Figure 2 provides the current layout of the site. The site consisted of an Inner Substation area which includes the active electrical substation infrastructure (i.e., high voltage power lines, towers, transformers, and electrical control houses. Subsurface electrical power supply ducts and grounding grid are located beneath a crushed gravel cover inside the Inner Substation. Access to the Inner Substation is restricted by Eversource and requires specialized training prior to entry.

The remainder of the site is referred to as the Outer Substation area which includes all areas outside the Inner Substation (Figure 2). The Outer Substation includes a grassed area surrounding the eastern and northern sides of the substation. A fenced area with the rectangular-shaped high-pressure gas control house located on the western portion of the Outer Substation Area. The Hockanum River is located in the Outer Substation area and abuts the Inner Substation to the south. Wooded and overgrown areas are located on the northern portion of the site adjacent to the St. Joseph Church's paved parking lot and along the southern portion of the site between the Hockanum River and West Main Street.

Groundwater beneath the site and adjacent properties has been classified as GB by CTDEEP which indicates that groundwater is within a historically highly urbanized area or an area of intense industrial activity and where public water supply service is available. Such groundwater may not be suitable for human consumption without treatment due to waste discharges, spills or leaks of chemicals or land use.

The Hockanum River is classified as B meaning it is only suitable for recreational purposes, industrial process and cooling, and fish and wildlife habitat.

1.2 Regulatory Criteria

Analytical results discussed in this report were compared to remediation criteria listed in the CTDEEP Remediation Standard Regulations (RSRs) (January 1996, Amended June 2013). The 2013 RSRs do not provide soil and groundwater criteria for all substances detected at the Site. Criteria for the Additional Polluting Substances detected at the site that are listed in the data summary tables of this report were obtained from "Table 10: DEEP Recommended Criteria Values for Common Additional Polluting Substances and Alternative Criteria Requests, dated December 10, 2015".

CTDEEP's intent in developing the RSRs was to define the following:

- Minimum remediation performance standards;
- Specific numeric clean-up criteria; and
- A process for establishing alternative site-specific standards, if warranted.

The RSRs apply to efforts to remediate contaminated soil, surface water, soil vapors, or a groundwater plume at or emanating from a release area or AOC, provided the remedial action is required by the following:

- CGS Chapter 445 (Hazardous Waste, Section 22a-134, the PTA), or Chapter 446K (Water Pollution Control), or CGS Section 22a-208a(C)(2); or
- Relevant subsections of CGS 22a-133 (Voluntary Clean-up) including but not limited, any such action required to be taken or verified by a LEP, except as otherwise provided in the regulations.

The site is enrolled in the VRP; as such, the RSRs apply to the assessment work conducted at the site.

1.2.1 Soil Criteria

The CTDEEP soil remediation criteria integrates two risk-based goals: (1) the Direct Exposure Criteria (DEC) to protect human health from risks associated with direct exposure to contaminated soil; and (2) the Pollutant Mobility Criteria (PMC) to protect groundwater quality from contaminants that could potentially migrate or leach from soil to groundwater.

Direct Exposure Criteria

Specific numeric exposure criteria for a broad range of contaminants in soil have been established by the CTDEEP, based on certain exposure assumptions. The DEC apply to accessible soil to a depth of 15 feet. The DEC for substances other than PCBs do not apply to inaccessible soil at a release area, if such inaccessible soil is less than 15 feet below the ground surface, an environmental land-use restriction (ELUR) is in effect with respect to the subject release area. For PCBs, a maximum concentration of 10

milligrams per kilogram (mg/Kg) can remain in soils considered inaccessible. Inaccessible soil generally means polluted soil, which is the following:

- More than 4 feet below the ground surface;
- More than 2 feet below a paved surface comprised of a minimum of three inches of bituminous pavement or concrete;
- Beneath an existing building; or
- Beneath another permanent structure(s) approved by the CTDEEP Commissioner. Buildings can be constructed, and/or clean fill can be placed over contaminated soils rendering them inaccessible.

The CTDEEP has established two sets of DEC using exposure assumptions appropriate for residential land use (RES DEC) or for industrial and certain commercial land use (I/C DEC). In general, all sites are required to be remediated to the residential criteria. If the I/C land use criteria are applicable and used, an ELUR notification is required in accordance with the RSRs.

Pollutant Mobility Criteria

The PMC that apply to remediation of a site depends on the groundwater classification of the site. The purpose of these criteria is to prevent contamination to groundwater in "GA" classified areas, and to prevent unacceptable further degradation to groundwater in "GB" classified areas.

The applicable PMC for the Site is the PMC for a "GB" classified area. The PMC generally applies to all soil within the unsaturated zone, which represents the soil located from the ground surface to the seasonal high-water table in "GB" classified areas. The criteria do not apply to environmentally isolated soils that are polluted with substances other than VOCs provided an ELUR is recorded for the release area which ensures that such soils will not be exposed (unless approved in writing by the CTDEEP Commissioner). Environmentally isolated soils are defined as certain contaminated soils, which are above the seasonal high-water table, beneath an existing building and not a source of on-going contamination. An ELUR must be recorded for the site, which ensures that such soils will not be exposed by building demolition or other activities. Buildings can be constructed over contaminated soils rendering them environmentally isolated.

Remediation based upon the listed PMC requires that a substance, other than an inorganic substance or PCB, in soil be remediated to at least that concentration at which the results of a mass analysis of soil for such substances does not exceed the PMC applicable to the groundwater classification (i.e., GB) of the area in which the soil is located (default PMC). An inorganic substance (metals) or PCBs in soil must be remediated to at least that concentration at which the analytical results of leachate produced from either the Toxicity Characteristic Leaching Procedure (TCLP) or the Synthetic Precipitation Leaching Procedure (SPLP) does not exceed the PMC applicable to the groundwater classification of the area in which the soil is located.

In addition, the RSRs provide an alternate method for compliance with the PMC. For polluted soils within a GB Groundwater area, a SPLP or TCLP concentration of a substance in soil may be remediated to ten-times the groundwater protection criteria provided that non-aqueous phase liquid (NAPL) is present in soils as defined in the calculation provided in the RSRs.

1.2.2 Groundwater Criteria

Groundwater remediation requirements are dependent upon the groundwater classification of the site. The objectives of these standards are the following:

- Protect and preserve groundwater in "GA" areas as a natural resource
- Protect existing use of groundwater regardless of the area's groundwater classification
- Prevent further degradation of groundwater quality
- Prevent degradation of surface water from discharges of impacted groundwater
- Protect human health and the environment.

Portions of the RSRs governing groundwater regulate remediation of groundwater based on each substance present within the plume and by each distinct plume of impact. Several factors influence the remediation goal at a given site, including: background water quality, the groundwater classification, the proximity of nearby surface water, existing groundwater uses, and the presence of buildings and their usage. When assessing general groundwater remediation requirements, these factors must be considered.

Since the site is situated within a "GB" classified area, the following criteria apply to the site:

- Surface Water Protection Criteria (SWPC)
- Groundwater Volatilization Criteria (VC)

Surface Water Protection Criteria

The SWPC apply to all groundwater that discharges to a surface water; and therefore, applies to the site. The SWPC ensures that groundwater contamination resulting from on-site sources, which exceed background concentrations, is remediated to levels that adequately protect surface water quality. In general, compliance with the SWPC is achieved when the compound in groundwater directly upgradient from the discharge point emanating from a site is equal to or less than the SWPC established by the CTDEEP. Compliance with the SWPC can also be achieved when the 95% Upper Confidence Limit of the arithmetic mean of all sample results from a groundwater plume are equal or less than the established SWPC. Additionally, site-specific alternative SWPC can be established in accordance with the RSRs.

Groundwater Volatilization Criteria

The VC apply to all VOC-impacted groundwater within 15 feet of the ground surface or the lowest floor of an overlying building. According to the regulations, the VOC of concern will be remediated to a concentration that is equal to or less than the applicable Residential Volatilization Criteria (Res VC) for groundwater. It is noted that if VOC-impacted groundwater is located beneath a building that solely used for industrial or commercial purposes; then the groundwater may be remediated such that the concentrations are equal to or less than the applicable Industrial/Commercial Volatilization Criteria (I/C VC) in lieu of the RES VC. This is provided, however, that an ELUR be in effect at the site or the portion of the site covered by the building. The ELUR must also ensure that the parcel (or portion thereof beneath the building) will not be used for any residential purpose in the future and that future use is limited to industrial or commercial activity.

1.3 Phase I ESA

Tighe & Bond issued the Phase I ESA for the Rockville Former MGP site in March 2017. The Phase I ESA was completed to identify areas of environmental concern (AOCs) at the site in accordance with the CTDEEP's Site Characterization Site Guidance Document (SCGD). The following on-site and off-site AOCs were identified during the Phase I ESA. Figure 3 provides a summary of the on-site and off-site AOC locations.

On-site AOCs:

- **AOC-1**: Former Retorts/Generating Room
- **AOC-2**: Former Purifying House
- **AOC-3**: Former Gas Holder #1 [Gasometer-22,000 ft^3 Capacity]
- **AOC-4**: Former Gas Holder #2 [Gasometer-22,000 ft^3 Capacity]
- **AOC-5**: Former Gas Holder #3 [Gasometer-110,000 ft^3 Capacity]
- **AOC-6**: Former Coal Shed
- **AOC-7**: Former Transformer House
- **AOC-8**: Current Substation
- **AOC-9**: Historic Site Fill
- **AOC-10**: Hockanum River Sediment
- **AOC-11**: Coal Tar impacts and Fill Observed at TB-33 (Southwestern portion of site)
- **AOC-12**: Creosote/Coal Tar impacts and Fill Observed (Southeastern portion of site)
- **AOC-13**: Possible Historic Fill to the south of the Hockanum River
- **AOC-14**: Creosote impacts and Fill Observed (Northern portion of Site)
- **AOC-15**: Site-Wide Groundwater Impacts

Off-Site AOCs:

- **AOC-16**: Off-Site Creosote Impacts St. Joseph's School/Church Parking Lot
- **AOC-17**: Off-site Creosote Impacts Maple Street Right-of Way (ROW)
- **AOC-18**: Off-site Petroleum Impacts #8 and #12 Maple Street
- **AOC-19**: Suspected Fill #12 and #14 Maple Street (not related to site)
- **AOC-20**: Off-site Creosote Impacts #14 Maple Street
- **AOC-21**: Off-site Surface Soils Maple Street School (not related to site)
- **AOC-22**: Off-site Surface Soils 175 Union Street (not related to site)
- **AOC-23**: Off-site Groundwater Impacts

Tighe & Bond concluded that based upon available information the site does not qualify as an "Establishment" as defined by Section 22a-134 (the CT Transfer Act) of the Connecticut General Statutes (CGS).

Tighe & Bond proposed that a Phase III ESA be completed to assess the nature and extent of coal tar/creosote impacts and to assess if releases occurred at other identified AOCs at the site. In addition, Tighe & Bond proposed the collection of additional water service records for properties within 500-feet of the site as part of an updated Water Well Receptor Survey which was completed as part of the 2017 Phase III ESA activities at the site.

1.4 Significant Environmental Hazards Notification and Investigation

Tighe & Bond identified that benzo(a)pyrene was detected in SS-102 (0-6") at a concentration of 45 milligrams/kilogram (mg/Kg) which is above CTDEEP's Significant Environmental Hazard (SEH) Condition Notification Threshold Concentration of 30 mg/Kg during the 2017 Phase III ESA. SEH soil delineation activities are provided in *Significant Environmental Hazard Soil Delineation, Former Rockville Manufactured Gas Plant, Rockville Substation 14W, 13 Maple Street, Rockville, CT*, dated February 25, 2018, prepared by Tighe & Bond.

SS-102 was collected from the top six inches of soil below the crushed gravel cover within the active Inner Substation Area. The SS-102 sample location is situated within the footprint of the former Coal Shed associated with the MGP. Historic fill material, and a large piece of coal were observed within soils during the collection of SS-102. A SEH Notification Form was submitted to CTDEEP on February 26, 2018 because the SEH Condition in surface soils was not mitigated within 90-days of identification.

CTDEEP issued an SEH acknowledgement letter *RE: Notification of Significant Environmental Hazard, Former Rockville Manufactured Gas Plant, 13 Maple Street, Vernon, CT* dated March 16, 2018 (SEH Acknowledgement Letter). The SEH Acknowledgement Letter indicated that the reported condition did not require an immediate response to limit short-term risk because a permanent fence surrounds the property limiting access. However, annual inspection reports, site investigation and remediation would need to be continued in accordance with the plan provided in the SEH notification form.

The SEH shallow soil investigation included the advancement of hand auger soil borings, HA-1 through HA-09 to 2 feet below grade around SS-102 within and adjacent to the footprint of the former coal house within the Inner Substation. The soil boring locations are provided on Figure 4. Fill materials observed in soil included brick, coal fragments, slag, wood, asphalt, glass fragments and ash. Hand auger refusal was encountered at HA-03 on a suspected foundation within the footprint of the former Coal Shed. Concentrations of benzo(a)pyrene were detected above the SEH Condition Notification Threshold Concentration of 30 mg/Kg in the three SEH investigation sample locations and depth intervals:

- HA-01A (1.0-1.5 feet): 53 mg/Kg
- HA-02 (1.5-2.0 feet): 33 mg/Kg
- HA-03 (0.5 -1.0 feet): 32 mg/Kg

PAHs were detected above the Res DEC, I/C DEC, and GB PMC at each of the hand auger locations (HA-01 through HA-09). The findings of the SEH Soil delineation were provided to CTDEEP in a letter report dated September 25, 2018.

1.5 2017 Annual Report

The 2017 Annual Report for the Rockville Former MGP site provided a summary of the first round of Phase III ESA investigations at the site. The 2017 Annual Report provided a summary of soil, groundwater, sediment and surface water sampling that was completed at the site under the VRP. A summary of Phase III ESA and previous investigations are provided in Figure 5. The Annual Report identified data gaps that were identified in process of assessing the on-site and off-site impacts. CTDEEP requires that data gaps be fully investigated as part of the Conceptual Site Model (CSM) process prior to the remediation of a site. The following data gaps were presented in the 2017 Annual Report:

- Off-site Delineation of Coal Tar Impacts to North and West of Site: Coal tar impacts were encountered to the north of the site within the St. Joseph Church Parking lot within SB-15 and MW-20S between approximately 31.5 and 38 feet below grade below the water table. Coal tar impacts were encountered in SB-13 between 20 and 40 feet below grade at the northwestern site boundary. Concentrations of PAHs were detected above the SWPC in deep monitoring MW-18D and in bedrock well MW-03BR at the northwest corner of the site and in MW-7S on the northeast corner of the site. ETPH was detected above the SWPC in MW-18D and MW-7S.

  Additional delineation of soil and groundwater impacts was identified for the northwest portion of the site and off-site to the north and west.

- Assessment of Soils in Vicinity of Gas Holder #1 and Gas Holder #2: Coal tar impacted soils were encountered inside the former Gas Holders above the water table. Impacted soils were encountered outside the former Gas Holders in SB-04 and SB-05 near the apparent water table.

  Additional investigations were proposed to assess coal tar impacts above the seasonal high-water table for compliance with the GB PMC.

- Delineation of Coal Tar/Petroleum Impacts Along the Sewer Line: Visually-impacted soils with petroleum odors and coal-tar odors were observed near the brick sewer line that transverses the site from Maple Street to West Street from 5 feet to 20 feet below grade. Concentrations of ETPH, PAHs and/or metals (arsenic and lead) exceeded RSR criteria in soils and PAHs exceeded the SPWC in MW-5S at the southwestern corner of the Inner Substation.

  Additional off-site delineation of soil and groundwater impacts to the west were proposed to assess the extent of impacts along the sewer line.

- Assessment of Extent of Impacted Soils within the Inner Substation Area: Soil containing fill materials were observed within surficial soil and soil borings completed within the Inner Substation. Concentrations of PAHs, ETPH, and metals (arsenic and lead) were detected above RSR criteria. Further delineation of vertical and lateral extent of impacts in subsurface soils within the Inner Substation was recommended.

- Extent of Impacted Soils within the Southern Outer Substation Area: Fill materials were encountered within the southern portion of the Outer Substation in the vicinity of the substation driveway beneath the grassed area to the east of

the existing Control House, along the northern bank of the Hockanum River and within the overgrown portion of the site to the south of the Hockanum River abutting West Main Street. Soils in this area of the site contained concentrations of PAHs and/or ETPH above RSR criteria. Additional delineation was recommended to assess the nature and extent of the fill materials.

- Seasonal Groundwater Variation: Assessment of the seasonal groundwater variation at the site. Previous groundwater sampling was completed by Northeast Utilities Service Company in April 1990 and February 1993. A comprehensive sampling during the seasonal high-water table condition was proposed to assess current groundwater conditions during the seasonal high groundwater condition at the site.

- Water Supply Well Use at 13 Windsor Avenue: A water supply well record was identified for 13 Windsor Avenue in 1971. The property is currently serviced by the Connecticut Water Company. Additional efforts were recommended to assess if the supply well was currently in use.

Section 2
Phase III ESA Summary

Tighe & Bond developed a Phase III ESA investigation program to assess the nature and extent of on-site and off-site impacts associated with the Rockville former MGP and site-related AOCs. The Phase III ESA built upon previous investigations completed by Northeast Utilities Service Company Environmental Service Department between 1990 and 1995. The Phase III ESA was initially completed between August and November 2017. Data gaps were identified following the completion Phase III ESA in 2017. Additional Phase III ESA investigations were completed in 2018 to address data gaps and advance the CSM for the site.

The Phase III ESA included the collection of hand auger soil borings to assess shallow subsurface soils, advancement subsurface soil borings to characterize soils and the installation of monitoring wells to characterize groundwater conditions on-site and off-site areas of investigation. Sediments within the Hockanum River were collected to assess sediment concentrations identified during previous site investigations and to assess contributions from outfalls that discharge to the Hockanum River. Figure 5 depicts the on-site and off-site investigation areas, previous investigation areas, and Phase III ESA sample locations.

2.1 Methods

As part of the Phase III ESA, Eversource conducted outreach to secure property access agreements for abutting properties at 17 Maple Street, 51 West Street and St. Joseph Church property. Continued coordination with the United States Postal Service (USPS) was completed with to maintain access to the USPS access road for off-site groundwater gauging and sampling to the east of the site. Access to off-site properties was secured between June and September 2018. Access was requested by the property owner for 59/ 61 West Street to the west of the site; however, access was not provided for Phase III ESA investigations.

Tighe & Bond and the environmental drilling subcontractor, Cisco Geotechnical, LLC (CISCO), marked out investigation locations and notified Call-Before-You-Dig (CBYD)/811 to identify publicly-owned utilities for the on-site and off-site Phase III ESA locations prior to the commencing intrusive work. In addition, private subsurface utility mark-out contractor, Underground Survey, LLC, was retained to identify subsurface utilities or obstructions at Phase III ESA locations. As a precaution, soils borings and/or monitoring wells within the Maple Street right-of-way (ROW) and within the Inner Substation Area were vacuum cleared to 5-feet below grade to avoid potentially damaging buried subsurface utilities or substation infrastructure.

Environmental drilling was completed using a Geoprobe® 3230 drill rig or Geoprobe® 7822 drill rig. The compact Geoprobe 54LT was utilized for drilling on the western site boundary with 59/61 West Street where a smaller drilling footprint was required at the property boundary. Drilling was completed using direct-push drilling using Geoprobe's dual tube DT35 sampling system which cased-off the borehole during the advancement of the deep soil borings. Samples were primarily collected using a 3.25-inch sampler which used dedicated acetate liners. Shallow samples within the top 5-feet were collected with a standard Marco-Core and dedicated acetate liner. Each boring was drilled continuously to the target completion depth of the soil boring or rig refusal. Soil

borings were advanced from 12 feet to 75 feet below grade. Soils were logged for lithology and evidence of visual and/or olfactory impacts. Soils were screened within a photo-ionization detector (PID) and up to two headspace screening samples were collected from soil sample interval. Analytical soil samples were collected from soils containing fill, coal tar/creosote-impacted intervals or just above the seasonal high groundwater table to assess compliance with the GB PMC, or below the water table at similar depth/ elevations adjacent impacts to delineate the lateral extent of coal tar impacts or fill materials. Following completion, deep soil borings advanced below the water table were abandoned via grouting. Shallow soil borings above the water table abandoned with a combination bentonite chips and/or clean sand.

Following the collection of samples, soil boring sampling equipment was decontaminated by steam cleaning over a decontamination pad located within the Outer Substation Area of the site prior to commencing sampling at the next Phase III ESA sample location.

Hand auger soil borings were collected with a hand auger or a post-hole digger because of the coarse nature of the fill. Hand auger borings were advanced to collect shallow soil samples from the ground surface to 4 feet below grade in areas with limited access for a drill rig along the bank of the Hockanum River.

Groundwater monitoring wells were installed using 4 ¼" hollow-stem augers using the Geoprobe® 3230. Each overburden monitoring well consisted of a 0.010"-slotted poly-vinyl chloride (PVC) screen that were 10-feet in length affixed to a PVC riser that extended to the ground surface using standard well construction methods which included a sand filter pack constructed 2 feet above the top of the screen and a bentonite seal. The annulus of the deep overburden monitoring well, MW-26D, was grouted with a bentonite-grout slurry above the bentonite to seal the borehole above the well screen in order to assess water quality of the deep overburden aquifer. For water table monitoring wells, the boring annulus above the water table was backfilled with clean sand or native soil cuttings above the bentonite seal. Phase III ESA locations within the Maple Street ROW were repaired by CISCO with hot asphalt pavement in accordance with the Town of Vernon street permit.

MW-26BR was installed by drilling the bedrock with a roller bit to allow for the installation of steel isolation casing. The isolation casing was grout into the bedrock and allowed to cure after which MW-26BR was drilled with an air hammer.

Water table groundwater monitoring wells, designated with "S", were installed to straddle the groundwater table which ranged between approximately 7.5 feet below grade within the Rockville 14W Inner Substation Area to 34 feet below grade in MW-23S within the USPS Access Road off-site to the east. The difference in elevation is attributable in part to a significant increase in elevation, approximately 22 feet, to the north across the site and off-site in the area MW-23S. Deep monitoring wells, designated "D" were screened in glacial materials between 64 to 83 feet below grade at or near the bedrock interface. The bedrock surface elevation contours are provided on Figure 6. Newly installed monitoring wells were surveyed by Kratzert, Jones and Associates, Inc. a Connecticut-licensed surveyor and incorporated into the site-wide survey.

Newly installed groundwater monitoring wells were developed with a Waterra Hydro lift pump or whale submersible pump and surged with a surge block and check value to remove silt. In addition, MW-14S and MW-14D were developed prior to the spring event and fall event. MW-13S and MW-13D were redeveloped prior to the fall sampling event. MW-13S was previously filled with sediments and MW-13D was historically paved over

and was located as part of 2018 activities. Groundwater wells were gauged and sampled at least one week following development.

Groundwater monitoring wells were sampled using *EPA Region 1 Low Stress (low flow) Purging and Sampling of Groundwater Samples from Monitoring Wells, dated July 30, 1996, Revised September 19, 2017.* Groundwater samples were collected with a peristaltic pump or a bladder pump for wells where depth to groundwater was below 25 feet below grade. Groundwater was pumped through dedicated tubing through a flow through cell that was monitored with a multi-parameter YSI meter that measured groundwater parameters including pH, conductivity, oxygen reduction potential (ORP), dissolved oxygen and temperature. Turbidity was monitored with a separate turbidimeter during groundwater purging.

Monitoring well screen interval information, depth to groundwater and groundwater elevation is provided on Table 1 (Appendix B). Low-flow groundwater monitoring sheets are provided in Appendix C.

All field work was completed under a site-specific health and safety plan (HASP). Work activities completed within the active Inner Substation Area of the Rockville Substation 14W required completion of Eversource Substation Awareness Training and oversight by a Eversource Qualified Escort during work within the Inner Substation Area.

Phase III ESA analytical samples were collected into laboratory provided and preserved sample containers, chilled on ice and maintained under chain-of-custody prior to delivery to the analytical testing laboratory, Phoenix Environmental Laboratories, Inc. (Phoenix) in Manchester, CT. Phoenix is a Connecticut Department of Health (CTDPH)-approved commercial environmental laboratory (PH-0618). Analytical samples were analyzed by reasonable confidence protocol (RCP) analytical methods. Samples were analyzed for site constituent of concern (COCs) by the following methods: volatile organic compounds (VOCs) via EPA Method 8260, SVOCs via EPA Method 8270, total CTDEEP RSR metals, leachable CTDEEP RSR metals and cyanide via synthetic precipitation leaching procedure (SPLP), extractable total petroleum hydrocarbons (ETPH) via CTDEEP ETPH Method and total cyanide via EPA 9012. PCBs were analyzed using EPA Method 8082 for soils collected within the Inner Substation and in select soils collected on the West Main Street parcel. Select soil samples were collected for pesticides in the grassed area of the Outer Substation to assess historic detections of pesticides.

A summary of detected analytical results are provided by media, soil, groundwater, and sediment on Table 2, Table 3, and Table 4, respectively in Appendix B. Analytical laboratory data reports are provided in Appendix D.

A summary of Phase III ESA work completed on-site at 13 Maple Street and off-site are discussed in following Sections 2.2 and 2.3, respectively.

2.2 On-Site Investigations and Findings

On-site Phase III ESA investigations were completed between July and October 2018 and SEH investigations were completed between April and May 2018. Site Investigations included:

- Advancement of 35 soil borings
  - soil borings (SB-28 through SB-39, SB-40, SB-40A, SB-41 through SB-59, and SB-65)
  - Three soil borings for monitoring well installations (MW-24S, MW-25S, MW-30S/SB-40)
- Advancement of 21 hand auger soil borings (HA-01 through HA-18)
  - Ten SEH hand auger soil borings: HA-1, HA-1A, and HA-2 through HA-9
  - Eleven Phase III ESA hand auger soil borings: HA-7A, HA-9A, and HA-10 through HA-18
  - Installation of four shallow, monitoring wells screened across the water table designated "S" including one replacement well designated "R"): MW-24S, MW-25S, MW-30S and MW-4SR

Phase III ESA analytical samples collected on-site included:

- Eighty-eight soil samples, including three blind duplicate samples. Of these samples, thirty-one, including one duplicate, were associated with the SEH assessment within the Inner Substation.
- Twenty-eight groundwater samples, including two duplicates, were collected during the spring groundwater sampling event and nine groundwater samples, including one duplicate, were collected during the fall groundwater sampling event. Groundwater samples were not collected from the following monitoring wells because coal tar blebs, staining and/or sheens were observed during the development or subsequent gauging of the wells: MW-10SR, MW-24S, MW-02D, MW-03D, MW-10D on-site and MW-20S (off-site)
- Seven sediment samples (SED-06A, SED-06B, SED-06C and SED-07 through SED-09) including one blind duplicate sample from sediments within the Hockanum River.

A summary of on-site Phase III ESA findings is provided below. A preliminary CSM table is provided as Table 5.

2.2.1 Subsurface Soils

Assessment of Extent of Impacted Soils within the Inner Substation Area

- Shallow subsurface soils within the Inner Substation at the former Coal House (AOC-6) and Current Substation (AOC-8) were assessed as part of the SEH investigation described above. Concentrations of PAHs were detected above the RES DEC, I/C DEC and GB PMC at each hand auger location. Benzo(a) pyrene exceeded the SEH Condition Notification Threshold Concentration in HA-01A, HA-02, and HA-03 within the footprint of the former Coal Shed within the Inner Substation. Fill materials including ash and coal fragments, were observed in soils collected from hand auger borings completed to a depth of 2 feet below grade.
- Soils containing fill materials including brick, coal fragments, ash, were observed in soils collected from the central, southern and eastern potions of the Inner Substation. Shallow soils with cobbles were observed in the northern and western portion of the Inner Substation. Concentrations of PAHs, ETPH and total arsenic

exceeded RSR criteria within the soils containing fill material to 7 feet below grade. Fill material was encountered in the footprint of the former Generator House in SB-47 to a depth of 11 feet below grade.

- Concentrations of PAHs were detected above the RES DEC, I/C DEC and GB PMC in soil samples collected to between 2 and 7-feet below grade within soils that contained fill including soil borings: SB-33 (5 to 7 feet), B-34 (2 to 4 feet), B-35 (5 to 7 feet), B-36 (2 to 4 feet), SB-38 (5 to 7 feet), SB-43 (0.5 to 2 feet and 5 to 7 feet), and SB-46 (5 to 7 feet) and hand auger soil borings HA-07A (0 to 1 foot), HA-09A (2 to 2.5 feet) and HA-10 (2 to 2.5 feet).
- Concentrations of ETPH were detected above the RES DEC, I/C DEC and or the GB PMC in SB-33 (5 to 7 feet), B-34 (2 to 4 feet), B-35 (5 to 7 feet), SB-43 (5 to 7 feet) and) and hand auger soil borings HA-07A (0 to 1 foot), HA-09A (2 to 2.5 feet) and HA-10 (2 to 2.5 feet).
- Concentrations of total arsenic were detected above the RES DEC and I/C DEC in soil borings SB-33 (5 to 7 feet), B-34 (2 to 4 feet), B-35 (5 to 7 feet), B-36 (2 to 4 feet), SB-43 (0.5 to 2 feet), and SB-46 (5 to 7 feet) and hand auger soil borings HA-09A(2 to 2.5 feet), HA-10 (2 to 2.5 feet) and HA-11 (1 to 2 feet). Elevated concentrations of lead ranging from 49.1 to 106 mg/Kg below the RES DEC. SPLP arsenic and lead were either not detected or detected below the GB PMC.
- VOCs were detected in soil borings advanced in the shallow fill within SB-33 (5 to 7 feet), B-34 (2 to 4 feet), B-35 (5 to 7 feet), B-36 (2 to 4 feet). Concentrations of benzene exceeded the GB PMC in SB-33 (5 to 7 feet) and SB-34 (2 to 4 feet). Petroleum-related VOCs were also detected in SB-33 through SB-36 at concentrations below the GB PMC and RES DEC. Concentrations of tetrachloroethylene (PCE) were detected in shallow soil samples collected from B-34 (2 to 4 feet), B-35 (5 to 7 feet), SB-42 (2 to 4 Feet), SB-43 (0.5 to 2 feet), SB-44 (1 to 3 feet) at concentrations below the GB PMC and RES DEC.

Delineation of Coal Tar/Petroleum Impacts Along the Sewer Line

Additional Phase III soil borings, SB-33 through SB-40A were advanced to assess subsurface soil impacts (sheens with petroleum and/or coal tar-like odor) that were observed in from approximately 5 feet to 21 feet below grade in the southwestern portion of the Inner Substation (AOC-11) near the sewer main that transverses the site. A sheen and coal tar-like odor were observed between 19 and 24.5 feet below grade in SB-10 to the south of the sewer main. Concentrations of ETPH, PAHs and/or metals (arsenic and lead) exceeded the Res DEC and/or GB PMC in SB-11 and MW-2BR.

The invert for the sewer main is located between approximately 10.2 feet below grade within Maple Street to approximately 6.6 feet below grade within the Inner Substation. Sewer discharge flow is westward from Maple Street to West Street. The sewer line continues westward beneath the off-site property located at 59/61 West Street and West Street.

Soils with sheens and/or coal tar odors were encountered in SB-33 to westward to SB-36 from 11.5 feet to 20 feet below grade below the apparent watertable within the Inner Substation Area. Soils exhibiting a sheen with coal tar odors were observed in SB-38 from 10 to 11 feet below grade at the southwest property boundary and in SB-40 from 8 to 15 feet below grade along the western site boundary. Fill material, ash, coal and brick. was observed in soil borings in the vicinity of the sewer line in soil borings SB-39, SB-40 and SB-40A to 4 feet below grade.

Soil samples were collected at the apparent water table at SB-38 and SB-40A. Concentrations of individual PAH compounds, chrysene in SB-38 (5 to 7 feet) and benzo (a) pyrene in SB-40A were detected above the RES DEC, I/C DEC, and/or GB PMC. Concentrations of multiple PAHs were detected in SB-39 (3 to 5 feet) within fill material above the RES DEC, I/C DEC, and/or GB PMC. ETPH was detected in SB-40A at 230 mg/Kg below RSR criteria but was detected above the RES DEC in SB-39 within the fill material.

Cyanide was detected in SB-38 at 3.55 mg/Kg and in a duplicate soil sample for SB-39 at 2.33 mg/Kg below RSR criteria.

Extent of Impacted Soils within the Southern Outer Substation Area

Fill materials were encountered within southern portion of the Outer Substation in the vicinity of the substation driveway beneath the grassed area to the east of the existing Control House, along the bank of the Hockanum River. Soils in this area of the site contained concentrations of PAHs and/or ETPH above RSR criteria. Phase III ESA investigations in this area included the advancement of the following:

- Five soil borings, SB-32, SB-48, SB-49, SB-50 and SB-51 within the grassed area of the Outer Substation.
- Seven hand auger borings, HA-12 through HA-18, along the bank of the Hockanum River.
- Four soil borings, SB-54 through SB-58, located on the overgrown West Main Street Parcel.

Fill material including coal, slag and ash were observed in SB-32 and SB-48 through SB-51 from 2 feet to as deep as 10 feet below grade. Concentrations of PAHs and ETPH were detected above the RES DEC, I/C DEC and/or the GB PMC in SB-32 (2 to 4 feet) and SB-51 (2 to 4 feet). Concentrations of arsenic were detected in each of the soil borings above the RES DEC and I/C DEC. In SB-50, coal tar material was observed in soils mixed with brick and wood piping. Sheens and coal tar blebs were observed from 15 to 17 feet below grade and sheens and coal tar odors were observed from 17 feet to 25 feet below grade. Further to the east in SB-51, petroleum odors and grey staining were observed in SB-51 from 14 to 17 feet below grade. Sheen, coal tar blebs and/or coal tar odors were observed from 17 to 20 feet below grade.

Soils with fill materials were observed along the Hockanum River bank. Hand auger samples were collected from 0.5 to 4 feet below grade. Concentrations of PAHs were detected above the Res DEC, I/C DEC, and GB PMC in each hand auger location with the exception of HA-15. HA-18 (1 to 2 feet) had elevated concentrations of PAHs. Benzo (a) pyrene was detected at 86 mg/Kg which exceeds the SEH Condition Notification Threshold Concentration of 30 mg/Kg. This information was transmitted to CTDEEP in an e-mail from Tighe & Bond on December 28, 2018. CTDEEP responded via e-mail on December 28, 2018 indicating that the discovery of additional subsurface soils above the

SEH Condition Threshold Concentration at HA-18 are covered under the February 26, 2018 SEH Notification and that a separate SEH Notification was not required.

ETPH was detected above the RES DEC, I/C DEC and/or the GB PMC in HA-16 and HA-18. Arsenic was detected above the RES DEC and I/C DEC in HA-15, HA-16 and HA-18. Leachable lead was detected above the GB PMC.

To the south of the Hockanum River, fill materials including coal, ash and brick were observed in soil borings SB-54 to SB-57 to as deep as 8 feet below grade. Concentrations of PAHs were detected above the RES DEC, I/C DEC and GB PMC in SB-54, SB-55, SB-56 and SB-58 in samples collected between 0.5 and 4 feet below grade.

Assessment of Soils in Vicinity of Gas Holder #1 and Gas Holder #2

Six soil borings, SB-28 through SB-31, SB-65 and MW-24S, were advanced adjacent to the Relief Holder No.1 and No.2 to assess shallow fill and coal tar impacts above the groundwater table.

Soil with fill materials, coal, ash, brick, slag, were encountered from 1 foot below grade to 7 feet below grade in SB-28 through SB-31 and MW-24S. Glass fragments were observed in the top 3 feet of SB-65. Concentrations of PAHs were detected above the RES DEC, I/C DEC and GB PMC. ETPH was detected above the RES DEC, I/C DEC and/or the GB PMC in shallow soil samples from SB-29 through SB-31 and SB-65. Benzene was detected above the GB PMC in SB-29 (1 to 3 feet). Arsenic was detected above the RES DEC and I/C DEC in SB-28 and SB-32. Leachable arsenic was not detected. Concentrations of cyanide were detected in shallow soil samples at concentrations below the RES DEC.

Coal tar impacts, sheen and coal tar odors, were observed in SB-31 between 11 feet and 15 feet below grade within a silty-sand and silt layers that are situated above the groundwater level of approximately 15 feet below grade in MW-9S. Coal tar impacts were observed at the apparent water table in SB-28, SB-31, and SB-65. Coal tar impacts, blebs and odors, were observed from 25 feet to 36.5 feet below grade in SB-28 and staining and sheen was observed from 15 to 24 feet below grade. Coal tar impacts were observed in SB-65 from 17 to 25 feet below grade where the boring was terminated. SB-65 is located topographically downgradient from Relief Holder #1 and Relief Holder #2. Soil samples were collected just above the apparent watertable in SB-28 through SB-31. Concentrations of PAHs were detected above the GB PMC in SB-28, SB-29 and SB-31. ETPH was detected above the GB PMC in SB-31 (15 to 17 feet). VOCs were detected at concentrations below RSR criteria in SB-31 (15 to 17 feet).

2.2.2 Groundwater

On-site groundwater impacts were assessed under AOC-15. A summary of RSR exceedances in groundwater are summarized by shallow (water table) and deep monitoring wells that are screened within the overburden aquifer and bedrock wells for the Phase III ESA sampling completed during 2018. Figures 7, 8, and 9 provide a groundwater contour maps and inferred flow direction for the shallow (water table), deep overburden aquifer and bedrock aquifer beneath the site and off-site areas of investigation based upon October 2018 gauging data. Groundwater flow is northward to north-northwest in the shallow (water table), deep overburden and bedrock aquifer. Groundwater flow in the deep overburden and bedrock aquifers has a north-northwest component along Maple Street.

Coal tar staining and blebs were measured with an oil-water interface probe in the following monitoring wells during groundwater gauging events:

- Water table Monitoring Wells: MW-10SR, MW-20S, MW-24S
- Deep Monitoring Wells:MW-02D, MW-03D, MW-10M, MW-10D

Measurable coal tar was present in MW-2D, MW-3D, MW-10SR and MW-10D during the spring monitoring event.

As a result, these monitoring wells were not sampled during 2018.

During the fall sampling event, measurable tar was present in MW-10SR and MW-10D. In the remaining wells listed above, coal tar staining was observed on the oil-water interface probe during gauging.

Shallow (Water table) Monitoring Wells

2018 Spring Monitoring Event
VOCs were detected in 11 of the 16 on-site monitoring wells. The highest VOC concentrations occurred in MW-09S located in the east central portion of the site adjacent to the former Purifying House, Generator House and Gas Holder #1. Concentrations of 1,2,4-trimethylbenzene, naphthalene, and total xylenes were detected in MW-09S at concentrations above the SWPC. Concentrations of VOCs were also detected above the SWPC and/or the Res VC in the following wells (Figure 7):

- MW-7S at the eastern boundary adjacent to Maple Street;
- MW-3S located within Outer Substation at the northwest site boundary; and
- MW-30S located adjacent to the Inner Substation and western site boundary with 59/61 West Street.

VOCs were not detected in MW-11 and MW-12 upgradient of the Inner Substation to the south of the Hockanum River, MW-08SR within the Inner Substation, and MW-06S located adjacent to the Inner Substation near the Hockanum River. Chlorinated VOCs, chloroform and tetrachloroethene were detected at concentrations below the RSR criteria in MW-16S, MW-17S and MW-4S within or directly adjacent to the Inner Substation. Chlorinated VOCs are not associated with MGP sites and these are possibly from an upgradient source.

Concentrations of PAHs were detected in 11 of 13 shallow monitoring wells. Detected concentrations of one or more PAH compounds exceeded the SWPC in the following ten monitoring wells (Figure 7):

- Inner Substation: MW-2SR, MW-5S, and MW-8SR and;
- Outer Substation: MW-1S, MW-3S, MW-4SR, MW-7S, MW-9S, 25S, and MW-30S

The highest PAH concentrations were detected in MW-9S which is located adjacent to the former Purifying House (AOC-2) and former Relief Holder No.1 (AOC-3). Acenaphthylene was detected in MW-30S at the western site boundary adjacent to 59/61 West Street and PAHs were detected in MW-7S on the eastern site boundary and in MW-1S along the western and northern site boundary, respectively. As with VOCs, PAHs were not detected in MW-11S and 12S located to the south, upgradient of the Hockanum River and MW-06S located adjacent to the Inner Substation and Hockanum River.

ETPH was detected in 6 of 13 shallow monitoring wells sampling during the spring sampling event. Concentrations of ETPH exceeded the SWPC and/or the Res VC in MW-3S, MW-5S, MW-7S, and MW-9S. The highest concentration of ETPH was detected in MW-9S downgradient of the former Purifying House and adjacent to Relief Holder No. 1.

Total cyanide was detected in 2 of 13 monitoring wells sampled during the spring sampling event. Cyanide was detected at 62 µg/L above the SWPC in MW-9S downgradient of the former Purifying House (AOC-1).

Metals, including barium, total chromium, nickel and or zinc were detected in each of the shallow monitoring wells at concentrations well below the SWPC. In addition, copper was detected in MW-8SR at 8 µg/L well below the SWPC.

2018 Fall Monitoring Event

Three monitoring wells, MW-24S, MW-25S, and MW-30S, were installed and MW-4S was reinstalled with replacement (MW-4SR) (Figure 7). Groundwater samples were collected from each monitoring well except for MW-24. Coal tar blebs and staining were observed in MW-24S during development and as a result was not sampled.

VOCs were detected at concentrations below the SWPC and Res VC in MW-30S at the western property boundary. PCE was detected in MW-4SR. VOCs were not detected in MW-25S.

Acenaphthylene was detected in MW-30S and MW-4SR at concentrations above the SWPC (Figure 7). Other PAH compounds were detected in each of the monitoring wells at concentrations below the SWPC.

EPTH was detected in MW-30S at 550 µg/L and 640 µg/L above the SWPC and Res VC. ETPH was not detected in MW-25S and MW-4SR.

Cyanide was detected in MW-4SR and MW-25 at 13 and 14 µg/L at concentrations below the SWPC. Cyanide was not detected in MW-30S.

Metals, barium and/ zinc were detected at the monitoring wells at concentrations below the SPWC.

Deep Monitoring Wells

2018 Spring Monitoring Event

VOCs were not detected in the deep monitoring wells with the exception of MW-10M located adjacent the 22,000 ft^3 gas holders (AOC 3 and AOC 4) and within MW-18D at the northwest property boundary. Concentrations of naphthalene and toluene were detected in MW-10M at concentrations below the SWPC. Naphthalene was detected at 290 µg/L in MW-18D above the SWPC. Concentrations of PAHs and/ or individual SVOCs were detected in MW-6D, MW-7D, MW-12D and MW-18D. In MW-18D, acenaphthylene was detected at 4.2 µg/L above the SWPC of 0.30 µg/L (Figure 8)

ETPH was only detected in MW-5D within the Inner Substation and MW-18D at the northeastern site boundary. ETPH was detected in MW-5D at 74 µg/L below the SWPC. ETPH was detected at 890 µg/L above the SWPC in MW-18D.

Metals, barium, chromium, copper, lead, nickel vanadium and/or zinc were detected in deep monitoring wells at concentrations below the SWPC in each well with the exception of MW-1D near the northern property boundary. Copper and nickel were detected above the SWPC in MW-1D. The concentrations of these metals and elevated metals in MW-1D appear to be related to turbid groundwater conditions at the time of the sample. Cyanide was not detected in deep on-site monitoring wells.

MW-2D, MW-3D and MW-10D were not sampled because coal tar observations were noted within the monitoring wells during 2018 (Figure 8).

2018 Fall Monitoring Event

MW-07D and MW-18D were resampled during the fall of 2018. VOCs, PAHs, ETPH and cyanide were not detected in MW-07D in the fall sampling event. In MW-18D, concentrations of VOCs, including benzene, naphthalene and total xylenes were detected above the SWPC (Figure 8). PAHs including, naphthalene, 2-methylnaphthalene, acenaphthylene and phenanthrene and EPTH were detected above the SWPC. Cyanide was not detected.

Bedrock Monitoring Wells

Three bedrock monitoring wells, MW-02BR, MW-03BR and MW-10BR were sampled during 2018. Groundwater samples were collected from MW-02BR, MW-03BR, and MW-10BR during the May 2018 sampling event. MW-03BR and MW-10BR also re-sampled during the fall sampling event.

2018 Spring Monitoring Event

VOCs were not detected in MW-02BR during the spring sampling event. VOCs were detected in MW-03BR and MW-10BR at concentrations below the SWPC. VOCs, including benzene, ethylbenzene, naphthalene, and/or toluene were detected in MW-03BR and MW-10BR. Carbon disulfide was detected in MW-02BR and chloroform was detected in MW-10BR.

PAHs were not detected in MW-02BR during the spring sampling event. Acenaphthylene was detected in MW-10BR at 0.41 above the SWPC. The remaining PAHs were detected in MW-03BR and MW-10BR at concentrations below the SWPC (Figure 9).

ETPH was not detected in MW-02BR and MW-03BR. ETPH was detected at 340 µg/L in MW-10BR which exceeded the SWPC of 0.250 µg/L.

Metals, including barium, lead, vanadium and zinc were detected in the bedrock wells at concentrations below the SWPC. Total chromium was detected in MW-03BR and MW-10BR at 7 µg/L and 66 µg/L, respectively. Total cyanide was not detected in groundwater in the bedrock monitoring wells during the sampling event.

2018 Fall Monitoring Event

VOCs, PAHs, ETPH were not detected MW-03BR during the fall sampling event. In MW-10BR, chloroform (VOC), PAHs, and ETPH were detected at concentrations below the

SWPC. PAHs were not detected in MW-03BR but were detected at concentrations below the SWPC in MW-10BR. Barium was detected in MW-03BR and MW-10BR below the SWPC. Total chromium was detected in MW-03BR and MW-10BR at 5 µg/L and 1 µg/L, respectively. Total cyanide was not detected in either MW-03BR and MW-10BR.

Hockanum River Sediments

Sediment samples were collected from outfall pipes that discharge to the Hockanum River upgradient of the site to assess discharge sources to sediment to the river

- SED-7 was collected at the base of the plastic outfall pipe from Maple Street. that conveys drainage from upgradient properties
- SED-8 was collected from with the stone masonry constructed outfall at Maple Street. The outfall was associated with the former Hockanum Mill that reportedly discharged to the Hockanum River during the operation of the mill
- SED-9 was collected from concrete outfall pipe located near the intersection of the Maple Street and West Main Street.

One VOC, toluene, was detected at 24 mg/Kg in SED-09. VOCs were not detected in the remaining sediment samples. PAHs detected in each of the sediment samples. Concentrations of total PAHs ranged from 8.18 mg/Kg SED-07 to 26.57 mg/Kg in SED-08. Concentrations of metals including barium, copper, total chromium, lead, mercury, nickel, vanadium and zinc. The highest concentrations of metals occurred in SED-09. ETPH was detected in each sediment sample ranging from 79 mg/Kg in the duplicate of SED-07 to 630 mg/Kg in SED-09. PCBs were not detected.

Sediments SED-6A, SED-6B and SED-6C were collected to assess for copper concentrations in the vicinity of SED-06 location collected during the 2017 Phase III ESA. Concentrations of copper were detected at 22.1 mg/Kg, 28.9 mg/Kg and 83.7 mg/Kg in the sediment samples.

2.3 Off-Site Investigation and Findings

In 2018, off-site Phase III ESA investigations were completed to further assess the extent of coal tar-related soil and groundwater impacts beneath three privately-owned properties to the north and northwest of the site. Additional investigations were completed within the Maple Street ROW to the northeast and the USPS Access Road ROW located to the east of the site. A summary of off-site investigations is provided in the table below by location.

Location	Soil Borings	Monitoring Wells
51 West Street [Residence]	SB-60	No monitoring well installed
St. Joseph's Church [Parking Lot]	SB-61, SB-62, SB-66 and SB-67 MW-26S and 26D	MW-26S, MW-26D and MW-26BR Existing wells: MW-14S, MW-14D, MW-13S and MW-13D, MW-21S
17 Maple Street [Residence]	SB-63	MW-27S

	MW-27S (boring)	
Maple Street ROW	SB-64	MW-28S
USPS Access Road ROW	MW-23S (boring)	MW-23S

Eversource conducted outreach with off-site private property owners to secure access during the 3rd quarter of 2018. Once access was secured, each location was marked out for public utilities by CBYD and marked out by Underground Survey prior to commencing drilling activities.

Off-site soil impacts to the north of the site beneath the St. Joseph Church parking lot were addressed under AOC-16 and impacts within the Maple Avenue ROW are addressed under AOC-17. Off-site groundwater impacts for St. Joseph Church and Maple Street ROW are addressed under AOC-23.

2.3.1 Subsurface Soils

51 West Street

One soil boring, SB-60, was advanced on 51 West Street to add the lateral extent of coal tar impacts to the west of the site. SB-60 was advanced to 55 feet below grade. A soil sample was collected from SB-60 (40 to 42 ft) at the depth consistent with coal tar impacts observed in SB-13 at the northwestern corner of the site during the Phase III ESA. VOCs were detected with the PID at 3.6 ppm at 40 feet during field screening of soil samples from the boring. VOCs, naphthalene and xylene, were detected at 0.16 mg/Kg and 0.0064 mg/Kg, respectively. These concentrations were well below the RES DEC; however, the RSRs are not applicable to soils below 15 feet. ETPH and PAHs were not detected in the sample.

St. Joseph Church Parking lot

Four soil borings, SB-61, SB-62, SB-66, and SB-67 were advanced in the parking lot area. Three of the four boring (SB-61, SB-66, and SB-67) were advanced in the central portion of the property near the maintenance garage. The fourth soil boring, SB-62, was advanced on the eastern edge of the parking lot adjacent to the boundary with 17 Maple Street residence. Soil borings for three monitoring wells, MW-26S, MW-26D and MW-26BR, were advanced at the southern corner of the property.

Soils with visual coal tar impacts were observed in SB-61 from 22.5 to 29 feet below grade and from 30 to 44 feet below grade within the St. Joseph Church Parking Lot. The vertical and horizontal extent of impacts are generally consistent with the previous site investigations completed by Northeast Utilities Service Co. and with Tighe & Bond's 2017 investigation. Visual evidence of coal tar impacts was not observed in SB-66, and SB-67 which define the extent of impacts within the St. Joseph Church Parking Lot. Coal tar odors were observed in SB-66 from 20 feet to 35 feet below grade.

Petroleum-related VOCs, ETPH and PAHs were detected in SB-61 (23 to 25 feet) within soils that contained visual coal tar impacts and odors below the water table. However, because of the deep nature of the impacts below the water table RSR criteria does not apply. ETPH and PAHs were not detected in soil samples collected from SB-66 (27 to 29 feet) and SB-67 (23 to 25 feet). VOCs were detected in SB-66 (27 to 29 feet) and were

not detected in SB-67 (23 to 25 feet). The soil samples were collected at similar elevations as SB-61 based upon surface elevation changes.

At the eastern portion of the property in SB-62, visual evidence of coal tar impacts was not observed in SB-62 which defines the eastern extent of impacts within the St. Joseph Church Parking Lot. VOCs, PAHs and ETPH were not detected in a sample collected from SB-62 (31 to 33 feet). At the western portion of the property, no visual impacts or elevated PID readings were observed during the installation of MW-26S and MW-26D within overburden soils.

17 Maple Street

One soil boring, SB-63, was advanced to 45 feet below grade in the backyard of 17 Maple Street. No evidence of coal tar impacts was observed, and no elevated PID measurements of VOCs in soils from SB-63.

A soil sample was collected at 35 to 37 feet below grade which coincides with coal tar impacted layer observed in the nearby monitoring MW-20S in the St. Joseph Church Parking Lot. VOCs, PAHs, and ETPH were not detected. These results are consistent with results from SB-17 that was advanced further to the west within the backyard area on the property in the 2017 investigation.

Maple Street ROW Area

One soil boring, SB-64, was advanced to 50 feet below grade within the Maple Street ROW.

Previous investigations encountered a combination of apparent petroleum and coal tar impacts were noted within Phase III ESA SB-18 and previous soil borings within the Maple Street ROW. During the 2017 Phase III ESA investigation, staining with strong petroleum odors were in nearby soil boring SB-18 from 19 to 23 feet below grade. Fuel oil impacts were previously encountered from 15 to 27 feet below grade on 8 Maple and 12 Maple Street properties further to the south during a previous site investigation by Northeast Utilities Service Co. During the Phase I ESA, a 1,000-gallon leaking underground storage tank (LUST) used for heating oil storage at the former 8 Maple Street Residence was identified in CTDEEP Spill report (Case No. 2003-06991) during the Phase I ESA. A fuel distribution company, Gottier Fuel is located upgradient of the site at 221 West Main Street.

A soil sample was collected from SB-64 (38.5 to 40 ft) at the depth consistent with coal tar impacts observed in MW-20S within the St. Joseph Church driveway to the northwest. VOCs were not detected with the PID during field screening of soil samples from the boring. VOCs, ETPH and PAHs were not detected in the sample.

2.3.2 Off-site Groundwater Impacts

Off-site groundwater impacts (AOC-23) are summarized below by respective areas: St. Joseph Church property, 17 Maple Street and the Maple Street ROW.

St. Joseph Church Property

Four monitoring wells (MW-14S, MW-14D, MW-19S, and MW-21S) were sampled during the spring sampling event. MW-13S and MW-13D were not sampled during the spring

event because MW-13D was paved over and MW-13S was filled with sediment because of a damaged manhole on the flush-mounted road box. MW-14S and MW-14D were also noted as having damaged road boxes. MW-13S, MW-13D, MW-14S, and MW-14D were developed in 2018 as part of the Phase III ESA.

Seven monitoring wells were sampled during the 2018 sampling event. Four existing monitoring wells, MW-13S, MW-13D, MW-14S, and MW-14D and three newly installed monitoring wells, MW-26S, MW-26D and MW-26BR were sampled during the fall event in 2018.

MW-20S was not sampled during 2018 Phase III ESA activities because coal tar was observed during the development of the monitoring well in 2017.

Shallow (Water table) Monitoring Wells

2018 Spring Sampling Event

VOCs and ETPH were not detected in MW-14S, MW-19S and MW-21S. Low levels of PAHs (naphthalene, phenanthrene, and/or acenaphthene) at concentrations below the SWPC. Bis(2-Ethylhexyl)phthalate, a plasticizer, was detected in MW-19S. This detection could be related to a possible lab contaminant. Total cyanide was detected at 14 µg/L in MW-14S below the SWPC. Total cyanide was not detected in MW-19S and MW-21S.

Metals, including barium, total chromium, nickel, and/or zinc, were detected but were at concentrations below the SWPC.

2018 Fall Sampling

VOCs, PAHs and ETPH were not detected in MW-13S, MW-14S, and MW-26S. Total cyanide was detected at 14 µg/L in MW-14S. Total cyanide was not detected in MW-13S and MW-26S.

Bis(2-Ethylhexyl)phthalate, a plasticizer, was detected in MW-13S and diethylphthalate was detected in MW-13S. These are identified by CTDEEP as common laboratory contaminants.

Metals, including barium, total chromium, copper, nickel, and/or zinc, were detected but were at concentrations below the SWPC. Total cyanide was not detected in MW-13S and MW-26S.

Deep Monitoring Wells

2018 Spring Sampling Event

Petroleum-related VOCs and PAHs were detected in MW-14D at concentrations below RSR criteria. Total cyanide was detected at 69 µg/L above the SWPC of 52 µg/L. ETPH was detected at 160 µg/L, Metals, including barium, total chromium, copper, nickel, and/or zinc, were detected but were at concentrations below the SWPC.

2018 Fall Sampling

Petroleum-related VOCs and 1,1,1-Trichloroethane, a chlorinated VOC, were detected in MW-14D at concentrations below RSR criteria. Naphthalene and chloroform (chlorinated VOC) was detected at 1.3 µg/L, respectively in MW-26D below the RSR criteria. VOCs were not detected in MW-13D.

Acenaphthylene was detected above the SWPC in MW-14D and MW-26D. The remaining detections of PAHs were detected in each monitoring well at concentrations below the SWPC. ETPH was detected at 320 µg/L in MW-14D above the SWPC of 250 µg/L. ETPH was not detected in MW-13D and MW-26D. Total cyanide was not detected in deep monitoring wells during the fall sampling.

Metals, including barium, nickel, vanadium and/or zinc, were detected but were at concentrations below the SWPC. Total chromium was detected between 4 µg/L and 53 µg/L.

Bedrock Monitoring Well

VOCs, ETPH and cyanide were not detected in MW-26BR. Naphthalene was detected at 0.1 µg/L, the laboratory detection limit and well below the SWPC of 210 µg/L. Barium was detected below the SWPC and total chromium was detected at 2 µg/L.

17 Maple Street

MW-27S was installed on October 1, 2018. VOCs and cyanide were not detected in MW-27S. Naphthalene (PAH) was detected at 0.15 µg/L and ETPH was detected at 69 µg/L. Both concentrations were below the SWPC.

Metals, barium, nickel and zinc, were detected but at concentrations below the SWPC.

Maple Street ROW

MW-28S was installed on July 30, 2018 and was sampled as part of the 2018 fall sampling event. VOCs, ETPH, and cyanide were not detected in MW-28S. Naphthalene (PAH) was detected at 0.1 µg/L below the SWPC of 210 µg/L. Barium and nickel were detected at concentrations below the SWPC.

MW-23S was sampled as part of the 2018 spring sampling event. MW-23S is along the U.S.P.S Access Road to the east of the site. VOCs, PAHs, ETPH and cyanide were not detected in MW-23S. Metals, including barium, total chromium, nickel, vanadium, and zinc, were detected but were at concentrations below the SWPC.

Section 3
Quality Assurance / Quality Control

Quality assurance/quality control (QA/QC) measures were implemented as part of the Phase III ESA including the collection of field QA/QC samples and laboratory sample analysis via RCP analytical methods. A summary of the Phase III ESA QA/QC measures are provided below. A full data quality assessment/ data usability evaluation will be completed as part of the Final Phase III ESA report.

Field QA/QC samples included the collection of blind duplicate samples for each sample media (soil, groundwater, sediment) and the collection/submittal of blank samples (equipment blank and trip blank samples) for groundwater. Duplicate sample results are provided next to the primary sample on Table 2 through Table 4, respectively.

Phase III ESA samples were analyzed by Phoenix in accordance with CTDEEP's RCPs. Each laboratory analytical data package contains a Laboratory Analysis QA/QC Certification Form which indicates that the laboratory followed the specified QA/QC performance criteria. Phase III ESA analytical samples were submitted within laboratory-provided and preserved sample jars and were analyzed within analytical method within holding times. A chain of custody accompanied the samples from collection to the laboratory.

The RCP analytical data packages provide a summary of QA/QC within the back of each data analytical data package. Tighe & Bond conducted an initial assessment of each laboratory report summarizing any preliminary issues such as proper reporting units, meeting necessary reporting limits, and following proper sample management. These tables are provided at the beginning of Appendix D. During our initial review of the laboratory reports the following issues were identified:

- Dilutions were required for several SVOCs, VOCs, and ETPH in various soil samples due to matrix interference or the presence of target and/or non-target compounds. Due to the dilutions, various samples had elevated reporting limits.
- Some soil samples exhibited suppression of the last internal standard in the low-level VOCs analysis; the affected compounds were reported from the high-level VOA. This resulted in some elevated reporting limits.
- The VOA for soil sample HA-10 (2-2.5') was received with pH <12. pH was adjusted at the lab; however, bias cannot be ruled out.

Several non-conformances were identified for non-target compounds that are not COCs at the site. In instances where non-conformances were identified for site-related COCs (i.e., metals and SVOCs), slight variability and biases were identified. A summary of all non-conformances is included as Table 6 in Appendix B. A description of site-related COC non-conformances is provided below.

The following non-conformances were identified for soil samples:

- Metals (Arsenic, Nickel, Mercury, Barium, Copper, and Lead)
    - In samples DUP-102, HA-10 (2-2'), HA-11 (1-2'), SB-34 2-4 FT, SB-35 (5-7 FT), SB-38 (5-7 FT), SB-39 (3-5 FT), SB-40A (5.5-7.5 FT), SB-41 1-3 FT, SB-42 2-4 FT, SB-44 (10-12`), SB-44 1-3 FT, SB-45 0-2 FT, SB-46 (5-7 FT), SB-47 2-4 FT, SB-53 (3-5 FT), SB-65 1-3 FT, laboratory

sample/duplicate RPDs exceeded the method criteria; as such, variability is possible. Copper was reported in a laboratory blank causing a possible high bias in sample SB-33(5-7ft). The bias does not affect data usability because the sample results were either not detected or well below applicable criteria.

- PAHs
    - Some PAH compounds in samples SB-36 (2 to 4 feet) and SB-37(2 to 4 feet) had elevated Laboratory Control Sample (LCS) and Laboratory Control Sample Duplicate (LCSD) RPDs; as such, variability is possible. The data usability is not likely affected because sample results appear consistent with nearby samples.

The following non-conformances were identified for groundwater samples:

- CT ETPH
    - In laboratory report GCA58993, the sample collected from MW-14D had poor surrogate recovery; as such, a low bias is possible. CT ETPH was reported in MW-14D at a concentration of 160 µg/L. The applicable criteria for CT ETPH is 250 µg/L; as such, it is plausible that without the bias, MW-14D could have exceeded the applicable criteria. In the fall sampling event CT ETPH was reported above applicable criteria in MW-14D.
- SVOCs
    - In laboratory report GCA51710, the sample collected from MW-4S had elevated surrogate recovery; as such, a high bias is possible. Data usability was not likely affected because SVOCs were not reported above laboratory reporting limits in the sample from MW-4S.
    - In laboratory report GCB96386, the samples collected from MW-14D, MW-14S, and the filtered and unfiltered samples from MW-26D and MW-30S had poor surrogate recovery; as such, a low bias is possible. Four of the six samples had SVOCs at concentrations above applicable criteria, the remaining two samples did not have SVOCs reported at concentrations above laboratory reporting limits. Results for these samples were consistent with previous sampling events. It is unlikely that the data usability was affected.
    - In laboratory report GCA61339, naphthalene was reported in the laboratory blank referenced to samples MW-3BR, MW-10BR, MW-18D, and MW-23S; as such, a high bias for naphthalene is possible. Data usability is not likely affected because naphthalene was not reported at concentrations near the applicable criteria in the above samples.

There were some variations in the relative percent difference (RPD) for soils and groundwater. The majority of the RPDs were within the acceptable range for the majority of the compounds. There were some compounds in soils and groundwater that were detected outside the 50% RPD for soils and groundwater. This is attributable to collection of shallow subsurface soils within soils within fill material which is highly variable. Variations in groundwater could be attributable to slight variations in turbidity during sampling.

Equipment blanks were collected during the spring and fall groundwater sampling events. Zinc was detected at 7 µg/L and bis(2-Ethylhexyl) phthalate was detected at

2.6 µg/L in the May 30, 2018 sampling event. These are identified as common laboratory contaminants by the CTDEEP. Naphthalene was detected at 0.14 µg/L just above the detection limit of 0.10 µg/L in the equipment blank for the bladder bump for the October 24, 2018 sampling. Groundwater wells sampled with this equipment could have a high bias. VOCs were not detected in trip blanks.

Based on the review of the non-conformances and the laboratory certification documentation, each lab report meets CTDEEP RCP. The non-conformances identified do not adversely affect the usability of the laboratory data. In those areas where COCs were involved, the data quality is only slightly affected by these non-conformances and is sufficient to satisfy the data quality objectives (DQOs) for the project.

Section 4
Conceptual Site Model

A CSM is a representation of an environmental system at a site that is used as a tool to identify releases, migration pathways, potential receptors, and ultimately risk. The CSM is used to develop work plans and provide a framework to address issues that arise during the investigation of a site. The CSM is refined throughout the site characterization process as new data are acquired. The final CSM will fully define the environmental system at the site and validate the hypotheses regarding the environmental fate of released contaminants.

A final, validated CSM includes the following components:

- Description of the site and environmental setting;
- Identification of AOCs and associated COCs;
- Potential release mechanisms for COCs at each AOC;
- Evaluation of migration pathways and locations at which environmental media are most likely to have been impacted by a release;
- Identification of AOCs at which releases have occurred as well as AOCs at which no releases have occurred;
- Evaluation of the nature and three-dimensional extent of contaminants; and
- Data and rationale to support conclusion.

Table 5 provides a preliminary CSM summary that was developed for the Rockville MGP site and has been updated based upon the findings of the 2018 Phase III ESA activities. A full CSM will be provided as part of the Phase III ESA Report. Based upon the CSM, additional investigations are needed to assess the nature and extent of impacts at the site and off-site AOCs as discussed below in Phase III ESA data gaps.

The following off-site AOCs related to surface soil impacts were not assessed during the Phase III ESA: AOC-19 Suspected Fill #12 and #14 Maple Street, AOC-21 Off-site Surface Soils Maple Street School and AOC-22 Off-site Surface Soils 175 Union Street. Historic PAH impacts in surface soils were determined to attributable to off-site source (airborne deposition) based upon information encountered during the preparation of the Phase I ESA for the site.

Off-site Petroleum Impacts #8 and #12 Maple Street (AOC-18) were not assessed during the Phase III ESA because the petroleum impacts appear to be tied to a LUST record for a 1,000-gallon heating oil UST at #8 Maple Property that was encountered during the Phase I ESA

Section 5
Well Receptor Survey

Tighe & Bond completed a Water Supply Well Receptor Survey during November 2017 in general accordance with CTDEEP's *Water Supply Well Receptor Survey Guidance Document* dated September 2009 (revised January 2015). The findings were provided in the 2017 Annual Report.

The 2017 Annual Report recommended additional efforts will be made to assess if the water supply well record identified for 13 Windsor Avenue was still in service and being utilized by the property owner (Figure 10). The private well record is provided below:

Date	Property	Distance (Approx.)	DCP Well Report Information
3-30-1971	13 Windsor Avenue	~690 feet (west)	Domestic Well Permit (#3902) for servicing 5 people. Bedrock well was completed to a depth of 127 feet below grade. Property currently has water service from the CT Water Co.

Eversource contacted the property owner to assess if the water supply well was still in service. The owner, Mr. John Regina, indicted that the buildings were connected to city water since the mid-1980s, and water from the well was terminated.

Section 6
Phase III ESA Data Gaps

During the completion of the Phase III ESA in 2018, data gaps were identified in process of assessing the on-site and off-site impacts. CTDEEP requires that data gaps be fully investigated as part of the conceptual site model process prior to the remediation of a site.

Tighe & Bond has identified the data gaps during the Phase III ESA:

- Off-site Delineation of Coal Tar Impacts to West of Site: Coal tar impacts sheens and odors were encountered in soil boring in SB-40/ MW-30S at the western boundary of the site. Impacts were encountered between 8 feet below grade and extended to 15 feet below grade. Concentrations of ETPH exceeds the SWPC and RES VC and acenaphthylene (PAH) was detected above the SWPC. Access was not provided to the 59/61 West Street property owner during the 2018 Phase III ESA. A sanitary sewer line is located adjacent to the impacted soil area. The sanitary sewer continues to the west where it crosses West Street.

  Additional delineation of soil and groundwater impacts are needed to the west of the site within the West Street ROW.

- Delineation of Benzo(a) Pyrene above the SEH Threshold Concentrations at HA-18: Benzo(a) pyrene was detected above the SEH Condition Threshold Concentration in a 1 to 2-foot sample collected from HA-18. Delineation of the concentrations of benzo(a) pyrene exceeding the SEH threshold is needed. On December 28, 2018, CTDEEP indicated that discovery of additional soils above the SEH Condition Threshold Concentration are covered under the February 26, 2018 SEH Notification and that a separate SEH Notification is not required.

- Assessment of Extent of PMC Soils within the Inner Substation Area: Soil containing fill materials were observed within surficial soil and soil borings completed within the Inner Substation. Concentrations of PAHs and EPTH were detected above the GB PMC. However, these COCs were not detected in groundwater monitoring wells above the SWPC downgradient of the Inner Substation. The RSRs allow for an exemption to the PMC if quarterly groundwater monitoring for COCs is in compliance with the SWPC. Additional assessment is proposed to assess these soils for this RSR exemption.

- On-site Deep Tar Delineation and Groundwater Assessment: Tar impacts were encountered surrounding the Gas Holder #1 and Gas Holder #2 (AOC-3 and AOC-4) and downgradient impacts (AOCs). Bedrock slopes northward toward the St. Joseph Church property. Coal tar blebs were observed in MW-03D and deep groundwater impacts with concentrations exceeding RSR criteria were detected at the northern property line. Investigation is needed to assess the deep extent of coal tar along the northern site boundary.

- Off-site Groundwater Assessment- St. Joseph's Church: ETPH and cyanide were detected in MW-14D above the SPWC and acenaphthylene was detected in MW-26D and MW-14D downgradient of the site. Additional characterization of concentrations in groundwater is needed to assess seasonal changes to

concentrations and extent of impacts. In addition, further groundwater assessment is recommended to assess if ETPH concentrations that are above the GWPC attenuate prior West Street which is the dividing line between GA and GB groundwater areas. Tighe & Bond will utilize the groundwater information to explore an alternate SWPC at downgradient wells to achieve compliance with the SWPC and assessment for the suitability of monitored natural attenuation at the site.

- Water Supply Service: Water supply service was not provided by the Connecticut Water Company for four properties downgradient within a 1,000-foot radius of the site during the water supply well receptor survey completed by Tighe & Bond in 2017.

  Rockville/Vernon:
  - 8 Charter Road Residence

  Ellington:
  - 7 Ertel Drive Residence
  - 2 Charter Road Residence
  - 4 Charter Road Residence

Additional efforts will be made to assess if these properties have active water service during 2019.

Section 7
VRP Schedule

Eversource submitted a VRP schedule, dated January 3, 2017, to CTDEEP in the 2016 CTDEEP Voluntary Remediation Program, Site Investigation and LEP Verification, Former Rockville Manufactured Gas Plant Site REM Id. No. 12390.

The following revised VRP schedule has been updated based upon the recently completed Phase III ESA at the site. A summary of activities that were completed in 2018 and proposed site investigation and remediation-related activities for 2019 and beyond is provided below.

Rockville Former MGP Site VRP Investigation and Remediation Schedule		
Task	**Completion Timeframe[1].**	**Notes**
Completed in 2018 Calendar Year		
On-Site Investigation	3rd and 4th Quarters	Phase III ESA investigations on-site and off-site were completed once access to private properties was secured and substation access was coordinated with Eversource. Water Well Supply Receptor Search follow-up completed at 13 Windsor Avenue.
Off-Site Investigation	3rd and 4th Quarters	
Proposed Schedule for 2019 Calendar Year		
On-site Supplemental Phase III ESA Investigations	1st – 4th Quarters	Additional investigations are needed to assess Phase III ESA data gaps
Off-site Supplemental Phase III ESA Investigations	1st – 4th Quarters	Additional investigations are needed to assess Phase III ESA data gaps. Additional water supply well search
Evaluation of Remedial Alternatives and Costs	3rd Quarter	Evaluate various remedial alternatives such as capping and Monitored Natural Attenuation as well as active technologies
Remedial Action Plan	4th Quarter	Prepare once Remedial Alternatives and Institutional Controls have been determined
Proposed Schedule for 2020 Calendar Year		
Institutional Controls including application to CTDEEP for approval, ELURs and subordination agreements	2nd and 3rd Quarters	Evaluate Environmental Land Use Restrictions, Engineered Controls, and use of Alternative Criteria, Legal Assistance will be required

Proposed Schedule for 2020 Calendar Year (contd.)		
Public Notice	2rd Quarter	30-day notice required
Bid Documents and Bidding	3rd to 4th Quarters	In accordance with Eversource procedures
Proposed Schedule for 2021 Calendar Year and Beyond		
Remedial Action	1st to 2nd Quarters	Assumes 6-month (Construction) timeframe
LEP Verification	1st to 3rd Quarters	Prescribed VRP Verification Form and Report
Groundwater Monitoring	To be determined	Long term groundwater monitoring may be required as part of an MNA Remedial Approach
Meetings and Reports		
CTDEEP Annual Reports	2019, 2020, 2021	Meetings with CTDEEP as needed for approvals

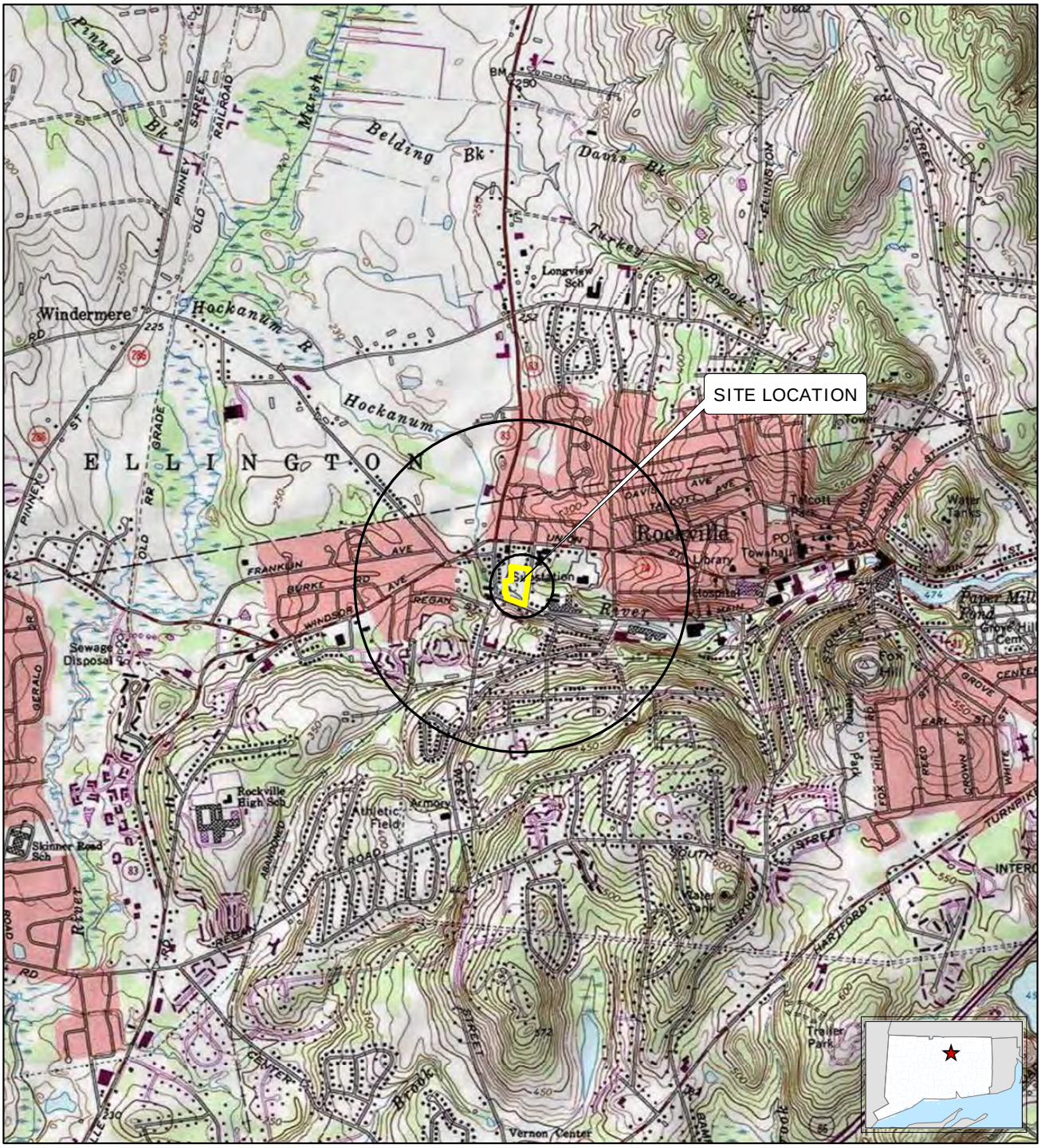
1. Timeframes to complete Tasks are best estimates. In the event that delays prevent the completion of a Task within the estimated Timeframe, CTDEEP will be notified.

This VRP schedule will be revised annually as new data are acquired through the site investigation and remedial planning process.

Tighe & Bond will work with Eversource in 2019 to further assess data gaps identified during the course of the Phase III ESA with the goal of gaining a better understanding of the conceptual site model.

Tighe&Bond

APPENDIX A



Legend

Site Boundary

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Engineers | Environmental Specialists

Based on USGS Topographic Map for Rockville, CT Revised 1984.
Contour Interval Equals 10 Feet.
Circles indicate 500-foot and half-mile radii

1:24,000
0 1,000 2,000
Feet

N

FIGURE 1
SITE LOCATION MAP
Eversource Rockville
Former MGP Site
Rockville, Connecticut

December 2018

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N-0915

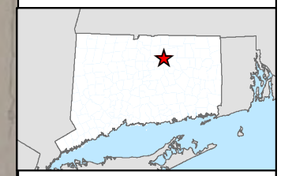


FIGURE 2:
CURRENT SITE CONDITIONS
AND HISTORIC STRUCTURES

LEGEND

- Stream
- Fence Line
- Historic Structure
- Sanitary Sewer Manhole
- Sanitary Sewer
- Site Boundary
- Approximate Parcel Boundary

LOCUS MAP



0 20 40 Feet

1 inch = 40 feet

REFERENCES

1. Based on 2012 Statewide Leaf-Off Orthophotography, Courtesty of University of Connecticut.
2. Figure 2 Site Diagram of Rockville MGP Site Showing Test Boring Locations, Topography and Piezometer Locations in the Hockanum River. Prepared by Northeast Utilities Service Company April 24, 1991.
3. Town of Vernon GIS: http://gis.vernon-ct.gov/newviewer/index.html

NOTES

SWPC - Surface Water Protection Criteria
RES VC - Residential Volitalization Criteria
I/C VC - Industrial Commercial Volitalization Criteria
* - Additional Polluting Substance Criteria

Eversource
Former Rockville MGP Site
Rockville, Connecticut
December 2018

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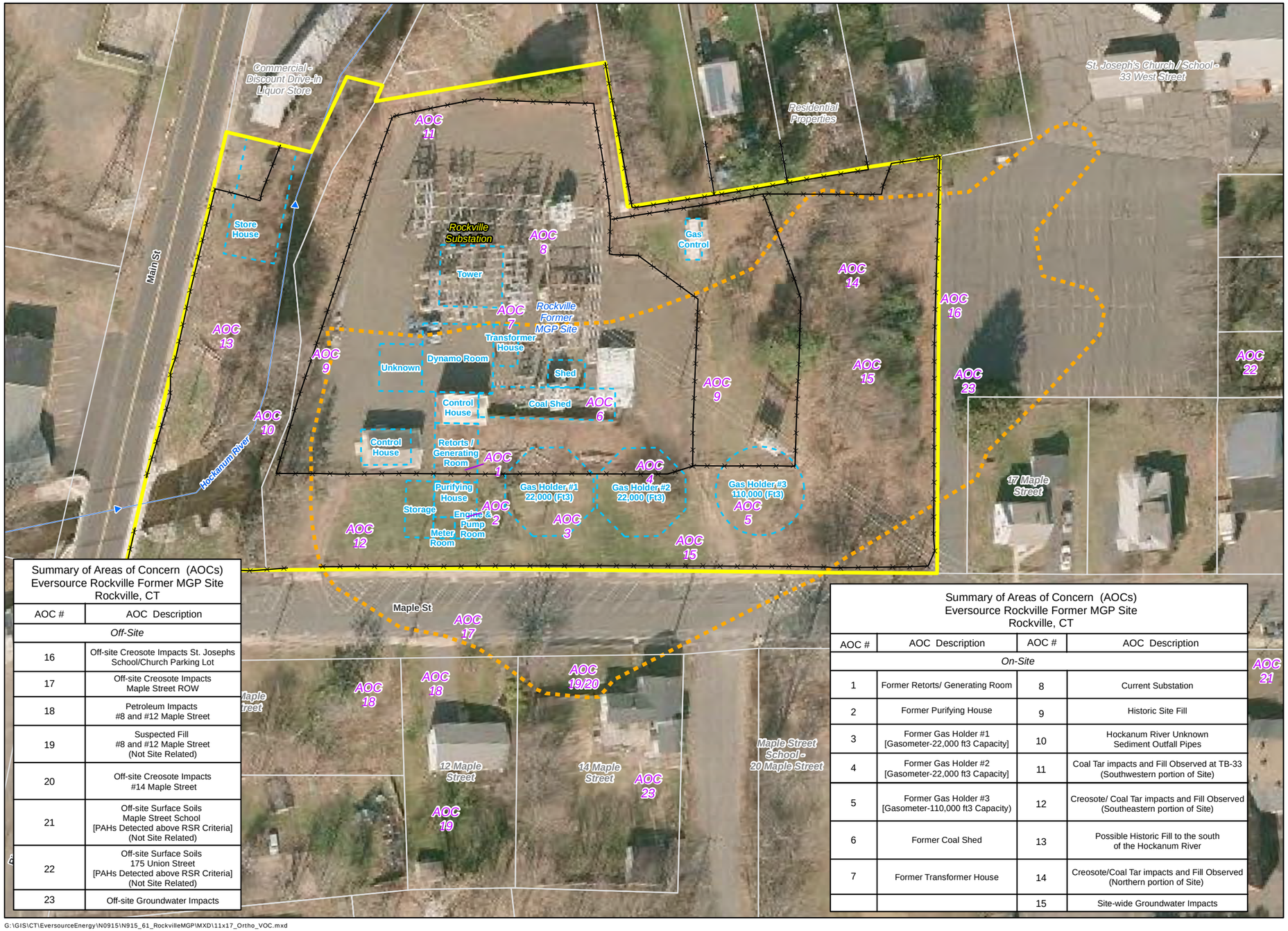

Summary of Areas of Concern (AOCs)
Eversource Rockville Former MGP Site
Rockville, CT

AOC #	AOC Description
Off-Site	
16	Off-site Creosote Impacts St. Josephs School/Church Parking Lot
17	Off-site Creosote Impacts Maple Street ROW
18	Petroleum Impacts #8 and #12 Maple Street
19	Suspected Fill #8 and #12 Maple Street (Not Site Related)
20	Off-site Creosote Impacts #14 Maple Street
21	Off-site Surface Soils Maple Street School [PAHs Detected above RSR Criteria] (Not Site Related)
22	Off-site Surface Soils 175 Union Street [PAHs Detected above RSR Criteria] (Not Site Related)
23	Off-site Groundwater Impacts

Summary of Areas of Concern (AOCs)
Eversource Rockville Former MGP Site
Rockville, CT

AOC #	AOC Description	AOC #	AOC Description
On-Site			
1	Former Retorts/ Generating Room	8	Current Substation
2	Former Purifying House	9	Historic Site Fill
3	Former Gas Holder #1 [Gasometer-22,000 ft3 Capacity]	10	Hockanum River Unknown Sediment Outfall Pipes
4	Former Gas Holder #2 [Gasometer-22,000 ft3 Capacity]	11	Coal Tar impacts and Fill Observed at TB-33 (Southwestern portion of Site)
5	Former Gas Holder #3 [Gasometer-110,000 ft3 Capacity)	12	Creosote/ Coal Tar impacts and Fill Observed (Southeastern portion of Site)
6	Former Coal Shed	13	Possible Historic Fill to the south of the Hockanum River
7	Former Transformer House	14	Creosote/Coal Tar impacts and Fill Observed (Northern portion of Site)
		15	Site-wide Groundwater Impacts

FIGURE 3: POTENTIAL AREAS OF CONCERN (AOC)

LEGEND

- Fence Line
- Historic Structure
- Site Boundary
- Approximate Lateral Extent of Creosote/Coal Tar Impacts
- Approximate Parcel Boundary
- AOC 17 — Area of Concern

LOCUS MAP



0 60
Feet
1 inch = 60 feet

NOTES

1. Based on 2012 Statewide Leaf-Off Orthophotography, Courtesty of University of Connecticut.
2. Figure 1 Surficial Soil, River Sediment and Test Boring Locations Performed During 1992, 1993 and 1994 at the Rockville Substation, Vernon, Connecticut Prepared by Northeast Utilities Service Co. dated 1/25/95.
3. Town of Vernon GIS: http://gis.vernon-ct.gov/newviewer/index.html

See Table 1: Area of Concern (AOC) and Conceptual Site Model Summary Table for AOC descriptions.

Eversource Rockville 14W
Former MGP Site
Rockville, Connecticut

December 2018

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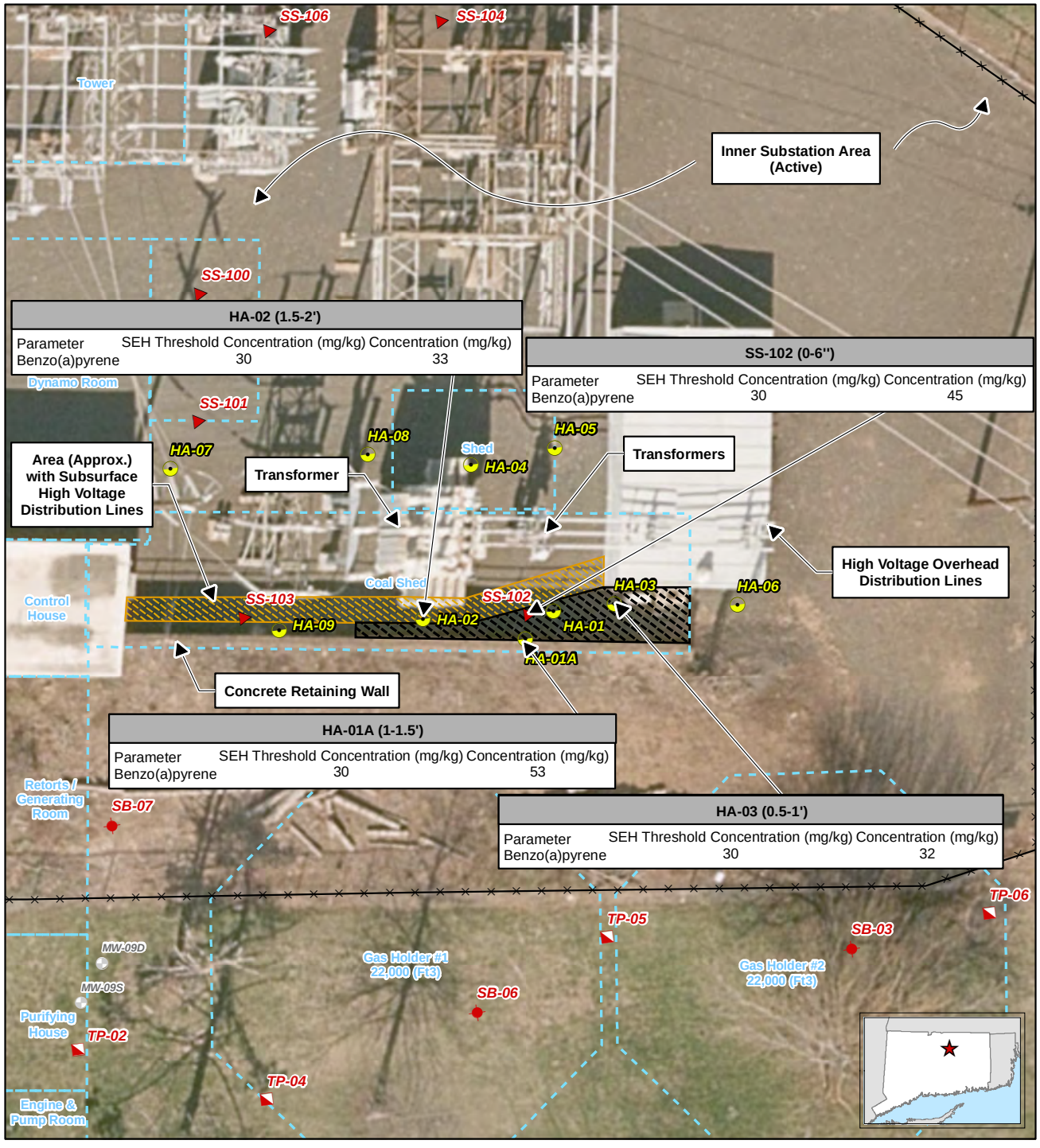

Legend

- Existing Monitoring Well
- Phase III ESA Locations
  - Soil Boring
  - Surface Soil Sample
  - Test Pit
- SEH Investigation Locations
  - Hand Auger
  - Fence Line
  - Historic Structure
- High Voltage Subsurface Electric Lines
- Site Boundary
- Concentrations of Benzo(a)pyrene Above SEH Threshold Concentration

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Note: Only concentrations above the SEH threshold shown.

Based on 2016 Statewide Leaf-Off Orthophotography. Courtesy of CTECO.

1:240

0 10 20
Feet

FIGURE **4**
SIGNIFICANT ENVIRONMENTAL HAZARD (SEH) **INVESTIGATION** SAMPLE LOCATIONS
Eversource
Rockville Former MGP Site
Rockville, Connecticut

December 2018

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N-0915

FIGURE 5 SAMPLE LOCATION SUMMARY

LEGEND

Previous Site Investigations
- Sediment Sample
- Surface Water Sample
- Monitoring Well
- Soil Boring
- Subsurface Soil
- Vapor Well
- Test Pit Location

2018 Phase III Sample Locations
- Hand Auger Location
- Sediment Sample
- Soil Boring Location
- Overburden Monitoring Well ("S", "D") and Bedrock Monitoring Well ("BR")

Significant Environmental Hazard Sample Locations 2018
- Hand Auger Location

- DNAPL (Tar) - Staining / Globules Observed During the Gauging and Development Activities
- Petroleum Impacts (Staining or Odor) in Soils
- Visual Creosote/Coal Tar in Soils
- Creosote/Coal Tar Odor in Soils
- No Visual Impact in Soils
- RSR Exceedance
- Stream Flow
- Fence Line
- Historic Structure
- Approximate Lateral Extent of Creosote/Coal Tar Impacts
- Site Boundary
- Approximate Parcel Boundary
- Sanitary Sewer Line
- Sanitary Sewer Manhole

LOCUS MAP



0 40 80 Feet

1 inch = 40 feet

REFERENCES

1. Based on 2012 Statewide Leaf-Off Orthophotography, Courtesty of University of Connecticut.
2. Figure 2 Site Diagram of Rockville MGP Site Showing Test Boring Locations, Topography and Piezometer Locations in the Hockanum River. Prepared by Northeast Utilities Service Company April 24, 1991.
3. Town of Vernon GIS: http://gis.vernon-ct.gov/newviewer/index.html
4. Surveys Conducted by Kratzert, Jones & Associates in 2016 and 2017

NOTES

1. See Table 1: Area of Concern (AOC) and Conceptual Site Model Summary Table for AOC descriptions.
2. R = Monitoring Well Re-Install
3. "S" wells are screened in overburden at the water table.
"D" wells are screened in overburden at the bedrock interface.
"BR" wells are proposed to be installed within the bedrock.

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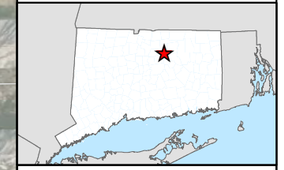
FIGURE **6**:
BEDROCK SURFACE ELEVATION CONTOUR MAP

LEGEND

- MW-10BR 171.57' — Bedrock Surface Elevation (w/ Approximate North American Vertical Datum Elevation 1988)
- Inferred Bedrock Surface Slope Direction
- Hockanum River
- Fence Line
- Site Boundary
- Approximate Parcel Boundary

LOCUS MAP



0 30 60 Feet

1 inch = 60 feet

NOTES

1. Bedrock Elevations are Approximate and Based Upon Dirlling Observations and Boring Logs From Previous Investigations
See Boring Logs For Depth information and Drilling Observations
2. Bedrock elevation at MW-3BR is calculated using information from MW-03D

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REFERENCES:
1. Based on 2016 Statewide Leaf-Off Orthophotography, Courtesty of University of Connecticut.
2. Figure 2 Site Diagram of Rockville MGP Site Showing Test Boring Locations, Topography and Pieometer Locations in the Hockanum River.
Prepared by Northeast Utilities Service Company April 24, 1991.
3. Town of Vernon GIS: http://gis.vernon-ct.gov/newviewer/index.html
4. Surveys Conducted by Kratzert, Jones & Associates in 2016, 2017, and 2018.

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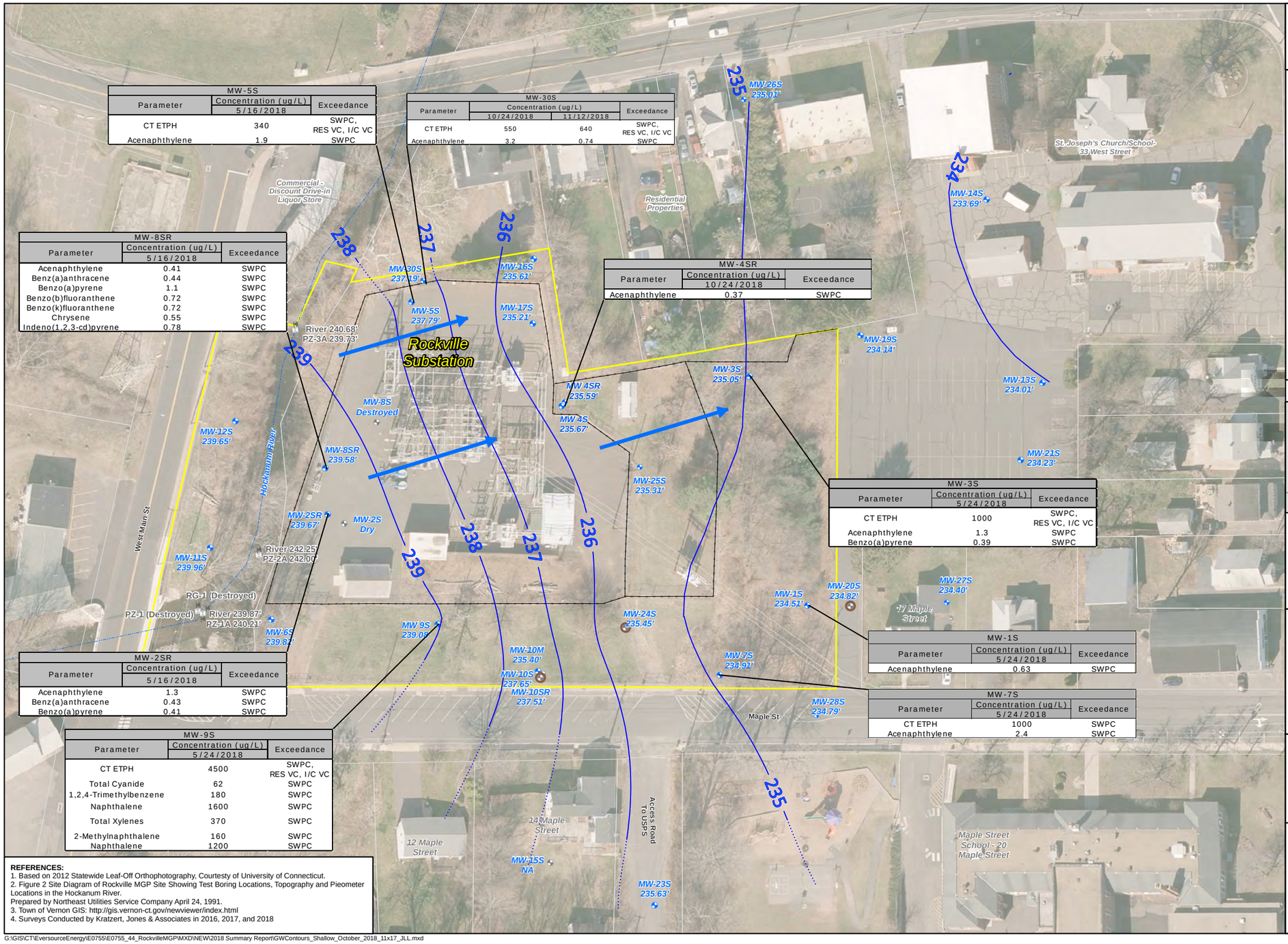

FIGURE 7:
SHALLOW WATER TABLE CONTOURS AND 2018 ANALYTICAL EXCEEDANCE SUMMARY

LEGEND

- MW 3S 235.05' — Monitoring Well Gauged and Sampled in 2018 (w/ North American Vertical Datum Elevation 1988)
- Monitoring Well Gauged But Not Sampled in 2018
- NAPL Detected in Monitoring Well During 2018 Gauging Event
- Piezometer
- River Gauge and River Level Measurements
- Groundwater Elevation Contour (October 24, 2018)
- Inferred Groundwater Elevation Contour (October 24, 2018)
- Inferred Groundwater Flow Direction
- Stream
- Fence Line
- Site Boundary
- Approximate Parcel Boundary

LOCUS MAP



0 35 70 Feet

1 inch = 70 feet

NOTES

NM - Not Measured
NA -Not Accessible (Not Measured)
ug/L - Micrograms Per Liter
SWPC - Surface Water Protection Criteria
RES VC - Residential Volitalization Criteria
I/C VC - Industrial Commercial Volitalization Criteria
* - Additional Polluting Substance Criteria Depth To Groundwater Ranged From ~8 Feet to ~34 Feet. See Table 1 For Screen Intervals And Depth To Water Measurements

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REFERENCES:
1. Based on 2012 Statewide Leaf-Off Orthophotography, Courtesty of University of Connecticut.
2. Figure 2 Site Diagram of Rockville MGP Site Showing Test Boring Locations, Topography and Pieometer Locations in the Hockanum River.
Prepared by Northeast Utilities Service Company April 24, 1991.
3. Town of Vernon GIS: http://gis.vernon-ct.gov/newviewer/index.html
4. Surveys Conducted by Kratzert, Jones & Associates in 2016, 2017, and 2018

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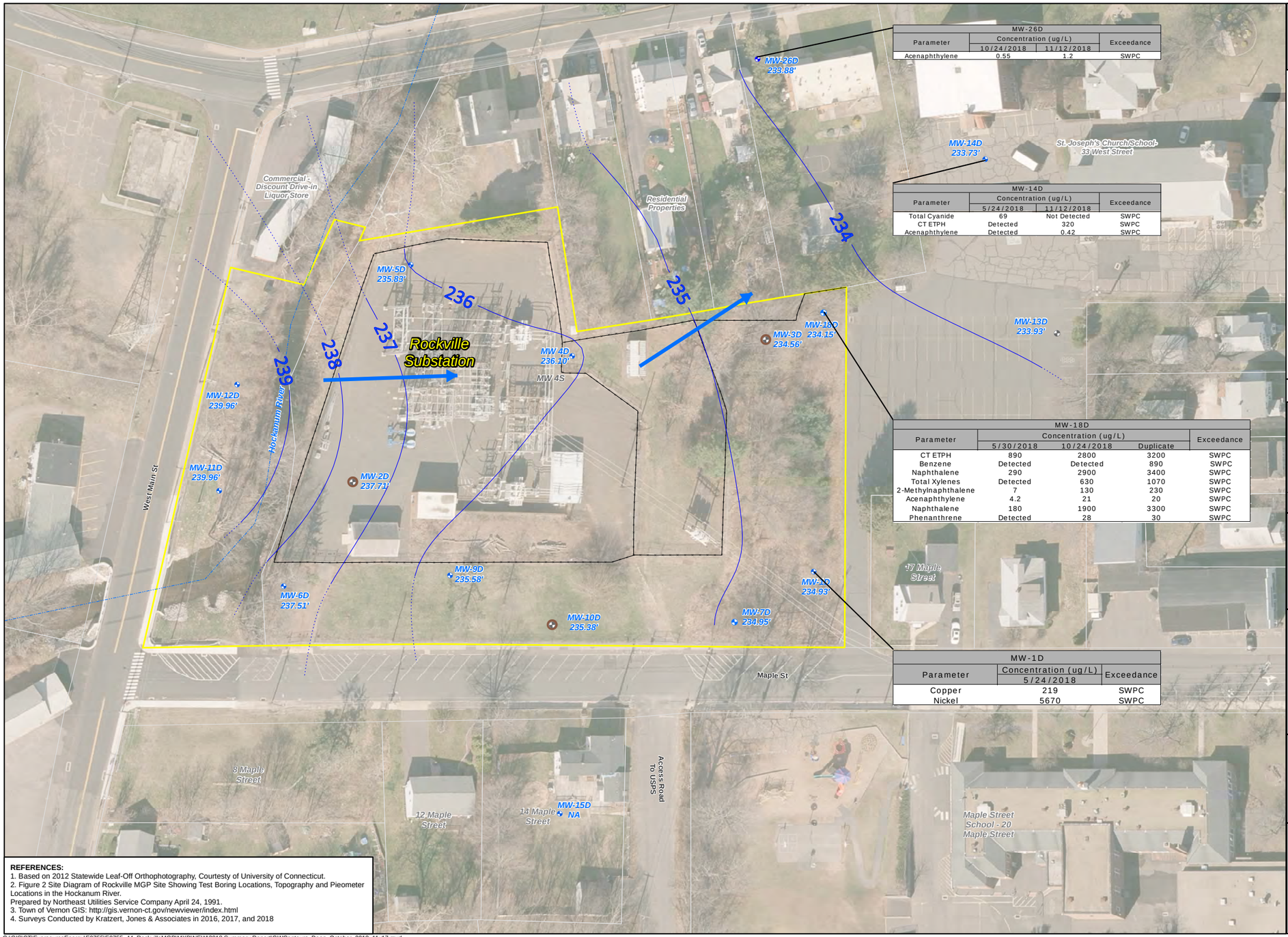

MW-26D			
Parameter	Concentration (ug/L)		Exceedance
	10/24/2018	11/12/2018	
Acenaphthylene	0.55	1.2	SWPC

MW-14D			
Parameter	Concentration (ug/L)		Exceedance
	5/24/2018	11/12/2018	
Total Cyanide	69	Not Detected	SWPC
CT ETPH	Detected	320	SWPC
Acenaphthylene	Detected	0.42	SWPC

MW-18D				
Parameter	Concentration (ug/L)			Exceedance
	5/30/2018	10/24/2018	Duplicate	
CT ETPH	890	2800	3200	SWPC
Benzene	Detected	Detected	890	SWPC
Naphthalene	290	2900	3400	SWPC
Total Xylenes	Detected	630	1070	SWPC
2-Methylnaphthalene	7	130	230	SWPC
Acenaphthylene	4.2	21	20	SWPC
Naphthalene	180	1900	3300	SWPC
Phenanthrene	Detected	28	30	SWPC

MW-1D		
Parameter	Concentration (ug/L)	Exceedance
	5/24/2018	
Copper	219	SWPC
Nickel	5670	SWPC

REFERENCES:
1. Based on 2012 Statewide Leaf-Off Orthophotography, Courtesy of University of Connecticut.
2. Figure 2 Site Diagram of Rockville MGP Site Showing Test Boring Locations, Topography and Pieometer Locations in the Hockanum River.
Prepared by Northeast Utilities Service Company April 24, 1991.
3. Town of Vernon GIS: http://gis.vernon-ct.gov/newviewer/index.html
4. Surveys Conducted by Kratzert, Jones & Associates in 2016, 2017, and 2018

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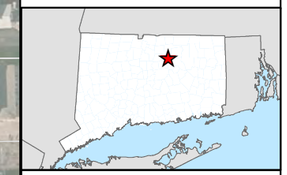
FIGURE 8: DEEP AQUIFER CONTOURS AND 2018 ANALYTICAL EXCEEDANCE SUMMARY

LEGEND

- MW-14D 233.73' — Monitoring Well Gauged and Sampled in 2018 (w/ North American Vertical Datum Elevation 1988)
- Monitoring Well Gauged But Not Sampled in 2018
- NAPL Detected in Monitoring Well During 2018 Gauging Event
- Groundwater Elevation Contour (October 24, 2018)
- Inferred Groundwater Flow Direction
- Stream
- Fence Line
- Site Boundary
- Approximate Parcel

LOCUS MAP



0 35 70 Feet

1 inch = 70 feet

NOTES

NM - Not Measured
NA -Not Accessible (Not Measured)
ug/L - Micrograms Per Liter
SWPC - Surface Water Protection Criteria
RES VC - Residential Volitalization Criteria
I/C VC - Industrial Commercial Volitalization Criteria
* - Additional Polluting Substance Criteria
Depth To Groundwater Ranged From ~10 Feet to ~31 Feet. See Table 1 For Screen Intervals And Depth To Water Measurements

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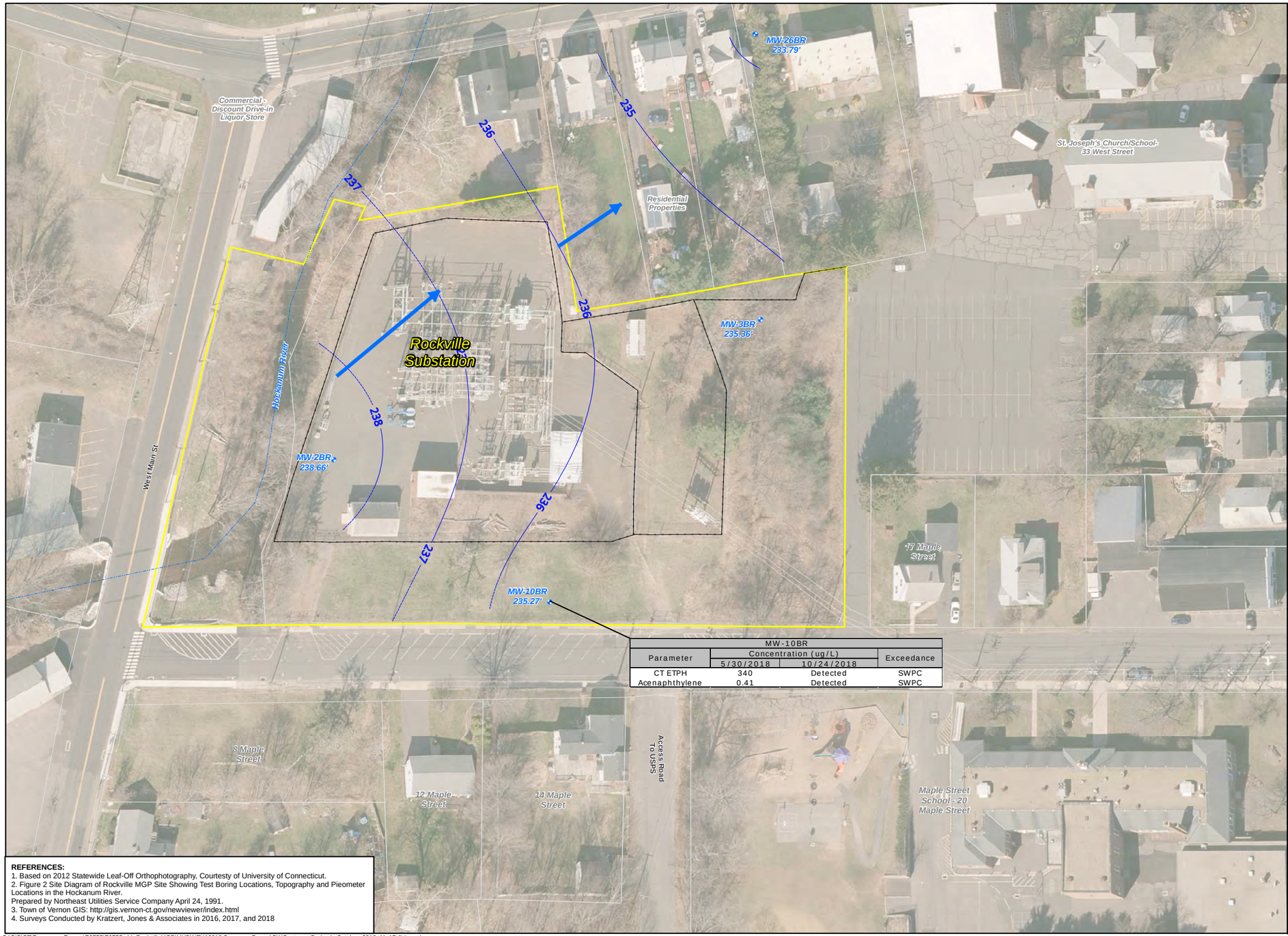

Parameter	MW-10BR Concentration (ug/L) 5/30/2018	10/24/2018	Exceedance
CT ETPH	340	Detected	SWPC
Acenaphthylene	0.41	Detected	SWPC

REFERENCES:
1. Based on 2012 Statewide Leaf-Off Orthophotography, Courtesy of University of Connecticut.
2. Figure 2 Site Diagram of Rockville MGP Site Showing Test Boring Locations, Topography and Pieometer Locations in the Hockanum River.
Prepared by Northeast Utilities Service Company April 24, 1991.
3. Town of Vernon GIS: http://gis.vernon-ct.gov/newviewer/index.html
4. Surveys Conducted by Kratzert, Jones & Associates in 2016, 2017, and 2018

FIGURE **9**:
BEDROCK AQUIFER CONTOURS AND 2018 ANALYTICAL EXCEEDANCE SUMMARY

LEGEND

- MW-10BR 235.27' — Monitoring Well (w/ North American Vertical Datum Elevation 1988)
- Groundwater Contour Measuered on October 24, 2018
- Inferred Groundwater Flow Direction
- Stream
- Fence Line
- Site Boundary
- Approximate Parcel Boundary

LOCUS MAP



0 35 70 Feet

1 inch = 70 feet

NOTES

NM - Not Measured
NA -Not Accessible (Not Measured)
ug/L - Micrograms Per Liter
SWPC - Surface Water Protection Criteria
RES VC - Residential Volitalization Criteria
I/C VC - Industrial Commercial Volitalization Criteria
* - Additional Polluting Substance Criteria
Depth To Groundwater Ranged From ~9 Feet to ~23 Feet. See Table 1 For Screen Intervals And Depth To Water Measurements

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December 2018

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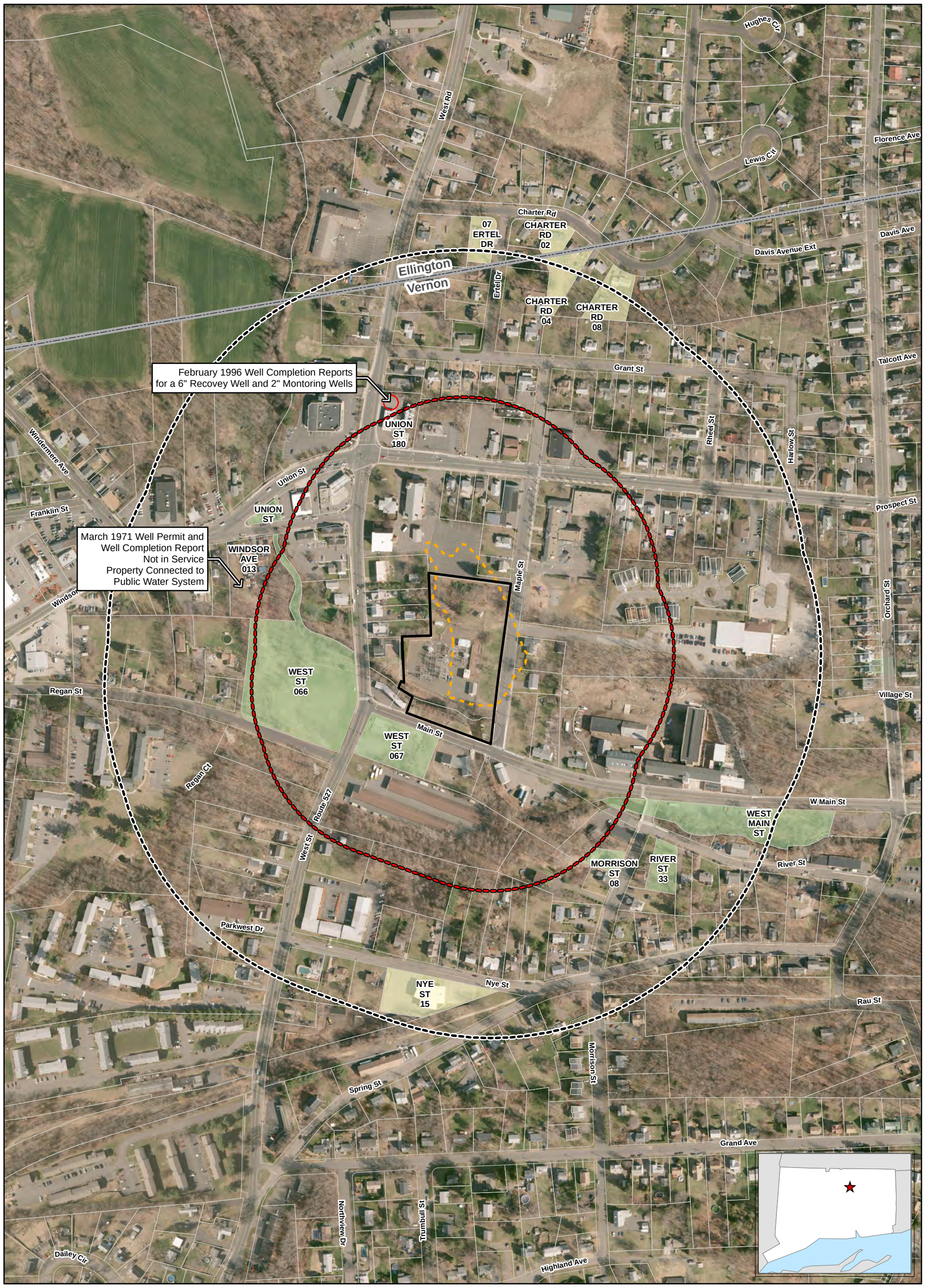

LEGEND

- Site Boundary
- Approximate Lateral Extent of Creosote/Coal Tar Impacts
- Approximate Parcel Boundary
- Town Boundary
- Parcel with No Current Water Service with Connecticut Water (Undeveloped)
- Parcel with No Current Water Service with Connecticut Water (Developed)
- 500' Buffer
- 1000' Buffer

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1. Based on 2016 Statewide Orthophotography, Courtesy of CTECO.
2. Unshaded parcels within buffer zones are supplied with water by the Connecticut Water Company.
3. Connecticut Water Company Service connection records searched 11/17/17
4. Water Well Completion Reports for the Town of Vernon from 1977 through 2016 available from Department of Consumer Protection (DCP)
5. GIS Parcels: Town of Vernon and Town of Ellington Tax assessor property information

1:3,600
0 150 300
Feet

N

FIGURE **10**
WATER WELL RECEPTOR SURVEY SUMMARY

Vernon & Ellington,
Connecticut

December 2018

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N-0915

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APPENDIX B

Table 1
Monitoring Well Construction, Groundwater Gauging and Hockanum River Gauging Information Summary
Eversource Rockville Former MGP Site
13 Maple Street
Vernon, CT

Well ID	Location	Monitoring Well Construction		5/22/2018			10/24/2018			Notes
		Top of Well Casing or Measuring Point Elevation (ft. NAVD 88)	Ground Elevation (ft. MSL)	Depth to water (ft.)	Groundwater and River Elevation (ft. NAVD88)	Product Thickness (ft.)	Depth to water (ft.)	Groundwater and River Elevation (ft. NAVD88)	Product Thickness (ft.)	
Monitoring Well Locations										
MW-1S	Overgrown Area- Outer Substation	259.37	261.15	24.63	234.74	-	24.86	234.51		
MW-1D		259.59	261.24	24.45	235.14	-	24.66	234.93		
MW-2S	Inner Substation	249.01	249.01	-	-	-	-	-		Obstruction found in well.
MW-2SR		247.10	247.48	7.10	240.00	-	7.43	239.67		Staining and globules of tar observed in development water
MW-2D		247.62	249.01	9.78	237.84	0.40	9.91	237.71		0.4' of product observed in bottom of well.
MW-2BR		247.24	247.44	8.49	238.75	-	8.58	238.66		
MW-3S	Wooded Area- Outer Substation	250.12	250.54	14.84	235.28	-	15.07	235.05		
MW-3D		251.58	250.68	16.86	234.72	0.63	17.02	234.56		Globules of tar observed in development water
MW-3BR		252.73	249.14	16.34	236.39	-	17.37	235.36		
MW-4S	Grassed Area- Outer Substation	249.25	248.81	13.36	235.89	-	13.58	235.67		
MW-4SR		249.11	248.81	-	-	-	13.52	235.59		
MW-4D		249.40	248.75	13.24	236.16	-	13.30	236.10		
MW-5S	Inner Substation	244.74	246.37	6.71	238.03	-	6.95	237.79		Orange sediment like precipitate noticed at water level
MW-5D		244.56	246.32	8.62	235.94	-	8.73	235.83		
MW-6S	Grassed Area- Outer Substation	250.31	248.76	10.10	240.21	-	10.49	239.82		
MW-6D		249.69	249.00	12.02	237.67	-	12.18	237.51		
MW-7S		262.13	263.81	27.03	235.10	-	27.22	234.91		
MW-7D		265.01	261.76	29.81	235.20	-	30.06	234.95		
MW-8S		248.43	248.56	-	-	-	-	-		Unable to be located, likely destroyed.
MW-8SR		246.29	246.69	6.37	239.92	-	6.71	239.58		
MW-9S		254.17	255.75	14.80	239.37	-	15.09	239.08		
MW-9D		253.95	255.63	18.19	235.76	-	18.37	235.58		
MW-10S		257.82	259.42	20.33	237.49	-	20.17	237.65		
MW-10SR		257.68	258.04	20.50	237.18	0.30	20.17	237.51	0.10	Staining and globules of tar observed in development water
MW-10M		257.35	259.08	21.75	235.60	-	21.95	235.40		
MW-10D		257.33	258.98	22.50	234.83	0.24	21.95	235.38	0.05	Heavy staining observed on the tape of the meter. Globules of tar observed water pumped during DNAPL Assessment
MW-10BR		257.33	257.57	21.93	235.40	-	22.06	235.27		
MW-11S	West Main Street Parcel	252.17	251.20	11.76	240.41	-	12.21	239.96		
MW-11D		251.91	251.10	11.50	240.41	-	11.95	239.96		
MW-12S		251.54	250.80	11.52	240.02	-	11.89	239.65		
MW-12D		251.69	250.90	11.35	240.34	-	11.73	239.96		
MW-13S	St. Joseph Church Parking Lot	252.13	252.53	17.90	234.23	-	18.12	234.01		
MW-13D		251.91	252.45	-	-	-	17.98	233.93		Located Summer 2018. Redeveloped and sampled during Fall 2018
MW-14S		245.11	245.40	11.21	233.90	-	11.42	233.69		
MW-14D		244.90	245.36	10.96	233.94	-	11.17	233.73		
MW-16S	Outer Substation Area	246.82	244.86	11.15	235.67	-	11.21	235.61		
MW-17S		245.72	246.01	10.43	235.29	-	10.51	235.21		
MW-18D		254.03	251.16	19.67	234.36	-	19.88	234.15		
MW-19S	St. Joseph Church Parking Lot	251.88	252.16	17.53	234.35	-	17.74	234.14		
MW-20S		260.82	260.52	25.80	235.02	0.00	26.00	234.82	0.01	Staining and globules of tar observed in development water
MW-21S		255.11	255.30	20.70	234.41	-	20.88	234.23		
MW-23S	USPS ROW	268.98	269.20	33.17	235.81	-	33.35	235.63		
MW-24S	Grassed Area- Outer Substation	257.07	257.59	-	-	-	21.62	235.45		Staining and globules of tar observed in development water
MW-25S		250.82	250.99	-	-	-	15.51	235.31		
MW-26S	Front of St. Joseph Convent	243.97	244.53	-	-	-	8.96	235.01		
MW-26D		244.28	244.45	-	-	-	10.40	233.88		
MW-26BR		244.16	244.32	-	-	-	10.37	233.79		
MW-27S	17 Maple Street	260.80	261.00	-	-	-	26.40	234.40		
MW-28S	Maple Street ROW	263.85	264.11	-	-	-	29.06	234.79		
MW-30S	Rear of Substation	244.46	244.58	-	-	-	7.27	237.19		
Hockanum River Piezometers and Gauging Locations										
RG-1 (River Gauge)	Hockanum River	245.12		-	-	-	-	-		Nov. 2017- Damaged by fallen tree.
PZ-1		244.54		-	-	-	-	-		Nov. 2017- Damaged by fallen tree.
PZ-1 River Level		244.54		-	-	-	-	-		Nov. 2017- Damaged by fallen tree.
PZ-1A		246.79		3.46	243.33	-	6.58	240.21		
PZ-1A River Level		246.79		5.40	241.39	-	6.92	239.87		
PZ-2A		244.90		3.11	241.79	-	2.90	242.00		
PZ-2A River Level		244.90		2.65	242.25	-	2.65	242.25		
PZ-3A		244.12		-	-	-	4.39	239.73		Nov. 2017- Damaged by high water. Reinstalled Summer 2018
PZ-3A River Level		244.12		-	-	-	3.44	240.68		Nov. 2017- Damaged by high water. Reinstalled Summer 2018

Notes:
NA -Not Applicable
* - Data Unavailable
"S" denotes a water table monitoring well (Shallow Groundwater Zone)
"M" denotes an intermediate monitoring well (Intermediate Groundwater Zone)
"D" denotes a deep monitoring well (Intermediate Groundwater Zone)
red text- indicates a well was destroyed or unusable.
Denotes product observed in the well : measured or observed during development or pumping.
Elevation for measuring point was surveyed by Kratzer Jones Associates in 2016 and 2017. Elevations in NAVD 88.
MSL- mean sea level-Elevations obtained from Eversource survey information: Rockville Manufactured Gas Plant Site Investigation Report dated March 1992
PZ-18

TABLE 2
Summary of Soil Analytical Data
13 Maple Street
Rockville, CT

Sample ID					SB-28	^SB-28	SB-29	SB-29	SB-30	^SB-30	SB-31	^SB-31	SB-32	SB-33	SB-34	SB-35	SB-36	SB-37	SB-38	SB-39	DUP-102	SB-40A	SB-41	SB-42	SB-43	SB-43	SB-44	SB-44	SB-45	SB-46	SB-47	SB-47	SB-48	SB-49
Sample Depth					1 - 3 ft	22 - 24 ft	3 - 5 ft	14 - 16 ft	2 - 4 ft	15 - 17 ft	1 - 3 ft	15 - 17 ft	2 - 4 ft	5 - 7 ft	2 - 4 ft	5 - 7 ft	2 - 4 ft	2 - 4 ft	5 - 7 ft	3 - 5 ft	3 - 5 ft	5.5 - 7.5 ft	1 - 3 ft	2 - 4 ft	0.5 - 2 ft	5 - 7 ft	1 - 3 ft	10 - 12 ft	0 - 2 ft	5 - 7 ft	2 - 4 ft	11 - 13 ft	2 - 4 ft	3 - 5 ft
Laboratory ID					CA98809	CA98810	CA99810	CA99811	CA98807	CA98808	CA98805	CA98806	CA96215	CA91708	CA91709	CA94067	CA91711	CA91712	CA94069	CB20631	CB20633	CB20630	CA91715	CA91714	CA98174	CA98175	CA91719	CA95004	CA91720	CA94064	CA91717	CA94065	CA96216	CA98183
Sample Date					7/26/2018	7/26/2018	7/27/2018	7/27/2018	7/26/2018	7/26/2018	7/26/2018	7/26/2018	7/23/2018	7/17/2018	7/16/2018	7/19/2018	7/16/2018	7/16/2018	7/19/2018	8/28/2018	8/28/2018	8/28/2018	7/16/2018	7/16/2018	7/24/2018	7/24/2018	7/17/2018	7/20/2018	7/17/2018	7/19/2018	7/17/2018	7/19/2018	7/23/2018	7/25/2018
Apparent Depth to Water					24'	24'	18'	18'	17'	17'	11'	11'	7'	7'	7'	7'	7'	5'	8'	5'	5'	7.5'	10'	9'	7'	7'	12'	12'	15'	7'	13'	13'	7'	9'
Duplicate					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SB-39	-	-	-	-	-	-	-	-	-	-	-	-	-
	RES DEC^	I/C DEC^	GB PMC**~	10X GWPC																														
CT ETPH (mg/Kg)	500	2,500	2,500	NA	320	ND <260	**520**	470	**760**	**710**	-	**6600**	**2900**	**1400**	**4800**	**8600**	280	ND <59	ND <52	**1200**	**1100**	230	ND <61	140	ND <320	**630**	140	ND <54	ND <62	**1600**	ND <54	**6400**	ND <55	ND <53
SPLP CT ETPH (mg/L)	NA	NA	NA	2,500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VOCs (mg/Kg)																																		
1,2,4-Trimethylbenzene	500*	1000*	28*	NA	ND <0.0059	ND <0.0057	-	ND <0.0079	ND <0.47	ND <0.0053	-	2.5	ND <0.0057	ND <0.36	ND <0.0045	ND <0.0094	ND <0.42	ND <0.0068	ND <0.0054	ND <0.017	ND <0.019	ND <0.0078	ND <0.0073	ND <0.0062	ND <0.0074	-	ND <0.0061	ND <0.0064	ND <0.45	ND <0.0044	-	ND <0.33	ND <0.01	ND <0.38
1,3,5-Trimethylbenzene	500*	1000*	28*	NA	ND <0.0059	ND <0.0057	-	ND <0.0079	ND <0.47	ND <0.0053	-	0.8	ND <0.0057	ND <0.36	ND <0.0045	ND <0.0094	ND <0.42	ND <0.0068	ND <0.0054	ND <0.017	ND <0.019	ND <0.0078	ND <0.0073	ND <0.0062	ND <0.0074	-	ND <0.0061	ND <0.0064	ND <0.45	ND <0.0044	-	ND <0.33	ND <0.01	ND <0.38
2-Isopropyltoluene	NE	NE	NE	NA	ND <0.0059	ND <0.0057	-	ND <0.0079	ND <0.47	ND <0.0053	-	0.18	ND <0.0057	ND <0.36	ND <0.0045	ND <0.0094	ND <0.42	ND <0.0068	ND <0.0054	ND <0.017	ND <0.019	ND <0.0078	ND <0.0073	ND <0.0062	ND <0.0074	-	ND <0.0061	ND <0.0064	ND <0.45	ND <0.0044	-	ND <0.33	ND <0.01	ND <0.38
4-Isopropyltoluene (cymene)	500*	1000*	5*	NA	ND <0.0059	ND <0.0057	-	ND <0.0079	ND <0.47	ND <0.0053	-	ND <0.4	ND <0.0057	ND <0.36	ND <0.0045	ND <0.0094	ND <0.42	ND <0.0068	ND <0.0054	ND <0.017	ND <0.019	ND <0.0078	ND <0.0073	ND <0.0062	ND <0.0074	-	ND <0.0061	ND <0.0064	ND <0.45	ND <0.0044	-	ND <0.33	ND <0.01	ND <0.38
Benzene	21	200	0.2	NA	**3**	ND <0.0057	-	ND <0.0079	ND <0.0074	ND <0.0053	-	ND <0.2	ND <0.0057	**0.22**	**0.35**	ND <0.0094	ND <0.0057	ND <0.0068	ND <0.0054	ND <0.017	ND <0.019	ND <0.0078	ND <0.0073	ND <0.0062	ND <0.0074	-	ND <0.0061	ND <0.0064	ND <0.0065	ND <0.0044	-	ND <0.2	ND <0.01	ND <0.011
Butylbenzene, n-	500*	1000*	70*	NA	ND <0.0059	ND <0.0057	-	ND <0.0079	ND <0.47	ND <0.0053	-	0.83	ND <0.0057	ND <0.36	ND <0.0045	ND <0.0094	ND <0.42	ND <0.0068	ND <0.0054	ND <0.017	ND <0.019	ND <0.0078	ND <0.0073	ND <0.0062	ND <0.0074	-	ND <0.0061	ND <0.0064	ND <0.45	ND <0.0044	-	0.22	ND <0.01	ND <0.38
Butylbenzene, sec-	500*	1000*	70*	NA	ND <0.0059	ND <0.0057	-	ND <0.0079	ND <0.47	ND <0.0053	-	0.25	ND <0.0057	ND <0.36	ND <0.0045	ND <0.0094	ND <0.42	ND <0.0068	ND <0.0054	ND <0.017	ND <0.019	ND <0.0078	ND <0.0073	ND <0.0062	ND <0.0074	-	ND <0.0061	ND <0.0064	ND <0.45	ND <0.0044	-	ND <0.33	ND <0.01	ND <0.38
Ethylbenzene	500	1,000	10.1	NA	ND <0.0059	ND <0.0057	-	ND <0.0079	ND <0.0074	ND <0.0053	-	1.3	ND <0.0057	0.0036	ND <0.0045	ND <0.0094	ND <0.0057	ND <0.0068	ND <0.0054	ND <0.017	ND <0.019	ND <0.0078	ND <0.0073	ND <0.0062	ND <0.0074	-	ND <0.0061	ND <0.0064	ND <0.0065	ND <0.0044	-	0.19	ND <0.01	ND <0.011
Isopropylbenzene (cumene)	500*	1000*	5*	NA	ND <0.0059	ND <0.0057	-	ND <0.0079	ND <0.47	ND <0.0053	-	1.2	ND <0.0057	ND <0.36	ND <0.0045	ND <0.0094	ND <0.42	ND <0.0068	ND <0.0054	ND <0.017	ND <0.019	ND <0.0078	ND <0.0073	ND <0.0062	ND <0.0074	-	ND <0.0061	ND <0.0064	ND <0.45	ND <0.0044	-	0.19	ND <0.01	ND <0.38
m,p-Xylene[1]	NE	NE	NE	NA	ND <0.0059	ND <0.0057	-	ND <0.0079	ND <0.0074	ND <0.0053	-	ND <0.4	ND <0.0057	0.019	ND <0.0045	ND <0.0094	ND <0.0057	ND <0.0068	ND <0.0054	ND <0.017	ND <0.019	ND <0.0078	ND <0.0073	ND <0.0062	ND <0.0074	-	ND <0.0061	ND <0.0064	ND <0.0065	ND <0.0044	-	ND <0.33	ND <0.01	ND <0.011
Methylene chloride	82	760	1	NA	ND <0.0059	ND <0.0057	-	ND <0.0079	ND <0.0074	ND <0.0053	-	ND <0.4	ND <0.0057	ND <0.36	ND <0.0045	ND <0.0094	ND <0.0057	ND <0.0068	ND <0.0054	ND <0.017	ND <0.019	ND <0.0078	ND <0.0073	ND <0.0062	ND <0.0074	-	ND <0.0061	ND <0.0064	ND <0.0065	ND <0.0044	-	ND <0.33	ND <0.01	ND <0.011
Naphthalene	1,000	2,500	56	NA	ND <0.0059	ND <0.0057	-	ND <0.0079	0.38	ND <0.0053	-	4.2	ND <0.0057	0.64	2.4	0.35	0.2	ND <0.0068	ND <0.0054	ND <0.017	ND <0.019	ND <0.0078	ND <0.0073	ND <0.0062	ND <0.0074	-	ND <0.0061	ND <0.0064	ND <0.45	0.49	-	0.84	ND <0.01	ND <0.38
n-Propylbenzene	500*	1000*	10*	NA	ND <0.0059	ND <0.0057	-	ND <0.0079	ND <0.47	ND <0.0053	-	1.1	ND <0.0057	ND <0.36	ND <0.0045	ND <0.0094	ND <0.42	ND <0.0068	ND <0.0054	ND <0.017	ND <0.019	ND <0.0078	ND <0.0073	ND <0.0062	ND <0.0074	-	ND <0.0061	ND <0.0064	ND <0.45	ND <0.0044	-	0.17	ND <0.01	ND <0.38
o-Xylene[1]	NE	NE	NE	NA	ND <0.0059	ND <0.0057	-	ND <0.0079	ND <0.0074	ND <0.0053	-	0.7	ND <0.0057	0.022	ND <0.0045	ND <0.0094	ND <0.0057	ND <0.0068	ND <0.0054	ND <0.017	ND <0.019	ND <0.0078	ND <0.0073	ND <0.0062	ND <0.0074	-	ND <0.0061	ND <0.0064	ND <0.0065	ND <0.0044	-	ND <0.33	ND <0.01	ND <0.011
Styrene	500	1,000	20	NA	ND <0.0059	ND <0.0057	-	ND <0.0079	ND <0.0074	ND <0.0053	-	ND <0.4	ND <0.0057	0.0053	ND <0.0045	ND <0.0094	ND <0.0057	ND <0.0068	ND <0.0054	ND <0.017	ND <0.019	ND <0.0078	ND <0.0073	ND <0.0062	ND <0.0074	-	ND <0.0061	ND <0.0064	ND <0.0065	ND <0.0044	-	ND <0.33	ND <0.01	ND <0.011
Tetrachloroethene	12	110	1	NA	ND <0.0059	ND <0.0057	-	ND <0.0079	ND <0.0074	ND <0.0053	-	ND <0.4	ND <0.0057	ND <0.0055	0.65	0.32	ND <0.0057	ND <0.0068	ND <0.0054	ND <0.017	ND <0.019	ND <0.0078	ND <0.0073	0.47	0.0073	-	0.55	ND <0.0064	ND <0.0065	0.17	-	ND <0.33	ND <0.01	ND <0.011
Toluene	500	1,000	67	NA	0.28	ND <0.0057	-	ND <0.0079	ND <0.0074	ND <0.0053	-	ND <0.4	ND <0.0057	0.4	0.37	ND <0.0094	ND <0.0057	ND <0.0068	ND <0.0054	ND <0.017	ND <0.019	ND <0.0078	ND <0.0073	ND <0.0062	ND <0.0074	-	ND <0.0061	ND <0.0064	ND <0.0065	ND <0.0044	-	ND <0.33	ND <0.01	ND <0.011
Total Xylenes	500	1,000	19.5	NA	ND <0.0059	ND <0.0057	-	ND <0.0079	ND <0.0074	ND <0.0053	-	0.7	ND <0.0057	0.041	ND <0.0045	ND <0.0094	ND <0.0057	ND <0.0068	ND <0.0054	ND <0.017	ND <0.019	ND <0.0078	ND <0.0073	ND <0.0062	ND <0.0074	-	ND <0.0061	ND <0.0064	ND <0.0065	ND <0.0044	-	ND <0.33	ND <0.01	ND <0.011
SPLP VOCs (ug/L)					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,4-Trimethylbenzene	NA	NA	NA	1,400*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3,5-Trimethylbenzene	NA	NA	NA	1,400*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Isopropyltoluene	NA	NA	NA	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-Isopropyltoluene (cymene)	NA	NA	NA	250*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	NA	NA	NA	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Butylbenzene, n-	NA	NA	NA	3,500*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Butylbenzene, sec-	NA	NA	NA	3,500*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	NA	NA	NA	7,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Isopropylbenzene (cumene)	NA	NA	NA	250*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
m,p-Xylene[1]	NA	NA	NA	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
n-Propylbenzene	NA	NA	NA	500*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
o-Xylene[1]	NA	NA	NA	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Styrene	NA	NA	NA	1,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	NA	NA	NA	10,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Xylenes	NA	NA	NA	5,300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene	NA	NA	NA	2,800	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCBs (mg/Kg)																																		
Aroclor-1254	NE	NE	NA	NA	ND <0.36	-	-	-	-	-	-	-	-	ND <0.35	ND <0.38	ND <0.38	ND <0.37	-	-	-	-	-	ND <0.42	0.87	-	-	ND <0.37	ND <0.36	ND <0.41	ND <0.37	ND <0.36	-	-	-
Aroclor-1268	NE	NE	NA	NA	ND <0.36	-	-	-	-	-	-	-	-	ND <0.35	ND <0.38	ND <0.38	ND <0.37	-	-	-	-	-	ND <0.42	ND <0.42	-	-	ND <0.37	ND <0.36	ND <0.41	ND <0.37	ND <0.36	-	-	-
Total PCBs	1	10	NA	NA	ND <0.36	-	-	-	-	-	-	-	-	ND <0.35	ND <0.38	ND <0.38	ND <0.37	-	-	-	-	-	ND <0.42	0.87	-	-	ND <0.37	ND <0.36	ND <0.41	ND <0.37	ND <0.36	-	-	-
Total Cyanide (mg/Kg)	1,400	41,000	NA	NA	3.17	6.55	-	ND <0.54	27.3	ND <0.54	26.5	ND <0.52	25.3	0.55	1.39	3.23	10.8	ND <0.60	3.55	1.52	2.33	ND <0.56	ND <0.63	0.89	ND <0.65	ND <0.55	0.82	0.89	ND <0.56	2.38	ND <0.55	-	1.98	2.72
SPLP Cyanide (mg/L)	NA	NA	2	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pesticides (mg/Kg)																																		
Dieldrin	0.04	0.36	0.01	NA	-	-	ND <0.0035	-	-	-	0.0049	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
CT DEEP RSRs - Connecticut Department of Energy & Environmental Protection Remediation Standard Regulations
RES DEC - Residential Direct Exposure Criteria
I/C DEC - Industrial/Commercial Direct Exposure Criteria
GB PMC - Pollutant Mobility Criteria for groundwater class GB
10XGWPC - Ten Times the Groundwater Protection Criteria
mg/Kg - milligrams per kilogram
mg/L - milligrams per liter
CT ETPH - Connecticut Extractable Total Petroleum Hydrocarbons
VOCs - Volatile Organic Compounds
SVOCs - Semi Volatile Organic Compounds
PCB - Polychlorinated Biphenyl
SPLP - Synthetic Precipitation Leaching Procedure
ND - Not detected above laboratory limits
NE - CTDEEP RSR Criteria not established
NA - Not Applicable
* - Additional Polluting Substance and Alternative Criteria approved by CTDEEP for use with permission on a site-by-site basis.
** - GB PMC values are established for leachable metals and PCBs using TCLP or SPLP analysis.
[1] - Xylene criteria apply to Total Xylenes only
^ - DEC does not apply to soils at depths greater than 15'
~ - PMC does not apply to samples soils below the seasonal high watertable
# - PMC exempt based on SPLP analysis
Only compounds detected are summarized in the table (compounds that are not listed were not detected)
Bolded and boxed - Concentration exceeds RSR Criteria
Bolded Only - Concentration exceeds APS Criteria
- Sample not analyzed

TABLE 2
Summary of Soil Analytical Data
13 Maple Street
Rockville, CT

Sample ID					SB-28	^SB-28	SB-29	SB-29	SB-30	^SB-30	SB-31	^SB-31	SB-32	SB-33	SB-34	SB-35	SB-36	SB-37	SB-38	SB-39	DUP-102	SB-40A	SB-41	SB-42	SB-43	SB-43	SB-44	SB-44	SB-45	SB-46	SB-47	SB-47	SB-48	SB-49
Sample Depth					1 - 3 ft	22 - 24 ft	3 - 5 ft	14 - 16 ft	2 - 4 ft	15 - 17 ft	1 - 3 ft	15 - 17 ft	2 - 4 ft	5 - 7 ft	2 - 4 ft	5 - 7 ft	2 - 4 ft	2 - 4 ft	5 - 7 ft	3 - 5 ft	3 - 5 ft	5.5 - 7.5 ft	1 - 3 ft	2 - 4 ft	0.5 - 2 ft	5 - 7 ft	1 - 3 ft	10 - 12 ft	0 - 2 ft	5 - 7 ft	2 - 4 ft	11 - 13 ft	2 - 4 ft	3 - 5 ft
Laboratory ID					CA98809	CA98810	CA99810	CA99811	CA98807	CA98808	CA98805	CA98806	CA96215	CA91708	CA91709	CA94067	CA91711	CA91712	CA94069	CB20631	CB20633	CB20630	CA91715	CA91714	CA98174	CA98175	CA91719	CA95004	CA91720	CA94064	CA91717	CA94065	CA96216	CA98183
Sample Date					7/26/2018	7/26/2018	7/27/2018	7/27/2018	7/26/2018	7/26/2018	7/26/2018	7/26/2018	7/23/2018	7/17/2018	7/16/2018	7/19/2018	7/16/2018	7/16/2018	7/19/2018	8/28/2018	8/28/2018	8/28/2018	7/16/2018	7/16/2018	7/24/2018	7/24/2018	7/17/2018	7/20/2018	7/17/2018	7/19/2018	7/17/2018	7/19/2018	7/23/2018	7/25/2018
Apparent Depth to Water					24'	24'	18'	18'	17'	17'	11'	11'	7'	7'	7'	7'	7'	5'	8'	5'	5'	7.5'	10'	9'	7'	7'	12'	12'	15'	7'	13'	13'	7'	9'
Duplicate					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SB-39	-	-	-	-	-	-	-	-	-	-	-	-	-
	RES DEC^	I/C DEC^	GB PMC**~	10X GWPC																														
Semi-VOCs (mg/Kg)																																		
2-Methylnaphthalene	270*	1000*	5.6*	NA	ND <0.25	0.49	0.73	1.5	0.3	ND <0.25	ND <2.7	ND <0.26	ND <1.3	1.9	4.7	ND <5.6	0.57	ND <0.27	ND <0.24	ND <1.3	3.6	0.45	ND <0.29	ND <0.26	ND <0.3	0.43	ND <0.26	ND <0.25	ND <0.29	**6.8**	ND <0.26	ND <1.3	ND <0.26	ND <0.25
Acenaphthene	1000*	2500*	84*	NA	ND <0.25	ND <0.24	0.71	ND <0.25	ND <0.26	ND <0.25	ND <2.7	29	ND <1.3	ND <1.2	ND <2.7	ND <13	ND <0.26	ND <0.27	ND <0.24	ND <1.3	ND <1.4	ND <0.26	ND <0.29	ND <0.26	ND <0.3	0.28	ND <0.26	ND <0.25	ND <0.29	0.88	ND <0.26	14	ND <0.26	ND <0.25
Acenaphthylene	1,000	2,500	84	NA	0.77	2.2	5.5	6.2	2	0.26	8.3	2.7	12	2.8	28	56	5.3	ND <0.27	0.3	6.5	26	1.6	ND <0.29	1.1	0.76	3.1	0.65	ND <0.25	ND <0.29	7	0.37	5.4	0.26	ND <0.25
Anthracene	1,000	2,500	400	NA	0.99	0.37	2.9	ND <0.25	0.91	ND <0.25	ND <2.7	12	2	1.4	14	22	0.92	ND <0.27	ND <0.24	1.9	7.3	ND <0.26	ND <0.29	0.37	0.54	10	ND <0.26	ND <0.25	ND <0.29	6.2	0.4	18	ND <0.26	ND <0.25
Benz(a)anthracene	1	7.8	1	NA	**1.7**	ND <0.24	**5**	0.44	**2.1**	ND <0.25	**2**	**6.8**	**14**	**2.7**	**28**	**150**	0.73	ND <0.27	0.79	**3.5**	**22**	ND <0.26	ND <0.29	0.42	**2.9**	**35**	0.72	ND <0.25	ND <0.29	**16**	0.73	**14**	0.43	ND <0.25
Benzo(a)pyrene	1	1	1	NA	**1.3**	0.83	**6**	**5.9**	**1.9**	ND <0.25	**2.9**	**5.5**	**13**	**4.7**	**16**	**150**	**2**	ND <0.27	0.55	**20**	**44**	**1.1**	ND <0.29	0.62	**3**	**24**	0.93	ND <0.25	ND <0.29	**13**	0.86	**12**	0.64	ND <0.25
Benzo(b)fluoranthene	1	7.8	1	NA	**1.6**	0.38	***4.8***	***2.8***	**3.1**	ND <0.25	**3**	**7.3**	**20**	**3.8**	**23**	**120**	**1.4**	ND <0.27	0.85	**10**	**28**	0.38	ND <0.29	0.57	***2.6***	**23**	0.87	ND <0.25	ND <0.29	**9**	0.71	**7.3**	0.72	ND <0.25
Benzo(g,h,i)perylene	8.4*	78*	1*	NA	***1.6***	0.94	***5.4***	***4***	***2.3***	0.25	***9.4***	***2***	***21***	***10***	***26***	***140***	***2.9***	0.56	0.83	***14***	***41***	0.87	ND <0.29	***1.1***	***1.4***	***12***	0.91	0.31	ND <0.29	***7.1***	0.84	***6.3***	0.77	ND <0.25
Benzo(k)fluoranthene	8.4	78	1	NA	**1.5**	0.28	***4.1***	***2.4***	**2.9**	ND <0.25	**3.2**	**2.9**	**17**	**2.2**	**19**	**130**	**1.2**	ND <0.27	0.8	**11**	**34**	0.29	ND <0.29	0.53	**2.5**	**18**	0.89	ND <0.25	ND <0.29	**12**	0.57	**9.6**	0.67	ND <0.25
Carbazole	31*	290*	1*	NA	ND <0.36	-	ND <0.68	-	ND <0.38	-	ND <1	-	-	-	-	-	-	-	-	-	-	-	ND <0.42	ND <0.37	ND <0.43	-	ND <0.37	ND <0.36	ND <0.41	0.52	ND <0.37	-	-	-
Chrysene	84*	780*	1*	NA	***2.4***	ND <0.24	***5.4***	***2.6***	***3.3***	ND <0.25	**3**	**5.9**	**19**	**3.7**	**37**	**160**	1	ND <0.27	***1.1***	**5.6**	**33**	0.31	ND <0.29	0.71	**2.9**	**33**	0.81	ND <0.25	ND <0.29	**17**	0.73	**15**	0.62	ND <0.25
Dibenz(a,h)anthracene	1*	1*	1*	NA	0.36	ND <0.24	***1.3***	***1.1***	0.66	ND <0.25	**1.3**	0.43	***4.1***	***1.7***	***4.4***	***21***	0.42	ND <0.27	ND <0.24	***2.4***	***6.2***	ND <0.26	ND <0.29	ND <0.26	0.5	**4.9**	ND <0.26	ND <0.25	ND <0.29	**1.9**	ND <0.26	**1.4**	ND <0.26	ND <0.25
Dibenzofuran	68*	1000*	1.4*	NA	ND <0.25	-	0.86	-	ND <0.26	-	ND <1	-	-	-	-	-	-	-	-	-	-	-	ND <0.29	ND <0.26	ND <0.3	-	ND <0.26	ND <0.25	ND <0.29	1.3	ND <0.26	-	-	-
DI-N-Octyl phthalate	1000	2500	20	NA	ND <0.25	-	ND <0.48	-	ND <0.26	-	ND <2.7	-	-	-	-	-	-	-	-	-	-	-	ND <0.29	ND <0.26	ND <0.3	-	0.72	ND <0.25	ND <0.29	ND <0.26	ND <0.26	-	-	-
Fluoranthene	1,000	2,500	56	NA	3.5	0.37	6.5	0.26	3.2	ND <0.25	ND <2.7	14	8.6	3.3	50	**170**	0.82	ND <0.27	0.81	2.5	15	ND <0.26	ND <0.29	0.5	3.7	33	0.8	ND <0.25	ND <0.29	22	1.7	24	0.52	ND <0.25
Fluorene	1,000	2,500	56	NA	0.43	ND <0.24	0.97	0.54	0.36	ND <0.25	ND <2.7	17	ND <1.3	ND <1.2	5.8	ND <13	0.73	ND <0.27	ND <0.24	ND <1.3	2.4	ND <0.26	ND <0.29	ND <0.26	ND <0.3	1.9	ND <0.26	ND <0.25	ND <0.29	5.9	ND <0.26	16	ND <0.26	ND <0.25
Indeno(1,2,3-cd)pyrene	1*	7.8*	1*	NA	***1.4***	0.91	***5.4***	***4***	***2.4***	ND <0.25	***6.8***	***1.9***	***21***	***11***	***22***	***120***	***2.5***	0.53	0.79	***15***	***38***	0.93	ND <0.29	0.87	***1.7***	***16***	0.89	ND <0.25	ND <0.29	***6.9***	0.81	***6.4***	0.84	ND <0.25
Naphthalene	1,000	2,500	56	NA	ND <0.25	0.62	0.87	1.4	0.4	ND <0.25	ND <2.7	1.7	1.5	1.3	6.9	ND <13	0.77	ND <0.27	ND <0.24	ND <1.3	5.4	0.51	ND <0.29	ND <0.26	ND <0.3	0.87	ND <0.26	ND <0.25	ND <0.29	6.7	ND <0.26	2.4	ND <0.26	ND <0.25
Pentachlorophenol	5.1	48	1	NA	ND<0.36	-	ND<0.68	-	ND<0.38	-	ND<1.4	-	-	-	-	-	-	-	-	-	-	-	ND<0.42	ND<0.37	-	-	ND<0.37	ND<0.36	ND<0.41	ND<0.37	ND<0.37	-	-	-
Phenanthrene	1,000	2,500	40	NA	4.6	0.37	6.4	1.6	2.4	ND <0.25	ND <2.7	35	2	4	**45**	38	0.43	ND <0.27	0.31	ND <1.3	2.9	ND <0.26	ND <0.29	ND <0.26	1.4	19	0.27	ND <0.25	ND <0.29	25	1.3	24	ND <0.26	ND <0.25
Pyrene	1,000	2,500	40	NA	5.2	0.79	7.7	0.44	4	ND <0.25	4	20	19	7	**110**	**450**	1.6	ND <0.27	1.4	6.7	37	ND <0.26	ND <0.29	0.9	4	30	0.99	ND <0.25	ND <0.29	28	1.6	32	0.76	0.33
SPLP Semi-VOCs (ug/L)																																		
2-Methylnaphthalene	NA	NA	NA	280*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acenaphthene	NA	NA	NA	4,200*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acenaphthylene	NA	NA	NA	4,200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Anthracene	NA	NA	NA	20,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benz(a)anthracene	NA	NA	NA	0.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(a)pyrene	NA	NA	NA	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	NA	NA	NA	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	NA	NA	NA	4.8*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	NA	NA	NA	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chrysene	NA	NA	NA	48*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibenz(a,h)anthracene	NA	NA	NA	1*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fluoranthene	NA	NA	NA	2,800	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fluorene	NA	NA	NA	2,800	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	NA	NA	NA	1*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene	NA	NA	NA	2,800	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenanthrene	NA	NA	NA	2,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyrene	NA	NA	NA	2,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Metals (mg/Kg)																																		
Antimony	27	8,200	NA	NA	ND <3.9	-	-	-	ND <3.5	-	ND <4.0	-	ND <3.6	ND <3.4	ND <3.9	ND <3.8	ND <4.0	ND <3.9	ND <3.3	ND <3.6	ND <3.6	ND <3.4	ND <4.0	ND <3.6	ND <4.4	ND <3.5	ND <3.6	ND <3.3	ND <4.1	ND <3.7	ND <3.8	-	ND <4.0	ND <3.8
Arsenic	10	10	NA	NA	**14.5**	-	-	-	8.45	-	3.62	-	**10.2**	**22.4**	**15.4**	**91.6**	**14.8**	4.48	3.86	7.8	4.62	1.84	6.81	**28.5**	**48.5**	6.35	6.66	2.54	2.23	**18.5**	1.93	-	**17.5**	**147**
Barium	4,700	140,000	NA	NA	99.6	-	-	-	69.6	-	46.2	-	40.9	66.6	69.2	79.7	71.6	63.5	63.6	55.3	72.5	92.7	75.1	92	59.1	65	81.2	41.9	76.3	59.3	49.4	-	49.7	80.3
Beryllium	2	2	NA	NA	0.78	-	-	-	0.39	-	0.45	-	ND <0.29	0.33	ND <0.31	ND <0.31	1.38	0.58	0.45	0.44	0.51	0.52	0.57	0.35	0.55	0.45	0.43	0.4	0.54	0.37	0.35	-	0.61	0.86
Cadmium	34	1,000	NA	NA	ND <0.39	-	-	-	ND <0.35	-	ND <0.40	-	0.47	0.44	0.86	0.85	1.41	ND <0.39	0.52	0.37	1.1	0.4	0.47	0.38	0.52	ND <0.35	0.42	0.41	ND <0.41	0.72	ND <0.38	-	ND <0.40	0.51
Chromium			NA	NA	13.3	-	-	-	27	-	19.5	-	7.68	13.8	16.4	9.39	19	19.7	17.7	20.3	16.4	11.8	17.1	15.5	14.4	15.2	12.1	17.2	15.6	13.7	12	-	10.6	7.3
Copper	2,500	76,000	NA	NA	74.5	-	-	-	37.8	-	28.6	-	33.9	34.2	32	24.3	40.7	15.3	28.5	40.7	13.5	13.4	18.1	21.5	34.9	21	29	15.5	7.74	24	9.72	-	50.1	42.6
Lead	400	1,000	NA	NA	41.4	-	-	-	69	-	134	-	61.3	55.5	79.4	55.2	82.8	20.2	49.1	68.8	13.2	1.3	30.1	44.6	64.7	49	31.8	8.29	5.52	45.5	13.4	-	48.1	10.4
Mercury	20	610	NA	NA	ND <0.13	-	-	-	0.21	-	1.09	-	0.14	0.04	0.36	0.33	0.44	0.05	0.18	0.22	0.06	ND <0.03	0.06	ND <0.03	0.16	0.1	0.54	ND <0.03	ND <0.03	0.21	ND <0.03	-	0.17	ND <0.03
Nickel	1,400	7,500	NA	NA	10.7	-	-	-	12.6	-	14	-	11.8	11	10.9	6.22	12.6	10.8	11.8	9.4	9.9	8.8	9.33	8.87	11.5	11.1	9.28	10.4	8.89	11.4	7.27	-	13.9	14.1
Selenium	340	10,000			ND <5.2	-	-	-	ND <5.2	-	ND <5.2	-	ND <1.4	ND <2.1	ND <3.6	ND <15	ND <1.6	ND <1.5	ND <1.3	ND <1.5	ND <1.5	ND <1.4	ND <1.6	ND <1.4	ND <1.8	ND <1.4	ND <1.4	ND <1.4	ND <1.3	ND <1.6	ND <1.5	ND <1.5	-	ND <1.6	15.5
Silver	340	10,000	NA	NA	ND <3.0	-	-	-	ND <3.0	-	ND <3.0	-	ND <0.36	ND <1.8	ND <1.8	ND <0.38	ND <0.40	ND <0.39	ND <0.33	ND <0.36	ND <0.36	ND <0.34	ND <1.8	ND <1.8	ND <2.5	ND <2.5	ND <1.8	ND <0.33	ND <1.8	ND <3.7	ND <1.8	-	ND <0.40	ND <2.5
Vanadium	470	14,000	NA	NA	18.8	-	-	-	33.3	-	28.2	-	19	31.5	20.6	36	36.5	35.8	38.5	26.4	52.2	49.3	27.9	24.7	27.9	25.5	30.8	33.2	29.1	22.7	23.1	-	28.8	19.9
Zinc	20,000	610,000	NA	NA	12.2	-	-	-	30	-	82.1	-	13	38.1	48.2	58.2	140	38.8	57	67.3	132	54.9	80.6	70.6	176	75.9	74.4	24.7	28.9	125	20.8	-	26.3	27.3
SPLP Metals (mg/L)																																		
Antimony	NA	NA	0.06	NA	-	-	-	-	-	-	ND <0.005	-	ND <0.005	ND <0.02	ND <0.02	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.02	ND <0.02	ND <0.005	-	ND <0.02	ND <0.005	ND <0.02	ND <0.005	ND <0.02	-	-	-
Arsenic	NA	NA	0.5	NA	-	-	-	-	-	-	ND <0.004	-	ND <0.004	ND <0.02	ND <0.02	0.022	0.005	ND <0.004	0.007	ND <0.004	ND <0.004	ND <0.004	ND <0.02	ND <0.02	0.011	-	ND <0.02	ND <0.004	ND <0.02	0.009	ND <0.02	-	-	-
Barium	NA	NA	10	NA	-	-	-	-	-	-	0.014	-	0.035	ND <0.010	0.016	ND <0.010	0.019	0.013	ND <0.010	ND <0.010	0.017	0.003	ND <0.010	ND <0.010	ND <0.010	-	ND <0.010	ND <0.010	ND <0.010	ND <0.010	0.011	-	-	-
Beryllium	NA	NA	0.04	NA	-	-	-	-	-	-	ND <0.001	-	ND <0.001	ND <0.001	ND <0.001	ND <0.001	ND <0.001	ND <0.001	ND <0.001	ND <0.001	ND <0.001	ND <0.001	ND <0.001	ND <0.001	ND <0.001	-	ND <0.001	ND <0.001	ND <0.001	ND <0.001	ND <0.001	-	-	-
Cadmium	NA	NA	0.05	NA	-	-	-	-	-	-	ND <0.005	-	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.005	-	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.005	-	-	-
Chromium	NA	NA	0.5	NA	-	-	-	-	-	-	ND <0.010	-	ND <0.010	ND <0.010	ND <0.010	ND <0.010	ND <0.010	ND <0.010	ND <0.010	ND <0.010	ND <0.010	0.001	ND <0.010	ND <0.010	ND <0.010	-	ND <0.010	ND <0.010	ND <0.010	ND <0.010	ND <0.010	-	-	-
Copper	NA	NA	13	NA	-	-	-	-	-	-	0.012	-	ND <0.010	ND <0.010	ND <0.010	ND <0.010	ND <0.010	ND <0.010	ND <0.010	ND <0.010	0.011	0.002	ND <0.010	ND <0.010	ND <0.010	-	ND <0.010	ND <0.010	ND <0.010	ND <0.010	ND <0.010	-	-	-
Lead	NA	NA	0.15	NA	-	-	-	-	-	-	0.026	-	ND <0.010	ND <0.010	0.013	ND <0.010	0.015	ND <0.010	ND <0.010	ND <0.010	ND <0.010	ND <0.010	ND <0.010	ND <0.010	0.011	-	ND <0.010	ND <0.010	ND <0.010	ND <0.010	ND <0.010	-	-	-
Mercury	NA	NA	0.02	NA	-	-	-	-	-	-	0.0006	-	ND <0.0005	ND <0.0005	ND <0.0005	ND <0.0005	ND <0.0005	ND <0.0005	ND <0.0005	ND <0.0005	ND <0.0005	ND <0.0005	ND <0.0005	ND <0.0005	ND <0.0005	-	ND <0.0005	ND <0.0005	ND <0.0005	ND <0.0005	ND <0.0005	-	-	-
Nickel	NA	NA	1	NA	-	-	-	-	-	-	ND <0.010	-	ND <0.010	ND <0.010	ND <0.010	0.016	ND <0.010	ND <0.010	ND <0.010	ND <0.010	ND <0.010	0.002	ND <0.010	ND <0.010	ND <0.010	-	ND <0.010	ND <0.010	ND <0.010	ND <0.010	ND <0.010	-	-	-
Selenium	NA	NA	0.5	NA	-	-	-	-	-	-	ND <0.020	-	ND <0.020	ND <0.020	ND <0.020	ND <0.020	ND <0.020	ND <0.020	ND <0.020	ND <0.020	ND <0.020	ND <0.020	ND <0.020	ND <0.020	ND <0.020	-	ND <0.020	ND <0.020	ND <0.020	ND <0.020	ND <0.020	-	-	-
Silver	NA	NA	0.36	NA	-	-	-	-	-	-	ND <0.010	-	ND <0.010	ND <0.010	ND <0.010	ND <0.010	ND <0.010	ND <0.010	ND <0.010	ND <0.010	ND <0.010	ND <0.010	ND <0.010	ND <0.010	ND <0.010	-	ND <0.010	ND <0.010	ND <0.010	ND <0.010	ND <0.010	-	-	-
Vanadium	NA	NA	0.5	NA	-	-	-	-	-	-	ND <0.010	-	ND <0.010	ND <0.010	ND <0.010	ND <0.010	ND <0.010	ND <0.010	ND <0.010	ND <0.010	ND <0.010	0.002	ND <0.010	ND <0.010	ND <0.010	-	ND <0.010	ND <0.010	ND <0.010	ND <0.010	ND <0.010	-	-	-
Zinc	NA	NA	50	NA	-	-	-	-	-	-	0.031	-	ND <0.010	0.015	0.015	0.018	0.086	ND <0.010	ND <0.010	ND <0.010	0.014	0.003	ND <0.010	0.027	0.018	-	ND <0.010	ND <0.010	ND <0.010	0.017	ND <0.010	-	-	-

Notes:
CT DEEP RSRs - Connecticut Department of Energy & Environmental Protection Remediation Standard Regulations
RES DEC - Residential Direct Exposure Criteria
I/C DEC - Industrial/Commercial Direct Exposure Criteria
GB PMC - Pollutant Mobility Criteria for groundwater class GB
10XGWPC - Ten Times the Groundwater Protection Criteria
mg/Kg - milligrams per kilogram
mg/L - milligrams per liter
CT ETPH - Connecticut Extractable Total Petroleum Hydrocarbons
VOCs - Volatile Organic Compounds
SVOCs - Semi Volatile Organic Compounds
PCB - Polychlorinated Biphenyl
SPLP - Synthetic Precipitation Leaching Procedure
ND - Not detected above laboratory limits
NE - CTDEEP RSR Criteria not established
NA - Not Applicable
* - Additional Polluting Substance and Alternative Criteria approved by CTDEEP for use with permission on a site-by-site basis.
** - GB PMC values are established for leachable metals and PCBs using TCLP or SPLP analysis.
[1] - Xylene criteria apply to Total Xylenes only
^ - DEC does not apply to samples collected at depths greater than 15'
~ - PMC does not apply to samples collected below the seasonal high water table
# - PMC exempt based on SPLP analysis
Only compounds detected are summarized in the table (compounds that are not listed were not detected)
Bolded and boxed - Concentration exceeds RSR Criteria
Bolded Only - Concentration exceeds APS Criteria
- Sample not analyzed

TABLE 2
Summary of Soil Analytical Data
13 Maple Street
Rockville, CT

Sample ID					SB-50	SB-51	SB-51	^SB-52	SB-53	SB-54	SB-55	SB-55	SB-56	SB-57	SB-57	SB-58	SB-59	~^SB-59	~^SB-60	~^SB-61	~^SB-62	~^DUP-101	~^SB-63	~^SB-64	SB-65	~^SB-66	~^SB-66	~^SB-67	HA-01A	HA-01A	HA-01A	HA-02	HA-02	HA-03
Sample Depth					2 - 4 ft	2 - 4 ft	10 - 11 ft	16 - 18 ft	3 - 5 ft	2 - 4 ft	2 - 4 ft	8 - 9 ft	0.5 - 2 ft	2 - 4 ft	~8 - 10 ft	0.5 - 2 ft	2 - 3 ft	22 - 24 ft	40 - 42 ft	23 - 25 ft	31 - 33 ft	31 - 33 ft	35 - 37 ft	38.5 - 40 ft	1 - 3 ft	17 - 19 ft	27 - 29 ft	23 - 25 ft	0 - 0.5 ft	0.5 - 1 ft	1 - 1.5 ft	0.5 - 1.5 ft	1.5 - 2 ft	0 - 0.5 ft
Laboratory ID					CA96214	CA96212	CA96213	CA98185	CB20632	CA98182	CA98180	CA98181	CA98179	CA98177	CA98178	CA98176	CA99812	CA99813	CB17429	CB15819	CB15818	CB15820	CB62410	CB01075	CA91721	CB72216	CB72217	CB72218	CA35714	CA35715	CA35716	CA35717	CA35718	CA35719
Sample Date					7/23/2018	7/23/2018	7/23/2018	7/25/2018	8/28/2018	7/25/2018	7/25/2018	7/25/2018	7/25/2018	7/25/2018	7/25/2018	7/25/2018	7/27/2018	7/27/2018	8/23/2018	8/20/2018	8/20/2018	8/20/2018	10/1/2018	7/30/2018	7/17/2018	10/15/2018	10/15/2018	10/15/2018	4/24/2018	4/24/2018	4/24/2018	4/24/2018	4/24/2018	4/24/2018
Apparent Depth to Water					7'	11'	11'	18'	5'	10'	9'	9'	8'	8'	8'	13'	15'	15'	10'	19'	24'	24'	26.5'	30'	17'	14'	14'	20'	NE	NE	NE	NE	NE	NE
Duplicate					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SB-62	-	-	-	-	-	-	-	-	-	-	-	-
	RES DEC^	I/C DEC^	GB PMC**~	10X GWPC																														
CT ETPH (mg/Kg)	500	2,500	2,500	NA	210	480	-	**4200**	130	140	330	ND <61	ND <260	ND <53	ND <60	ND <260	ND <52	ND <60	ND <62	**910**	ND <57	ND <57	ND <56	ND <58	**2600**	ND <55	ND <59	ND <54	-	-	-	-	-	-
SPLP CT ETPH (mg/L)	NA	NA	NA	2,500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VOCs (mg/Kg)																																		
1,2,4-Trimethylbenzene	500*	1000*	28*	NA	ND <0.012	-	ND <0.0079	3.4	ND <0.0062	ND <0.0064	ND <0.0040	-	ND <0.0063	ND <0.0059	-	ND <0.39	ND <0.46	ND <0.0046	ND <0.0050	3	ND <0.0073	ND <0.0053	ND <0.0068	ND <0.0044	ND <0.36	ND <0.0054	0.0082	ND <0.0073	-	-	-	-	-	-
1,3,5-Trimethylbenzene	500*	1000*	28*	NA	ND <0.012	-	ND <0.0079	1.6	ND <0.0062	ND <0.0064	ND <0.0040	-	ND <0.0063	ND <0.0059	-	ND <0.39	ND <0.46	ND <0.0046	ND <0.0050	0.89	ND <0.0073	ND <0.0053	ND <0.0068	ND <0.0044	ND <0.36	ND <0.0054	ND <0.0065	ND <0.0073	-	-	-	-	-	-
2-Isopropyltoluene	NE	NE	NE	NA	ND <0.012	-	ND <0.0079	ND <0.68	ND <0.0062	ND <0.0064	ND <0.0040	-	ND <0.0063	ND <0.0059	-	ND <0.39	ND <0.46	ND <0.0046	ND <0.0050	ND <0.29	ND <0.0073	ND <0.0053	ND <0.0068	ND <0.0044	ND <0.36	ND <0.0054	ND <0.0065	ND <0.0073	-	-	-	-	-	-
4-Isopropyltoluene (cymene)	500*	1000*	5*	NA	ND <0.012	-	ND <0.0079	1.8	ND <0.0062	ND <0.0064	ND <0.0040	-	ND <0.0063	ND <0.0059	-	ND <0.39	ND <0.46	ND <0.0046	ND <0.0050	0.32	ND <0.0073	ND <0.0053	ND <0.0068	ND <0.0044	ND <0.36	ND <0.0054	ND <0.0065	ND <0.0073	-	-	-	-	-	-
Benzene	21	200	0.2	NA	ND <0.012	-	ND <0.0079	ND <0.2	ND <0.0062	ND <0.0064	ND <0.0040	-	ND <0.0063	ND <0.0059	-	ND <0.0063	ND <0.01	ND <0.0046	ND <0.0050	0.2	ND <0.0073	ND <0.0053	ND <0.0068	ND <0.0044	ND <0.0089	ND <0.0054	0.19	ND <0.0073	-	-	-	-	-	-
Butylbenzene, n-	500*	1000*	70*	NA	ND <0.012	-	ND <0.0079	0.83	ND <0.0062	ND <0.0064	ND <0.0040	-	ND <0.0063	ND <0.0059	-	ND <0.39	ND <0.46	ND <0.0046	ND <0.0050	0.22	ND <0.0073	ND <0.0053	ND <0.0068	ND <0.0044	ND <0.36	ND <0.0054	ND <0.0065	ND <0.0073	-	-	-	-	-	-
Butylbenzene, sec-	500*	1000*	70*	NA	ND <0.012	-	ND <0.0079	ND <0.68	ND <0.0062	ND <0.0064	ND <0.0040	-	ND <0.0063	ND <0.0059	-	ND <0.39	ND <0.46	ND <0.0046	ND <0.0050	ND <0.29	ND <0.0073	ND <0.0053	ND <0.0068	ND <0.0044	ND <0.36	ND <0.0054	ND <0.0065	ND <0.0073	-	-	-	-	-	-
Ethylbenzene	500	1,000	10.1	NA	ND <0.012	-	ND <0.0079	ND <0.68	ND <0.0062	ND <0.0064	ND <0.0040	-	ND <0.0063	ND <0.0059	-	ND <0.0063	0.0069	ND <0.0046	ND <0.0050	1.9	ND <0.0073	ND <0.0053	ND <0.0068	ND <0.0044	ND <0.0089	ND <0.0054	0.23	ND <0.0073	-	-	-	-	-	-
Isopropylbenzene (cumene)	500*	1000*	5*	NA	ND <0.012	-	ND <0.0079	ND <0.68	ND <0.0062	ND <0.0064	ND <0.0040	-	ND <0.0063	ND <0.0059	-	ND <0.39	ND <0.46	ND <0.0046	ND <0.0050	0.61	ND <0.0073	ND <0.0053	ND <0.0068	ND <0.0044	ND <0.36	ND <0.0054	ND <0.0065	ND <0.0073	-	-	-	-	-	-
m,p-Xylene[1]	NE	NE	NE	NA	ND <0.012	-	ND <0.0079	ND <0.68	ND <0.0062	ND <0.0064	ND <0.0040	-	ND <0.0063	ND <0.0059	-	ND <0.0063	ND <0.01	ND <0.0046	0.0064	0.96	ND <0.0073	ND <0.0053	ND <0.0068	ND <0.0044	ND <0.0089	ND <0.0054	0.022	ND <0.0073	-	-	-	-	-	-
Methylene chloride	82	760	1	NA	ND <0.012	-	ND <0.0079	ND <0.68	ND <0.0062	ND <0.0064	ND <0.0040	-	ND <0.0063	ND <0.0059	-	ND <0.0063	ND <0.01	ND <0.0046	ND <0.0050	ND <0.29	ND <0.0073	ND <0.0053	ND <0.0068	ND <0.0044	ND <0.0089	ND <0.0054	ND <0.0065	ND <0.0073	-	-	-	-	-	-
Naphthalene	1,000	2,500	56	NA	ND <0.012	-	ND <0.0079	12	ND <0.0062	ND <0.0064	ND <0.0040	-	ND <0.0063	ND <0.0059	-	ND <0.39	0.42	ND <0.0046	0.16	31	ND <0.0073	ND <0.0053	ND <0.0068	ND <0.0044	ND <0.36	ND <0.0054	0.57	ND <0.0073	-	-	-	-	-	-
n-Propylbenzene	500*	1000*	10*	NA	ND <0.012	-	ND <0.0079	ND <0.68	ND <0.0062	ND <0.0064	ND <0.0040	-	ND <0.0063	ND <0.0059	-	ND <0.39	ND <0.46	ND <0.0046	ND <0.0050	0.35	ND <0.0073	ND <0.0053	ND <0.0068	ND <0.0044	ND <0.36	ND <0.0054	ND <0.0065	ND <0.0073	-	-	-	-	-	-
o-Xylene[1]	NE	NE	NE	NA	ND <0.012	-	ND <0.0079	ND <0.68	ND <0.0062	ND <0.0064	ND <0.0040	-	ND <0.0063	ND <0.0059	-	ND <0.0063	ND <0.01	ND <0.0046	ND <0.0050	0.91	ND <0.0073	ND <0.0053	ND <0.0068	ND <0.0044	ND <0.0089	ND <0.0054	0.024	ND <0.0073	-	-	-	-	-	-
Styrene	500	1,000	20	NA	ND <0.012	-	ND <0.0079	ND <0.68	ND <0.0062	ND <0.0064	ND <0.0040	-	ND <0.0063	ND <0.0059	-	ND <0.0063	ND <0.01	ND <0.0046	ND <0.0050	ND <0.29	ND <0.0073	ND <0.0053	ND <0.0068	ND <0.0044	ND <0.0089	ND <0.0054	ND <0.0065	ND <0.0073	-	-	-	-	-	-
Tetrachloroethene	12	110	1	NA	ND <0.012	-	ND <0.0079	ND <0.68	ND <0.0062	ND <0.0064	ND <0.0040	-	ND <0.0063	ND <0.0059	-	ND <0.0063	ND <0.01	ND <0.0046	ND <0.0050	ND <0.29	ND <0.0073	ND <0.0053	ND <0.0068	ND <0.0044	ND <0.0089	ND <0.0054	ND <0.0065	ND <0.0073	-	-	-	-	-	-
Toluene	500	1,000	67	NA	ND <0.012	-	ND <0.0079	ND <0.68	ND <0.0062	ND <0.0064	ND <0.0040	-	ND <0.0063	ND <0.0059	-	ND <0.0063	0.0048	ND <0.0046	ND <0.0050	ND <0.29	ND <0.0073	ND <0.0053	ND <0.0068	ND <0.0044	ND <0.0089	ND <0.0054	ND <0.0065	ND <0.0073	-	-	-	-	-	-
Total Xylenes	500	1,000	19.5	NA	ND <0.012	-	ND <0.0079	ND <0.68	ND <0.0062	ND <0.0064	ND <0.0040	-	ND <0.0063	ND <0.0059	-	ND <0.0063	ND <0.01	ND <0.0046	0.0064	1.87	ND <0.0073	ND <0.0053	ND <0.0068	ND <0.0044	ND <0.0089	ND <0.0054	0.046	ND <0.0073	-	-	-	-	-	-
SPLP VOCs (ug/L)					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,4-Trimethylbenzene	NA	NA	NA	1,400*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3,5-Trimethylbenzene	NA	NA	NA	1,400*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Isopropyltoluene	NA	NA	NA	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-Isopropyltoluene (cymene)	NA	NA	NA	250*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	NA	NA	NA	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Butylbenzene, n-	NA	NA	NA	3,500*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Butylbenzene, sec-	NA	NA	NA	3,500*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	NA	NA	NA	7,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Isopropylbenzene (cumene)	NA	NA	NA	250*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
m,p-Xylene[1]	NA	NA	NA	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
n-Propylbenzene	NA	NA	NA	500*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
o-Xylene[1]	NA	NA	NA	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Styrene	NA	NA	NA	1,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	NA	NA	NA	10,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Xylenes	NA	NA	NA	5,300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene	NA	NA	NA	2,800	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCBs (mg/Kg)																																		
Aroclor-1254	NE	NE	NA	NA	-	-	-	-	-	-	ND <0.35	-	-	ND <0.35	-	-	-	-	-	-	-	-	-	-	ND <0.38	-	-	-	-	-	-	-	-	-
Aroclor-1268	NE	NE	NA	NA	-	-	-	-	-	-	ND <0.35	-	-	ND <0.35	-	-	-	-	-	-	-	-	-	-	ND <0.38	-	-	-	-	-	-	-	-	-
Total PCBs	1	10	NA	NA	-	-	-	-	-	-	ND <0.35	-	-	ND <0.35	-	-	-	-	-	-	-	-	-	-	ND <0.38	-	-	-	-	-	-	-	-	-
Total Cyanide (mg/Kg)	1,400	41,000	NA	NA	2.63	7.25	-	34.3	0.6	ND <0.54	ND <0.53	-	ND <0.53	ND <0.49	-	ND <0.53	0.8	-	-	-	-	-	-	-	1.18	-	-	-	-	-	-	-	-	-
SPLP Cyanide (mg/L)	NA	NA	2	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pesticides (mg/Kg)																																		
Dieldrin	0.04	0.36	0.01	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
CT DEEP RSRs - Connecticut Department of Energy & Environmental Protection Remediation Standard Regulations
RES DEC - Residential Direct Exposure Criteria
I/C DEC - Industrial/Commercial Direct Exposure Criteria
GB PMC - Pollutant Mobility Criteria for groundwater class GB
10XGWPC - Ten Times the Groundwater Protection Criteria
mg/Kg - milligrams per kilogram
mg/L - milligrams per liter
CT ETPH - Connecticut Extractable Total Petroleum Hydrocarbons
VOCs - Volatile Organic Compounds
SVOCs - Semi Volatile Organic Compounds
PCB - Polychlorinated Biphenyl
SPLP - Synthetic Precipitation Leaching Procedure
ND - Not detected above laboratory limits
NE - CTDEEP RSR Criteria not established
NA - Not Applicable
* - Additional Polluting Substance and Alternative Criteria approved by CTDEEP for use with permission on a site-by-site basis.
** - GB PMC values are established for leachable metals and PCBs using TCLP or SPLP analysis.
[1] - Xylene criteria apply to Total Xylenes only
^ - DEC does not apply to soils at depths greater than 15'
~ - PMC does not apply to samples soils below the seasonal high watertable
# - PMC exempt based on SPLP analysis
Only compounds detected are summarized in the table (compounds that are not listed were not detected)
Bolded and boxed - Concentration exceeds RSR Criteria
Bolded Only - Concentration exceeds APS Criteria
- Sample not analyzed

TABLE 2
Summary of Soil Analytical Data
13 Maple Street
Rockville, CT

Sample ID					SB-50	SB-51	SB-51	^SB-52	SB-53	SB-54	SB-55	SB-55	SB-56	SB-57	SB-57	SB-58	SB-59	~^SB-59	~^SB-60	~^SB-61	~^SB-62	~^DUP-101	~^SB-63	~^SB-64	SB-65	~^SB-66	~^SB-66	~^SB-67	HA-01A	HA-01A	HA-01A	HA-02	HA-02	HA-03
Sample Depth					2 - 4 ft	2 - 4 ft	10 - 11 ft	16 - 18 ft	3 - 5 ft	2 - 4 ft	2 - 4 ft	8 - 9 ft	0.5 - 2 ft	2 - 4 ft	~8 - 10 ft	0.5 - 2 ft	2 - 3 ft	22 - 24 ft	40 - 42 ft	23 - 25 ft	31 - 33 ft	31 - 33 ft	35 - 37 ft	38.5 - 40 ft	1 - 3 ft	17 - 19 ft	27 - 29 ft	23 - 25 ft	0 - 0.5 ft	0.5 - 1 ft	1 - 1.5 ft	0.5 - 1.5 ft	1.5 - 2 ft	0 - 0.5 ft
Laboratory ID					CA96214	CA96212	CA96213	CA98185	CB20632	CA98182	CA98180	CA98181	CA98179	CA98177	CA98178	CA98176	CA99812	CA99813	CB17429	CB15819	CB15818	CB15820	CB62410	CB01075	CA91721	CB72216	CB72217	CB72218	CA35714	CA35715	CA35716	CA35717	CA35718	CA35719
Sample Date					7/23/2018	7/23/2018	7/23/2018	7/25/2018	8/28/2018	7/25/2018	7/25/2018	7/25/2018	7/25/2018	7/25/2018	7/25/2018	7/25/2018	7/27/2018	7/27/2018	8/23/2018	8/20/2018	8/20/2018	8/20/2018	10/1/2018	7/30/2018	7/17/2018	10/15/2018	10/15/2018	10/15/2018	4/24/2018	4/24/2018	4/24/2018	4/24/2018	4/24/2018	4/24/2018
Apparent Depth to Water					7'	11'	11'	18'	5'	10'	9'	9'	8'	8'	8'	13'	15'	15'	10'	19'	24'	24'	26.5'	30'	17'	14'	14'	20'	NE	NE	NE	NE	NE	NE
Duplicate					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SB-62	-	-	-	-	-	-	-	-	-	-	-	-
	RES DEC^	I/C DEC^	GB PMC**~	10X GWPC																														
Semi-VOCs (mg/Kg)																																		
2-Methylnaphthalene	270*	1000*	5.6*	NA	ND <0.29	0.35	-	***45***	ND <0.26	ND <0.25	ND <0.24	ND <0.29	ND <0.24	ND <0.25	ND <0.28	ND <0.25	0.55	ND <0.28	ND <0.29	***10***	ND <0.26	ND <0.26	ND <0.26	ND <0.27	ND <0.52	ND <0.26	ND <0.28	ND <0.25	ND <2.6	***30***	***230***	ND <0.24	***53***	ND <2.5
Acenaphthene	1000*	2500*	84*	NA	ND <0.29	ND <0.25	-	31	ND <0.26	ND <0.25	0.72	ND <0.29	ND <0.24	ND <0.25	ND <0.28	ND <0.25	ND <0.25	ND <0.28	ND <0.29	11	ND <0.26	ND <0.26	ND <0.26	ND <0.27	ND <0.52	ND <0.26	ND <0.28	ND <0.25	ND <2.6	28	***190***	ND <0.24	ND <16	ND <2.5
Acenaphthylene	1,000	2,500	84	NA	0.29	1.6	-	9.9	0.72	0.33	1.1	ND <0.29	0.99	ND <0.25	ND <0.28	0.33	0.37	ND <0.28	ND <0.29	3.3	ND <0.26	ND <0.26	ND <0.26	ND <0.27	8.4	ND <0.26	ND <0.28	ND <0.25	6.4	8.3	ND <32	ND <0.24	43	4.6
Anthracene	1,000	2,500	400	NA	ND <0.29	1.5	-	24	0.65	0.6	3.8	ND <0.29	0.9	ND <0.25	ND <0.28	0.32	ND <0.25	ND <0.28	ND <0.29	9.2	ND <0.26	ND <0.26	ND <0.26	ND <0.27	2.1	ND <0.26	ND <0.28	ND <0.25	3	16	89	ND <0.24	42	3.4
Benz(a)anthracene	1	7.8	1	NA	0.36	***5.5***	-	***12***	***3.7***	***2.3***	***14***	ND <0.29	***3.7***	ND <0.25	ND <0.28	***1.4***	0.35	ND <0.28	ND <0.29	***8***	ND <0.26	ND <0.26	ND <0.26	ND <0.27	0.65	ND <0.26	ND <0.28	ND <0.25	***8.6***	***17***	***57***	0.25	***39***	***14***
Benzo(a)pyrene	1	1	1	NA	0.53	***5.7***	-	***7.9***	***4.4***	***2.3***	***11***	0.81	***3.4***	ND <0.25	ND <0.28	***2.5***	0.3	ND <0.28	ND <0.29	***6.9***	ND <0.26	ND <0.26	ND <0.26	ND <0.27	***2.7***	ND <0.26	ND <0.28	ND <0.25	***11***	***20***	***53***	0.28	***33***	***14***
Benzo(b)fluoranthene	1	7.8	1	NA	0.41	***6***	-	***3.9***	***4.1***	***2.2***	***9.9***	0.5	***3.1***	ND <0.25	ND <0.28	***2.3***	0.28	ND <0.28	ND <0.29	***3.3***	ND <0.26	ND <0.26	ND <0.26	ND <0.27	***2.7***	ND <0.26	ND <0.28	ND <0.25	***8.4***	***14***	ND <32	ND <0.24	***23***	***10***
Benzo(g,h,i)perylene	8.4*	78*	1*	NA	0.49	***5.2***	-	***3.7***	***2.4***	***1.3***	***6.7***	0.59	***2.1***	ND <0.25	ND <0.4	***1.3***	0.34	ND <0.28	ND <0.29	***2.4***	ND <0.26	ND <0.26	ND <0.26	ND <0.27	***4.4***	ND <0.26	ND <0.28	ND <0.25	***10***	***13***	ND <32	0.35	***22***	***8.9***
Benzo(k)fluoranthene	8.4	78	1	NA	0.43	***4.9***	-	***6.6***	***3.4***	***1.7***	***9.6***	0.52	***2.8***	ND <0.25	ND <0.28	***1.8***	0.33	ND <0.28	ND <0.29	***3.8***	ND <0.26	ND <0.26	ND <0.26	ND <0.27	***1.4***	ND <0.26	ND <0.28	ND <0.25	***8.6***	***13***	ND <32	0.25	***26***	***11***
Carbazole	31*	290*	1*	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND <0.74	-	-	-	-	-	-	-	-	-
Chrysene	84*	780*	1*	NA	0.57	***6.1***	-	***14***	***4.6***	***2.3***	***14***	ND <0.29	***3.8***	ND <0.25	ND <0.28	***1.6***	0.48	ND <0.28	ND <0.29	***8***	ND <0.26	ND <0.26	ND <0.26	ND <0.27	***1.3***	ND <0.26	ND <0.28	ND <0.25	***8.5***	***19***	***56***	0.27	***44***	***15***
Dibenz(a,h)anthracene	1*	1*	1*	NA	ND <0.29	***1.2***	-	ND <1.2	0.88	0.33	***1.7***	ND <0.29	0.47	ND <0.25	ND <0.28	0.36	ND <0.25	ND <0.28	ND <0.29	0.59	ND <0.26	ND <0.26	ND <0.26	ND <0.27	***1.2***	ND <0.26	ND <0.28	ND <0.25	ND <2.6	ND <2.7	ND <15	ND <0.24	ND <7.6	ND <2.5
Dibenzofuran	68*	1000*	1.4*	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND <0.52	-	-	-	-	-	-	-	-	-
Di-N-Octyl phthalate	1000	2500	20	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND <0.52	-	-	-	-	-	-	-	-	-
Fluoranthene	1,000	2,500	56	NA	0.48	7.2	-	17	3.7	3.9	19	ND <0.29	6.8	ND <0.25	ND <0.28	2.8	0.44	ND <0.28	ND <0.29	19	ND <0.26	ND <0.26	ND <0.26	ND <0.27	ND <0.52	ND <0.26	ND <0.28	ND <0.25	13	37	***130***	0.35	***73***	21
Fluorene	1,000	2,500	56	NA	ND <0.29	0.77	-	26	ND <0.26	ND <0.25	1.3	ND <0.29	0.28	ND <0.25	ND <0.28	ND <0.25	ND <0.25	ND <0.28	ND <0.29	7.1	ND <0.26	ND <0.26	ND <0.26	ND <0.27	0.79	ND <0.26	ND <0.28	ND <0.25	ND <2.6	20	***120***	ND <0.24	49	ND <2.5
Indeno(1,2,3-cd)pyrene	1*	7.8*	1*	NA	0.5	***5.3***	-	***3.5***	***2.5***	***1.6***	***7.7***	0.77	***2.5***	ND <0.25	ND <0.48	***1.7***	0.33	ND <0.28	ND <0.29	***2.4***	ND <0.26	ND <0.26	ND <0.26	ND <0.27	***4.1***	ND <0.26	ND <0.28	ND <0.25	***10***	ND <32	0.29	***27***	***9.4***
Naphthalene	1,000	2,500	56	NA	ND <0.29	0.56	-	4.8	0.38	ND <0.25	0.36	ND <0.29	ND <0.24	ND <0.25	ND <0.28	ND <0.25	0.61	ND <0.28	ND <0.29	19	ND <0.26	ND <0.26	ND <0.26	ND <0.27	1.7	ND <0.26	ND <0.28	ND <0.25	ND <2.6	24	***170***	ND <0.24	20	ND <2.5
Pentachlorophenol	5.1	48	1	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND<0.74	-	-	-	-	-	-	-	-	-
Phenanthrene	1,000	2,500	40	NA	0.61	6.5	-	***53***	1.5	2	14	ND <0.29	3	ND <0.25	ND <0.28	1.3	0.52	ND <0.28	ND <0.29	22	ND <0.26	ND <0.26	ND <0.26	ND <0.27	ND <0.52	ND <0.26	ND <0.28	ND <0.25	3.8	***56***	***360***	ND <0.24	***190***	11
Pyrene	1,000	2,500	40	NA	0.74	9.1	-	29	5	3.7	18	ND <0.29	6.7	ND <0.25	ND <0.28	2.6	0.58	ND <0.28	ND <0.29	29	ND <0.26	ND <0.26	ND <0.26	ND <0.27	0.93	ND <0.26	ND <0.28	ND <0.25	13	40	***180***	0.41	***110***	24
SPLP Semi-VOCs (ug/L)																																		
2-Methylnaphthalene	NA	NA	NA	280*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acenaphthene	NA	NA	NA	4,200*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acenaphthylene	NA	NA	NA	4,200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Anthracene	NA	NA	NA	20,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benz(a)anthracene	NA	NA	NA	0.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(a)pyrene	NA	NA	NA	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	NA	NA	NA	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	NA	NA	NA	4.8*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	NA	NA	NA	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chrysene	NA	NA	NA	48*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibenz(a,h)anthracene	NA	NA	NA	1*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fluoranthene	NA	NA	NA	2,800	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fluorene	NA	NA	NA	2,800	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	NA	NA	NA	1*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene	NA	NA	NA	2,800	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenanthrene	NA	NA	NA	2,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyrene	NA	NA	NA	2,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Metals (mg/Kg)																																		
Antimony	27	8,200	NA	NA	17.1	ND <3.3	-	ND <3.8	ND <3.6	ND <3.9	ND <3.2	ND <4.3	ND <3.5	ND <3.2	ND <4.3	ND <3.2	-	-	-	-	-	-	-	-	ND <3.6	-	-	-	-	-	-	-	-	-
Arsenic	10	10	NA	NA	**15.9**	**10.7**	-	1.53	**16.9**	4.04	2.84	2.08	4.38	1.29	3.06	6.02	-	-	-	-	-	-	-	-	3.17	-	-	-	-	-	-	-	-	-
Barium	4,700	140,000	NA	NA	32.4	62.6	-	36.9	57.7	77.5	35.3	70.7	46.4	36.1	56.2	47.9	-	-	-	-	-	-	-	-	76.8	-	-	-	-	-	-	-	-	-
Beryllium	2	2	NA	NA	1.04	0.63	-	0.81	0.49	ND <0.31	0.32	0.55	0.39	0.34	0.48	0.33	-	-	-	-	-	-	-	-	0.49	-	-	-	-	-	-	-	-	-
Cadmium	34	1,000	NA	NA	0.46	0.68	-	0.45	0.47	0.62	ND <0.32	ND <0.43	0.4	ND <0.32	ND <0.43	0.7	-	-	-	-	-	-	-	-	ND <0.36	-	-	-	-	-	-	-	-	-
Chromium			NA	NA	12.5	12.3	-	26.5	14.1	32.8	18.5	16.9	15.4	9.84	16.8	24.8	-	-	-	-	-	-	-	-	47.3	-	-	-	-	-	-	-	-	-
Copper	2,500	76,000	NA	NA	56.4	69.7	-	15.9	99.8	41.5	33	13	27.2	11	11.8	35.8	-	-	-	-	-	-	-	-	22.6	-	-	-	-	-	-	-	-	-
Lead	400	1,000	NA	NA	273	44.2	-	8.75	110	125	88.9	36.8	66.4	9.47	8.03	147	-	-	-	-	-	-	-	-	79.3	-	-	-	-	-	-	-	-	-
Mercury	20	610	NA	NA	0.41	0.19	-	ND <0.03	0.26	0.17	0.04	ND <0.03	0.04	ND <0.03	0.08	0.24	-	-	-	-	-	-	-	-	0.1	-	-	-	-	-	-	-	-	-
Nickel	1,400	7,500	NA	NA	12.4	14.3	-	20.6	25.2	6.56	9.01	9.65	10.3	6.04	8.71	9.58	-	-	-	-	-	-	-	-	9.8	-	-	-	-	-	-	-	-	-
Selenium	340	10,000			ND <1.7	ND <1.3	-	ND <1.5	ND <1.4	ND <1.6	ND <1.3	ND <1.7	ND <1.4	ND <1.3	ND <1.7	ND <1.3	-	-	-	-	-	-	-	-	ND <1.5	-	-	-	-	-	-	-	-	-
Silver	340	10,000	NA	NA	ND <0.43	ND <0.33	-	ND <2.5	ND <0.36	ND <2.5	ND <2.5	ND <2.5	ND <2.5	ND <2.5	ND <2.5	ND <2.5	-	-	-	-	-	-	-	-	ND <1.8	-	-	-	-	-	-	-	-	-
Vanadium	470	14,000	NA	NA	25.9	21.5	-	35.1	19	19.9	31.8	34.3	26.2	23.8	39.6	33.7	-	-	-	-	-	-	-	-	28.8	-	-	-	-	-	-	-	-	-
Zinc	20,000	610,000	NA	NA	39.1	63.7	-	73.1	125	83.8	62.8	62.2	78.1	28.1	50.5	104	-	-	-	-	-	-	-	-	35.3	-	-	-	-	-	-	-	-	-
SPLP Metals (mg/L)																																		
Antimony	NA	NA	0.06	NA	-	-	-	-	-	ND <0.005	-	ND <0.005	-	-	ND <0.005	ND <0.005	-	-	-	-	-	-	-	-	ND <0.02	-	-	-	-	-	-	-	-	-
Arsenic	NA	NA	0.5	NA	-	-	-	-	-	ND <0.004	-	ND <0.004	-	-	0.005	0.008	-	-	-	-	-	-	-	-	ND <0.02	-	-	-	-	-	-	-	-	-
Barium	NA	NA	10	NA	-	-	-	-	-	ND <0.010	-	ND <0.010	-	-	0.078	ND <0.010	-	-	-	-	-	-	-	-	0.149	-	-	-	-	-	-	-	-	-
Beryllium	NA	NA	0.04	NA	-	-	-	-	-	ND <0.001	-	ND <0.001	-	-	ND <0.001	ND <0.001	-	-	-	-	-	-	-	-	ND <0.001	-	-	-	-	-	-	-	-	-
Cadmium	NA	NA	0.05	NA	-	-	-	-	-	ND <0.005	-	ND <0.005	-	-	ND <0.005	ND <0.005	-	-	-	-	-	-	-	-	ND <0.005	-	-	-	-	-	-	-	-	-
Chromium	NA	NA	0.5	NA	-	-	-	-	-	ND <0.010	-	ND <0.010	-	-	0.022	ND <0.010	-	-	-	-	-	-	-	-	ND <0.010	-	-	-	-	-	-	-	-	-
Copper	NA	NA	13	NA	-	-	-	-	-	ND <0.010	-	ND <0.010	-	-	0.019	0.012	-	-	-	-	-	-	-	-	ND <0.010	-	-	-	-	-	-	-	-	-
Lead	NA	NA	0.15	NA	-	-	-	-	-	0.027	-	ND <0.010	-	-	0.056	0.012	-	-	-	-	-	-	-	-	ND <0.010	-	-	-	-	-	-	-	-	-
Mercury	NA	NA	0.02	NA	-	-	-	-	-	ND <0.0005	-	ND <0.0005	-	-	ND <0.0005	ND <0.0005	-	-	-	-	-	-	-	-	ND <0.0005	-	-	-	-	-	-	-	-	-
Nickel	NA	NA	1	NA	-	-	-	-	-	ND <0.010	-	ND <0.010	-	-	ND <0.010	ND <0.010	-	-	-	-	-	-	-	-	ND <0.010	-	-	-	-	-	-	-	-	-
Selenium	NA	NA	0.5	NA	-	-	-	-	-	ND <0.020	-	ND <0.020	-	-	ND <0.020	ND <0.020	-	-	-	-	-	-	-	-	ND <0.020	-	-	-	-	-	-	-	-	-
Silver	NA	NA	0.36	NA	-	-	-	-	-	ND <0.010	-	ND <0.010	-	-	ND <0.010	ND <0.010	-	-	-	-	-	-	-	-	ND <0.010	-	-	-	-	-	-	-	-	-
Vanadium	NA	NA	0.5	NA	-	-	-	-	-	ND <0.010	-	ND <0.010	-	-	0.023	0.014	-	-	-	-	-	-	-	-	ND <0.010	-	-	-	-	-	-	-	-	-
Zinc	NA	NA	50	NA	-	-	-	-	-	0.014	-	ND <0.010	-	-	0.072	0.014	-	-	-	-	-	-	-	-	ND <0.010	-	-	-	-	-	-	-	-	-

Notes:
CT DEEP RSRs - Connecticut Department of Energy & Environmental Protection Remediation Standard Regulations
RES DEC - Residential Direct Exposure Criteria
I/C DEC - Industrial/Commercial Direct Exposure Criteria
GB PMC - Pollutant Mobility Criteria for groundwater class GB
10XGWPC - Ten Times the Groundwater Protection Criteria
mg/Kg - milligrams per kilogram
mg/L - milligrams per liter
CT ETPH - Connecticut Extractable Total Petroleum Hydrocarbons
VOCs - Volatile Organic Compounds
SVOCs - Semi Volatile Organic Compounds
PCB - Polychlorinated Biphenyl
SPLP - Synthetic Precipitation Leaching Procedure
ND - Not detected above laboratory limits
NE - CTDEEP RSR Criteria not established
NA - Not Applicable
* - Additional Polluting Substance and Alternative Criteria approved by CTDEEP for use with permission on a site-by-site basis.
** - GB PMC values are established for leachable metals and PCBs using TCLP or SPLP analysis.
1 - Xylene criteria apply to Total Xylenes only
^ - DEC does not apply to samples collected at depths greater than 15'
~ - PMC does not apply to samples collected below the seasonal high water table
# - PMC exempt based on SPLP analysis
Only compounds detected are summarized in the table (compounds that are not listed were not detected)
Bolded and boxed - Concentration exceeds RSR Criteria
Bolded Only - Concentration exceeds APS Criteria
- Sample not analyzed

TABLE 2
Summary of Soil Analytical Data
13 Maple Street
Rockville, CT

Sample ID				HA-03	Dup-1	HA-03	HA-03	HA-04	HA-04	HA-04	HA-04	HA-05	HA-05	HA-05	HA-05	HA-06	HA-06	HA-06	HA-06	HA-07	HA-07	HA-07	HA-07A	HA-08	HA-08	HA-08	HA-09	HA-09	HA-09	HA-9A	HA-10	HA-11	HA-12	HA-13	HA-14
Sample Depth				0.5 - 1 ft	0.5 - 1 ft	1 - 1.5 ft	1.5 - 2 ft	0 - 0.5 ft	0.5 - 1 ft	1 - 1.5 ft	1.5 - 2 ft	0 - 0.5 ft	0.5 - 1 ft	1 - 1.5 ft	1.5 - 2 ft	0 - 0.5 ft	0.5 - 1 ft	1 - 1.5 ft	1.5 - 2 ft	0.7 - 1.25 ft	1.25 - 1.75 ft	1.75 - 2 ft	0 - 1 ft	0.5 - 1 ft	1 - 1.5 ft	1.5 - 2 ft	0.5 - 1 ft	1 - 1.5 ft	1.5 - 2 ft	2 - 2.5 ft	2 - 2.5 ft	1 - 2 ft	2 - 4 ft	0.5 - 1.5 ft	2 - 3 ft
Laboratory ID				CA35720	CA35723	CA35721	CA35722	CA35724	CA35725	CA35726	CA35727	CA35728	CA35729	CA35730	CA35731	CA35732	CA35733	CA35734	CA35735	CA48719	CA48720	CA48721	CA95005	CA48722	CA48723	CA48724	CA48725	CA48726	CA48727	CA95006	CA95007	CA95008	CB22896	CB82853	CB82854
Sample Date				4/24/2018	4/24/2018	4/24/2018	4/24/2018	4/24/2018	4/24/2018	4/24/2018	4/24/2018	4/24/2018	4/24/2018	4/24/2018	4/24/2018	4/24/2018	4/24/2018	4/24/2018	4/24/2018	5/16/2018	5/16/2018	5/16/2018	07/20/18	5/16/2018	5/16/2018	5/16/2018	5/16/2018	5/16/2018	5/16/2018	5/16/2018	07/20/18	7/20/2018	7/20/2018	8/30/2018	10/24/2018	10/24/2018
Apparent Depth to Water				NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
Duplicate				-	HA-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	RES DEC^	I/C DEC^	GB PMC**~	10X GWPC																															
CT ETPH (mg/Kg)	500	2,500	2,500	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**780**	-	-	-	-	-	-	**2500**	**5800**	78	ND <63	480	ND <390
SPLP CT ETPH (mg/L)	NA	NA	NA	2,500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VOCs (mg/Kg)																																			
1,2,4-Trimethylbenzene	500*	1000*	28*	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3,5-Trimethylbenzene	500*	1000*	28*	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Isopropyltoluene	NE	NE	NE	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-Isopropyltoluene (cymene)	500*	1000*	5*	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	21	200	0.2	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Butylbenzene, n-	500*	1000*	70*	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Butylbenzene, sec-	500*	1000*	70*	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	500	1,000	10.1	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Isopropylbenzene (cumene)	500*	1000*	5*	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
m,p-Xylene[1]	NE	NE	NE	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methylene chloride	82	760	1	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene	1,000	2,500	56	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
n-Propylbenzene	500*	1000*	10*	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
o-Xylene[1]	NE	NE	NE	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Styrene	500	1,000	20	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	12	110	1	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	500	1,000	67	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Xylenes	500	1,000	19.5	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPLP VOCs (ug/L)																																			
1,2,4-Trimethylbenzene	NA	NA	NA	1,400*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3,5-Trimethylbenzene	NA	NA	NA	1,400*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Isopropyltoluene	NA	NA	NA	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-Isopropyltoluene (cymene)	NA	NA	NA	250*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	NA	NA	NA	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Butylbenzene, n-	NA	NA	NA	3,500*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Butylbenzene, sec-	NA	NA	NA	3,500*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	NA	NA	NA	7,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Isopropylbenzene (cumene)	NA	NA	NA	250*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
m,p-Xylene[1]	NA	NA	NA	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
n-Propylbenzene	NA	NA	NA	500*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
o-Xylene[1]	NA	NA	NA	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Styrene	NA	NA	NA	1,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	NA	NA	NA	10,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Xylenes	NA	NA	NA	5,300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene	NA	NA	NA	2,800	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCBs (mg/Kg)																																			
Aroclor-1254	NE	NE	NA	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND <0.36	-	-	-	-	-	-	ND <0.38	-	-	-	-	-
Aroclor-1268	NE	NE	NA	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND <0.36	-	-	-	-	-	-	ND <0.38	-	-	-	-	-
Total PCBs	1	10	NA	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND <0.36	-	-	-	-	-	-	ND <0.38	-	-	-	-	-
Total Cyanide (mg/Kg)	1,400	41,000	NA	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.94	-	-	-	-	-	-	7.36	32.8	ND <0.50	0.58	ND <0.76	ND <0.71
SPLP Cyanide (mg/L)	NA	NA	2	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.02	-	-	-	-
Pesticides (mg/Kg)																																			
Dieldrin	0.04	0.36	0.01	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
CT DEEP RSRs - Connecticut Department of Energy & Environmental Protection Remediation Standard Regulations
RES DEC - Residential Direct Exposure Criteria
I/C DEC - Industrial/Commercial Direct Exposure Criteria
GB PMC - Pollutant Mobility Criteria for groundwater class GB
10XGWPC - Ten Times the Groundwater Protection Criteria
mg/Kg - milligrams per kilogram
mg/L - milligrams per liter
CT ETPH - Connecticut Extractable Total Petroleum Hydrocarbons
VOCs - Volatile Organic Compounds
SVOCs - Semi Volatile Organic Compounds
PCB - Polychlorinated Biphenyl
SPLP - Synthetic Precipitation Leaching Procedure
ND - Not detected above laboratory limits
NE - CTDEEP RSR Criteria not established
NA - Not Applicable
* - Additional Polluting Substance and Alternative Criteria approved by CTDEEP for use with permission on a site-by-site basis.
** - GB PMC values are established for leachable metals and PCBs using TCLP or SPLP analysis.
[1] - Xylene criteria apply to Total Xylenes only
^ - DEC does not apply to soils at depths greater than 15'
~ - PMC does not apply to samples soils below the seasonal high watertable
# - PMC exempt based on SPLP analysis
Only compounds detected are summarized in the table (compounds that are not listed were not detected)
Bolded and boxed - Concentration exceeds RSR Criteria
Bolded Only - Concentration exceeds APS Criteria
- Sample not analyzed

TABLE 2
Summary of Soil Analytical Data
13 Maple Street
Rockville, CT

Sample ID					HA-03	Dup-1	HA-03	HA-03	HA-04	HA-04	HA-04	HA-04	HA-05	HA-05	HA-05	HA-05	HA-06	HA-06	HA-06	HA-06	HA-07	HA-07	HA-07	HA-07A	HA-08	HA-08	HA-08	HA-09	HA-09	HA-09	HA-9A	HA-10	HA-11	HA-12	HA-13	HA-14
Sample Depth					0.5 - 1 ft	0.5 - 1 ft	1 - 1.5 ft	1.5 - 2 ft	0 - 0.5 ft	0.5 - 1 ft	1 - 1.5 ft	1.5 - 2 ft	0 - 0.5 ft	0.5 - 1 ft	1 - 1.5 ft	1.5 - 2 ft	0 - 0.5 ft	0.5 - 1 ft	1 - 1.5 ft	1.5 - 2 ft	0.7 - 1.25 ft	1.25 - 1.75 ft	1.75 - 2 ft	0 - 1 ft	0.5 - 1 ft	1 - 1.5 ft	1.5 - 2 ft	0.5 - 1 ft	1 - 1.5 ft	1.5 - 2 ft	2 - 2.5 ft	2 - 2.5 ft	1 - 2 ft	2 - 4 ft	0.5 - 1.5 ft	2 - 3 ft
Laboratory ID					CA35720	CA35723	CA35721	CA35722	CA35724	CA35725	CA35726	CA35727	CA35728	CA35729	CA35730	CA35731	CA35732	CA35733	CA35734	CA35735	CA48719	CA48720	CA48721	CA95005	CA48722	CA48723	CA48724	CA48725	CA48726	CA48727	CA95006	CA95007	CA95008	CB22896	CB82853	CB82854
Sample Date					4/24/2018	4/24/2018	4/24/2018	4/24/2018	4/24/2018	4/24/2018	4/24/2018	4/24/2018	4/24/2018	4/24/2018	4/24/2018	4/24/2018	4/24/2018	4/24/2018	4/24/2018	4/24/2018	5/16/2018	5/16/2018	5/16/2018	07/20/18	5/16/2018	5/16/2018	5/16/2018	5/16/2018	5/16/2018	5/16/2018	07/20/18	7/20/2018	7/20/2018	8/30/2018	10/24/2018	10/24/2018
Apparent Depth to Water					NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
Duplicate					-	HA-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	RES DEC^	I/C DEC^	GB PMC**~	10X GWPC																																
Semi-VOCs (mg/Kg)																																				
2-Methylnaphthalene	270*	1000*	5.6*	NA	ND <2.5	ND <2.5	ND <2.6	ND <2.6	ND <2.7	ND <0.27	ND <0.28	ND <0.28	ND <0.14	0.52	0.57	ND <0.26	ND <0.15	ND <0.14	ND <0.14	0.44	ND <0.25	ND <0.26	ND <5.4	ND <0.5	0.26	ND <0.27	ND <0.27	ND <0.26	0.49	ND <5.6	1.9	2.4	ND <0.25	ND <0.29	ND <0.39	ND <0.37
Acenaphthene	1000*	2500*	84*	NA	ND <2.5	ND <2.5	ND <2.6	ND <2.6	ND <2.7	ND <0.27	ND <0.28	ND <0.28	ND <0.14	ND <0.25	ND <0.25	ND <0.26	ND <0.15	ND <0.14	ND <0.14	ND <0.25	ND <0.25	ND <0.26	ND <5.4	ND <0.5	ND <0.25	ND <0.27	ND <0.27	ND <0.26	0.31	ND <6.4	ND <1.3	ND <1.4	ND <0.25	ND <0.29	ND <0.39	ND <0.37
Acenaphthylene	1,000	2,500	84	NA	7.5	8.8	5	6.2	6.3	0.37	0.37	ND <0.28	ND <0.14	2.5	2.6	ND <0.26	0.82	0.39	ND <0.14	2.4	0.69	ND <0.26	ND <5.4	1.4	1.5	2.5	0.86	2.7	3.4	16	12	21	ND <0.25	0.61	0.6	0.53
Anthracene	1,000	2,500	400	NA	5.7	6	5.9	12	ND <2.7	0.47	1.2	0.4	ND <0.14	1.1	1	ND <0.26	0.3	0.24	ND <0.14	1.5	0.27	ND <0.26	ND <5.4	0.56	0.67	1.2	0.6	1.5	2.4	ND <6.4	3.7	7.8	ND <0.25	ND <0.29	0.97	0.79
Benz(a)anthracene	1	7.8	1	NA	**24**	**25**	**17**	**29**	**4.2**	**2.1**	**4.3**	**1.3**	ND <0.14	**3.4**	**2.6**	ND <0.26	0.74	0.71	0.15	**5.8**	0.92	0.35	**25**	**1.5**	**1.7**	**4.6**	**2**	**6.8**	**6.5**	**7.2**	**3.3**	**11**	ND <0.25	**1.6**	**4.1**	**3.4**
Benzo(a)pyrene	1	1	1	NA	**32**	**25**	**14**	**26**	**7.3**	**1.8**	**3.5**	**1.1**	ND <0.14	**2.1**	**2.1**	0.31	**1.1**	0.84	0.17	**5.3**	**1.3**	0.39	**21**	**1.9**	**2.1**	**4.4**	**2.1**	**7.6**	**6.8**	**23**	**7.2**	**14**	ND <0.25	**1.9**	**4.4**	**3.7**
Benzo(b)fluoranthene	1	7.8	1	NA	**24**	**21**	**11**	**21**	**7.6**	**1.5**	**3.1**	0.92	ND <0.14	**3**	**2.9**	0.33	0.79	0.64	ND <0.14	**4.3**	0.9	0.31	**18**	**2.1**	**1.7**	**5.4**	**2**	**6.4**	**6.8**	**15**	**6.6**	**17**	ND <0.25	**1.7**	**5**	**3.9**
Benzo(g,h,i)perylene	8.4*	78*	1*	NA	***18***	***17***	***9.1***	***15***	***11***	***1.2***	***1.6***	0.67	ND <0.14	***3.1***	***3.2***	0.49	1	0.64	ND <0.14	***3.3***	***1.2***	0.33	***11***	***2.2***	***2.4***	***3.4***	***1.7***	***5.4***	***6***	***26***	***12***	***24***	ND <0.25	***1.2***	***2.5***	***2.4***
Benzo(k)fluoranthene	8.4	78	1	NA	**25**	**22**	**12**	**23**	**8**	**1.7**	**3.5**	**1.1**	ND <0.14	**3.2**	**3**	0.43	0.79	0.68	0.15	**3.8**	0.92	0.31	**18**	**1.8**	**1.6**	**4.3**	**1.8**	**5**	**4.2**	**13**	**6**	**17**	ND <0.25	**1.5**	**3.9**	**3**
Carbazole	31*	290*	1*	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chrysene	84*	780*	1*	NA	***25***	***27***	***18***	***28***	***7.1***	***2.3***	***4.3***	***1.2***	ND <0.14	***4.6***	***3.3***	ND <0.26	1	0.76	0.16	***6.4***	***1.1***	0.37	***23***	***2***	***2***	***5.1***	***2.1***	***7***	***7.3***	***9.3***	***5.1***	***18***	ND <0.25	***2***	***5***	***4***
Dibenz(a,h)anthracene	1*	1*	1*	NA	***5.2***	***4.9***	***2.6***	***4.7***	***3***	0.39	0.51	ND <0.28	ND <0.14	0.72	0.64	ND <0.26	0.23	0.16	ND <0.14	0.88	0.26	ND <0.26	ND <5.4	ND <0.5	0.58	1	0.48	***1.8***	***1.4***	ND <6.4	***2.6***	***4.4***	ND <0.25	0.33	0.82	0.77
Dibenzofuran	68*	1000*	1.4*	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Di-N-Octyl phthalate	1000	2500	20	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fluoranthene	1,000	2,500	56	NA	37	40	32	**57**	3.3	2.9	6.5	2.2	ND <0.14	2.8	2	ND <0.26	0.94	1.2	0.24	7.1	1	0.43	34	1.6	2.2	7.2	3	8	11	ND <6.4	3.4	8.9	ND <0.25	2.6	10	8.3
Fluorene	1,000	2,500	56	NA	ND <2.5	ND <2.5	2.9	4.5	ND <2.7	ND <0.27	ND <0.28	ND <0.28	ND <0.14	ND <0.25	ND <0.25	ND <0.26	ND <0.15	ND <0.14	ND <0.14	ND <0.25	ND <0.25	ND <0.26	ND <5.4	ND <0.5	ND <0.25	0.42	ND <0.27	0.31	0.26	ND <6.4	ND <1.3	1.6	ND <0.25	ND <0.29	0.42	ND <0.37
Indeno(1,2,3-cd)pyrene	1*	7.8*	1*	NA	***20***	***18***	***9***	***17***	***11***	***1.4***	***1.8***	0.76	ND <0.14	***2.9***	***2.9***	0.49	***1.3***	0.77	0.16	***3.5***	***1.2***	0.33	***13***	***2.0000***	***2.5***	***4.1***	***1.8***	***6.1***	***6.2***	***24***	***11***	***23***	ND <0.25	***1.4***	***3.1***	***2.9***
Naphthalene	1,000	2,500	56	NA	ND <2.5	ND <2.5	ND <2.6	ND <2.6	ND <2.7	ND <0.27	ND <0.28	ND <0.28	ND <0.14	0.71	0.74	ND <0.26	ND <0.15	ND <0.14	ND <0.14	0.56	ND <0.25	ND <0.26	ND <5.4	ND <0.5	0.42	0.6	ND <0.27	0.31	0.63	ND <6.4	1.6	2.7	ND <0.25	ND <0.29	ND <0.39	ND <0.37
Pentachlorophenol	5.1	48	1	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenanthrene	1,000	2,500	40	NA	17	**19**	24	**47**	3.5	1.6	3.7	1.6	ND <0.14	1.4	0.97	ND <0.26	0.44	0.63	ND <0.14	5.1	0.34	ND <0.26	11	0.88	0.98	2.1	1.8	3	10	ND <6.4	1.9	3.1	ND <0.25	1.2	4.5	3.7
Pyrene	1,000	2,500	40	NA	33	**41**	32	**51**	5.3	2.7	6.2	1.9	ND <0.14	5	3.6	ND <0.26	1.4	1.3	0.24	11	1.4	0.49	34	-	2.9	7.2	3	9.9	12	10	6	19	ND <0.25	2.7	8.5	7.2
SPLP Semi-VOCs (ug/L)																																				
2-Methylnaphthalene	NA	NA	NA	280*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acenaphthene	NA	NA	NA	4,200*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acenaphthylene	NA	NA	NA	4,200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Anthracene	NA	NA	NA	20,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benz(a)anthracene	NA	NA	NA	0.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(a)pyrene	NA	NA	NA	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	NA	NA	NA	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	NA	NA	NA	4.8*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	NA	NA	NA	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chrysene	NA	NA	NA	48*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibenz(a,h)anthracene	NA	NA	NA	1*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fluoranthene	NA	NA	NA	2,800	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fluorene	NA	NA	NA	2,800	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	NA	NA	NA	1*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene	NA	NA	NA	2,800	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenanthrene	NA	NA	NA	2,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyrene	NA	NA	NA	2,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Metals (mg/Kg)																																				
Antimony	27	8,200	NA	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND <3.7	-	-	-	-	-	-	ND <4.1	ND <3.8	ND <3.3	ND <4.4	ND <6.1	ND <5.6
Arsenic	10	10	NA	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.84	-	-	-	-	-	-	**11.8**	**15.1**	**13.8**	6.16	1.7	1.1
Barium	4,700	140,000	NA	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	64.6	-	-	-	-	-	-	70.1	64.9	45.1	74.6	67.8	31.3
Beryllium	2	2	NA	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.54	-	-	-	-	-	-	0.41	0.4	0.39	0.53	ND <0.48	ND <0.45
Cadmium	34	1,000	NA	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.65	-	-	-	-	-	-	0.83	0.67	0.39	0.56	ND <0.61	ND <0.56
Chromium			NA	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15.1	-	-	-	-	-	-	15.7	20.6	12.4	33	20.5	11.3
Copper	2,500	76,000	NA	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30.6	-	-	-	-	-	-	103	104	20.6	37.2	38	23.6
Lead	400	1,000	NA	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	73.4	-	-	-	-	-	-	80.9	106	10.2	123	60.7	50.4
Mercury	20	610	NA	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.38	-	-	-	-	-	-	0.13	0.46	0.03	0.33	0.05	ND <0.04
Nickel	1,400	7,500	NA	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14.7	-	-	-	-	-	-	8.58	9.61	9.92	8.79	9.84	5.32
Selenium	340	10,000			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND <1.5	-	-	-	-	-	-	ND <1.6	ND<1.5	ND<1.3	ND<1.8	ND<2.4	ND<2.2
Silver	340	10,000	NA	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND <0.37	-	-	-	-	-	-	ND <0.41	ND <0.38	ND <0.33	ND <0.44	ND <0.61	ND <0.56
Vanadium	470	14,000	NA	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24.9	-	-	-	-	-	-	29.2	29.1	29.5	29.9	30.2	18.6
Zinc	20,000	610,000	NA	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	87.8	-	-	-	-	-	-	60.5	52.7	41	89.5	110	63
SPLP Metals (mg/L)																																				
Antimony	NA	NA	0.06	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arsenic	NA	NA	0.5	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND <0.004	-	-	-	-
Barium	NA	NA	10	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.075	-	-	-	-
Beryllium	NA	NA	0.04	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND <0.001	-	-	-	-
Cadmium	NA	NA	0.05	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND <0.005	-	-	-	-
Chromium	NA	NA	0.5	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND <0.010	-	-	-	-
Copper	NA	NA	13	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND <0.010	-	-	-	-
Lead	NA	NA	0.15	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND <0.010	-	-	-	-
Mercury	NA	NA	0.02	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND <0.0005	-	-	-	-
Nickel	NA	NA	1	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND <0.010	-	-	-	-
Selenium	NA	NA	0.5	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND<0.02	-	-	-	-
Silver	NA	NA	0.36	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND <0.010	-	-	-	-
Vanadium	NA	NA	0.5	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND <0.010	-	-	-	-
Zinc	NA	NA	50	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.021	-	-	-	-

Notes:
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RES DEC - Residential Direct Exposure Criteria
I/C DEC - Industrial/Commercial Direct Exposure Criteria
GB PMC - Pollutant Mobility Criteria for groundwater class GB
10XGWPC - Ten Times the Groundwater Protection Criteria
mg/Kg - milligrams per kilogram
mg/L - milligrams per liter
CT ETPH - Connecticut Extractable Total Petroleum Hydrocarbons
VOCs - Volatile Organic Compounds
SVOCs - Semi Volatile Organic Compounds
PCB - Polychlorinated Biphenyl
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ND - Not detected above laboratory limits
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1 - Xylene criteria apply to Total Xylenes only
^ - DEC does not apply to samples collected at depths greater than 15'
~ - PMC does not apply to samples collected below the seasonal high water table
# - PMC exempt based on SPLP analysis
Only compounds detected are summarized in the table (compounds that are not listed were not detected)
Bolded and boxed - Concentration exceeds RSR Criteria
Bolded Only - Concentration exceeds APS Criteria
- Sample not analyzed

TABLE 2
Summary of Soil Analytical Data
13 Maple Street
Rockville, CT

Sample ID					HA-15	HA-16	HA-DUP	HA-17	HA-18
Sample Depth					1.5 - 2 ft	0.5 - 2.5 ft	0.5 - 2.5 ft	1 - 2 ft	1 - 2 ft
Laboratory ID					CB82855	CB22895	CB22897	CB22894	CB82856
Sample Date					10/24/2018	8/30/2018	8/30/2018	8/30/2018	10/24/2018
Apparent Depth to Water					NE	NE	NE	NE	NE
Duplicate					-	-	HA-16	-	-
	CT DEEP RSRs								
	RES DEC^	I/C DEC^	GB PMC**~	10X GWPC					
CT ETPH (mg/Kg)	500	2,500	2,500	NA	ND <64	**1100**	**1300**	350	**4500**
SPLP CT ETPH (mg/L)	NA	NA	NA	2,500	-	-	-	-	-
VOCs (mg/Kg)									
1,2,4-Trimethylbenzene	500*	1000*	28*	NA	-	-	-	-	-
1,3,5-Trimethylbenzene	500*	1000*	28*	NA	-	-	-	-	-
2-Isopropyltoluene	NE	NE	NE	NA	-	-	-	-	-
4-Isopropyltoluene (cymene)	500*	1000*	5*	NA	-	-	-	-	-
Benzene	21	200	0.2	NA	-	-	-	-	-
Butylbenzene, n-	500*	1000*	70*	NA	-	-	-	-	-
Butylbenzene, sec-	500*	1000*	70*	NA	-	-	-	-	-
Ethylbenzene	500	1,000	10.1	NA	-	-	-	-	-
Isopropylbenzene (cumene)	500*	1000*	5*	NA	-	-	-	-	-
m,p-Xylene[1]	NE	NE	NE	NA	-	-	-	-	-
Methylene chloride	82	760	1	NA	-	-	-	-	-
Naphthalene	1,000	2,500	56	NA	-	-	-	-	-
n-Propylbenzene	500*	1000*	10*	NA	-	-	-	-	-
o-Xylene[1]	NE	NE	NE	NA	-	-	-	-	-
Styrene	500	1,000	20	NA	-	-	-	-	-
Tetrachloroethene	12	110	1	NA	-	-	-	-	-
Toluene	500	1,000	67	NA	-	-	-	-	-
Total Xylenes	500	1,000	19.5	NA	-	-	-	-	-
SPLP VOCs (ug/L)									
1,2,4-Trimethylbenzene	NA	NA	NA	1,400*	-	-	-	-	-
1,3,5-Trimethylbenzene	NA	NA	NA	1,400*	-	-	-	-	-
2-Isopropyltoluene	NA	NA	NA	NE	-	-	-	-	-
4-Isopropyltoluene (cymene)	NA	NA	NA	250*	-	-	-	-	-
Benzene	NA	NA	NA	10	-	-	-	-	-
Butylbenzene, n-	NA	NA	NA	3,500*	-	-	-	-	-
Butylbenzene, sec-	NA	NA	NA	3,500*	-	-	-	-	-
Ethylbenzene	NA	NA	NA	7,000	-	-	-	-	-
Isopropylbenzene (cumene)	NA	NA	NA	250*	-	-	-	-	-
m,p-Xylene[1]	NA	NA	NA	NE	-	-	-	-	-
n-Propylbenzene	NA	NA	NA	500*	-	-	-	-	-
o-Xylene[1]	NA	NA	NA	NE	-	-	-	-	-
Styrene	NA	NA	NA	1,000	-	-	-	-	-
Toluene	NA	NA	NA	10,000	-	-	-	-	-
Total Xylenes	NA	NA	NA	5,300	-	-	-	-	-
Naphthalene	NA	NA	NA	2,800	-	-	-	-	-
PCBs (mg/Kg)									
Aroclor-1254	NE	NE	NA	NA	-	-	-	-	-
Aroclor-1268	NE	NE	NA	NA	-	-	-	-	-
Total PCBs	1	10	NA	NA	-	-	-	-	-
Total Cyanide (mg/Kg)	1,400	41,000	NA	NA	ND <0.65	56.7	124	3.59	2.02
SPLP Cyanide (mg/L)	NA	NA	2	NA	-	-	-	-	-
Pesticides (mg/Kg)									
Dieldrin	0.04	0.36	0.01	NA	-	-	-	-	-

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SVOCs - Semi Volatile Organic Compounds
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[1] - Xylene criteria apply to Total Xylenes only
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~ - PMC does not apply to samples soils below the seasonal high watertable
# - PMC exempt based on SPLP analysis
Only compounds detected are summarized in the table (compounds that are not listed were not detected)
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Bolded Only - Concentration exceeds APS Criteria
- Sample not analyzed

TABLE 2
Summary of Soil Analytical Data
13 Maple Street
Rockville, CT

Sample ID					HA-15	HA-16	HA-DUP	HA-17	HA-18
Sample Depth					1.5 - 2 ft	0.5 - 2.5 ft	0.5 - 2.5 ft	1 - 2 ft	1 - 2 ft
Laboratory ID					CB82855	CB22895	CB22897	CB22894	CB82856
Sample Date					10/24/2018	8/30/2018	8/30/2018	8/30/2018	10/24/2018
Apparent Depth to Water					NE	NE	NE	NE	NE
Duplicate					-	-	HA-16	-	-
	CT DEEP RSRs								
	RES DEC^	I/C DEC^	GB PMC**~	10X GWPC					
Semi-VOCs (mg/Kg)									
2-Methylnaphthalene	270*	1000*	5.6*	NA	ND <0.3	0.36	0.31	0.36	3.6
Acenaphthene	1000*	2500*	84*	NA	ND <0.3	ND <0.28	0.56	ND <0.25	ND <1.2
Acenaphthylene	1,000	2,500	84	NA	ND <0.3	2.9	3	2.6	27
Anthracene	1,000	2,500	400	NA	ND <0.3	2	2.9	1.8	25
Benz(a)anthracene	1	7.8	1	NA	ND <0.3	**13**	**18**	**5.6**	**140**
Benzo(a)pyrene	1	1	1	NA	0.34	**18**	**23**	**6.2**	**86**
Benzo(b)fluoranthene	1	7.8	1	NA	0.3	**22**	**21**	***7.4***	**77**
Benzo(g,h,i)perylene	8.4*	78*	1*	NA	0.48	***13***	***19***	***1.1***	***70***
Benzo(k)fluoranthene	8.4	78	1	NA	ND <0.3	**6.4**	**17**	**2.9**	**88**
Carbazole	31*	290*	1*	NA	-	-	-	-	-
Chrysene	84*	780*	1*	NA	ND <0.3	***15***	***22***	***6.3***	***140***
Dibenz(a,h)anthracene	1*	1*	1*	NA	ND <0.3	***3.3***	***3.8***	0.49	***13***
Dibenzofuran	68*	1000*	1.4*	NA	-	-	-	-	-
Di-N-Octyl phthalate	1000	2500	20	NA	-	-	-	-	-
Fluoranthene	1,000	2,500	56	NA	0.37	17	28	6.2	**120**
Fluorene	1,000	2,500	56	NA	ND <0.3	0.39	0.73	0.45	3.4
Indeno(1,2,3-cd)pyrene	1*	7.8*	1*	NA	0.57	***12***	***18***	***1.3***	***72***
Naphthalene	1,000	2,500	56	NA	ND <0.3	0.63	0.59	0.58	6.7
Pentachlorophenol	5.1	48	1	NA	-	-	-	-	-
Phenanthrene	1,000	2,500	40	NA	ND <0.3	4.7	9.7	5	5.2
Pyrene	1,000	2,500	40	NA	0.42	26	38	12	**270**
SPLP Semi-VOCs (ug/L)									
2-Methylnaphthalene	NA	NA	NA	280*	-	-	-	-	-
Acenaphthene	NA	NA	NA	4,200*	-	-	-	-	-
Acenaphthylene	NA	NA	NA	4,200	-	-	-	-	-
Anthracene	NA	NA	NA	20,000	-	-	-	-	-
Benz(a)anthracene	NA	NA	NA	0.6	-	-	-	-	-
Benzo(a)pyrene	NA	NA	NA	2	-	-	-	-	-
Benzo(b)fluoranthene	NA	NA	NA	0.8	-	-	-	-	-
Benzo(g,h,i)perylene	NA	NA	NA	4.8*	-	-	-	-	-
Benzo(k)fluoranthene	NA	NA	NA	5	-	-	-	-	-
Chrysene	NA	NA	NA	48*	-	-	-	-	-
Dibenz(a,h)anthracene	NA	NA	NA	1*	-	-	-	-	-
Fluoranthene	NA	NA	NA	2,800	-	-	-	-	-
Fluorene	NA	NA	NA	2,800	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	NA	NA	NA	1*	-	-	-	-	-
Naphthalene	NA	NA	NA	2,800	-	-	-	-	-
Phenanthrene	NA	NA	NA	2,000	-	-	-	-	-
Pyrene	NA	NA	NA	2,000	-	-	-	-	-
Metals (mg/Kg)									
Antimony	27	8,200	NA	NA	ND <4.2	ND <4.1	ND <3.8	ND <3.6	ND <3.9
Arsenic	10	10	NA	NA	**21.1**	**18.6**	**18.6**	3.72	**10.4**
Barium	4,700	140,000	NA	NA	83.9	77.9	83.4	178	45.4
Beryllium	2	2	NA	NA	0.79	0.37	0.41	0.33	0.42
Cadmium	34	1,000	NA	NA	0.63	0.77	0.78	2.39	ND <0.39
Chromium			NA	NA	18	15.6	15.7	21	10.3
Copper	2,500	76,000	NA	NA	65	42.7	44	198	36.6
Lead	400	1,000	NA	NA	473	101	110	169	76.6
Mercury	20	610	NA	NA	0.04	1.09	0.63	2.35	0.52
Nickel	1,400	7,500	NA	NA	17.6	10.2	10.9	14.2	9.45
Selenium	340	10,000			ND<1.7	ND<1.6	ND <1.5	ND<1.4	ND<1.5
Silver	340	10,000	NA	NA	ND <0.42	ND <0.41	ND <0.38	1.06	ND <0.39
Vanadium	470	14,000	NA	NA	32.4	27.3	29.3	31.3	17.1
Zinc	20,000	610,000	NA	NA	53	101	107	278	35.3
SPLP Metals (mg/L)									
Antimony	NA	NA	0.06	NA	-	-	-	-	-
Arsenic	NA	NA	0.5	NA	-	-	-	ND <0.004	-
Barium	NA	NA	10	NA	-	-	-	0.024	-
Beryllium	NA	NA	0.04	NA	-	-	-	ND <0.001	-
Cadmium	NA	NA	0.05	NA	-	-	-	ND <0.005	-
Chromium	NA	NA	0.5	NA	-	-	-	ND <0.010	-
Copper	NA	NA	13	NA	-	-	-	0.127	-
Lead	NA	NA	0.15	NA	-	-	-	**0.034**	-
Mercury	NA	NA	0.02	NA	-	-	-	ND <0.0005	-
Nickel	NA	NA	1	NA	-	-	-	ND <0.010	-
Selenium	NA	NA	0.5	NA	-	-	-	ND<0.02	-
Silver	NA	NA	0.36	NA	-	-	-	ND <0.010	-
Vanadium	NA	NA	0.5	NA	-	-	-	ND <0.010	-
Zinc	NA	NA	50	NA	-	-	-	0.028	-

Notes:

CT DEEP RSRs - Connecticut Department of Energy & Environmental Protection Remediation Standard Regulations

RES DEC - Residential Direct Exposure Criteria

I/C DEC - Industrial/Commercial Direct Exposure Criteria

GB PMC - Pollutant Mobility Criteria for groundwater class GB

10XGWPC - Ten Times the Groundwater Protection Criteria

mg/Kg - milligrams per kilogram

mg/L - milligrams per liter

CT ETPH - Connecticut Extractable Total Petroleum Hydrocarbons

VOCs - Volatile Organic Compounds

SVOCs - Semi Volatile Organic Compounds

PCB - Polychlorinated Biphenyl

SPLP - Synthetic Precipitation Leaching Procedure

ND - Not detected above laboratory limits

NE - CTDEEP RSR Criteria not established

NA - Not Applicable

* - Additional Polluting Substance and Alternative Criteria approved by CTDEEP for use with permission on a site-by-site basis.

** - GB PMC values are established for leachable metals and PCBs using TCLP or SPLP analysis.

[1] - Xylene criteria apply to Total Xylenes only

^ - DEC does not apply to samples collected at depths greater than 15'

~ - PMC does not apply to samples collected below the seasonal high water table

- PMC exempt based on SPLP analysis

Only compounds detected are summarized in the table (compounds that are not listed were not detected)

Bolded and boxed - Concentration exceeds RSR Criteria

Bolded Only - Concentration exceeds APS Criteria

- Sample not analyzed

TABLE 3
Groundwater Analytical Data Summary
Rockville Former MGP Site
13 Maple Street
Rockville, CT

Sample ID	CTDEEP RSR			MW-1S^		MW-1D		MW-2SR	MW-2BR		MW-3S		MW-3BR			MW-4S			MW-4SR	MW-4D			MW-5S	
Sample Date				11/22/2016	5/24/2018	11/22/2016	5/24/2018	5/16/2018	11/10/2017	5/16/2018	11/22/2016	5/24/2018	11/9/2017	5/30/2018	10/24/2018	12/8/2016	5/22/2018	5/22/2018	10/24/2018	11/21/2016	12/8/2016	5/22/2018	12/2/2016	5/16/2018
Lab Sample ID				BV89929	CA58993	BV89928	CA58994	CA48716	BZ39893	CA48717	BV89927	CA58995	BZ39264	CA61339	CB82840	BX01511	CA51710	CA51719	CB82836	BV89159	BX01512	CA51711	BV94073	CA48713
Duplicate Sample																		MW-4S						
	SWPC	RES VC	I/C VC																					
CT ETPH (ug/L)																								
CT ETPH	*250*	*250*	*250*	***490***	79	ND <75	ND <67	ND <66	ND <67	ND <66	ND <70	***1000***	84	ND <66	ND <71	ND <70	ND <66	ND <66	ND <67	ND <70	-	ND <66	240	***340***
Cyanide (ug/L)																								
Total Cyanide	52	NA	NA	ND <10	ND <10	ND <10	ND <10	ND <10	ND <10	ND <10	ND <10	ND <10	ND <10	ND <10	ND <10	ND <10	11	12	13	ND <10	-	ND <10	ND <10	ND <10
Metals (ug/L)																								
Antimony	86000	NA	NA	ND <5	ND <5	ND <5	ND <5	ND <5	ND <5	ND <5	ND <5	ND <5	ND <5	ND <3	ND <5	ND <5	ND <5	ND <5	ND <5	ND <5	-	ND <5	ND <5	ND <5
Arsenic	4	NA	NA	ND <4	ND <4	ND <4	ND <4	ND <4	ND <4	ND <4	ND <4	ND <4	ND <4	ND <4	ND <4	ND <4	ND <4	ND <4	ND <4	ND <4	-	ND <4	ND <4	ND <4
Barium	*2200*	NA	NA	274	273	327	321	121	347	365	19	48	135	207	230	78	84	86	118	258	-	281	62	79
Total Chromium	NE	NA	NA	ND <1	15	2	683	ND <1	10	ND <1	8	6	96	7	5	ND <1	ND <1	ND <1	ND <1	1	-	18	ND <1	ND <1
Copper	48	NA	NA	ND <5	ND <5	ND <5	**219**	ND <5	ND <5	ND <5	ND <5	ND <5	ND <5	ND <5	ND <5	ND <5	ND <5	ND <5	ND <5	ND <5	-	ND <5	ND <5	ND <5
Lead	13	NA	NA	ND <2	ND <2	ND <2	ND <2	ND <2	ND <2	ND <2	ND <2	ND <2	ND <2	3	ND <2	ND <2	ND <2	ND <2	ND <2	ND <2	-	ND <2	ND <2	ND <2
Mercury	0.4	NA	NA	ND <0.2000	ND <0.2000	ND <0.2000	ND <0.2000	ND <0.2000	ND <0.2000	ND <0.2000	ND <0.2000	ND <0.2000	ND <0.2000	ND <0.2000	ND <0.2000	ND <0.2000	ND <0.2000	ND <0.2000	ND <0.2000	ND <0.2000	-	ND <0.2000	ND <0.2000	ND <0.2000
Nickel	880	NA	NA	7	6	359	**5670**	ND <1	ND <1	ND <1	8	28	ND <1	ND <1	ND <1	1	1	1	ND <1	4	-	13	ND <1	ND <1
Silver				ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	-	ND<1	ND<1	ND<1
Vanadium	*270*	NA	NA	ND <2	ND <2	ND <2	ND <2	ND <2	ND <2	ND <2	ND <2	ND <2	4	ND <2	ND <2	ND <2	ND <2	ND <2	ND <2	ND <2	-	ND <2	ND <2	ND <2
Zinc	123	NA	NA	ND <2	2	ND <2	48	4	4	ND <2	ND <2	2	ND <2	ND <2	ND <4	6	30	31	19	ND <2	-	2	9	13
VOCs (ug/L)																								
1,1,1-Trichloroethane	62000	20400	50000	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	-	ND <1.0	ND <1.0	ND <1.0
1,2,4-Trimethylbenzene	*150*	*940*	*12800*	2.2	1.4	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	21	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	-	ND <1.0	1.2	ND <1.0
1,3,5-Trimethylbenzene	*260*	*730*	*10000*	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	11	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	-	ND <1.0	ND <1.0	ND <1.0
4-Isopropyltoluene (cymene)	*200*	*870*	*2100*	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	1.4	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	-	ND <1.0	ND <1.0	ND <1.0
Benzene	710	215	530	ND <0.70	ND <0.70	ND <0.70	ND <0.70	ND <0.70	ND <0.70	ND <0.70	ND <0.70	45	ND <0.70	1.2	ND <0.70	ND <0.70	ND <0.70	ND <0.70	ND <0.70	ND <0.70	-	ND <0.70	ND <0.70	ND <0.70
Bromodichloromethane	*510*	*1.1*	*35*	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	1.2	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	-	ND <0.50	ND <0.50	ND <0.50
Carbon disulfide	*150*	*2100*	*5200*	ND <5.0	ND <5.0	ND <5.0	ND <5.0	ND <5.0	ND <5.0	ND <5.0	ND <5.0	ND <5.0	ND <5.0	5.1	ND <5.0	ND <5.0	ND <5.0	ND <5.0	ND <5.0	ND <5.0	-	ND <5.0	ND <5.0	ND <5.0
Chloroform	14100	287	710	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	7.8	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	-	ND <1.0	ND <1.0	ND <1.0
Dibromochloromethane	1020	NE	NE	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	-	ND <0.50	ND <0.50	ND <0.50
Ethylbenzene	580000	50000	50000	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	60	1.3	1.2	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	-	ND <1.0	ND <1.0	ND <1.0
Isopropylbenzene (cumene)	*210*	*900*	*2200*	2	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	2.7	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	-	ND <1.0	ND <1.0	ND <1.0
m,p-Xylene	NE	NE	NE	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	87	1.1	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	-	ND <1.0	ND <1.0	ND <1.0
Methyl tert butyl ether	*10000*	50000	50000	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	-	ND <1.0	ND <1.0	ND <1.0
Methylene chloride	48000	50000	50000	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	-	ND <1.0	ND <1.0	ND <1.0
Naphthalene	*210*	NE	NE	ND <1.0	1.4	ND <1.0	ND <1.0	4.6	ND <1.0	ND <1.0	ND <1.0	210	19	1.3	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	-	ND <1.0	5	2.7
n-Propylbenzene	*10000*	*1200*	*2900*	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	-	ND <1.0	ND <1.0	ND <1.0
o-Xylene	NE	NE	NE	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	69	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	-	ND <1.0	ND <1.0	ND <1.0
Styrene	*320*	580	2065	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	5.8	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	-	ND <1.0	ND <1.0	ND <1.0
Tetrachloroethene	88	1500	3820	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	2.1	1.7	2	1	ND <1.0	-	ND <1.0	ND <1.0	ND <1.0
Toluene	4000000	23500	50000	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	86	ND <1.0	3.5	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	-	ND <1.0	ND <1.0	ND <1.0
Total Xylenes	*270*	21300	50000	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	156	1.1	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	-	ND <1.0	ND <1.0	ND <1.0
SVOCs (ug/L)																								
2,4-Dimethylphenol	*150*	NE	NE	ND <1.1	ND <0.94	ND <1.0	ND <0.94	ND <0.94	ND <0.95	ND <0.94	ND <1.0	8.3	ND <0.98	ND <0.94	ND <1.1	ND <1.0	ND <0.94	ND <0.95	ND <1.0	-	ND <1.0	ND <0.95	ND <1.0	ND <0.94
2-Methylnaphthalene	*62*	*1000*	*13100*	ND <1.1	ND <0.94	ND <1.0	ND <0.94	1.3	ND <0.95	ND <0.94	ND <1.0	ND <0.94	3.1	ND <0.94	ND <1.1	ND <1.0	ND <0.94	ND <0.95	ND <1.0	-	ND <1.0	ND <0.95	ND <1.0	ND <0.94
2-Methylphenol	*670*	NE	NE	ND <1.1	ND <0.94	ND <1.0	ND <0.94	ND <0.94	ND <0.95	ND <0.94	ND <1.0	1.2	ND <0.98	ND <0.94	ND <1.1	ND <1.0	ND <0.94	ND <0.95	ND <1.0	-	ND <1.0	ND <0.95	ND <1.0	ND <0.94
Acenaphthene	*150*	*30500*	*50000*	16	6.8	ND <0.05	ND <0.05	1.2	ND <0.05	ND <0.05	ND <0.05	2.6	1.3	0.35	ND <0.06	ND <0.05	ND <0.05	ND <0.05	0.69	-	ND <0.05	ND <0.05	11	5.5
Acenaphthylene	0.3	NE	NE	**2.9**	**0.63**	ND <0.05	ND <0.05	**1.3**	ND <0.05	ND <0.05	ND <0.05	**1.3**	**1.6**	0.13	ND <0.06	0.11	0.22	0.1	**0.37**	-	0.12	ND <0.05	**3.4**	**1.9**
Acetophenone	NE	NE	NE	ND <5.4	ND <4.7	ND <5.0	ND <4.7	ND <4.7	ND <4.8	ND <4.7	ND <5.0	ND <4.7	ND <4.9	ND <4.7	ND <5.6	ND <5.0	ND <4.7	ND <4.8	ND <5.1	-	ND <5.0	ND <4.8	ND <5.0	ND <4.7
Anthracene	1100000	NE	NE	0.88	ND <0.05	ND <0.05	ND <0.05	0.92	ND <0.05	ND <0.05	ND <0.05	0.58	0.35	0.08	ND <0.06	ND <0.05	0.13	0.14	0.31	-	ND <0.05	ND <0.05	3.3	1.8
Benz(a)anthracene	0.3	NE	NE	0.12	ND <0.05	ND <0.05	ND <0.05	**0.43**	ND <0.05	ND <0.05	ND <0.05	0.2	ND <0.05	ND <0.05	ND <0.06	ND <0.05	ND <0.05	ND <0.05	ND <0.05	-	ND <0.05	ND <0.05	**0.33**	0.27
Benzo(a)pyrene	0.3	NE	NE	ND <0.05	ND <0.05	ND <0.05	ND <0.05	**0.41**	0.06	ND <0.05	ND <0.05	**0.39**	ND <0.05	ND <0.05	ND <0.06	ND <0.05	0.07	ND <0.05	ND <0.05	-	ND <0.05	ND <0.05	ND <0.05	ND <0.05
Benzo(b)fluoranthene	0.3	NE	NE	ND <0.05	ND <0.05	ND <0.05	ND <0.05	0.22	ND <0.05	ND <0.05	ND <0.05	0.23	ND <0.05	ND <0.05	ND <0.06	ND <0.05	ND <0.05	ND <0.05	ND <0.05	-	ND <0.05	ND <0.05	ND <0.05	ND <0.05
Benzo(g,h,i)perylene	*150*	NE	NE	ND <0.54	ND <0.19	ND <0.50	ND <0.19	0.32	ND <0.19	ND <0.19	ND <0.50	0.24	ND <0.20	ND <0.19	ND <0.22	ND <0.50	ND <0.19	ND <0.19	ND <0.20	-	ND <0.50	ND <0.19	ND <0.50	ND <0.19
Benzo(k)fluoranthene	0.3	NE	NE	ND <0.05	ND <0.05	ND <0.05	ND <0.05	0.23	ND <0.05	ND <0.05	ND <0.05	0.29	ND <0.05	ND <0.05	ND <0.06	ND <0.05	ND <0.05	ND <0.05	ND <0.05	-	ND <0.05	ND <0.05	ND <0.05	ND <0.05
bis(2-Ethylhexyl)phthalate	59	NE	NE	ND <0.54	ND <0.47	ND <0.50	ND <0.47	ND <0.47	ND <0.48	ND <0.47	ND <0.50	ND <0.47	ND <0.49	ND <0.47	ND <0.56	ND <0.50	ND <0.47	ND <0.48	ND <0.51	-	ND <0.50	ND <0.48	ND <0.50	ND <0.47
Carbazole	*53*	NE	NE	ND <5.4	ND <4.7	ND <5.0	ND <4.7	ND <4.7	ND <4.8	ND <4.7	ND <5.0	ND <4.7	ND <4.9	ND <4.7	ND <5.0	ND <5.0	ND <4.7	ND <4.8	ND <5.0	-	ND <5.0	ND <4.8	ND <5.0	ND <4.7
Chrysene	*0.54*	NE	NE	0.1	ND <0.05	ND <0.05	ND <0.05	0.43	ND <0.05	ND <0.05	ND <0.05	0.24	ND <0.05	ND <0.05	ND <0.06	ND <0.05	ND <0.05	ND <0.05	ND <0.05	-	ND <0.05	ND <0.05	0.36	0.27
Dibenz(a,h)anthracene	*0.3*	NE	NE	ND <0.01	ND <0.01	ND <0.01	ND <0.01	0.06	ND <0.01	ND <0.01	ND <0.01	0.05	ND <0.01	ND <0.01	ND <0.06	ND <0.01	0.02	ND <0.01	ND <0.05	-	ND <0.01	ND <0.01	ND <0.01	ND <0.01
Dibenzofuran	*40*	*460*	*5800*	ND <5.4	0.1	ND <5.0	ND <0.05	0.19	ND <0.05	ND <0.05	ND <5.0	ND <0.05	0.11	ND <0.05	ND <0.06	ND <5.0	ND <0.05	ND <0.05	0.2	-	ND <5.0	ND <0.05	ND <5.0	0.68
Diethylphthalate	*2200*	NE	NE	ND <5.4	ND <4.7	ND <5.0	ND <4.7	ND <4.7	ND <4.8	ND <4.7	ND <5.0	ND <4.7	ND <4.9	ND <4.7	ND <5.6	ND <5.0	ND <4.7	ND <4.8	ND <5.1	-	ND <5.0	ND <4.8	ND <5.0	ND <4.7
Fluoranthene	3700	NE	NE	1.7	0.26	ND <0.05	ND <0.05	1.7	ND <0.05	ND <0.05	ND <0.05	0.42	0.29	0.16	ND <0.06	ND <0.05	ND <0.05	ND <0.05	0.93	-	ND <0.05	ND <0.05	2.7	1.5
Fluorene	140000	NE	NE	0.6	0.35	ND <0.10	ND <0.09	1.6	ND <0.10	ND <0.09	ND <0.10	0.25	0.98	ND <0.09	ND <0.11	ND <0.10	ND <0.09	ND <0.10	ND <0.10	-	ND <0.10	ND <0.10	9.8	5.1
Indeno(1,2,3-cd)pyrene	*0.54*	NE	NE	ND <0.05	ND <0.05	ND <0.05	ND <0.05	0.2	ND <0.05	ND <0.05	ND <0.05	0.18	ND <0.05	ND <0.05	ND <0.06	ND <0.05	0.07	ND <0.05	ND <0.05	-	ND <0.05	ND <0.05	ND <0.05	ND <0.05
Naphthalene	*210*	NE	NE	0.8	0.15	ND <0.10	ND <0.09	3.6	ND <0.10	ND <0.09	ND <0.10	0.25	8.7	0.16	ND <0.20	ND <0.10	ND <0.09	ND <0.10	ND <0.10	-	0.13	ND <0.10	3.6	1.9
Nitrobenzene	*2300*	*51*	*750*	ND <0.11	ND <0.09	ND <0.10	ND <0.09	ND <0.09	ND <0.10	ND <0.09	ND <0.10	ND <0.09	ND <0.10	ND <0.09	ND <0.11	ND <0.10	ND <0.09	ND <0.10	ND <0.10	-	0.11	ND <0.10	ND <0.10	ND <0.09
Phenanthrene	*14*	NE	NE	0.55	ND <0.05	ND <0.05	ND <0.05	3.4	ND <0.05	ND <0.05	ND <0.05	0.07	2	0.06	ND <0.06	ND <0.05	ND <0.05	ND <0.05	0.07	-	ND <0.05	ND <0.05	0.92	0.89
Phenol	9.20E+07	NE	NE	ND <1.1	ND <0.94	ND <1.0	ND <0.94	ND <0.94	ND <0.95	ND <0.94	ND <1.0	8.2	ND <0.98	ND <0.94	ND <1.1	ND <1.0	ND <0.94	ND <0.95	ND <1.0	-	ND <1.0	ND <0.95	ND <1.0	ND <0.94
Pyrene	110000	NE	NE	1.9	0.29	ND <0.05	ND <0.05	2.4	0.08	ND <0.05	ND <0.05	0.71	0.37	0.26	ND <0.06	ND <0.05	ND <0.05	ND <0.05	1	-	ND <0.05	ND <0.05	4.2	2.3

Notes
CT DEEP RSRs - Connecticut Department of Energy & Environmental Protection Remediation Standard Regulations
SWPC - Surface Water Protection Criteria
RES VC - Residential Volatilization Criteria
I/C VC - Industrial/Commercial Volatilization Criteria
ug/L - micrograms per Liter
CT ETPH - Connecticut Extractable Total Petroleum Hydrocarbons
VOCs - Volatile Organic Compounds
SVOCs - Semi Volatile Organic Compounds
ND - Not detected above listed laboratory reporting limit
NE - RSR criteria not established
Italics Criteria - Additional Polluting Substance and Alternative Criteria (APS) approved by CTDEEP for use with permission on a site-by-site basis.

[1]- Xylene criteria apply to Total Xylenes
^ - Volatilization Criteria Does Not Apply to Wells Screen Greater Than 15' Below the Water table
Only compounds detected are summarized in the table (compounds that are not listed were not detected)
Bolded and boxed - Concentration exceeds RSR value
Bolded, boxed, and Italics - Concentration exceeds APS RSR value

TABLE 3
Groundwater Analytical Data Summary
Rockville Former MGP Site
13 Maple Street
Rockville, CT

Sample ID	CTDEEP RSR			MW-5D		MW-6S		MW-6D			MW-7S^				MW-7D^			MW-8SR			MW-9S			MW-9D		
Sample Date				12/2/2016	5/16/2018	11/21/2016	5/22/2018	11/21/2016	12/7/2016	5/22/2018	11/21/2016	12/7/2016	12/7/2016	5/24/2018	11/9/2017	5/31/2018	10/24/2018	11/10/2017	5/16/2018	11/21/2016	5/24/2018	11/21/2016	11/21/2016	12/7/2016	5/24/2018
Lab Sample ID				BV94074	CA48714	BV89151	CA51712	BV89154	BX00267	CA51713	BV89155	BX00266	BX00270	CA58996	BZ39261	CA61367	CB82849	BZ39894	CA48715	BV89152	CA58997	BV89150	BV89158	BX00268	CA59003
Duplicate Sample													Dup-2									MW-9S				
	SWPC	RES VC	I/C VC																							
CT ETPH (ug/L)																										
CT ETPH	*250*	*250*	*250*	ND <70	74	ND <70	ND <66	ND <70	-	ND <66	***1500***	-	-	***1000***	ND <68	ND <67	ND <69	ND <68	ND <67	***4100***	***4500***	***3900***	ND <70	-	ND <67
Cyanide (ug/L)																										
Total Cyanide	52	NA	NA	ND <10	ND <10	ND <10	ND <10	ND <10	-	ND <10	ND <10	-	-	ND <10	ND <10	ND <10	ND <10	ND <10	ND <10	**140**	**62**	**140**	ND <10	-	ND <10
Metals (ug/L)																										
Antimony	86000	NA	NA	ND <5	ND <5	ND <5	ND <5	ND <5	-	ND <5	ND <5	-	-	ND <5	ND <5	ND <5	ND <5	ND <5	ND <5	ND <5	ND <5	ND <5	ND <5	-	ND <5
Arsenic	4	NA	NA	ND <4	ND <4	ND <4	ND <4	4	-	ND <4	ND <4	-	-	ND <4	ND <4	ND <4	ND <4	ND <4	ND <4	ND <4	ND <4	ND <4	ND <4	-	ND <4
Barium	*2200*	NA	NA	164	125	27	31	95	-	73	285	-	-	329	176	299	298	71	56	72	177	70	300	-	294
Total Chromium	NE	NA	NA	3	13	4	40	9	-	22	ND <1	-	-	ND <1	10	2	ND <1	4	3	ND <1	ND <1	ND <1	21	-	674
Copper	48	NA	NA	ND <5	ND <5	ND <5	ND <5	ND <5	-	ND <5	ND <5	-	-	ND <5	ND <5	ND <5	ND <5	12	8	ND <5	ND <5	ND <5	ND <5	-	22
Lead	13	NA	NA	ND <2	ND <2	ND <2	ND <2	ND <2	-	ND <2	ND <2	-	-	ND <2	ND <2	ND <2	ND <2	3	ND <2	ND <2	ND <2	ND <2	ND <2	-	ND <2
Mercury	0.4	NA	NA	ND <0.2000	ND <0.2000	ND <0.2000	ND <0.2000	ND <0.2000	-	ND <0.2000	ND <0.2000	-	-	0.2	ND <0.2000	ND <0.2000	ND <0.2000	ND <0.2000	ND <0.2000	ND <0.2000	ND <0.2000	ND <0.2	ND <0.2000	-	ND <0.2000
Nickel	880	NA	NA	5	9	10	8	9	-	6	2	-	-	2	2	ND <1	ND <1	2	ND <1	ND <1	ND <1	ND <1	24	-	372
Silver				ND<1	ND<1	ND<1	ND<1	ND<1	-	ND<1	ND<1	-	-	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	-	ND<1
Vanadium	*270*	NA	NA	ND <2	ND <2	ND <2	ND <2	ND <2	-	ND <2	ND <2	-	-	ND <2	7	2	ND <2	4	ND <2	ND <2	ND <2	ND <2	ND <2	-	4
Zinc	123	NA	NA	2	ND <2	4	4	ND <2	-	2	3	-	-	2	7	3	ND <4	8	11	ND <2	ND <2	ND <2	ND <2	-	6
VOCs (ug/L)																										
1,1,1-Trichloroethane	62000	20400	50000	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	-	ND <1.0	ND <2.0	-	-	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <5.0	ND <10	ND <5.0	ND <1.0	-	ND <1.0
1,2,4-Trimethylbenzene	*150*	*940*	*12800*	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	-	ND <1.0	20	-	-	27	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	***260***	***180***	***260***	ND <1.0	-	ND <1.0
1,3,5-Trimethylbenzene	*260*	*730*	*10000*	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	-	ND <1.0	ND <2.0	-	-	1.5	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	91	62	92	ND <1.0	-	ND <1.0
4-Isopropyltoluene (cymene)	*200*	*870*	*2100*	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	-	ND <1.0	ND <2.0	-	-	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	14	ND <10	14	ND <1.0	-	ND <1.0
Benzene	710	215	530	ND <0.70	ND <0.70	ND <0.70	ND <0.70	ND <0.70	-	ND <0.70	1.6	-	-	2	ND <0.70	ND <0.70	ND <0.70	ND <0.70	ND <0.70	28	31	28	ND <0.70	-	ND <0.70
Bromodichloromethane	*510*	*1.1*	*35*	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	-	ND <0.50	ND <0.56	-	-	ND <0.50	1.1	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <1.3	ND <2.5	ND <1.3	ND <0.50	-	ND <0.50
Carbon disulfide	*150*	*2100*	*5200*	ND <5.0	ND <5.0	ND <5.0	ND <5.0	ND <5.0	-	ND <5.0	ND <10	-	-	ND <5.0	ND <5.0	ND <5.0	ND <5.0	ND <5.0	ND <5.0	ND <25	ND <40	ND <25	ND <5.0	-	ND <5.0
Chloroform	14100	287	710	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	-	ND <1.0	ND <2.0	-	-	ND <1.0	8.1	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <5.0	ND <6.0	ND <5.0	ND <1.0	-	ND <1.0
Dibromochloromethane	1020	NE	NE	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	-	ND <0.50	ND <0.50	-	-	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <1.3	ND <2.5	ND <1.3	ND <0.50	-	ND <0.50
Ethylbenzene	580000	50000	50000	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	-	ND <1.0	86	-	-	11	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	570	500	560	ND <1.0	-	ND <1.0
Isopropylbenzene (cumene)	*210*	*900*	*2200*	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	-	ND <1.0	11	-	-	11	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	47	36	46	ND <1.0	-	ND <1.0
m,p-Xylene	NE	NE	NE	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	-	ND <1.0	14	-	-	8.5	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	180	130	190	ND <1.0	-	ND <1.0
Methyl tert butyl ether	*10000*	50000	50000	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	-	ND <1.0	ND <2.0	-	-	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <5.0	ND <10	ND <5.0	ND <1.0	-	ND <1.0
Methylene chloride	48000	50000	50000	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	-	ND <1.0	ND <2.0	-	-	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <5.0	ND <10	ND <5.0	ND <1.0	-	ND <1.0
Naphthalene	*210*	NE	NE	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	-	ND <1.0	78	-	-	160	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	***2700***	***1600***	***2800***	ND <1.0	-	ND <1.0
n-Propylbenzene	*10000*	*1200*	*2900*	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	-	ND <1.0	2.6	-	-	1.6	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	21	15	22	ND <1.0	-	ND <1.0
o-Xylene	NE	NE	NE	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	-	ND <1.0	54	-	-	46	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	320	240	310	ND <1.0	-	ND <1.0
Styrene	*320*	580	2065	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	-	ND <1.0	ND <2.0	-	-	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <5.0	ND <10	ND <5.0	ND <1.0	-	ND <1.0
Tetrachloroethene	88	1500	3820	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	-	ND <1.0	ND <2.0	-	-	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <5.0	ND <5.0	ND <5.0	ND <1.0	-	ND <1.0
Toluene	4000000	23500	50000	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	-	ND <1.0	9.2	-	-	1.8	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	40	27	42	ND <1.0	-	ND <1.0
Total Xylenes	*270*	21300	50000	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	-	ND <1.0	68	-	-	54.5	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	***500***	***370***	***500***	ND <1.0	-	ND <1.0
SVOCs (ug/L)																										
2,4-Dimethylphenol	*150*	NE	NE	ND <1.0	ND <0.94	ND <1.0	ND <0.94	-	ND <1.0	ND <0.94	-	ND <1.0	ND <2.0	ND <0.94	ND <0.99	ND <0.94	ND <1.0	ND <0.98	ND <0.94	-	ND <47	ND <100	-	ND <1.0	ND <0.94
2-Methylnaphthalene	*62*	*1000*	*13100*	ND <1.0	ND <0.94	ND <1.0	ND <0.94	-	ND <1.0	ND <0.94	-	ND <1.0	ND <1.0	ND <0.94	ND <0.99	ND <0.94	ND <1.0	ND <0.98	ND <0.94	-	***160***	***220***	-	ND <1.0	ND <0.94
2-Methylphenol	*670*	NE	NE	ND <1.0	ND <0.94	ND <1.0	ND <0.94	-	ND <1.0	ND <0.94	-	ND <1.0	ND <2.0	ND <0.94	ND <0.99	ND <0.94	ND <1.0	ND <0.98	ND <0.94	-	ND <47	ND <100	-	ND <1.0	ND <0.94
Acenaphthene	*150*	*30500*	*50000*	ND <0.05	ND <0.05	ND <0.05	ND <0.05	-	1.1	0.85	-	55	53	21	0.92	ND <0.05	ND <0.05	ND <0.05	ND <0.05	-	100	120	-	ND <0.05	ND <0.05
Acenaphthylene	0.3	NE	NE	ND <0.05	ND <0.05	ND <0.05	ND <0.05	-	0.18	0.15	-	**9.1**	**7.9**	**2.4**	0.08	ND <0.05	ND <0.05	0.22	**0.41**	-	ND <13	ND <28	-	ND <0.05	ND <0.05
Acetophenone	NE	NE	NE	ND <5.0	ND <4.7	ND <5.0	ND <4.7	-	ND <5.0	ND <4.7	-	5.4	ND <10	ND <4.7	ND <4.9	ND <4.7	ND <5.0	ND <4.9	ND <4.7	-	ND <47	ND <100	-	ND <5.0	ND <4.7
Anthracene	1100000	NE	NE	ND <0.05	ND <0.05	ND <0.05	ND <0.05	-	ND <0.05	ND <0.05	-	7.4	6.4	0.57	0.06	ND <0.05	ND <0.05	0.1	0.13	-	ND <47	ND <100	-	ND <0.05	ND <0.05
Benz(a)anthracene	0.3	NE	NE	ND <0.05	ND <0.05	ND <0.05	ND <0.05	-	ND <0.05	ND <0.05	-	**0.49**	**0.34**	0.19	0.07	ND <0.05	ND <0.05	**0.41**	**0.44**	-	ND <16	ND <34	-	ND <0.05	0.08
Benzo(a)pyrene	0.3	NE	NE	ND <0.05	ND <0.05	ND <0.05	ND <0.05	-	ND <0.05	ND <0.05	-	**0.36**	0.27	0.22	ND <0.05	ND <0.05	ND <0.05	**0.86**	**1.1**	-	ND <15	ND <33	-	ND <0.05	0.07
Benzo(b)fluoranthene	0.3	NE	NE	ND <0.05	ND <0.05	ND <0.05	ND <0.05	-	ND <0.05	ND <0.05	-	0.19	0.13	0.11	ND <0.05	ND <0.05	ND <0.05	**0.57**	**0.72**	-	ND <16	ND <34	-	ND <0.05	0.05
Benzo(g,h,i)perylene	*150*	NE	NE	ND <0.50	ND <0.19	ND <0.50	ND <0.19	-	ND <0.50	ND <0.19	-	ND <0.50	ND <0.50	ND <0.19	ND <0.20	ND <0.19	ND <0.20	0.74	1.1	-	ND <15	ND <32	-	ND <0.50	ND <0.19
Benzo(k)fluoranthene	0.3	NE	NE	ND <0.05	ND <0.05	ND <0.05	ND <0.05	-	ND <0.05	ND <0.05	-	0.19	0.16	0.13	ND <0.05	ND <0.05	ND <0.05	**0.56**	**0.72**	-	ND <16	ND <33	-	ND <0.05	0.05
bis(2-Ethylhexyl)phthalate	59	NE	NE	ND <0.50	ND <0.47	ND <0.50	ND <0.47	-	ND <0.50	ND <0.47	-	ND <0.50	ND <0.50	ND <0.47	ND <0.49	ND <0.47	ND <0.50	ND <0.49	ND <0.47	-	ND <14	ND <29	-	ND <0.50	ND <0.47
Carbazole	*53*	NE	NE	ND <5.0	ND <4.7	ND <5.0	ND <4.7	-	ND <5.0	ND <4.7	-	ND <5.0	ND <10	ND <4.7	ND <4.9	ND <4.7	ND <5.0	ND <4.9	ND <4.7	-	50	ND <76	-	ND <5.0	ND <4.7
Chrysene	*0.54*	NE	NE	ND <0.05	ND <0.05	ND <0.05	ND <0.05	-	ND <0.05	ND <0.05	-	0.44	0.38	0.22	0.06	ND <0.05	ND <0.05	0.49	**0.55**	-	ND <16	ND <34	-	ND <0.05	0.08
Dibenz(a,h)anthracene	*0.3*	NE	NE	ND <0.01	ND <0.01	ND <0.01	ND <0.01	-	ND <0.01	ND <0.01	-	0.03	0.02	0.03	ND <0.01	ND <0.01	ND <0.05	0.1	0.26	-	ND <15	ND <32	-	ND <0.01	ND <0.01
Dibenzofuran	*40*	*460*	*5800*	ND <5.0	ND <0.05	ND <5.0	ND <0.05	-	ND <5.0	0.05	-	ND <5.0	ND <10	0.87	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	-	ND <47	ND <29	-	ND <5.0	ND <0.05
Diethylphthalate	*2200*	NE	NE	ND <5.0	ND <4.7	ND <5.0	ND <4.7	-	ND <5.0	ND <4.7	-	ND <5.0	ND <10	ND <4.7	ND <4.9	ND <4.7	ND <5.0	ND <4.9	ND <4.7	-	ND <47	ND <100	-	ND <5.0	ND <4.7
Fluoranthene	3700	NE	NE	ND <0.05	ND <0.05	ND <0.05	ND <0.05	-	0.08	0.13	-	3.1	2.5	0.41	0.34	ND <0.05	ND <0.05	0.38	0.39	-	ND <47	ND <100	-	ND <0.05	0.07
Fluorene	140000	NE	NE	ND <0.10	ND <0.09	ND <0.10	ND <0.09	-	0.7	0.53	-	17	15	3.6	0.24	ND <0.09	ND <0.10	ND <0.10	ND <0.09	-	ND <47	ND <100	-	ND <0.10	ND <0.09
Indeno(1,2,3-cd)pyrene	*0.54*	NE	NE	ND <0.05	ND <0.05	ND <0.05	ND <0.05	-	ND <0.05	ND <0.05	-	0.13	0.07	0.11	ND <0.05	ND <0.05	ND <0.05	***0.64***	***0.78***	-	ND <16	ND <33	-	ND <0.05	ND <0.05
Naphthalene	*210*	NE	NE	ND <0.10	ND <0.09	0.19	ND <0.09	-	0.1	ND <0.09	-	87	88	130	ND <0.10	ND <0.09	ND <0.10	ND <0.10	ND <0.09	-	***1200***	***1300***	-	0.23	ND <0.09
Nitrobenzene	*2300*	*51*	*750*	ND <0.10	ND <0.09	ND <0.10	ND <0.09	-	ND <0.10	ND <0.09	-	ND <0.10	3.4	ND <0.09	ND <0.10	ND <0.09	ND <0.10	ND <0.10	ND <0.09	-	ND <16	ND <100	-	ND <0.10	ND <0.09
Phenanthrene	*14*	NE	NE	ND <0.05	ND <0.05	ND <0.05	ND <0.05	-	ND <0.05	0.06	-	***25***	***23***	1.8	0.09	ND <0.05	ND <0.05	0.09	0.09	-	ND <47	***38***	-	ND <0.05	ND <0.05
Phenol	9.20E+07	NE	NE	ND <1.0	ND <0.94	ND <1.0	ND <0.94	-	ND <1.0	ND <0.94	-	ND <1.0	ND <2.0	ND <0.94	ND <0.99	ND <0.94	ND <1.0	ND <0.98	ND <0.94	-	ND <47	ND <100	-	ND <1.0	ND <0.94
Pyrene	110000	NE	NE	ND <0.05	ND <0.05	ND <0.05	ND <0.05	-	0.24	0.24	-	4.1	3.4	0.67	0.49	ND <0.05	ND <0.05	0.76	0.93	-	ND <47	ND <100	-	ND <0.05	0.13

Notes
CT DEEP RSRs - Connecticut Department of Energy & Environmental Protection Remediation Standard Regulations
SWPC - Surface Water Protection Criteria
RES VC - Residential Volatilization Criteria
I/C VC - Industrial/Commercial Volatilization Criteria
ug/L - micrograms per Liter
CT ETPH - Connecticut Extractable Total Petroleum Hydrocarbons
VOCs - Volatile Organic Compounds
SVOCs - Semi Volatile Organic Compounds
ND - Not detected above listed laboratory reporting limit
NE - RSR criteria not established
Italics Criteria - Additional Polluting Substance and Alternative Criteria (APS) approved by CTDEEP for use with permission on a site-by-site basis.

[1]- Xylene criteria apply to Total Xylenes
^ - Volatilization Criteria Does Not Apply to Wells Screen Greater Than 15' Below the Water table
Only compounds detected are summarized in the table (compounds that are not listed were not detected)
Bolded and boxed - Concentration exceeds RSR value
Bolded, boxed, and Italics - Concentration exceeds APS RSR value

TABLE 3
Groundwater Analytical Data Summary
Rockville Former MGP Site
13 Maple Street
Rockville, CT

Sample ID	CTDEEP RSR			MW-10M^				MW-10BR^			MW-11S		MW-11D		MW-12S		MW-12D		MW-13S	MW-13D	MW-14S		
Sample Date				11/21/2016	12/7/2016	5/24/2018	5/24/2018	11/9/2017	5/30/2018	10/24/2018	11/22/2016	5/22/2018	11/22/2016	5/22/2018	11/22/2016	5/22/2018	11/22/2016	5/22/2018	10/24/2018	10/24/2018	11/9/2017	5/24/2018	11/12/2018
Lab Sample ID				BV89153	BX00269	CA59000	CA59004	BZ39263	CA61342	CB82838	BV89923	CA51714	BV89925	CA51715	BV89924	CA51716	BV89926	CA51717	CB82842	CB82848	BZ39267	CA59002	CB96387
Duplicate Sample	SWPC	RES VC	I/C VC				MW-Dup 2																
CT ETPH (ug/L)																							
CT ETPH	*250*	*250*	*250*	***620***	-	ND <66	ND <66	78	***340***	90	ND <70	ND <66	ND <70	ND <66	ND <70	ND <66	ND <70	ND <66	ND <72	ND <69	ND <66	ND <66	ND <66
Cyanide (ug/L)																							
Total Cyanide	52	NA	NA	ND <10	-	ND <10	ND <10	ND <10	ND <10	ND <10	ND <10	ND <10	10	ND <10	ND <10	ND <10	ND <10	ND <10	ND <10	ND <10	ND <10	14	14
Metals (ug/L)																							
Antimony	86000	NA	NA	ND <5	-	ND <5	ND <5	ND <5	ND <50	ND <5	ND <5	ND <5	ND <5	ND <5	ND <5	ND <5	ND <5	ND <5	ND <5	ND <5	ND <5	ND <5	ND <5
Arsenic	4	NA	NA	ND <4	-	ND <4	ND <4	ND <4	ND <4	ND <4	ND <4	ND <4	ND <4	ND <4	ND <4	ND <4	ND <4	ND <4	ND <4	ND <4	ND <4	ND <4	ND <4
Barium	*2200*	NA	NA	50	-	110	111	144	88	160	44	42	78	61	41	37	78	176	261	217	243	215	283
Total Chromium	NE	NA	NA	ND <1	-	3	3	144	66	1	ND <1	ND <1	ND <1	1	ND <1	ND <1	ND <1	4	104	53	144	13	14
Copper	48	NA	NA	ND <5	-	ND <5	ND <5	ND <5	ND <5	ND <5	ND <5	ND <5	ND <5	ND <5	ND <5	ND <5	ND <5	ND <5	5	ND <5	6	ND <5	ND <5
Lead	13	NA	NA	ND <2	-	ND <2	ND <2	ND <2	ND <2	ND <2	ND <2	ND <2	ND <2	ND <2	ND <2	ND <2	ND <2	ND <2	ND <2	ND <2	ND <2	ND <2	ND <2
Mercury	0.4	NA	NA	ND <0.2000	-	ND <0.2000	ND <0.2000	ND <0.2000	ND <0.2000	ND <0.2000	ND <0.2000	ND <0.2000	ND <0.2000	ND <0.2000	ND <0.2000	ND <0.2000	ND <0.2000	ND <0.2000	ND <0.2000	ND <0.2000	ND <0.2000	ND <0.2000	ND <0.2000
Nickel	880	NA	NA	ND <1	-	13	14	1	ND <1	ND <1	ND <1	ND <1	ND <1	1	ND <1	ND <1	ND <1	2	159	173	729	497	244
Silver				ND<1	-	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1
Vanadium	*270*	NA	NA	ND <2	-	ND <2	ND <2	10	5	ND <2	ND <2	ND <2	ND <2	3	ND <2	ND <2	ND <2	3	ND <2	ND <2	ND <2	ND <2	2
Zinc	123	NA	NA	ND <2	-	10	10	42	3	ND <4	ND <2	4	2	5	ND <2	ND <2	ND <2	3	5	5	13	54	18
VOCs (ug/L)																							
1,1,1-Trichloroethane	62000	20400	50000	ND <2.0	-	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
1,2,4-Trimethylbenzene	*150*	*940*	*12800*	14	-	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
1,3,5-Trimethylbenzene	*260*	*730*	*10000*	4.3	-	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
4-Isopropyltoluene (cymene)	*200*	*870*	*2100*	ND <2.0	-	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
Benzene	710	215	530	1.2	-	ND <0.70	ND <0.70	ND <0.70	ND <0.70	ND <0.70	ND <0.70	ND <0.70	ND <0.70	ND <0.70	ND <0.70	ND <0.70	ND <0.70	ND <0.70	ND <0.70	ND <0.70	ND <0.70	ND <0.70	ND <0.70
Bromodichloromethane	*510*	*1.1*	*35*	ND <0.56	-	ND <0.50	ND <0.50	0.88	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50
Carbon disulfide	*150*	*2100*	*5200*	ND <10	-	ND <5.0	ND <5.0	ND <5.0	ND <5.0	ND <5.0	ND <5.0	ND <5.0	ND <5.0	ND <5.0	ND <5.0	ND <5.0	ND <5.0	ND <5.0	ND <5.0	ND <5.0	ND <5.0	ND <5.0	ND <5.0
Chloroform	14100	287	710	ND <2.0	-	ND <1.0	ND <1.0	15	12	3.4	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
Dibromochloromethane	1020	NE	NE	ND <0.50	-	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50
Ethylbenzene	580000	50000	50000	55	-	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
Isopropylbenzene (cumene)	*210*	*900*	*2200*	3.2	-	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
m,p-Xylene	NE	NE	NE	40	-	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
Methyl tert butyl ether	*10000*	50000	50000	ND <2.0	-	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
Methylene chloride	48000	50000	50000	ND <2.0	-	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
Naphthalene	*210*	NE	NE	***320***	-	2.2	1.7	2	1.6	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
n-Propylbenzene	*10000*	*1200*	*2900*	ND <2.0	-	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
o-Xylene	NE	NE	NE	19	-	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
Styrene	*320*	580	2065	ND <2.0	-	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
Tetrachloroethene	88	1500	3820	ND <2.0	-	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
Toluene	4000000	23500	50000	22	-	1.4	ND <1.0	ND <1.0	1.2	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
Total Xylenes	*270*	21300	50000	59	-	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
SVOCs (ug/L)																							
2,4-Dimethylphenol	*150*	NE	NE	-	ND <5.0	ND <0.94	ND <0.94	ND <0.94	ND <0.94	ND <1.1	ND <1.0	ND <0.94	ND <1.0	ND <0.94	ND <1.0	ND <0.94	ND <1.0	ND <0.94	ND <1.1	ND <0.96	ND <0.94	ND <0.94	-
2-Methylnaphthalene	*62*	*1000*	*13100*	-	ND <25	ND <0.94	ND <0.94	ND <0.94	ND <0.94	ND <1.1	ND <1.0	ND <0.94	ND <1.0	ND <0.94	ND <1.0	ND <0.94	ND <1.0	ND <0.94	ND <1.1	ND <0.96	ND <0.94	ND <0.94	ND <0.10
2-Methylphenol	*670*	NE	NE	-	ND <5.0	ND <0.94	ND <0.94	ND <0.94	ND <0.94	ND <1.1	ND <1.0	ND <0.94	ND <1.0	ND <0.94	ND <1.0	ND <0.94	ND <1.0	ND <0.94	ND <1.1	ND <0.96	ND <0.94	ND <0.94	-
Acenaphthene	*150*	*30500*	*50000*	-	12	ND <0.05	ND <0.05	0.09	0.15	0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.10	ND <0.05	ND <0.05	0.1	ND <0.05
Acenaphthylene	0.3	NE	NE	-	***10***	0.1	0.06	0.26	***0.41***	0.07	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05
Acetophenone	NE	NE	NE	-	ND <25	ND <4.7	ND <4.7	ND <4.7	ND <4.7	ND <5.3	ND <5.0	ND <4.7	ND <5.0	ND <4.7	ND <5.0	ND <4.7	ND <5.0	ND <4.7	ND <5.3	ND <4.8	ND <4.7	ND <4.7	-
Anthracene	1100000	NE	NE	-	7.1	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05
Benz(a)anthracene	0.3	NE	NE	-	***0.6***	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05
Benzo(a)pyrene	0.3	NE	NE	-	0.08	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05
Benzo(b)fluoranthene	0.3	NE	NE	-	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05
Benzo(g,h,i)perylene	*150*	NE	NE	-	ND <0.50	ND <0.19	ND <0.19	ND <0.19	ND <0.19	ND <0.21	ND <0.50	ND <0.19	ND <0.50	ND <0.19	ND <0.50	ND <0.19	ND <0.50	ND <0.19	ND <0.21	ND <0.19	ND <0.19	ND <0.19	ND <0.05
Benzo(k)fluoranthene	0.3	NE	NE	-	0.06	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05
bis(2-Ethylhexyl)phthalate	59	NE	NE	-	ND <0.50	ND <0.47	ND <0.47	ND <0.47	ND <0.47	ND <0.53	ND <0.50	ND <0.47	ND <0.50	ND <0.47	ND <0.50	ND <0.47	ND <0.50	ND <0.47	0.64	ND <0.48	ND <0.47	ND <0.47	-
Carbazole	*53*	NE	NE	-	ND <19	ND <4.7	ND <4.7	ND <4.7	ND <4.7	ND <5.0	ND <5.0	ND <4.7	ND <5.0	ND <4.7	ND <5.0	ND <4.7	ND <5.0	ND <4.7	ND <5.0	ND <4.8	ND <4.7	ND <4.7	-
Chrysene	*0.54*	NE	NE	-	0.44	0.06	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05
Dibenz(a,h)anthracene	*0.3*	NE	NE	-	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.05	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.05	ND <0.05	ND <0.01	ND <0.01	ND <0.05
Dibenzofuran	*40*	*460*	*5800*	-	ND <25	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <5.0	ND <0.05	ND <5.0	ND <0.05	ND <5.0	ND <0.05	ND <5.0	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	-
Diethylphthalate	*2200*	NE	NE	-	ND <25	ND <4.7	ND <4.7	ND <4.7	ND <4.7	ND <5.3	ND <5.0	ND <4.7	ND <5.0	ND <4.7	ND <5.0	ND <4.7	ND <5.0	ND <4.7	ND <5.3	ND <4.8	ND <4.7	ND <4.7	-
Fluoranthene	3700	NE	NE	-	8	0.26	ND <0.05	0.09	0.1	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05
Fluorene	140000	NE	NE	-	8.7	ND <0.09	ND <0.09	0.14	0.16	ND <0.11	ND <0.10	ND <0.09	ND <0.10	ND <0.09	ND <0.10	ND <0.09	ND <0.10	ND <0.09	ND <0.11	ND <0.10	ND <0.09	ND <0.09	ND <0.05
Indeno(1,2,3-cd)pyrene	*0.54*	NE	NE	-	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05
Naphthalene	*210*	NE	NE	-	190	ND <0.09	ND <0.09	1.1	1.3	0.31	ND <0.10	ND <0.09	ND <0.10	ND <0.09	ND <0.10	ND <0.09	ND <0.10	ND <0.09	ND <0.20	0.82	ND <0.09	0.57	ND <0.10
Nitrobenzene	*2300*	*51*	*750*	-	ND <0.10	ND <0.09	ND <0.09	ND <0.09	ND <0.09	ND <0.11	ND <0.10	ND <0.09	ND <0.10	ND <0.09	ND <0.10	ND <0.09	ND <0.10	ND <0.09	ND <0.11	ND <0.10	ND <0.09	ND <0.09	-
Phenanthrene	*14*	NE	NE	-	***19***	ND <0.05	ND <0.05	0.32	0.33	0.12	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05
Phenol	9.20E+07	NE	NE	-	ND <5.0	ND <0.94	ND <0.94	ND <0.94	ND <0.94	ND <1.1	ND <1.0	ND <0.94	ND <1.0	ND <0.94	ND <1.0	ND <0.94	ND <1.0	ND <0.94	ND <1.1	ND <0.96	ND <0.94	ND <0.94	-
Pyrene	110000	NE	NE	-	9.8	0.25	ND <0.05	0.11	0.15	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05

Notes
CT DEEP RSRs - Connecticut Department of Energy & Environmental Protection Remediation Standard Regulations
SWPC - Surface Water Protection Criteria
RES VC - Residential Volatilization Criteria
I/C VC - Industrial/Commercial Volatilization Criteria
ug/L - micrograms per Liter
CT ETPH - Connecticut Extractable Total Petroleum Hydrocarbons
VOCs - Volatile Organic Compounds
SVOCs - Semi Volatile Organic Compounds
ND - Not detected above listed laboratory reporting limit
NE - RSR criteria not established
Italics Criteria - Additional Polluting Substance and Alternative Criteria (APS) approved by CTDEEP for use with permission on a site-by-site basis.

[1]- Xylene criteria apply to Total Xylenes
^ - Volatilization Criteria Does Not Apply to Wells Screen Greater Than 15' Below the Water table
Only compounds detected are summarized in the table (compounds that are not listed were not detected)
Bolded and boxed - Concentration exceeds RSR value
Bolded, boxed, and Italics - Concentration exceeds APS RSR value

TABLE 3
Groundwater Analytical Data Summary
Rockville Former MGP Site
13 Maple Street
Rockville, CT

Sample ID	CTDEEP RSR			MW-14D^			MW-16S		MW-17S		MW-18D^				MW-19S			MW-21S		MW-23S		MW-25S	MW-26S
Sample Date				11/9/2017	5/24/2018	11/12/2018	11/10/2017	5/22/2018	11/10/2017	5/16/2018	11/9/2017	5/30/2018	10/24/2018	10/24/2018	11/9/2017	11/9/2017	5/24/2018	11/9/2017	5/24/2018	11/9/2017	5/30/2018	10/24/2018	10/24/2018
Lab Sample ID				BZ39268	CA59001	CB96386	BZ39896	CA51718	BZ39895	CA48712	BZ39262	CA61340	CB82841	CB82850	BZ39266	BZ39270	CA58998	BZ39269	CA58999	BZ39265	CA61341	CB82837	CB82843
Duplicate Sample														MW-Dup		MW-Dup							
	SWPC	RES VC	I/C VC																				
CT ETPH (ug/L)																							
CT ETPH	*250*	*250*	*250*	ND <66	160	**320**	ND <67	ND <66	ND <67	70	***530***	***890***	***2800***	***3200***	ND <69	ND <67	ND <67	ND <68	ND <66	ND <66	ND <67	ND <68	ND <71
Cyanide (ug/L)																							
Total Cyanide	52	NA	NA	ND <10	**69**	ND<10	ND <10	ND <10	ND <10	ND <10	ND <10	ND <10	ND <10	ND <10	ND <10	ND <10	ND <10	ND <10	ND <10	ND <10	ND <10	14	ND <10
Metals (ug/L)																							
Antimony	86000	NA	NA	ND <5	ND <5	ND <5	ND <5	ND <5	ND <5	ND <5	ND <5	ND <50	ND <5	ND <5	ND <5	ND <5	ND <5	ND <5	ND <5	14	ND <50	ND <5	ND <5
Arsenic	4	NA	NA	ND <4	ND <4	ND <4	ND <4	ND <4	ND <4	ND <4	ND <4	ND <4	ND <4	ND <4	ND <4	ND <4	ND <4	ND <4	ND <4	ND <4	ND <4	ND <4	ND <4
Barium	*2200*	NA	NA	168	12	209	23	20	31	16	82	111	198	204	74	74	69	216	223	91	172	112	197
Total Chromium	NE	NA	NA	364	37	9	2	ND <1	ND <1	ND <1	26	2	ND <1	ND <1	3	ND <1	ND <1	2	ND <1	13	20	ND <1	ND <1
Copper	48	NA	NA	13	16	ND <5	ND <5	ND <5	ND <5	ND <5	7	ND <5	ND <5	ND <5	ND <5	ND <5	ND <5	ND <5	ND <5	ND <5	6	ND <5	ND <5
Lead	13	NA	NA	4	ND <2	ND <2	ND <2	ND <2	2	ND <2	ND <2	ND <2	ND <2	ND <2	ND <2	ND <2	ND <2	ND <2	ND <2	ND <2	ND <2	ND <2	ND <2
Mercury	0.4	NA	NA	ND <0.2000	ND <0.2000	ND <0.2000	ND <0.2000	ND <0.2000	ND <0.2000	ND <0.2000	ND <0.2000	ND <0.2000	ND <0.2000	ND <0.2000	ND <0.2000	ND <0.2000	ND <0.2000	ND <0.2000	ND <0.2000	ND <0.2000	ND <0.2000	ND <0.2000	ND <0.2000
Nickel	880	NA	NA	84	60	138	ND <1	ND <1	ND <1	ND <1	3	ND <1	ND <1	1	ND <1	ND <1	2	ND <1	ND <1	2	6	ND <1	3
Silver				ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1
Vanadium	*270*	NA	NA	4	ND <2	3	ND <2	ND <2	ND <2	ND <2	7	ND <2	ND <2	ND <2	ND <2	ND <2	ND <2	ND <2	ND <2	6	11	ND <2	ND <2
Zinc	123	NA	NA	16	14	7	ND <2	ND <2	ND <2	ND <2	10	3	ND <4	ND <4	ND <2	ND <2	ND <2	3	ND <2	10	37	ND <4	ND <4
VOCs (ug/L)																							
1,1,1-Trichloroethane	62000	20400	50000	1.1	ND <1.0	1.2	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <2.0	ND <10	ND <20	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
1,2,4-Trimethylbenzene	*150*	*940*	*12800*	ND <1.0	3.1	5.2	ND <1.0	ND <1.0	ND <1.0	ND <1.0	8.4	16	98	120	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
1,3,5-Trimethylbenzene	*260*	*730*	*10000*	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	3.1	5.9	29	36	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
4-Isopropyltoluene (cymene)	*200*	*870*	*2100*	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <2.0	ND <10	ND <20	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
Benzene	710	215	530	2.5	53	40	ND <0.70	ND <0.70	ND <0.70	ND <0.70	1.8	190	680	**890**	ND <0.70	ND <0.70	ND <0.70	ND <0.70	ND <0.70	ND <0.70	ND <0.70	ND <0.70	ND <0.70
Bromodichloromethane	*510*	*1.1*	*35*	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	***3***	ND <1.0	ND <2.5	ND <5.0	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50
Carbon disulfide	*150*	*2100*	*5200*	ND <5.0	ND <5.0	ND <5.0	ND <5.0	ND <5.0	ND <5.0	ND <5.0	33	ND <10	ND <40	ND <40	ND <5.0	ND <5.0	ND <5.0	ND <5.0	ND <5.0	ND <5.0	ND <5.0	ND <5.0	ND <5.0
Chloroform	14100	287	710	ND <1.0	ND <1.0	ND <1.0	ND <1.0	2.9	ND <1.0	ND <1.0	18	6.1	ND <6.0	ND <6.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	3.5	ND <1.0	ND <1.0	ND <1.0
Dibromochloromethane	1020	NE	NE	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	0.58	ND <1.0	ND <2.5	ND <5.0	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50
Ethylbenzene	580000	50000	50000	1.1	21	3.2	ND <1.0	ND <1.0	ND <1.0	ND <1.0	22	84	430	860	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
Isopropylbenzene (cumene)	*210*	*900*	*2200*	ND <1.0	1.6	3.4	ND <1.0	ND <1.0	ND <1.0	ND <1.0	2	3.8	26	36	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
m,p-Xylene	NE	NE	NE	ND <1.0	6.5	4.8	ND <1.0	ND <1.0	ND <1.0	ND <1.0	16	48	360	650	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
Methyl tert butyl ether	*10000*	50000	50000	1.1	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <2.0	ND <10	ND <20	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
Methylene chloride	48000	50000	50000	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <2.0	ND <10	ND <20	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
Naphthalene	*210*	NE	NE	5	97	150	ND <1.0	ND <1.0	ND <1.0	ND <1.0	44	***290***	***2900***	***3400***	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
n-Propylbenzene	*10000*	*1200*	*2900*	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <2.0	ND <10	ND <20	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
o-Xylene	NE	NE	NE	ND <1.0	11	14	ND <1.0	ND <1.0	ND <1.0	ND <1.0	11	57	270	420	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
Styrene	*320*	580	2065	ND <1.0	2	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <2.0	ND <10	ND <20	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
Tetrachloroethene	88	1500	3820	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	6.4	5.2	ND <1.0	ND <2.0	ND <5.0	ND <5.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
Toluene	4000000	23500	50000	ND <1.0	33	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	3.7	250	880	1300	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
Total Xylenes	*270*	21300	50000	ND <1.0	17.5	18.8	ND <1.0	ND <1.0	ND <1.0	ND <1.0	27	105	***630***	***1070***	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
SVOCs (ug/L)																							
2,4-Dimethylphenol	*150*	NE	NE	ND <0.94	ND <0.94	-	ND <0.96	ND <0.94	ND <0.97	ND <0.94	ND <0.97	ND <1.9	ND <4.9	ND <5.0	ND <0.98	ND <0.98	ND <0.94	ND <0.94	ND <0.94	ND <0.95	ND <0.94	ND <0.96	ND <1.0
2-Methylnaphthalene	*62*	*1000*	*13100*	ND <0.94	1.5	5	ND <0.96	ND <0.94	ND <0.97	ND <0.94	28	7	***130***	***230***	ND <0.98	ND <0.98	ND <0.94	ND <0.94	ND <0.94	ND <0.95	ND <0.94	ND <0.96	ND <1.0
2-Methylphenol	*670*	NE	NE	ND <0.94	ND <0.94	-	ND <0.96	ND <0.94	ND <0.97	ND <0.94	ND <0.97	2.2	ND <4.9	ND <5.0	ND <0.98	ND <0.98	ND <0.94	ND <0.94	ND <0.94	ND <0.95	ND <0.94	ND <0.96	ND <1.0
Acenaphthene	*150*	*30500*	*50000*	0.39	1.6	7.7	ND <0.05	ND <0.05	ND <0.05	ND <0.05	8.4	14	75	ND <150	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	0.23	ND <0.05
Acenaphthylene	0.3	NE	NE	ND <0.05	0.09	**0.42**	ND <0.05	ND <0.05	ND <0.05	ND <0.05	***21***	***4.2***	***21***	***20***	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	0.13	ND <0.05
Acetophenone	NE	NE	NE	ND <4.7	ND <4.7	-	ND <4.8	ND <4.7	ND <4.9	ND <4.7	ND <4.8	ND <9.6	ND <4.9	ND <9.9	ND <4.9	ND <4.9	ND <4.7	ND <4.7	ND <4.7	ND <4.8	ND <4.7	ND <4.8	ND <5.0
Anthracene	1100000	NE	NE	ND <0.05	ND <0.05	0.33	ND <0.05	ND <0.05	ND <0.05	ND <0.05	1.7	0.7	5.5	5.8	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	0.08	ND <0.05
Benz(a)anthracene	0.3	NE	NE	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	0.06	0.06	ND <0.98	ND <0.99	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05
Benzo(a)pyrene	0.3	NE	NE	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.98	ND <0.99	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05
Benzo(b)fluoranthene	0.3	NE	NE	0.06	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.98	ND <0.99	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05
Benzo(g,h,i)perylene	*150*	NE	NE	ND <0.19	ND <0.19	ND <0.05	ND <0.19	ND <0.19	ND <0.19	ND <0.19	ND <0.19	ND <0.19	ND <0.98	ND <0.99	ND <0.20	ND <0.20	ND <0.19	ND <0.19	ND <0.19	ND <0.19	ND <0.19	ND <0.19	ND <0.20
Benzo(k)fluoranthene	0.3	NE	NE	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.98	ND <0.99	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05
bis(2-Ethylhexyl)phthalate	59	NE	NE	0.47	ND <0.47	-	ND <0.48	ND <0.47	ND <0.49	ND <0.47	ND <0.48	ND <0.48	ND <2.0	ND <2.0	ND <0.49	ND <0.49	0.65	ND <0.47	ND <0.47	ND <0.48	ND <0.47	ND <0.48	ND <0.50
Carbazole	*53*	NE	NE	ND <4.7	ND <4.7	-	ND <4.8	ND <4.7	ND <4.9	ND <4.7	ND <4.8	ND <9.6	7	8	ND <4.9	ND <4.9	ND <4.7	ND <4.7	ND <4.7	ND <4.8	ND <4.7	ND <4.8	ND <5.0
Chrysene	*0.54*	NE	NE	0.06	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	0.05	0.06	ND <0.98	ND <0.99	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05
Dibenz(a,h)anthracene	*0.3*	NE	NE	0.01	ND <0.01	ND <0.05	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.98	ND <0.99	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.01	ND <0.05	ND <0.05
Dibenzofuran	*40*	*460*	*5800*	ND <0.05	ND <0.05	-	ND <0.05	ND <0.05	ND <0.05	ND <0.05	0.83	0.48	2.9	3.5	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	0.18	ND <0.05
Diethylphthalate	*2200*	NE	NE	ND <4.7	ND <4.7	-	ND <4.8	ND <4.7	ND <4.9	ND <4.7	ND <4.8	ND <9.6	ND <4.9	ND <5.0	ND <4.9	ND <4.9	ND <4.7	ND <4.7	ND <4.7	ND <4.8	ND <4.7	ND <4.8	5.4
Fluoranthene	3700	NE	NE	0.13	ND <0.05	0.2	ND <0.05	ND <0.05	ND <0.05	ND <0.05	0.82	1.1	ND <4.9	ND <5.0	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05
Fluorene	140000	NE	NE	ND <0.09	0.29	2.2	ND <0.10	ND <0.09	ND <0.10	ND <0.09	7	3	22	25	ND <0.10	ND <0.10	ND <0.09	ND <0.09	ND <0.09	ND <0.10	ND <0.09	ND <0.10	ND <0.10
Indeno(1,2,3-cd)pyrene	*0.54*	NE	NE	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.98	ND <0.99	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05
Naphthalene	*210*	NE	NE	ND <0.09	18	92	ND <0.10	ND <0.09	ND <0.10	ND <0.09	130	180	***1900***	***3300***	ND <0.10	ND <0.10	0.14	ND <0.09	0.4	ND <0.10	ND <0.09	ND <0.10	ND <0.10
Nitrobenzene	*2300*	*51*	*750*	ND <0.09	ND <0.09	-	ND <0.10	ND <0.09	ND <0.10	ND <0.09	ND <0.10	ND <0.10	ND <4.9	ND <5.0	ND <0.10	ND <0.10	ND <0.09	ND <0.09	ND <0.09	ND <0.10	ND <0.09	ND <0.10	ND <0.10
Phenanthrene	*14*	NE	NE	0.11	0.11	1.2	ND <0.05	ND <0.05	ND <0.05	ND <0.05	5.4	3	***28***	***30***	ND <0.05	ND <0.05	ND <0.05	ND <0.05	0.06	ND <0.05	ND <0.05	ND <0.05	ND <0.05
Phenol	9.20E+07	NE	NE	ND <0.94	ND <0.94	-	ND <0.96	ND <0.94	ND <0.97	ND <0.94	ND <0.97	5	ND <4.9	ND <5.0	ND <0.98	ND <0.98	ND <0.94	ND <0.94	ND <0.94	ND <0.95	ND <0.94	ND <0.96	ND <1.0
Pyrene	110000	NE	NE	0.15	ND <0.05	0.25	ND <0.05	ND <0.05	ND <0.05	ND <0.05	0.96	1.5	ND <4.9	ND <5.0	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05

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RES VC - Residential Volatilization Criteria
I/C VC - Industrial/Commercial Volatilization Criteria
ug/L - micrograms per Liter
CT ETPH - Connecticut Extractable Total Petroleum Hydrocarbons
VOCs - Volatile Organic Compounds
SVOCs - Semi Volatile Organic Compounds
ND - Not detected above listed laboratory reporting limit
NE - RSR criteria not established
Italics Criteria - Additional Polluting Substance and Alternative Criteria (APS) approved by CTDEEP for use with permission on a site-by-site basis.

[1]- Xylene criteria apply to Total Xylenes
^ - Volatilization Criteria Does Not Apply to Wells Screen Greater Than 15' Below the Water table
Only compounds detected are summarized in the table (compounds that are not listed were not detected)
Bolded and boxed - Concentration exceeds RSR value
Bolded, boxed, and Italics - Concentration exceeds APS RSR value

TABLE 3
Groundwater Analytical Data Summary
Rockville Former MGP Site
13 Maple Street
Rockville, CT

Sample ID	CTDEEP RSR			MW-26D			MW-26BR^	MW-27S	MW-28S	MW-30S		
Sample Date				10/24/2018	11/12/2018	11/12/2018	10/24/2018	10/24/2018	10/24/2018	10/24/2018	11/12/2018	11/12/2018
Lab Sample ID				CB82845	CB96388	CB96389	CB82847	CB82846	CB82844	CB82839	CB96390	CB96391
Duplicate Sample	SWPC	RES VC	I/C VC			**DISSOLVED**						**DISSOLVED**
CT ETPH (ug/L)												
CT ETPH	*250*	*250*	*250*	ND <69	-	-	ND <67	69	ND <66	***550***	***640***	***500***
Cyanide (ug/L)												
Total Cyanide	52	NA	NA	ND <10	-	-	ND <10	ND <10	ND <10	ND <10	-	-
Metals (ug/L)												
Antimony	86000	NA	NA	ND <5	-	-	ND <5	ND <5	ND <5	ND <5	-	-
Arsenic	4	NA	NA	ND <4	-	-	ND <4	ND <4	ND <4	ND <4	-	-
Barium	*2200*	NA	NA	52	-	-	100	268	227	47	-	-
Total Chromium	NE	NA	NA	4	-	-	2	2	ND <1	ND <1	-	-
Copper	48	NA	NA	ND <5	-	-	ND <5	ND <5	ND <5	ND <5	-	-
Lead	13	NA	NA	ND <2	-	-	ND <2	ND <2	ND <2	ND <2	-	-
Mercury	0.4	NA	NA	ND <0.2000	-	-	ND <0.2000	ND <0.2000	ND <0.2000	ND <0.2000	-	-
Nickel	880	NA	NA	ND <1	-	-	ND <1	2	2	ND <1	-	-
Silver				ND<1	-	-	ND<1	ND<1	ND<1	ND<1	-	-
Vanadium	*270*	NA	NA	3	-	-	ND <2	ND <2	ND <2	ND <2	-	-
Zinc	123	NA	NA	ND <4	-	-	ND <4	6	ND <4	31	-	-
VOCs (ug/L)												
1,1,1-Trichloroethane	62000	20400	50000	ND <1.0	-	-	ND <1.0	ND <1.0	ND <1.0	ND <1.0	-	-
1,2,4-Trimethylbenzene	*150*	*940*	*12800*	ND <1.0	-	-	ND <1.0	ND <1.0	ND <1.0	13	-	-
1,3,5-Trimethylbenzene	*260*	*730*	*10000*	ND <1.0	-	-	ND <1.0	ND <1.0	ND <1.0	ND <1.0	-	-
4-Isopropyltoluene (cymene)	*200*	*870*	*2100*	ND <1.0	-	-	ND <1.0	ND <1.0	ND <1.0	ND <1.0	-	-
Benzene	710	215	530	ND <0.70	-	-	ND <0.70	ND <0.70	ND <0.70	ND <0.70	-	-
Bromodichloromethane	*510*	*1.1*	*35*	ND <0.50	-	-	ND <0.50	ND <0.50	ND <0.50	ND <0.50	-	-
Carbon disulfide	*150*	*2100*	*5200*	ND <5.0	-	-	ND <5.0	ND <5.0	ND <5.0	ND <5.0	-	-
Chloroform	14100	287	710	1.3	-	-	ND <1.0	ND <1.0	ND <1.0	ND <1.0	-	-
Dibromochloromethane	1020	NE	NE	ND <0.50	-	-	ND <0.50	ND <0.50	ND <0.50	ND <0.50	-	-
Ethylbenzene	580000	50000	50000	ND <1.0	-	-	ND <1.0	ND <1.0	ND <1.0	2.3	-	-
Isopropylbenzene (cumene)	*210*	*900*	*2200*	ND <1.0	-	-	ND <1.0	ND <1.0	ND <1.0	1.3	-	-
m,p-Xylene	NE	NE	NE	ND <1.0	-	-	ND <1.0	ND <1.0	ND <1.0	4.4	-	-
Methyl tert butyl ether	*10000*	50000	50000	ND <1.0	-	-	ND <1.0	ND <1.0	ND <1.0	ND <1.0	-	-
Methylene chloride	48000	50000	50000	ND <1.0	-	-	ND <1.0	ND <1.0	ND <1.0	ND <1.0	-	-
Naphthalene	*210*	NE	NE	1.3	-	-	ND <1.0	ND <1.0	ND <1.0	180	-	-
n-Propylbenzene	*10000*	*1200*	*2900*	ND <1.0	-	-	ND <1.0	ND <1.0	ND <1.0	ND <1.0	-	-
o-Xylene	NE	NE	NE	ND <1.0	-	-	ND <1.0	ND <1.0	ND <1.0	9.7	-	-
Styrene	*320*	580	2065	ND <1.0	-	-	ND <1.0	ND <1.0	ND <1.0	ND <1.0	-	-
Tetrachloroethene	88	1500	3820	ND <1.0	-	-	ND <1.0	ND <1.0	ND <1.0	ND <1.0	-	-
Toluene	4000000	23500	50000	ND <1.0	-	-	ND <1.0	ND <1.0	ND <1.0	ND <1.0	-	-
Total Xylenes	*270*	21300	50000	ND <1.0	-	-	ND <1.0	ND <1.0	ND <1.0	14.1	-	-
SVOCs (ug/L)												
2,4-Dimethylphenol	*150*	NE	NE	ND <0.99	-	-	ND <0.96	ND <0.98	ND <0.94	ND <0.99	-	-
2-Methylnaphthalene	*62*	*1000*	*13100*	ND <0.99	ND <0.09	ND <0.09	ND <0.96	ND <0.98	ND <0.94	1.5	1	0.45
2-Methylphenol	*670*	NE	NE	ND <0.99	-	-	ND <0.96	ND <0.98	ND <0.94	ND <0.99	-	-
Acenaphthene	*150*	*30500*	*50000*	0.2	0.39	ND <0.09	ND <0.05	ND <0.05	ND <0.05	5.6	3.3	2.4
Acenaphthylene	0.3	NE	NE	**0.55**	**1.2**	ND <0.19	ND <0.05	ND <0.05	ND <0.05	**3.2**	**0.74**	**1.7**
Acetophenone	NE	NE	NE	ND <5.0	-	-	ND <4.8	ND <4.9	ND <4.7	ND <5.0	-	-
Anthracene	1100000	NE	NE	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	1.5	0.96	0.52
Benz(a)anthracene	0.3	NE	NE	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	0.13	0.08	ND <0.05
Benzo(a)pyrene	0.3	NE	NE	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	0.07	ND <0.05	ND <0.05
Benzo(b)fluoranthene	0.3	NE	NE	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05
Benzo(g,h,i)perylene	*150*	NE	NE	ND <0.20	ND <0.05	ND <0.05	ND <0.19	ND <0.20	ND <0.19	ND <0.20	ND <0.05	ND <0.05
Benzo(k)fluoranthene	0.3	NE	NE	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05
bis(2-Ethylhexyl)phthalate	59	NE	NE	ND <0.50	-	-	ND <0.48	ND <0.49	ND <0.47	ND <0.50	-	-
Carbazole	*53*	NE	NE	ND <5.0	-	-	ND <4.8	ND <4.9	ND <4.7	ND <5.0	-	-
Chrysene	*0.54*	NE	NE	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	0.15	0.1	ND <0.05
Dibenz(a,h)anthracene	*0.3*	NE	NE	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05
Dibenzofuran	*40*	*460*	*5800*	ND <0.05	-	-	ND <0.05	ND <0.05	ND <0.05	0.39	-	-
Diethylphthalate	*2200*	NE	NE	ND <5.0	-	-	ND <4.8	ND <4.9	ND <4.7	ND <5.0	-	-
Fluoranthene	3700	NE	NE	0.08	ND <0.28	ND <0.05	ND <0.05	ND <0.05	ND <0.05	0.99	0.67	0.27
Fluorene	140000	NE	NE	0.36	0.81	ND <0.11	ND <0.10	ND <0.10	ND <0.09	3.7	3.2	1.1
Indeno(1,2,3-cd)pyrene	*0.54*	NE	NE	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05	ND <0.05
Naphthalene	*210*	NE	NE	1.1	0.24	ND <0.09	0.1	0.15	0.1	110	70	49
Nitrobenzene	*2300*	*51*	*750*	ND <0.10	-	-	ND <0.10	ND <0.10	ND <0.09	ND <0.10	-	-
Phenanthrene	*14*	NE	NE	0.25	0.28	ND <0.05	ND <0.05	ND <0.05	ND <0.05	1.2	0.84	0.37
Phenol	9.20E+07	NE	NE	ND <0.99	-	-	ND <0.96	ND <0.98	ND <0.94	ND <0.99	-	-
Pyrene	110000	NE	NE	0.1	ND <0.28	ND <0.05	ND <0.05	ND <0.05	ND <0.05	1.4	0.52	0.39

Notes
CT DEEP RSRs - Connecticut Department of Energy & Environmental Protection Remediation Standard Regulations
SWPC - Surface Water Protection Criteria
RES VC - Residential Volatilization Criteria
I/C VC - Industrial/Commercial Volatilization Criteria
ug/L - micrograms per Liter
CT ETPH - Connecticut Extractable Total Petroleum Hydrocarbons
VOCs - Volatile Organic Compounds
SVOCs - Semi Volatile Organic Compounds
ND - Not detected above listed laboratory reporting limit
NE - RSR criteria not established
Italics Criteria - Additional Polluting Substance and Alternative Criteria (APS) approved by CTDEEP for use with permission on a site-by-site basis.

[1]- Xylene criteria apply to Total Xylenes
^ - Volatilization Criteria Does Not Apply to Wells Screen Greater Than 15' Below the Water table
Only compounds detected are summarized in the table (compounds that are not listed were not detected)
Bolded and boxed - Concentration exceeds RSR value
Bolded, boxed, and Italics - Concentration exceeds APS RSR value

TABLE 4
Sediment Analytical Data Summary
Rockville Former MGP Site
13 Maple Street
Rockville, CT

Sample ID	SED-01	SED-02	SED-DUP	SED-03	SED-04	SED-05	SED-06
Laboratory ID	BZ40749	BZ40750	BZ40755	BZ40751	BZ40752	BZ40753	BZ40754
Sample Date	11/13/2017	11/13/2017	11/13/2017	11/13/2017	11/13/2017	11/13/2017	11/13/2017
Duplicate			SED-02				
CT ETPH (mg/Kg)	170	310	250	ND <290	ND <290	330	1,100
Total Organic Carbon (mg/Kg)	19,000	17,000	25,000	5,100	6,200	10,000	24,000
VOCs (mg/Kg)							
Toluene	ND <4.8	ND <6.5	ND <7.0	ND <5.4	ND <6.4	ND <6.1	ND <5.8
SVOCs (mg/Kg)							
2-Methylnaphthalene	0.42	ND<0.31	ND<0.30	ND<0.27	ND<0.26	ND<0.31	ND<3.0
Acenaphthene	1.3	ND<0.31	ND<0.30	ND<0.27	ND<0.26	ND<0.31	ND<3.0
Acenaphthylene	0.38	0.42	0.49	0.58	0.29	0.41	ND<3.0
Anthracene	3.3	0.9	0.79	0.88	ND<0.26	0.59	ND<3.0
Benz(a)anthracene	7.2	3.0	2.7	4.0	1.0	1.9	3.9
Benzo(a)pyrene	6.1	2.7	2.4	3.6	1.1	1.8	3.6
Benzo(b)fluoranthene	5.3	2.8	2.2	3.1	0.89	1.7	ND<3.0
Benzo(g,h,i)perylene	3.3	1.6	1.4	1.8	0.78	1.1	ND<3.0
Benzo(k)fluoranthene	5.4	2.6	2.1	3.4	1.0	1.7	3.4
Carbazole	1.5	0.66	ND<0.43	ND<0.38	ND<0.37	ND<0.44	ND<4.3
Chrysene	7.6	3.5	3.0	4.1	1.2	2.1	4.7
Dibenz(a,h)anthracene	0.8	ND<0.31	ND<0.30	0.43	ND<0.26	ND<0.31	ND<3.0
Dibenzofuran	1.1	ND<0.31	ND<0.30	ND<0.27	ND<0.26	ND<0.31	ND<3.0
Fluoranthene	19	7.1	6.1	6.6	1.5	3.4	7.0
Fluorene	1	0.35	0.35	0.31	ND<0.26	0.32	ND<3.0
Indeno(1,2,3-cd)pyrene	3.9	1.7	1.5	2.0	0.77	1.1	ND<3.0
Naphthalene	0.77	ND<0.31	ND<0.30	ND<0.27	ND<0.26	ND<0.31	ND<3.0
Phenanthrene	19	4.3	3.8	2.5	0.81	2.2	5.5
Pyrene	16	5.6	5.0	6.3	1.6	3.1	8.3
PCBs (mg/Kg)	ND<0.44	ND<0.45	ND<0.42	ND<0.39	ND<0.38	ND<0.43	ND<0.43
Total Cyanide (mg/Kg)	ND<0.61	ND<0.68	ND<0.59	ND<0.59	ND<0.57	ND<0.61	ND<0.59
Metals (mg/Kg)							
Arsenic	ND <0.79	2.26	1.35	1.5	2.1	1.26	3.95
Barium	29	49.5	36.3	27.5	40.6	29.6	24.5
Cadmium	ND <0.40	ND <0.44	ND <0.41	0.4	0.89	ND <0.46	0.94
Chromium	9.22	17.5	10.1	10.2	14.6	11.3	17.4
Copper	16.1	26.1	28.4	27.6	46.4	20	2,190
Lead	37.7	64.1	46.1	26.1	78.2	28.8	153
Mercury	ND <0.03	ND <0.03	ND <0.03	ND <0.03	ND <0.03	ND <0.03	0.1
Nickel	6.81	8.7	7.25	7.53	9.02	7.97	12.2
Vanadium	21.7	37.3	29.5	31.9	41.5	31.7	26.5
Zinc	53.2	77.4	86.8	77.6	88.5	70.9	292

Notes
mg/Kg - milligrams per kilogram
NE - Not Established
ND- Not detected to the reporting limit shown
CT ETPH - Connecticut Extractable Total Petroleum Hydrocarbons
VOCs - Volatile Organic Compounds
PAHs - Polycyclic Aromatic Hydrocarbons
BDL - Below Detection Limits
- Compound Not Analyzed
Only compounds detected are summarized in the table (compounds that are not listed were not detected)

TABLE 4
Sediment Analytical Data Summary
Rockville Former MGP Site
13 Maple Street
Rockville, CT

Sample ID	**SED-06A**	**SED-06B**	**SED-06C**	**SED-07**	**SED-DUP-1**	**SED-08**	**SED-09**
Laboratory ID	CB20637	CB20638	CB20639	CB20634	CB20640	CB20635	CB20636
Sample Date	8/28/2018	8/28/2018	8/28/2018	8/28/2018	8/28/2018	8/28/2018	8/28/2018
Duplicate							
CT ETPH (mg/Kg)	-	-	-	91	79	100	630
Total Organic Carbon (mg/Kg)	-	-	-	-	-	-	-
VOCs (mg/Kg)							
Toluene	-	-	-	ND <6.2	ND <6.6	ND <6.1	240
SVOCs (mg/Kg)							
2-Methylnaphthalene	-	-	-	ND<0.28	ND<0.29	ND<0.3	ND<1.5
Acenaphthene	-	-	-	ND<0.28	ND<0.29	ND<0.3	ND<1.5
Acenaphthylene	-	-	-	ND<0.28	ND<0.29	0.33	ND<1.5
Anthracene	-	-	-	ND<0.28	ND<0.29	0.6	ND<1.5
Benz(a)anthracene	-	-	-	0.7	0.71	2.4	ND<1.5
Benzo(a)pyrene	-	-	-	0.77	0.84	2.4	1.9
Benzo(b)fluoranthene	-	-	-	1.2	1.4	4.1	3.7
Benzo(g,h,i)perylene	-	-	-	ND<0.28	ND<0.29	ND<0.3	ND<1.5
Benzo(k)fluoranthene	-	-	-	0.42	0.53	1.4	ND<1.5
Carbazole	-	-	-	ND<0.40	ND<0.41	ND<0.44	ND<2.2
Chrysene	-	-	-	0.79	0.84	2.6	2.2
Dibenz(a,h)anthracene	-	-	-	ND<0.28	ND<0.29	ND<0.3	ND<1.5
Dibenzofuran	-	-	-	ND<0.28	ND<0.29	ND<0.3	ND<1.5
Fluoranthene	-	-	-	1.6	1.7	5.2	3.6
Fluorene	-	-	-	ND<0.28	ND<0.29	ND<0.3	ND<1.5
Indeno(1,2,3-cd)pyrene	-	-	-	ND<0.28	ND<0.29	0.44	ND<1.5
Naphthalene	-	-	-	ND<0.28	ND<0.29	ND<0.3	ND<1.5
Phenanthrene	-	-	-	1.2	0.96	2.8	ND<1.5
Pyrene	-	-	-	1.5	1.6	4.3	3.2
PCBs (mg/Kg)	-	-	-	ND<0.40	ND<0.41	ND<0.43	ND<0.43
Total Cyanide (mg/Kg)	-	-	-	-	-	-	-
Metals (mg/Kg)							
Arsenic	-	-	-	ND <0.73	ND <0.77	ND <0.85	7.3
Barium	-	-	-	30.3	27.5	23.7	324
Cadmium	-	-	-	ND <0.36	ND <0.39	ND <0.43	2.9
Chromium	-	-	-	7.1	7.83	6.61	66.4
Copper	22.1	28.9	83.7	13.2	9.5	10	149
Lead	-	-	-	43.7	33.1	22.2	267
Mercury	-	-	-	ND <0.03	ND <0.03	ND <0.03	0.21
Nickel	-	-	-	7.6	5.25	6.37	41.6
Vanadium	-	-	-	16	16.6	15.2	109
Zinc	-	-	-	57.9	60.8	45.5	606

Notes
mg/Kg - milligrams per kilogram
NE - Not Established
ND- Not detected to the reporting limit shown
CT ETPH - Connecticut Extractable Total Petroleum Hydrocarbons
VOCs - Volatile Organic Compounds
PAHs - Polycyclic Aromatic Hydrocarbons
BDL - Below Detection Limits
- Compound Not Analyzed
Only compounds detected are summarized in the table (compounds that are not listed were not detected)

TABLE 5
Areas Of Concern (AOCs)/ Site Conceptual (CSM) Summary
Eversource Former Rockville MGP
13 Maple Street
Rockville, CT

AOC #	AOC Description	COCs	Possible Release Mechanisms and Migration Pathways	Potentially Affected Media	Previous Investigation Soil Locations	Phase III Soil Locations	Previous Investigation Groundwater Locations	Phase III Investigation Groundwater Locations	Phases of Investigation Completed	Previous COCs in Soil	Phase III COCs in Soil	Previous COCs in Groundwater	Phase III COCs in Groundwater	COCs in Surface Water	Investigation Status	Remediation Status
	Rockville Former MGP Site (On-Site)															
1	Former Retorts/ Generating Room	VOCs (BTEX), SVOCs, Metals, Total Cyanide, ETPH	Coal and oil used to generate manufactured gas. By-products generated could include coal tar residues, coal ash, coke, complexed cyanide compounds during the production of gas. Materials could have been used as fill in the building foundation.	Surface soils Subsurface soils Groundwater	TB-34 TB-47	SB-07 SB-43 SB-44 SB-46 SB-47 SB-48	MW-9S/ MW-9D	MW-9S/MW-9D	Phase III	Subsurface Soil samples from MW-09 contained VOC (ethylbenzene), SVOCs above GB PMC, metals detected. Pesticides detected (GB PMC exempt) Fill observed (ash, brick) and creosote sheen and odors on auger cuttings.	ETPH above RES and I/C DEC and GB PMC in SB-07, and SB-47 ETPH above RES DEC in SB-43 and SB-46 PAHs above RES and I/C DEC and GB PMC in SB-07, SB-43, SB-46, and SB-47 Fill observed (ash, brick, coal) in SB-07 Staining with petroleum odors (10-11.5 ft.) Coal tar impacts in SB-07 (16 to 25ft, 33-33.5ft., 39-40 ft.) Coal tar impacts in SB-43 and SB-47 11-15ft Coal tar impacts in SB-44 12-15ft and 24.5-26ft Coal tar impacts in SB-46 10-37ft	MW-9S: VOCs (xylenes), PAHs, metals, cyanide above SWPC MW-9D: PAHs and metals above SWPC	**Shallow:** MW-9S: ETPH, VOCs (1,2,4-trimethylbenzene and naphthalene), PAHs, cyanide above SWPC. ETPH detected above Res VC APS. **Deep:** MW-9D: VOC,ETPH and cyanide not detected. Naphthalene and metals detected below the SWPC.	Surface water (Hockanum River) upgradient of the AOC	Phase II Investigation (1992) Phase III Investigation (2016-2018)	Remedial evaluation pending the completion of the Phase III investigation.
2	Former Purifying House	VOCs (BTEX), SVOCs, Metals, Total Cyanide, ETPH	Manufactured gas was passed through lime used to scrub impurities (sulphur/cyanide) from the gas (Purifier waste). Materials could have been used as fill in the building foundation.	Surface soils Subsurface soils Groundwater	TBX1 TB-3 TB-4 TB-5 TB-20 TB-21 TB-22 SB-08	TP-01 TP-02 TP-03 SB-31 SB-52	MW-9S/ MW-9D	MW-9S/MW-9D	Phase III	Soil samples from MW-09 contained VOC (ethylbenzene), SVOCs above GB PMC, metals detected. Pesticides detected (GB PMC exempt) Fill observed (brick) and sheen and strong odors on auger cuttings.	ETPH and PAHs above RES and I/C DEC and GB PMC in SB-31 and SB-52 DEC does not apply due to samples greater than 15'. PAHs above RES and I/C DEC and GB PMC, ETPH above RES DEC in TP-03. PAHs detected above RES and I/C DEC and GB PMC. Cyanide detected in all but SB-31. Fill observed (bricks, metal pieces, metal conduit, cast iron pipe, ash) Coal tar impacts in SB-31 and SB-52 15-31ft	MW-9S: VOCs (xylenes), PAHs, metals, cyanide above SWPC MW-9D: PAHs and metals above SWPC	**Shallow:** MW-9S: ETPH, VOCs (1,2,4-trimethylbenzene and naphthalene), PAHs, cyanide above SWPC. ETPH detected above Res VC APS. **Deep:** MW-9D: VOC,ETPH and cyanide not detected. Naphthalene and metals detected below the SWPC.	Surface water (Hockanum River) upgradient of the AOC	Phase II Investigation (1992) Phase III Investigation (2016-2018)	Remedial evaluation pending the completion of the Phase III investigation.
3	Former Gas Holder #1 [Gasometer-22,000 ft^3 Capacity]	VOCs (BTEX), SVOCs, Total Cyanide, ETPH	Residual coal tar droplets collected inside the bottom of the holder which is likely subgrade based upon its age (pre-1900 and boring refusal). Possible leaks or spills from the holder to the soils.	Surface soils Subsurface soils Groundwater	TB-18 (Refusal 13.6') TB-19 (Refusal 14') TB-6 (Refusal 15.5') TB-7 (Refusal 16.5') TB-45 CSS-4	SB-04 SB-05 SB-06 SB-29 SB-30 SB-31 TP-04 TP-05	MW-10S MW-10M MW-10D	MW-9S MW-9D MW-10S MW-10M MW-10D MW-10BR MW-10SR	Phase III	Surface soil: PAHs detected. Soil samples from MW-10 contained VOCs, SVOCs, pesticides above GB PMC but below the water table. Strong sheen and odor observed on auger cuttings. Fill observed TB-18 and TB-19.	ETPH above RES DEC in SB-29 and SB-30. ETPH and VOCs above RES & I/C DEC and/or GB PMC in SB-05, SB-06, SB-31, and TP-05. DEC does not apply to SB-05 due to sample depth greater than 15'. PAHs above RES and I/C DEC and/or GB PMC in SB-29, SB-30, and SB-31 Fill observed (ash, slag, and/or metal) in SB-06, SB-29, SB-30, SB-31, TP-04, TP-05 Heavily coal tar impacted soils within the Gas Holder #1 (5.75 to 14 feet). Outside holder coal tar impacts observed in SB-04, SB-05 19.5- 39 feet, 44.5 ft. to 50 feet, 71 to 74 ft. and SB-31 from 11 to 31 ft and 47 to 49 ft	MW-9S: VOCs (xylenes), PAHs, metals, cyanide above SWPC MW-9D: PAHs and metals above SWPC MW-10S: VOCs and cyanide detected, PAHs and metals above SWPC. MW-10M: VOCs (xylenes) detected, PAHs and metals above SWPC MW-10D: SVOCs and metal (zinc) above SWPC	**Shallow:** MW-10SR: Not sampled due to visual observations of tar globules/ staining during development **Deep:** MW-10M: ETPH, VOCs (naphthalene) detected and PAHs above SWPC MW-10D: Not sampled due to visual observations of tar globules/ staining during development **Bedrock:** MW-10BR: ETPH, PAHs , VOCs, and metals detected.	Surface water (Hockanum River) upgradient of the AOC	Phase II Investigation (1992) Human Health Risk Assessment (1994) Phase III Investigation (2016-2018)	Remedial evaluation pending the completion of the Phase III investigation.
4	Former Gas Holder #2 [Gasometer-22,000 ft^3 Capacity]	VOCs (BTEX), SVOCs, Total Cyanide, ETPH	Residual coal tar droplets collected inside the bottom of the holder which is likely subgrade based upon its age (pre-1900) and boring refusal. Possible leaks or spills from the holder to the soils.	Surface soils Subsurface soils Groundwater	TBX-4 TB-16 (Refusal 18') TB-17 TB-8 TB-9 TB-42	SB-02 SB-03 SB-04 SB-05 SB-28 SB-29 TP-05 TP-06	MW-10S MW-10M MW-10D	MW-10S MW-10S2 MW-10M MW-10D MW-10BR MW-24S	Phase III	Surface soil: PAHs detected. Soil samples from MW-10 contained VOCs, SVOCs, pesticides above GB PMC but below the water table Strong sheen and odor observed on auger cuttings (TB-16 and TB-17). Fill (bricks) observed in TB-16.	PAHs, ETPH and VOCs above RES & I/C DEC and GB PMC in SB-03 and SB-05. PAHs and ETPH above GB PMC in SB-02. PAHs above RES and I/C DEC and/or GB PMC in SB-28 and SB-29. Arsenic above RES and I/C DEC and benzene above GB PMC in SB-28. ETPH above RES DEC in SB-29 Fill observed (ash, brick, coal) in SB-05, SB-28, and SB-29, Fill (wood, glass, metal) observed in TP-05. <u>Coal tar impacts:</u> SB-02: 18 to 39 ft. SB-03: 10.5 to 15 ft. SB-04: 2.5-37 ft. 44.5-50 ft. SB-05: 19.5 to 39 ft. , 71-74 ft. SB-28: 24-36.5 ft. TP-05.: 5.75 -6.0 ft.	MW-10S: VOCs and cyanide detected, PAHs and metals above SWPC. MW-10M: VOCs (xylenes) detected, PAHs and metals above SWPC MW-10D: SVOCs and metal (zinc) above SWPC	**Shallow:** MW-10SR: Not sampled due to visual observations of tar globules/ staining during development **Deep:** MW-10M: ETPH, VOCs (naphthalene) detected and PAHs above SWPC MW-10D: Not sampled due to visual observations of tar globules/ staining during development **Bedrock:** MW-10BR: ETPH, PAHs , VOCs, and metals detected.	Surface water (Hockanum River) upgradient of the AOC	Phase II Investigation (1992) Human Health Risk Assessment (1994) Phase III Investigation (2016-2018)	Remedial evaluation pending the completion of the Phase III investigation.

TABLE 5
Areas Of Concern (AOCs)/ Site Conceptual (CSM) Summary
Eversource Former Rockville MGP
13 Maple Street
Rockville, CT

AOC #	AOC Description	COCs	Possible Release Mechanisms and Migration Pathways	Potentially Affected Media	Previous Investigation Soil Locations	Phase III Soil Locations	Previous Investigation Groundwater Locations	Phase III Investigation Groundwater Locations	Phases of Investigation Completed	Previous COCs in Soil	Phase III COCs in Soil	Previous COCs in Groundwater	Phase III COCs in Groundwater	COCs in Surface Water	Investigation Status	Remediation Status
5	Former Gas Holder #3 [Gasometer-110,000 ft^3 Capacity)	VOCs (BTEX), SVOCs, Total Cyanide, ETPH	Residual coal tar droplets collected inside the bottom of the holder which is likely a shallow subgrade based upon its age (post 1900). Possible leaks or spills from the holder to the soils.	Surface soils Subsurface soils Groundwater	SS-3A CSS-3 TB-13 (Refusal 8') TB-14 (Refusal 6.5')	TP-07	Groundwater not investigated. Water encountered inside the holder foundation.	MW-7S/MW-7D	Phase III	Surface soils: PAHs and metals detected Fill observed	Surface soils: PAHs, cyanide and metals detected No visual impacts in soils.	Groundwater investigations not completed in AOC.	**Shallow :** MW-7S: ETPH and PAHs detected above the SWPC. VOCs and metals detected. **Deep:** MW-7D: PAHs, VOCs and metals detected	Surface water (Hockanum River) upgradient of the AOC	Phase II Investigation (1992) Human Health Risk Assessment (1994) Phase III Investigation (2016-2018)	Investigation complete. Soil remediation is not required. Groundwater impacts are likely associated with AOC-3 and AOC - 4 (Holder #1 and Holder #2). Groundwater impacts are addressed under site.
6	Former Coal Shed	PAHs, Metals	Coal stockpiled for MGP could be present in the soils.	Surface soils Subsurface soils	Soils not investigated	SS-102 SS-103 SEH Invest. HA-01 HA-02 HA-03 HA-04 HA-05 HA-06 HA-07 HA-08 HA-09	Groundwater not investigated (within active transformer yard)	Groundwater not investigated (within active transformer yard)	Phase III	No investigations completed in the AOC.	PAHs, ETPH, and lead above the RES and I/C DEC and GB PMC in SS-102. PCBs detected. Benzo (a) pyrene detected above the SEH Threshold Notification Concentration . PAHs, ETPH, and arsenic above the RES and I/C DEC and/or GB PMC in SS-103. Cyanide detected. PAHs above the RES and I/C DEC in HA-01 through HA-09. SEH Threshold Notification Concentration for benzo(a)pyrene delineated HA-01, HA-2 and HA-03 above the threshold. Fill observed (coal, ash) in shallow soils below the trap-rock gravel cover to 2 feet below grade.	Groundwater investigations not completed in AOC.	Groundwater investigations not completed in AOC.	Surface water (Hockanum River) upgradient of the AOC	Phase III Investigation (2018)	Delineation SEH soils for benzo (a) pyrene was completed in 2018. Remedial evaluation pending the completion of the Phase III investigation.
7	Former Transformer House	PCBs, ETPH	Transformer use. Possible leaks or spills could have impacted soils.	Surface soils Subsurface Soils	Soils not investigated (within active transformer yard)	SS-100 SS-101 SB-44	Groundwater not investigated (within active transformer yard)	Groundwater not investigated (within active transformer yard)	Phase III	No investigations completed in the AOC.	PAHs above RES and I/C DEC and GB PMC in SS-100. Arsenic above RES and I/C DEC in SS-100 and SS-101. ETPH and cyanide detected. Fill, coal and brick, encountered to 5 feet below grade in SB-44. ETPH and cyanide detected. Visual Impacts (Appear to be associated with AOC -1) 12- 15 ft.: Petroleum odor and sheen 24.5-26: Faint coal tar odor	Groundwater investigations not completed in AOC.	Groundwater investigations not completed in AOC.	Surface water (Hockanum River) upgradient of the AOC	Phase III Investigation (2018)	Phase III ESA investigations are proposed to assess the nature and extent of fill within the Inner Substation Area (AOC-8 below) Remedial evaluation pending the completion of the Phase III
8	Current Substation	PCBs, ETPH, Metals,	Possible leaks or spills from transformers	Surface soils Subsurface Soils If significant release: groundwater	TB-34 TB-38 TB-39S TB-32 MW-8S	SS-100 to SS-106 HA-01 to HA-11 SB-43 SB-44	MW-8S	MW-2SR, MW-2D, MW-2BR, MW-5S, MW-5D, MW-8SR, MW-16S, MW-17S. MW-25S	Phase III	PAHs and metals detected. Fill (sand) observed	Arsenic and ETPH above RES and I/C DEC in SS-100, SS-101, SS-104 and SS-106. PAHs, ETPH, and lead above the RES and I/C DEC and GB PMC in SS-102. PCBs detected. PAHs, ETPH, and arsenic above the RES and I/C DEC and/or GB PMC in SS-103. Cyanide detected. ETPH also above RES DEC, I/C DEC and GB PMC in SS-104 and Res DEC in SS-106. PAHs above RES and I/C DEC and GB PMC in SS-100, SS-104, SS-105 and SS-106. HA-01 through HA-07, HA-08 and HA-09: SEH investigation (See AOC 6). PAHs above the RES and I/C DEC in HA-01 through HA-09. SEH Threshold Notification Concentration for benzo(a)pyrene delineated. Fill observed in top 2 feet of soils. HA-09A: ETPH exceeds RES DEC, arsenic exceeds the RES and I/C DEC. PAHs exceed RES DEC, I/C DEC and GB PMC. Cyanide dected. PCBs not detected. HA-10: ETPH and PAHs exceed RES DEC, I/C DEC and GB PMC. Cyanide detected below RES DEC and GB PMC. Arsenic exceeds the RES and I/C DEC HA-11: Arsenic exceeds the RES and I/C DEC. ETPH detected. Visual Impacts (Appear to be associated with AOC -1) 12- 15 ft.: Petroleum odor and sheen 24.5-26: Faint coal tar odor	MW-8S: Metals detected above the SWPC. Cyanide detected.	**Shallow**: MW-2SR: Not sampled due to visual observations of tar globules (2017). PAHs detected above SWPC. VOC (naphthalene detected). MW-5S: PAHs detected above SWPC. ETPH detected above the SWPC, RES VC and I/C VC. VOCs, and metals detected. MW-8SR: PAHs detected above the SWPC. Elevated metals detected. Possibly associated with turbidity in sample. MW-16S: Metals and VOC (Chloroform) detected . MW-17S: VOCs (tetrachloroethene)and ETPH detected below SWPC. Metals detected. **Deep**: MW-2D: Not sampled due to visual observations of tar globules. MW-5D: Metals and ETPH detected **Bedrock**: MW-2BR: PAHs detected below the SWPC. Metals detected.	Surface water (Hockanum River) located adjacent but up gradient of location.	Phase II Investigation (1992) Phase III Investigation (2016-2018)	Phase III ESA investigations are proposed to assess the nature and extent of fill within the Inner Substation Area . Groundwater impacts in MW-5S are likely attributable to AOC-11

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9	Historic Site Fill	VOCs, SVOCs, Metals, PCBs, ETPH	Historic placement of fill during the development of Site.	Surface soils Subsurface soils	TB-02, TB-03,TB-04, TB-06, TB-13, TB-14, TB-16, TB-17, TB-18, TB-19, TB-20, TB-21, TB-22, TB-27, TB-31, TB-32, TB-33, TB-34, TB-38, TB-39, TB-40, TB-42, TB-45, TB-47, MW-02D, MW-04D, MW-05S, MW-05D, MW-10S, MW-10M, MW-10D Historic fill was identified in multiple borings which overlap with other AOCs	On-site soils borings, SS-100 to SS-107, TP-01, to TP-07. HA-01 to HA -18 Historic fill was identified in multiple borings which overlap with other AOCs	Not Applicable	Not Applicable	Phase III	Fill (i.e., ash and bricks observed)	Fill (i.e., ash, bricks, slag, metals, glass, building debris, coal, and site fill) and former MGP plant foundations observed in several Phase III investigation locations. Fill as deep as 15 ft. Concentrations of COCs including PAHs, ETPH, and metals above RSR criteria. Concentrations of benzo (a) pyrene above SEH Threshold Notification Concentration for benzo(a)pyrene delineated in SS-102, HA-01A, HA-02 HA-03 and HA-18.	Wells screened below fill (See AOC-15)	Wells screened below fill (See AOC-15)	Surface water (Hockanum River) located adjacent but up gradient of location.	Phase II Investigation (1992) Phase III Investigation (2018)	Additional Phase III Investigations proposed at the site to assess nature and extent of fill. Remedial evaluation pending the completion of the Phase III investigation.
10	Hockanum River Sediment	PAHs and Metals	Possible historic discharges to the river from the Site, historic discharges from up gradient industries, current storm water run-off and anthropogenic sources.	Sediment	R-Sed-A/B/C/D Sediments (A,B,C, D)	SED-01 SED-02 SED-03 SED-04 SED-05 SED-06 SED-07 SED-08 SED-09	Not Applicable	Not Applicable	Phase III	PAHs and metals detected above sediment screening criteria. VOC (methylene chloride) detected.	ETPH, PAHs, and metals detected. Highest PAH concentrations were detected upstream at SED -01. ETPH detected in all sediment samples. Metals detected in all sediment samples. Elevated copper, lead and zinc detected in SED-06. SED-06A, B, C were collected in the vicinity of SED-06. Outfall Sediment samples were collected at SED-07, SED-08 and SED-09:VOC (toluene), ETPH, PAHs and metals were detected.	Not applicable.	Not applicable.	Metals (Barium chromium, zinc) below criteria. Concentrations detected at upstream sample location.	Phase II Investigation (1992) Phase III Investigation (2017-2018)	Investigation is completed.
11	Coal Tar impacts and Fill Observed at TB-33 (Southwestern portion of Site)	VOCs (BTEX), SVOCs, Total Cyanide, ETPH	Historic placement of fill.	Surface soils Subsurface Soils Groundwater	TB-33 TB-34 MW-5S MW-5D	SB-11 SB-36 SB-37 SB-38 SB-39 SB-40 SB-41 SB-42 SB-53 MW-16S MW-17S	MW-5S MW-5D	MW-5S MW-5D MW-16S MW17S MW-30S	Phase III	VOCs, PAHs and metals detected. Fill (sand) with coal tar observed.	ETPH and PAHs detected above RES and I/C DEC and GB PMC in SB-11. Naphthalene (VOC) detected above GB PMC and arsenic and lead detected above RES and I/C DEC in SB-11. Fill (Ash and Slag) observed in SB-11, SB-36, SB-39 ,SB-40, SB-40A to approximately 5 feet. SB-11: Sheen and coal tar odor observed from 5 to 8 feet. SB-36: Coal tar odor 12 to 20 feet. Sheen 15 to 20 feet. SB-38: sheen and coal tar odor 10 to 11 feet. SB-40: sheen and coal tar odor 8 to 15 feet.	MW-5S: PAH (Acenaphthylene) detected above the SWPC. VOC (xylene) and metal (chromium) detected. MW-5D: VOC (Benzyl Alcohol) and metals detected above SWPC. SVOC (2-methylphenol) detected.	**Shallow:** MW-5S: ETPH and VOCs detected below SWPC. PAHs detected above SWPC. Metals detected. MW-16S: Metals and Chloroform (VOC) detected MW-17S: VOC (tetrachloroethene), ETPH detected below SWPC. Metals detected. **Deep:** MW-5D: Metals and ETPH detected	Surface water (Hockanum River) located adjacent but up gradient of location.	Phase II Investigation (1992) Phase III Investigation (2016- 2018)	Remedial evaluation pending the completion of the Phase III investigation.

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12	Creosote/ Coal Tar impacts and Fill Observed (Southeastern portion of Site)	VOCs (BTEX), SVOCs, Total Cyanide, ETPH	Historic placement of fill (AOC-13). Possible migration for spills or leaks from adjacent Retorts (AOC-1) or Purifying House (AOC-2).	Surface soils Subsurface Soils Groundwater	CSS-5 TB-2 TB-3 TB-24 TB-28 MW-6S MW-6D	SB-08 SB-09 SB-09A SB-10 SB-24 SB-32 SB-33 SB-48 SB-49 SB-50 SB-51 SS-107 SS-108 HA-17 HA-18	MW-2S MW-2D MW-6S MW-6D	MW-2SR MW-2D MW-2BR MW-6S MW-6D	Phase III	Surface Soil: PAHs exceeded the Res DEC and GB PMC. Subsurface soils: VOC(methylene chloride), SVOCs, cyanide, and metals detected. Fill (ash and sand fill), coal tar impacts sheen observed.	PAHs detected above RES and I/C DEC and GB PMC in SB-08, SB-09A. PAHs detected above the RES DEC and GB PMC in SB-24. ETPH detected above RES DEC in SB-09A. Concentrations of PAHs and ETPH were detected above the RES DEC, I/C DEC and/or the GB PMC in SB-32 and SB-51. Concentrations of arsenic were detected in above the RES DEC and I/C DEC. HA-17: ETPH and cyanides detected. PAHs detected above the RES DEC., I/C DEC and GB PMC. Lead above the GB PMC. HA-18: ETPH, PAHs above the RES DEC/ I/C DEC and GB PMC. Benzo (a) pyrene above the SEH Threshold Notification Concentration. SB-08: Staining and fuel oil odor 11 to 2 ft. Staining and coal tar odor from 24 to 29 ft. SB-10: Sheen and coal tar odor 9 to 24.5 ft. SB-33: coal tar odor 7 to 11 ft. Sheen, blebs and coal tar odor 11.5- 20 ft. SB-50: Coal tar from 11-12 ft. Sheens and coal tar blebs were observed from 15 to 17 feet. sheens and coal tar odors were observed from 17 feet to 25 feet SB-51: petroleum orders and grey staining from 14 to 17 feet. Sheen, coal tar blebs and/or coal tar odors were observed from 17 to 20 feet. Fill (brick, glass, slag, and/or ash) observed in SB-08, SB-09A and SB-24, SB-32, SB-33, SB-48, SB-49, SB-50, and SB-51.	MW-2S: Dry. MW-2D: Metals and PAHs detected above the SWPC and VOCs (xylene and ethylbenzene detected). MW-6S: Metals detected above the SWPC. SVOC (bis2-ethylhexylphthalate) detected.	**Shallow:** MW-2SR: Not sampled due to visual observations of tar globules (2017). MW-6S: Naphthalene and metals detected below the SWPC. **Deep**: MW-6D: PAHs detected below SWPC. Metals detected. MW-2D: Not sampled due to visual observations of tar globules **Bedrock:** MW-2BR: PAHs detected below the SWPC. Metals detected.	Hockanum River located adjacent but up gradient of location.	Phase II Investigation (1992) Human Health Risk Assessment (1994) Phase III Investigation (2016-2018)	Additional Phase III ESA investigations are proposed to further assess the nature and extent of fill in this area of the site. Delineation of benzo(a) pyrene in the vicinity of HA-18.
13	Possible Historic Fill to the south of the Hockanum River	PAHs	Possible historic placement of fill.	Surface Soil Subsurface Soil	SS-5A, SS5B, SS-5C, SS-5D TBX2 TB-63 and TB-64	SB-25 SB-26 SB-27 SB-54 SB-55 SB-56 SB-57	MW-11S MW-11D MW-12S MW-12D	MW-11S MW-11D MW-12S MW-12D	Phase III	Surface soil and shallow subsurface soils: PAHs exceeded the RDEC, IDEC and GB PMC.	Surface Soil: PAHs detected above RES and I/C DEC and GB PMC in SB-25, SB-54 and SB-55. Cyanide was detected in SB-54 and SB-55, Metals were detected in SB-54, SB-55, SB-56, and SB-57. SPLP metals were detected in SB-54 and SB-57. Fill (slag and/or ash) observed in SB-26, SB-27, SB-54, SB-55, SB-56, and SB-57.	MW-11S/ MW-11D MW-12S / 12D No analytical data	**Shallow:** MW-11S/ MW-12S: Metals detected **Deep:** MW-11D/ MW-12D: Metals and/or pyrene (PAH) detected	Hockanum River located adjacent and downgradient.	Phase II Investigation (1992) Human Health Risk Assessment (1994) Phase III Investigation (2017- 2018)	Remedial evaluation pending the completion of the Phase III investigation.
14	Coal Tar impacts and Fill Observed (Northern portion of Site)	VOCs (BTEX), SVOCs, Total Cyanide, ETPH	Impacted area to the north of former Gas Holders #1 and #2, Possible migration for spills or leaks from adjacent holders that migrated northward.	Surface soils Subsurface Soils Groundwater	TB-12, TB-36, TB-37,TB-40, TB-42 TB-46, TB-49A,TB-50, TB-51, TB-52, TB-53, TB-54, TB-55 TB-55A, TB-56, TB-58 , TB-59, TB-60, TB-61, TB-62, MW-1, MW-3S, MW-3D, MW-4S, MW-7S TBX5, TBX6 SS-3B. SS3-C, SS3-E, SS3-D, SS1-C, CSS-1, CSS-2	SB-01 SB-12 SB-13 SB-20 SB-21 SB-22 SB-45 SB-59 SB-60 (off-site) SB-64 (off-site)	MW-1S, MW-1D, MW-3S, MW-3D, MW-4S, MW-4D	MW-1S, MW-1D, MW-3S, MW-3D, MW-3BR, MW-4S, MW-4SR, MW-4D, MW-7S, MW-7D, MW-18D, MW-24S, MW-25S	Phase III	Surface Soil: PAHs detected above the Res DEC and GB PMC. Metals and cyanide detected. Subsurface soils: SVOCs detected above the Res and I/C DEC and GB PMC and VOCs and pesticide (lindane) detected above the GB PMC. Metals detected. Fill observed and coal tar odors and creosote sheen.	Shallow Subsurface Soils: PAHs detected in SB-21 above the RES DEC, I/C DEC and GB PMC. SPLP PAHs were not detected indicating PAHs are not leachable. PAHs detected in SB-22. PAHs, ETPH, VOCs, cyanide were not detected in SB-01, SB -12 and SB-13 in samples collected just above apparent water table. Elevated concentrations of ETPH, VOCs, and SVOCs detected in SB-13 (25.5-27.5') below water table (~15ft.) SB-45: Metals detected SB-59: PAHs, Cyanide, and VOCs detected Fill observed: Brick observed at 0.5-3.0 ft. in SB-21 and SB-59. Coal tar impacts were encountered SB-12: from 25-30 ft. (Staining, sheen and coated soils) and 37.5-39ft. (Strong coal tar odor) SB-13: 20-39 ft. (Staining and heavily coal tar coated soils and odors) SB-01: 29 to 31 ft. Sheen and coal tar odor. SB-45: Coal tar odors 30-41 ft. Coal tar blebs observed from 30-38 ft. SB-59: Coal and slag 2-3 ft. Coal tar odors 30 to 45 ft. PAHs,VOCs, and cyanide detected (2 to 3) SB-60: Coal tar odor 40 to 45 ft. Naphthalene and Xylene (VOCs) detected. SB-64: No visual impacts or odors.	**Shallow:** MW-1S:Metals detected above the SWPC. MW-3S: Metals and PAHs detected above the SWPC. VOCs detected. MW-4S: Metals detected above the SWPC. cyanide, VOCs (1,1,1-TCA) and SVOC (bis2-ethylhexylphthalate) detected. **Deep:** MW-1D: Metals detected above the SWPC. SVOCs detected. MW-3D: Metals detected above the SWPC. SVOCs and VOC (1,1,1-TCA) detected. MW4D: Lead detected above the SWPC.	**Shallow**: MW-4S: Cyanide, metals, VOCs, and PAHs detected MW-4SR: Acenaphthylene (PAH) detected above the SWPC. Cyanide detected. MW-25S: Cyanide, metals, and PAHs detected MW-3S/MW-7S: Metals and VOCs detected. PAHs and ETPH detected above the SWPC MW-1S: Metals, ETPH and PAHs detected above the SWPC. MW-24S: Coal tar obeerved development water. **Deep**: MW-1D: ETPH and VOCs detected. PAHs and metals (copper and nickel) detected above the SWPC. MW-4D/MW-7D: Metals detected. MW-18D: ETPH, VOCs, and PAHs detected above the SWPC. Metals detected. **Bedrock:** PAH (acenaphthylene) above SWPC [MW-3BR] . ETPH and VOCs detected. Metals detected.	Hockanum River is located up gradient on -site	Phase II (1990/1991) Human Health Risk Assessment (1994) Phase III ESA (2018)	Additional Phase III ESA investigations are proposed to further assess the nature and extent of coal tar impacts in the northwest portion of the site and off-site to the northwest.

TABLE 5
Areas Of Concern (AOCs)/ Site Conceptual (CSM) Summary
Eversource Former Rockville MGP
13 Maple Street
Rockville, CT

AOC #	AOC Description	COCs	Possible Release Mechanisms and Migration Pathways	Potentially Affected Media	Previous Investigation Soil Locations	Phase III Soil Locations	Previous Investigation Groundwater Locations	Phase III Investigation Groundwater Locations	Phases of Investigation Completed	Previous COCs in Soil	Phase III COCs in Soil	Previous COCs in Groundwater	Phase III COCs in Groundwater	COCs in Surface Water	Investigation Status	Remediation Status
15	Site wide groundwater impacts	VOCs, SVOCs, Metals, PCBs, ETPH, Chromium, Barium, ETPH	Groundwater impacts from spills or leaks occurring at the site. Groundwater flows to the north away from the Hockanum River.	Groundwater	NA	NA	MW-1S, MW-1D, MW-2S, MW-2D, MW-3S, MW-3D, MW-4S, MW-4D, MW-5S, MW-5D, MW-6S, MW-6D, MW-8S, MW-9S, MW-9D, MW-10S, MW-10M, MW-10D, MW-11S, MW-11D, MW-12S, MW-12D	MW-1S, MW-1D, MW-2SR, MW-2BR, MW-2D, MW-3S, MW-3BR, MW-4S, MW-4SR, MW-4D, MW-5S, MW-5D, MW-6S, MW-6D, MW-7S,MW-7D, MW-8SR, MW-9S, MW-9D, MW-10SR, MW-10M, MW-10BR,MW-11S, MW-11D, MW-12S, MW-12D, MW-16S, MW-17S, MW-18D, MW-19S, MW-24S, MW-25S	Phase III	See AOCs above for site investigation information for soils	See AOCs above for site investigation information for soils	**Shallow:** ETPH, VOCs, PAHs, metals, and Cyanide above the SWPC. See above AOCs for individual wells **Deep:** ETPH, VOCs, PAHs, metals, and Cyanide above the SWPC.. See above AOCs for individual wells	**Shallow:** ETPH, VOCs, PAHs, and /or Cyanide above the SWPC. in MW-1S, MW-5S, MW7S, MW-8SR, MW-9S, and MW-10M, MW-30S. Tar globules and staining observed in MW-2S, MW-10SR during development. Measureable coal tar observed in MW-10SR. See above AOCs for individual well summary of COCs. **Deep:** VOCs, ETPH, PAH (acenaphthylene) above the SWPC in MW-18D. Tar globules and staining observed in MW-2D, MW-3D and MW-10D **Bedrock**: PAH (acenaphthylene) above SWPC [MW-3BR] . ETPH and VOCs	Hockanum River is located up gradient on -site/ Losing Stream	Phase II Investigation (1992) Phase III Investigation (2016-2018)	Additional Phase III ESA investigation is proposed to assess the seasonality of groundwater conditions
Off-site AOCs																
16	Off-site Creosote Impacts St. Josephs School/Church Parking Lot	VOCs (BTEX), SVOCs, Total Cyanide, ETPH	Coal tar impacted area to the north of the property line. Possible migration of impacts to the north from the MGP. Shallow fill possible in the development of the property.	Subsurface Soils Groundwater Surface soils	Soil Borings TB-113, TB-115, TB-116, TB-117, TB-118, TB-119, TB-120, TB-121, TB-125, TB-126, TB-127, TB-130 Surface Soil R426-A, R426-B, R426-C, R426-D R437-A, R437-B, R437-C, R437-D R438-A, R438-B, R438-C, R438-D R446-A, R446-B, R446-C, R446-D R452-A, R452-B, R452-C, R452-D	SB-14, SB-15, SB-16, SB-17, MW-19S, MW-20S, SB-61, SB-62, SB-66, SB-67	MW-13S, MW-13D, MW-14S, MW-14D	MW-13S, MW-13D, MW-14S, MW-14D, MW-19S, MW-20S, MW-21S, MW-26S, MW-26D, MW-26BR	Phase III	Subsurface soils: PAHs detected above the GB PMC VOCs (ethylbenzene, toluene, and xylene detected). Fill observed and coal tar odors an creosote sheen. Surface Soil: PAHs detected above the Res DEC and GB PMC along West Street	PAHs, ETPH, VOCs, cyanide were not detected in SB-14, SB-15, SB-16, SB-17 in samples collected just above apparent water table. EPTH, VOCs, and PAHs detected in the deep soil samples collected from SB-14 and MW-20S within coal tar-impacted intervals below the water table. SB-14: 20.5-23 ft. coated with coal tar material with coal tar odors. SB-61: 22.5-44 ft. coal tar blebs, odors, and sheen. SB-66: 20-30 ft. coal tar odors. SB-15: 31.5-34 ft. veins coated with coal tar. MW-20S: 35-38 ft. black stained and sheen with coal tar odor. No visual impacts in SB-62 and SB-67.	**Shallow:** MW-13S: Copper detected above the SWPC. Metals, SVOC (bis2-ethylhexylphthalate) detected .MW-14S: Metals detected **Deep** MW-13D: Metals detected. . MW-14D Metals detected. VOC (tetrachloroethylene) and SVOC (bis2-ethylhexylphthalate) detected.	**Shallow**: MW-MW-13S: Metals and bis2-ethylhexylphthalate) MW-14S: PAHs, metals and cyanide detected. MW-19S: Metals detected MW-21S: Metals and PAHs detected MW-20S: Tar globules / staining in MW-20S. **Deep:** MW-14D: ETPH, cyanide, Acenaphthylene (PAH) above SWPC. Metals and VOCs detected. MW-13D: Metals and naphthalene detected MW-26D: Acenaphthylene above SWPC. Metals and VOCs detected. **Bedrock**: MW-26BR Naphthalene and barium dectected	Hockanum River is located upgradient on-site and approximately 600 feet to the west.	Phase II (off-site) 1993 Phase III Investigation (2017-2018)	Additional Phase III ESA investigation is proposed to further assess groundwater conditions at St. Joseph's Church property and to assess the seasonality of groundwater conditions
17	Off-site Creosote Impacts Maple Street ROW	VOCs (BTEX), SVOCs, Total Cyanide, ETPH	Impacted area within the Maple Street ROW from 15 to 32 feet. Possible migration of impacts from the Retorts (AOC-1) Former Gas Holders #1, #2, (AOCs 3,+). Possible off-site fuel oil impacted in TB-101 and TB-103 from up gradient source of fuel oil.	Subsurface Soils Groundwater	TB-97, TB-99, TB-101, TB-103, TB-104, TB-105, TB-106, TB-111A, TB-11B, and TB-111C	SB-18, SB-19, SB-64	Groundwater not investigated	MW-28S MW-23S	Phase III	Subsurface Soils had concentrations of VOCs, SVOCs, pesticides (Aldrin, alpha-BHC, and 2-Hexanone) at concentrations above the GB-PMC but were located below the water table. Cyanide and metals were detected. Creosote impacts (sheen and odors) encountered from 15 to 32 feet.	ETPH, VOCs, and PAHs detected in SB-18 above the GB PMC. The DEC does not apply to SB-18 due to the sample depth greater than 15'. SPLP VOCs and PAHs detected. Petroleum staining/ sheen and odors 19-23ft. Coal tar staining/ odors from 24-29 ft. ETPH and PAHs were detected above the RES and I/C DEC and GB PMC in SB-19. Petroleum staining/ sheen and odors 11-19 ft. Coal tar staining/ odors from 19-26.5 ft. ETPH, PAHs, and VOCs were not detected in SB-64 No visual impacts in SB-64	Groundwater not tested.	MW-23S: Metals detected MW-28S: Metals and naphthelene detected	Hockanum River located up gradient of location.	Phase II (off-site) 1993 Phase III Investigation (2018)	Off-site petroleum impacts are noted within the Maple Street ROW. Petroleum impacts also ere noted at #12 and #14 Maple Street. Impacts could be associated with former 1,000-gallon UST at former 8 Maple Street residence or other off-site source. Remedial evaluation impacts will be assessed rin the Remedial Evaluation.

TABLE 5
Areas Of Concern (AOCs)/ Site Conceptual (CSM) Summary
Eversource Former Rockville MGP
13 Maple Street
Rockville, CT

AOC #	AOC Description	COCs	Possible Release Mechanisms and Migration Pathways	Potentially Affected Media	Previous Investigation Soil Locations	Phase III Soil Locations	Previous Investigation Groundwater Locations	Phase III Investigation Groundwater Locations	Phases of Investigation Completed	Previous COCs in Soil	Phase III COCs in Soil	Previous COCs in Groundwater	Phase III COCs in Groundwater	COCs in Surface Water	Investigation Status	Remediation Status
18	Petroleum Impacts #12 and #14 Maple Street	VOCs (BTEX), SVOCs, ETPH	Petroleum-impacted soils from 15 to 27 feet below grade from an up gradient source that migrated via groundwater flow onto the properties.	Subsurface soils Groundwater	TB-203, TB-204, TB-206, TB-219, TB-221, TB-224 (#8 Maple Street) TB-200 and TB-217 (#12 Maple Street)	Not investigated during Phase III	Groundwater not investigated	MW-23S	Phase III	Subsurface soils contained detections of PAHs. Boring log was not available during the CSM development.	Not investigated during Phase III	Groundwater not tested.	**Shallow:** Adjacent USPS ROW: MW-23S: VOC (chloroform) and metals detected below SWPC	Hockanum River located up gradient of location.	Phase II (off-site) 1994 Phase III Investigation (2018)	Phase I ESA identified a 1,000 leaking underground storage tank used for heating oil at the former 8 Maple Street Residence.
19	Suspected Fill #12 and #14 Maple Street	PAHs	PAHs detected in the shallow subsurface soils (TB-217) possibly from historic fill used in the development of the property.	Surface soils Subsurface soils	TB-217	Not investigated during Phase III	Groundwater not investigated	MW-23S	Phase II	Subsurface soils contained detections of PAHs, with a detection of (Benzo (a)pyrene) above the Res DEC, I/C DEC and GB PMC. Boring log was not available during the CSM development to assess for presence of fill.	Not investigated during Phase III	Groundwater not tested.	**Shallow:** Adjacent USPS ROW: MW-23S: VOC (chloroform) and metals detected below SWPC	Hockanum River located up gradient of location.	Phase II (off-site) 1994 Phase III Investigation (2018)	Possible historic fill associated with the development of property or potential off-site source.
20	Off-site Creosote Impacts (Residence #14 Maple Street)	VOCs (BTEX), SVOCs, Total Cyanide, ETPH	Creosote-impacted soils (sheen and odor) between 30 and 37 feet. Creosote migrated beneath Maple Avenue onto the western portion of the property.	Subsurface soils Groundwater	TB-207, TB-210, TB-211, TB-215, MW-15D	Not investigated during Phase III	MW-15S MW-15D	MW-23S	Phase II	Subsurface soils contained detections of VOCs and PAHs at concentrations above the GB PMC. However, these impacts are likely below the water table and the GB PMC is not applicable.	Not investigated during Phase III	MW-15S: Metals and cyanide exceeded SWPC. VOC (MTBE detected). MW-15D: Metals detected above the SWPC.	**Shallow:** Adjacent USPS ROW: MW-23S: VOC (chloroform) and metals detected below SWPC	Hockanum River located up gradient of location.	Phase II (off-site) 1994 Phase III Investigation (2018)	Access to property was not provided. Coal tar impacts were assessed with a soil boring within Maple Street ROW (AOC-17) Remedial evaluation pending the completion of the Phase III
21	Off-site Surface Soils Maple Street School [PAHs Detected above RSR Criteria]	PAHs	PAHs detected in surface soils and shallow subsurface soils at the Maple Street School property.	Surface soils	R453, R454, R455, R456 R501-A, R-501-B, R-501-C, R-501-D R502-A, R-502-B, R-502-C, R-502-D R503-A, R-503-B, R-503-C, R-503-D R504-A, R-504-B, R-504-C, R-504-D R505-A, R-505-B, R-505-C, R-505-D R506-A, R-506-B, R-506-C, R-506-D	Not investigated during Phase III	Groundwater not investigated	Groundwater not investigated	Phase II	Surface soils and shallow subsurface soils	Not investigated during Phase III	Groundwater not tested.	Groundwater not tested.	Hockanum River located up gradient of location.	Phase II- Surface Soil collection in 1995	Possible historic fill associated with the development of the school property or potential off-site source.
22	Off-site Surface Soils 175 Union Street [PAHs Detected above RSR Criteria]	PAHs	PAHs are detected in surface soils at nearby off-site properties (175 Union Street and Tolland AWC)	Surface soils	R426-A,R426-B,R426-C, R426-D R437-A,R437-B,R437-C, R437-D R438-A,R438-B,R438-C, R438-D R446-A,R446-B,R446-C, R446-D R452-A,R452-B,R452-C, R452-D RBG2-B and RBG2-C	Not investigated during Phase III	Groundwater not investigated	Groundwater not investigated	Phase II	Surface soils and shallow subsurface soils	Not investigated during Phase III	Groundwater not tested.	Groundwater not tested.	Hockanum River located up gradient of location.	Phase II- Surface Soil collection in 1995	Possible historic fill associated with the development of the property or potential off-site source.

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Eversource Former Rockville MGP
13 Maple Street
Rockville, CT

AOC #	AOC Description	COCs	Possible Release Mechanisms and Migration Pathways	Potentially Affected Media	Previous Investigation Soil Locations	Phase III Soil Locations	Previous Investigation Groundwater Locations	Phase III Investigation Groundwater Locations	Phases of Investigation Completed	Previous COCs in Soil	Phase III COCs in Soil	Previous COCs in Groundwater	Phase III COCs in Groundwater	COCs in Surface Water	Investigation Status	Remediation Status
23	Off-site Groundwater Impacts	VOCs	Groundwater impacts from spills or leaks occurring at the site and migrating offsite.	Groundwater	NA	NA	MW-13S, MW-13D, MW-14S, MW-14D, MW-15S, MW-15D, MW-19S, MW-20S, MW-21S, MW-23S	MW-13S, MW-13D, MW-14S, MW-14D, MW-19S, MW-20S, MW-21S, MW-23S, MW-26S, MW-26D, MW-26BR, MW-27S, MW-28S, MW-30S	Phase III	Soils not assessed	Soils not assessed	**Shallow:** Metals and cyanide detected above SWPC. VOCs and PAHs detected **Deep:** Metals detected above SWPC. VOCs and PAHs detected	**Shallow:** Tar globules / staining in MW-20S. MW-19S/MW-21S/MW-28S: metal and PAHs detected MW-13S and MW-26S (Plasticizers detected -possible labcontamination) MW-27S: ETPH, metals, and naphthalene detected MW-23S: Metals detected MW-14S: Cyanide, metals, and PAHs detected **Deep:** MW-14D: metals and VOCs detected. ETPH, Cyanide, and PAHs detected above the SWPC. MW-26D metals and VOCs detected, PAHs detected above SWPC **Bedrock**: MW-26BR Naphthalene and barium detected.	Hockanum River is located upgradient on-site and approximately 275 feet to 400 feet to the west.	Phase II (off-site) 1994 Phase III (2018)	Additional Phase III ESA investigation is proposed to assess groundwater conditions at St. Joseph's Church property and to the west of the site and to assess the seasonality of groundwater conditions

NOTES:
MGP=- manufactured gas plant
VOC = Volatile Organic Compound
BTEX- Benzene, toluene, ethyl benzene and xylenes
ETPH- Extractable Total Petroleum Hydrocarbons
PAH = Polycyclic Aromatic Hydrocarbon
TPH = Total Petroleum Hydrocarbons
PCBs= Polychlorinated Biphenyls
SWPC- Surface Water Protection Criteria
Res DEC- Residential Direct Esposure Criteria
I/C DEC - Industrial Commercial Direct Exposure Criteria

CSM = Conceptual site model, described by the Connecticut Department of Environmental Protection as "a representation of an environmental system that is used as a tool for understanding and for explaining to others the basis and rationale for site investigation and the conclusions drawn about the environmental conditions at a site. A CSM describes, explains, and provides and understanding of the nature and distribution of contaminants necessary to evaluate potential risks to human health and the environment. The CSM is an iterative approach to site characterization. The number of iterations and quantity and quality of information is a function of the complexity of site conditions and data quality objectives". This interim CSM is subject to change.

AOC = Area of concern, defined by the Connecticut Department of Environmental Protection as "locations or areas at a site where hazardous waste and or hazardous substances (including petroleum products) have been used, stored, treated, handled, disposed, spilled, and/or released to the environment".

Tighe&Bond

APPENDIX C

Low-Flow Data Sheet

Project Name: Eversource (Former Rockville MGP Site)
Project Number: 14-0755-044
Static Depth to Water (ft): 24.67'
Depth to Bottom (ft): 30'
Screen Interval: 25'-30'
Point of Intake: 30'

Well: MW-1S
Date: 5/24/2018
Sample time: 10:22
Sampler: MQ
Purged (gal): ~1.25

Time (3-5 min.)	Discharge/ Pumping rate (100-400 mL/min)	DTW (ft) (<0.3 ft)	pH (+/- 0.1)	Temp. (°C) (<3%)	Turbidity (NTU) (< 5 NTU or <10%)	DO (mg/L) (<10%) or below 0.5	ORP (mV) (+/- 10 mV)	Specific Cond. (mS/cm) (<3%)
9:45	120	24.66	4.96	14.7	140.8	6.14	264.3	622
9:50	↓	24.67	5.64	14.4	59.70	4.37	233.5	583.5
9:55		24.67	5.68	14.4	41.79	4.55	227.5	565.6
10:00		24.67	5.74	14.6	35.12	4.63	218.6	562.2
10:05		24.67	5.74	14.4	29.11	4.05	196.3	571.0
10:10		24.67	5.82	14.6	15.80	4.21	192.1	571.5
10:15		24.67	5.82	14.7	14.49	4.13	189.4	570.9
10:20		24.67	5.83	14.7	15.13	3.99	189.7	573.3

Analysis: VOCs / SVOCs / Metals / ETPH / Other- total cyanide
Sample Containers: HCl voas 3 1L unpres Ambers 3 HNO3 Plastic 1 Other 1 NaOH
Pump: Bladder / Peristaltic / Grunfos / Other-

Color: clear
Odor: none
Sheen: none

Turbidity: low
Well Condition: good
Repairs: none

Low-Flow Data Sheet

Project Name: Eversource (Former Rockville MGP Site) Well: MW-10
Project Number: 14-0755-044 Date: 5/24/2018
Static Depth to Water (ft): 24.50 Sample time: 8:57
Depth to Bottom (ft): 74' Sampler: MG
Screen interval: [redacted] 65-75' Purged (gal): 1.75
Point of Intake: [redacted]

Time (3-5 min.)	Discharge/ Pumping rate (100-400 mL/min)	DTW (ft) (<0.3 ft)	pH (+/- 0.1)	Temp. (°C) (<3%)	Turbidity (NTU) (< 5 NTU or <10%)	DO (mg/L) (<10%) or below 0.5	ORP (mV) (+/- 10 mV)	Specific Cond. (mS/cm) (<3%)
8:05	130	24.49	3.65	13.2	15.62	3.64	442.5	811
8:10	↓	24.49	3.46	13.1	19.34	3.19	455.1	819
8:15		24.49	3.46	13.3	13.09	3.66	456.1	814
8:20		24.50	3.46	13.2	14.06	3.81	456.1	816
8:25		24.50	3.47	13.4	11.73	4.12	454.4	815
8:30		24.50	3.54	13.2	11.59	4.24	447.0	809
8:35		24.50	3.55	13.4	11.24	4.03	441.7	807
8:40		24.50	3.55	13.3	11.17	4.35	445.0	804
8:45		24.50	3.55	13.2	11.53	4.19	443.5	801
8:50		24.50	3.56	13.3	12.26	3.95	442.8	799
8:55		24.50	3.56	13.3	11.73	3.89	442.3	797
9:00	↓							

Analysis: VOCs / SVOCs / Metals / ETPH / Other- total cyanide
Sample Containers: HCl voas 3 1L unpres Ambers 3 HNO3 Plastic 1 Other 1 NaOH
Pump: Bladder / Peristaltic / Grunfos / Other-

Color: clear
Odor: none
Sheen: none

Turbidity: low
Well Condition: good
Repairs: none

Low-Flow Data Sheet

Project Name: Eversource-Rockville
Project Number: E-0755-44
Static Depth to Water (ft): 7.10
Depth to Bottom (ft): 14.75
Screen interval: 7-17
Point of intake:

Well: mw-25R
Date: 5/16/19
Sample time: 1445
Sampler: JSC
Purged (gal):

Time (3-5 min.)	Discharge/ Pumping rate (100-400 mL/min)	DTW (ft) (<0.3 ft)	pH (+/- 0.1)	Temp. (°C) (<3%)	Turbidity (NTU) (< 5 NTU or <10%)	DO (mg/L) (<10%) or below 0.5	ORP (mV) (+/- 10 mV)	Specific Cond. (mS/cm) (<3%)
14:10	200	7.14	6.36	9.45	139.0	4.07	130.2	910
14:15	200	7.14	6.45	8.94	129.1	1.62	131.5	915
14:20	200	7.14	6.47	8.93	85.09	1.39	130.7	902
14:25	200	7.14	6.47	8.96	54.67	1.27	130.5	872
14:30	200	7.14	6.49	8.87	22.14	1.12	125.3	835
14:35	200	7.14	6.49	8.91	14.09	1.11	119.0	815
14:40	200	7.14	6.50	8.99	12.36	1.11	116.3	823

Analysis: VOCs / SVOCs / Metals / ETPH / Other- Cyanide
Sample Containers: HCl voas 3 3 3 1L unpres Ambers 3 HNO3 Plastic 1 Other Nalth
Pump: Bladder / Peristalic / Grunfos / Other-

Color: Clear
Odor: none
Sheen: none

Turbidity: low
Well Condition: good
Repairs: none

Low-Flow Data Sheet

Project Name: Eversource-Rockville
Project Number: E-0755-44
Static Depth to Water (ft): 9.49
Depth to Bottom (ft): 59.62
Screen interval: 50-60
Point of intake:

Well: mw-28R
Date: 5/16/19
Sample time: 16:35
Sampler: BSC
Purged (gal): 6

Time (3-5 min.)	Discharge/ Pumping rate (100-400 mL/min)	DTW (ft) (<0.3 ft)	pH (+/- 0.1)	Temp. (°C) (<3%)	Turbidity (NTU) (< 5 NTU or <10%)	DO (mg/L) (<10%) or below 0.5	ORP (mV) (+/- 10 mV)	Specific Cond. (mS/cm) (<3%)
15:10	200	9.50	7.13	11.19	4.04	6.13	109.0	576
15:15	200	9.52	7.24	11.23	1.02	5.53	110.0	575
15:20	200	9.52	7.25	11.22	0.97	5.46	112.5	575
15:25	200	9.53	7.27	11.23	0.00	5.34	115.7	575
15:30	200	9.53	7.27	11.22	0.00	5.39	117.5	575
15:35	200	9.53	7.27	11.30	0.00	5.41	119.3	575
15:40	200	9.53	7.27	11.29	0.00	5.33	119.6	575
15:45	200	9.53	7.27	11.32	0.00	5.44	119.7	576
15:50	200	9.53	7.24	11.27	0.00	5.45	120.9	576
15:55	200	9.53	7.24	11.23	0.00	5.51	121.2	577
16:00	200	9.53	7.24	11.19	0.00	5.53	122.0	578
16:05	200	9.53	7.27	11.28	0.00	5.52	122.2	578
16:10	200	9.53	7.27	11.26	0.00	5.44	122.3	579
16:15	200	9.53	7.29	11.20	0.00	5.42	122.9	579
16:20	200	9.53	7.29	11.31	0.00	5.51	122.6	580
16:25	200	9.53	7.24	11.29	0.00	5.49	122.4	581
16:30	200	9.53	7.24	11:31	0.00	5.35	122.2	580

Sampled 16:35

Analysis: VOCs / SVOCs / Metals / ETPH / Other- Cyanide
Sample Containers: HCl voas 3 1L unpres Ambers 3 HNO3 Plastic 1 Other NaOH
Pump: Bladder / Peristaltic / Grunfos / Other-

mw-25: DTW 7.11
mw-20: 9.79 31.06
mw-26 06 Product
mw-bottom 16 mw-20

Color: Clear
Odor: None
Sheen: None

Turbidity: low
Well Condition: Good
Repairs: none

Low-Flow Data Sheet

Project Name: Eversource-Rockville MGP
Project Number: E-0755-44
Static Depth to Water (ft): 15.02
Depth to Bottom (ft): 20.31
Screen interval: 10-20'
Point of intake:

Well: ML-35
Date: 5/24/19
Sample time: 9:00
Sampler: BJM
Purged (gal): 2 gal

Time (3-5 min.)	Discharge/ Pumping rate (100-400 mL/min)	DTW (ft) (<0.3 ft)	pH (+/- 0.1)	Temp. (°C) (<3%)	Turbidity (NTU) (< 5 NTU or <10%)	DO (mg/L) (<10%) or below 0.5	ORP (mV) (+/- 10 mV)	Specific Cond. (mS/cm) (<3%)
9:15	140	15.02	6.53	9.33	77.41	42.87	43.7	439
9:20	140	15.02	6.59	9.97	24.66	1.46	37.4	437
9:25	140	15.02	6.53	9.20	19.31	1.93	33.1	437
9:30	140	15.02	6.52	9.30	15.55	1.99	35.1	436
9:35	140	15.02	6.51	9.06	22.52	1.92	41.6	443
9:40	140	15.02	6.49	9.64	21.66	2.27	49.0	445
9:45	140	15.02	6.46	9.65	17.40	2.96	60.0	449
9:50	140	15.02	6.49	9.70	17.95	3.06	64.5	450
9:55	140	15.02	6.49	9.64	10.73	3.10	67.2	451

Pump Shut Off 9:55

Analysis: VOCs / SVOCs / Metals / ETPH / Other- Cyanide
Sample Containers: HCl voas 3 HL unpres Ambers 3 HNO3 Plastic 1 Other H2O2
Pump: Bladder / Peristaltic / Grunfos / Other-

Color: None
Odor: Faint Sulfur odor
Sheen: None

Turbidity: low
Well Condition: good
Repairs: none

pre bubbles in tubing skewing YSI readings. Re-adjusted tubing

Low-Flow Data Sheet

Project Name: Eversource (Former Rockville MGP Site) **Well:** MW-38R
Project Number: 14-0755-044 **Date:** 5/30/2018
Static Depth to Water (ft): 17.44' **Sample time:** 10:25
Depth to Bottom (ft): 105' **Sampler:** mmg
Screen interval: 90-100' **Purged (gal):** ~2 gal
Point of intake:

Time (3-5 min.)	Discharge/ Pumping rate (100-400 mL/min)	DTW (ft) (<0.3 ft)	pH (+/- 0.1)	Temp. (°C) (<3%)	Turbidity (NTU) (< 5 NTU or <10%)	DO (mg/L) (<10%) or below 0.5	ORP (mV) (+/- 10 mV)	Specific Cond. (mS/cm) (<3%)
9:40	180	17.38	13.36	8.97	17.55	4.39	131.9	249.4
9:45	↓	17.41	8.96	13.3	20.56	4.09	131.6	247.3
9:50		17.43	9.10	13.4	18.84	4.03	117.2	245.1
9:55		17.43	9.33	13.8	9.34	4.46	101.4	244.6
10:00		17.43	9.36	13.6	8.05	4.44	96.3	245.3
10:05		17.43	9.34	13.3	8.01	4.46	95.3	245.9
10:10		17.45	9.39	13.8	8.50	4.39	90.3	246.0
10:15		17.45	9.37	13.7	6.83	4.27	90.0	245.4
10:20		17.45	9.36	13.7	6.92	4.26	90.1	245.6
10:25	↓	17.45	9.37	13.6	6.91	4.26	89.9	245.3

Analysis: (VOCs) / (SVOCs) / (Metals) / (ETPH) / Other- cyanide
Sample Containers: HCl voas 3 1L unpres Ambers 3 HNO3 Plastic 1 Other 1 NaOH
Pump: Bladder / (Peristaltic) / Grunfos / Other-

Color: clear
Odor: none
Sheen: none

Turbidity: low
Well Condition: good
Repairs: none

Low-Flow Data Sheet

Project Name: Eversource-Rockville MGP
Project Number: E-0755-44
atic Depth to Water (ft): 13.36
Depth to Bottom (ft): 15.67
Screen Interval: 10 slot 5-15'
Point of Intake:

Well: MW-45
Date: 5/22/25
Sample time: 9:25
Sampler: VSC
Purged (gal): 1.25 gal

Time (3-5 min.)	Discharge/ Pumping rate (100-400 mL/min)	DTW (ft) (<0.3 ft)	pH (+/- 0.1)	Temp. (°C) (<3%)	Turbidity (NTU) (< 5 NTU or <10%)	DO (mg/L) (<10%) or below 0.5	ORP (mV) (+/- 10 mV)	Specific Cond. (mS/cm) (<3%)
9:50	112.5	13.34	6.38	10.94	128.3	5.70	112.9	229
9:55	125	13.34	6.16	10.65	86.14	6.14	128.2	232
9:00	125	13.39	6.15	10.84	27.43	4.74	135.6	233
9:05	125	13.39	6.15	10.85	13.61	4.35	142.6	235
9:10	125	13.34	6.16	10.81	9.51	4.20	144.6	236
9:15	125	13.39	6.15	10.83	3.27	4.14	150.3	237

Sampled @ 9:25

Analysis: VOCs / SVOCs / Metals / ETPH / Other- Total Cyanide
Sample Containers: HCl voas 6 1L unpres Ambers 6 HNO3 Plastic 2 Other 2-NaOH Collected MW-DUP
Pump: Bladder / Peristaltic / Grunfos / Other-

Color: clear
Odor: none
Sheen: none

Turbidity: low
Well Condition: good
Repairs: none

Low-Flow Data Sheet

Project Name: Eversource-Rockville MGP
Project Number: E-0755-44
Static Depth to Water (ft): 13.34
Depth to Bottom (ft): 61.80
Screen Interval: 46.5-56.5
Point of Intake:

Well: MW-40
Date: 5/22/19
Sample time: 11:45
Sampler: BSC
Purged (gal): 4.5

Time (3-5 min.)	Discharge/ Pumping rate (100-400 mL/min)	DTW (ft) (<0.3 ft)	pH (+/- 0.1)	Temp. (°C) (<3%)	Turbidity (NTU) (< 5 NTU or <10%)	DO (mg/L) (<10%) or below 0.5	ORP (mV) (+/- 10 mV)	Specific Cond. (mS/cm) (<3%)
10:30	140	13.34	6.74	12.11	54.72	8.97	174.2	322
10:35	140	13.35	6.65	12.14	52.54	8.10	150.9	324
10:40	140	13.35	6.51	12.16	33.76	6.91	151.3	341
10:45	140	13.35	6.35	12.20	35.58	4.44	154.4	353
10:50	140	13.35	6.24	12.14	31.45	2.91	157.4	360
10:55	140	13.35	6.26	12.09	21.93	1.63	159.8	365
11:00	140	13.35	6.25	12.12	22.31	1.30	146.4	365
11:05	140	13.35	6.25	12.14	21.57	1.04	170.2	367
11:10	140	13.35	6.25	12.14	14.29	0.80	141.2	368
11:15	140	13.35	6.27	12.13	15.56	0.67	125.8	369
11:20	140	13.35	6.29	12.10	15.32	0.54	94.4	371
11:25	140	13.35	6.31	12.10	8.16	0.53	73.7	371
11:30	140	13.35	6.33	12.06	10.60	0.44	52.2	373
11:35	140	13.35	6.34	12.02	11.34	0.42	45.4	373
11:40	140	13.35	6.34	12.04	10.34	0.44	43.6	373

Sampled 11:45

Analysis: (VOCs) / (SVOCs) / (Metals) / (ETPH) / Other- Total Cyanide
Sample Containers: HCl voas 3 1L unpres Ambers 3 HNO3 Plastic 1 Other 1-NaOH
Pump: Bladder / (Peristaltic) / Grunfos / Other-

Color: Clear
Odor: none
Sheen: none

Turbidity: low
Well Condition: good
Repairs: none

Low-Flow Data Sheet

Project Name: Eversource-Rockville
Project Number: E-0755-44
Static Depth to Water (ft): 6.71
Depth to Bottom (ft): 14.68
Screen interval: 10' 5-15'
Point of intake:

Well: MW-55
Date: 5/16/24
Sample time: 0950
Sampler: BGK
Purged (gal): 3.5 gal

Time (3-5 min.)	Discharge/ Pumping rate (100-400 mL/min)	DTW (ft) (<0.3 ft)	pH (+/- 0.1)	Temp. (°C) (<3%)	Turbidity (NTU) (< 5 NTU or <10%)	DO (mg/L) (<10%) or below 0.5	ORP (mV) (+/- 10 mV)	Specific Cond. (mS/cm) (<3%)
10:10	200	6.73	6.56	10.05	58.74	1.44	93.5	295
10:15	200	6.73	6.52	10.12	24.44	0.44	93.9	294
10:20	200	6.73	6.60	9.95	12.41	0.56	94.3	294
10:25	200	6.73	6.64	9.64	156.3	0.41	93.7	297
10:30	200	6.73	6.65	10.01	64.91	0.26	91.7	295
10:35	200	6.73	6.61	10.10	4.46	0.17	91.3	295
10:40	200	6.73	6.59	10.10	4.14	0.14	95.5	293

Analysis: VOCs / SVOCs / Metals / ETPH / Other-
Sample Containers: HCl voas 3 1L unpres Ambers 3 HNO3 Plastic 1 Other NaOH 1
Pump: Bladder / Peristaltic / Grunfos / Other-

Color: Clear
Odor: none
Sheen: none

Turbidity: Clear
Well Condition: Good
Repairs: none

Low-Flow Data Sheet

Project Name: Eversource-Rockville
Project Number: E-0755-44
Static Depth to Water (ft): 9.62
Depth to Bottom (ft): 29.11
Screen interval: 18-28
Point of intake: 28

Well: MW-51
Date: 5/11/19
Sample time: 1200
Sampler: KJK
Purged (gal): 3.5

Time (3-5 min.)	Discharge/ Pumping rate (100-400 mL/min)	DTW (ft) (<0.3 ft)	pH (+/- 0.1)	Temp. (°C) (<3%)	Turbidity (NTU) (< 5 NTU or <10%)	DO (mg/L) (<10%) or below 0.5	ORP (mV) (+/- 10 mV)	Specific Cond. (mS/cm) (<3%)
11:30	200	9.62	6.66	10.79	25.15	8.53	109.8	246
11:35	200	9.62	6.54	11.16	10.42	0.54	122.1	246
11:40	200	9.62	6.54	11.03	11.03	0.26	123.2	246
11:45	200	9.62	6.51	10.99	11.07	0.19	124.1	246
11:50	200	9.62	6.47	10.74	6.59	6.13	125.1	248
11:55	200	9.62	6.44	10.77	2.48	0.10	128.4	247

Discontinued 1200

Analysis: VOCs / SVOCs / Metals / ETPH / Other- Cyanide
Sample Containers: HCl voas 3 1L unpres Ambers 3 HNO3 Plastic 1 Other NaOH
Pump: Bladder / Peristaltic / Grunfos / Other-

Color: Clear
Odor: None
Sheen: None

Turbidity: low
Well Condition: good
Repairs: None

Low-Flow Data Sheet

Project Name: Eversource-Rockville
Project Number: E-0755-44
Static Depth to Water (ft): 6.37
Depth to Bottom (ft): 16.40
Screen interval: 7-17
Point of intake:

Well: MW-[illegible]
Date: 5/16/24
Sample time: 1345
Sampler: BJK
Purged (gal): 2.5

Time (3-5 min.)	Discharge/ Pumping rate (100-400 mL/min)	DTW (ft) (<0.3 ft)	pH (+/- 0.1)	Temp. (°C) (<3%)	Turbidity (NTU) (< 5 NTU or <10%)	DO (mg/L) (<10%) or below 0.5	ORP (mV) (+/- 10 mV)	Specific Cond. (mS/cm) (<3%)
12:55	200	6.41	6.71	10.15	195.9	0.45	100.4	263
1300	200	6.41	6.90	9.45	176.4	0.14	99.0	261
1305	200	6.41	6.95	9.76	114.2	0.13	103.0	262
1310	200	6.41	6.96	9.75	44.25	0.09	110.2	264
13:15	200	6.41	6.90	9.76	49.77	0.04	115.3	262
13:20	200	6.41	6.84	9.75	63.69	0.02	114.5	260
13:25	200	6.41	6.81	9.66	47.49	0.03	121.1	261
13:30	200	6.41	6.80	9.72	40.01	0.01	123.9	260
13:35	200	6.41	6.74	9.70	21.04	0.00	124.2	261
13:40	200	6.41	6.74	9.70	25.74	0.00	124.3	261

Analysis: VOCs / SVOCs / Metals / ETPH / Other- Cyanide
Sample Containers: HCl voas 3 1L unpres Ambers 3 HNO3 Plastic 1 Other NaOH
Pump: Bladder / Peristaltic / Grunfos / Other-

Color:
Odor:
Sheen:

Turbidity:
Well Condition:
Repairs:

Low-Flow Data Sheet

Project Name: Eversource-Rockville MGP
Project Number: E-0755-44
Static Depth to Water (ft): 10.09
Depth to Bottom (ft): 15.11
Screen Interval: 2-12'
Point of Intake:

Well: MW-65
Date: 5/22/19
Sample time: 14:20
Sampler: RJC
Purged (gal):

Time (3-5 min.)	Discharge/ Pumping rate (100-400 mL/min)	DTW (ft) (<0.3 ft)	pH (+/- 0.1)	Temp. (°C) (<3%)	Turbidity (NTU) (< 5 NTU or <10%)	DO (mg/L) (<10%) or below 0.5	ORP (mV) (+/- 10 mV)	Specific Cond. (mS/cm) (<3%)
13:50	140	10.12	5.93	9.10	57.23	1.49	155.7	317
13:55	140	10.12	5.89	9.95	14.39	1.57	158.7	314
14:00	140	10.12	5.87	9.72	7.93	1.49	161.0	313
14:05	140	10.12	5.88	9.69	7.00	1.49	161.6	313
14:10	140	10.12	5.89	9.66	2.99	1.76	161.9	313
14:15	140	10.12	5.90	9.67	1.72	1.90	161.5	313

Sample

Analysis: (VOCs) / SVOCs / (Metals) / ETPH / Other- Total Cyanide
Sample Containers: HCl voas 3 1L unpres Ambers 3 HNO3 Plastic 1 Other NaOH
Pump: Bladder (Peristaltic) / Grunfos / Other-

Color: Clear
Odor: none
Sheen: none

Turbidity: low
Well Condition: Good
Repairs: none

Low-Flow Data Sheet

Project Name: Eversource-Rockville MGP
Project Number: E-0755-44
Static Depth to Water (ft): 11.99
Depth to Bottom (ft): 36.67
Screen Interval: ~~22-37~~ 25-35
Point of Intake: 34

Well: mw-6D
Date: 5/22/26
Sample time: 15:45
Sampler: KA
Purged (gal): 2.5

Time (3-5 min.)	Discharge/ Pumping rate (100-400 mL/min)	DTW (ft) (<0.3 ft)	pH (+/- 0.1)	Temp. (°C) (<3%)	Turbidity (NTU) (< 5 NTU or <10%)	DO (mg/L) (<10%) or below 0.5	ORP (mV) (+/- 10 mV)	Specific Cond. (mS/cm) (<3%)
14:55	150	12.44	6.20	7.53	1427	0.49	70.3	265
15:00	150	12.36	6.19	7.93	97.44	0.64	62.6	265
15:05	150	12.38	6.17	7.95	70.13	0.61	61.3	265
15:10	150	12.34	6.17	7.69	57.56	0.73	59.0	265
15:15	150	12.38	6.17	7.69	48.93	0.71	58.4	265
15:20	150	12.34	6.17	7.66	50.71	0.65	57.7	265
15:25	150	12.38	6.19	7.69	45.69	0.62	57.4	264
15:30	150	12.34	~~7.95~~ 6.19	7.93	25.99	0.59	56.6	263
15:35	150	12.38	6.19	7.91	12.10	0.54	58.6	264
15:40	150	12.38	6.19	7.88	9.15	0.65	59.4	264

Analysis: VOCs / SVOCs / Metals / ETPH / Other-3
Sample Containers: ~~HCl~~ voas 3 1L unpres Ambers 3 HNO3 Plastic 1 Other NaOH
Pump: Bladder / Peristalic / Grunfos / Other-

Color: clear
Odor: none
Sheen: none

Turbidity: low
Well Condition: good
Repairs: none

Low-Flow Data Sheet

Project Name: Eversource-Rockville MGP
Project Number: E-0755-44
Static Depth to Water (ft): 30.15
Depth to Bottom (ft): 43.75
Screen interval: 73-83' fGW
Point of intake:

Well: MW-70
Date: 5/31/18
Sample time: 07:45
Sampler: JPC
Purged (gal): 2.5

Time (3-5 min.)	Discharge/ Pumping rate (100-400 mL/min)	DTW (ft) (<0.3 ft)	pH (+/- 0.1)	Temp. (°C) (<3%)	Turbidity (NTU) (< 5 NTU or <10%)	DO (mg/L) (<10%) or below 0.5	ORP (mV) (+/- 10 mV)	Specific Cond. (mS/cm) (<3%)
0655	150	13.15	7.76	12.4	201.9	5.62	134.1	485.6
0700	150	30.17	6.84	12.5	451.1	5.62	134.2	676
0705	150	30.18	6.75	12.4	630.7	5.41	131.2	650
0710	150	30.20	6.73	12.4	344.4	5.45	127.6	651
0715	150	30.20	6.74	12.4	337.9	5.47	125.4	650
0720	150	30.20	6.75	12.4	194.3	5.47	122.5	674
0725	150	30.20	6.75	12.4	137.4	5.45	120.4	671
0730	150	30.20	6.75	12.4	130.7	5.46	120.5	674
0735	150	30.20	6.76	12.5	81.86	5.43	114.2	677
0740	150	30.20	6.76	12.6		5.44	114.3	677

Analysis: VOCs / SVOCs / Metals / EIPH / Other- Cyanide
Sample Containers: HCl voas 3 1L unpres Ambers 3 HNO3 Plastic 1 Other NaOH
Pump: Bladder / Peristaltic / Grunfos / Other-

Color: clear
Odor: none
Sheen: none

Turbidity: 66.32
Well Condition: needs new standpipe
Repairs: —

Low-Flow Data Sheet

Project Name: Eversource-Rockville MGP
Project Number: E-0755-44
Static Depth to Water (ft): 27.17
Depth to Bottom (ft): 32.71
Screen interval: 23-33'
Point of intake:

Well: MW-75
Date: 5/24/19
Sample time: 10:40
Sampler: JDC
Purged (gal): 2.5

Time (3-5 min.)	Discharge/ Pumping rate (100-400 mL/min)	DTW (ft) (<0.3 ft)	pH (+/- 0.1)	Temp. (°C) (<3%)	Turbidity (NTU) (< 5 NTU or <10%)	DO (mg/L) (<10%) or below 0.5	ORP (mV) (+/- 10 mV)	Specific Cond. (mS/cm) (<3%)
9:55	140	27.17	6.03	12.24	76.70	3.50	60.4	644
10:00	140	27.17	6.02	12.05	100.4	1.39	60.3	657
10:05	140	27.17	6.02	12.07	96.95	1.17	56.4	674
10:10	140	27.17	6.02	12.42	52.72	0.99	55.9	676
10:15	140	27.17	6.01	12.95	37.54	0.70	29.2	675
10:20	140	27.17	5.99	13.24	24.63	0.57	14.4	674
10:25	140	27.17	5.94	13.40	14.54	0.51	7.1	667
10:30	140	27.17	5.97	13.49	12.01	0.48	0.5	663
10:35	140	27.17	5.97	13.47	7.31	0.46	-1.2	664

10:40

Analysis: VOCs / SVOCs / Metals / ETPH / Other- Cyanide
Sample Containers: HCl voas 3 1L unpres Ambers 3 HNO3 Plastic 1 Other NaOH
Pump: Bladder / Peristaltic / Grunfos / Other-

Color: Clear
Odor: none
Sheen: none

Turbidity: low
Well Condition: Good
Repairs: none

Low-Flow Data Sheet

Project Name: Eversource-Rockville
Project Number: E-0755-44
Static Depth to Water (ft): 6.37
Depth to Bottom (ft): 16.40
Screen interval: 7-17
Point of intake:

Well: MW-85R
Date: 5/16/24
Sample time: 13:45
Sampler: BM
Purged (gal): 2.5

Time (3-5 min.)	Discharge/ Pumping rate (100-400 mL/min)	DTW (ft) (<0.3 ft)	pH (+/- 0.1)	Temp. (°C) (<3%)	Turbidity (NTU) (< 5 NTU or <10%)	DO (mg/L) (<10%) or below 0.5	ORP (mV) (+/- 10 mV)	Specific Cond. (mS/cm) (<3%)
12:55	200	6.41	6.71	10.15	195.9	0.45	160.4	263
13:00	200	6.41	6.90	9.45	176.4	0.18	99.0	261
13:05	200	6.41	6.95	9.76	114.2	0.13	103.0	262
13:10	200	6.41	6.96	9.75	44.25	0.09	110.2	264
13:15	200	6.41	6.90	9.76	49.77	0.04	113.3	262
13:20	200	6.41	6.94	9.75	63.69	0.02	114.5	260
13:25	200	6.41	6.91	9.66	47.49	0.03	121.1	261
13:30	200	6.41	6.90	9.72	40.04	0.04	123.9	260
13:35	200	6.41	6.74	9.70	21.04	0.00	124.2	261
13:40	200	6.41	6.74	9.70	24.74	0.00	124.3	261

Analysis: VOCs / SVOCs / Metals / ETPH / Other- Cyanide
Sample Containers: HCl voas 3 1L unpres Ambers 3 HNO3 Plastic 1 Other NaOH
Pump: Bladder / Peristaltic / Grunfos / Other-

Color: Clear
Odor:
Sheen:

Turbidity:
Well Condition:
Repairs:

Low-Flow Data Sheet

Project Name: Eversource-Rockville MGP
Project Number: E-0755-44
Static Depth to Water (ft): 14.46
Depth to Bottom (ft): 24.73
Screen interval: 15-25
Point of intake:

Well: MW-45
Date: 5/29/14
Sample time: 15:35
Sampler: BJC
Purged (gal):

Time (3-5 min.)	Discharge/ Pumping rate (100-400 mL/min)	DTW (ft) (<0.3 ft)	pH (+/- 0.1)	Temp. (°C) (<3%)	Turbidity (NTU) (< 5 NTU or <10%)	DO (mg/L) (<10%) or below 0.5	ORP (mV) (+/- 10 mV)	Specific Cond. (mS/cm) (<3%)
15:05	140	15.02	6.21	14.00	6.42	0.93	-99.7	770
15:10	140	15.05	6.23	13.99	6.86	0.94	-103.9	773
15:15	140	15.07	6.27	13.68	5.99	1.14	-106.7	777
15:20	140	15.07	6.29	13.59	5.93	0.91	-108.8	750
15:25	140	15.07	6.31	13.52	6.59	0.66	-105.0	743
15:30	140	15.07	6.32	13.54	4.32	0.64	-102.6	745

Sampled 15:35

Analysis: (VOCs) / SVOCs / Metals / ETPH / Other- Cyanide
Sample Containers: HCl voas 3 (3) 1L unpres Ambers 3 HNO3 Plastic 1 Other NaOH
Pump: Bladder / (Peristaltic) / Grunfos / Other-

Color: Clear
Odor: Gasoline
Sheen: none

Turbidity: low
Well Condition: good
Repairs: none

Low-Flow Data Sheet

Project Name: Eversource-Rockville MGP
Project Number: E-0755-44
Static Depth to Water (ft): 14.34
Depth to Bottom (ft): 64.41
Screen interval: 15-25 ft
Point of Intake:

Well: mw-9D
Date: 5/24/19
Sample time: 16:50
Sampler: TBC
Purged (gal): 2.5

Time (3-5 min.)	Discharge/ Pumping rate (100-400 mL/min)	DTW (ft) (<0.3 ft)	pH (+/- 0.1)	Temp. (°C) (<3%)	Turbidity (NTU) (< 5 NTU or <10%)	DO (mg/L) (<10%) or below 0.5	ORP (mV) (+/- 10 mV)	Specific Cond. (mS/cm) (<3%)
16:05	140	14.34	7.22	13.70	17.63	11.40	343	346
16:10	140	14.34	7.21	13.51	14.57	11.60	54.4	344
16:15	140	14.34	7.21	13.62	26.14	11.54	65.4	344
16:20	140	14.34	7.22	13.60	30.97	11.51	71.4	345
16:25	140	14.34	7.24	13.57	34.61	11.23	74.3	346
16:30	140	14.34	7.25	13.51	30.75	11.04	91.7	347
16:35	140	14.34	7.24	13.51	32.20	11.05	95.7	348
16:40	140	14.34	7.27	13.45	27.41	10.93	99.7	349
16:45	140	14.34	7.27	13.44	16.93	10.81	99.3	349

Sampled 16:50

Analysis: VOCs / SVOCs / Metals / ETPH / Other-
Sample Containers: HCl voas 3 1L unpres Ambers 3 HNO3 Plastic 1 Other NaOH
Pump: Bladder / Peristalic / Grunfos / Other-

Color: Clear
Odor: Gasoline
Sheen: None

Turbidity: Low
Well Condition: Good
Repairs: None

Low-Flow Data Sheet

Project Name: Eversource (Former Rockville MGP Site)
Project Number: 14-0755-044
Static Depth to Water (ft): 28.04
Depth to Bottom (ft): 78.7'
Screen interval: 50-60
Point of intake:

Well: MW-10M
Date: 5/24/2018
Sample time: 3:47
Sampler: mg
Purged (gal): ~25

Time (3-5 min.)	Discharge/ Pumping rate (100-400 mL/min)	DTW (ft) (<0.3 ft)	pH (+/- 0.1)	Temp. (°C) (<3%)	Turbidity (NTU) (< 5 NTU or <10%)	DO (mg/L) (<10%) or below 0.5	ORP (mV) (+/- 10 mV)	Specific Cond. (mS/cm) (<3%)
3:00	180	21.76	5.73	15.0	45.96	3.69	154.8	487.6
3:05	↓	28.00	5.68	14.8	22.44	0.52	163.0	488.5
3:10	↓	28.02	5.67	14.8	11.62	0.31	167.6	487.6
3:15	↓	28.02	5.66	14.7	6.15	0.19	172.5	486.6
3:20	↓	28.04	5.67	14.6	7.49	0.15	175.9	485.4
3:25	↓	28.04	5.66	14.6	5.08	0.16	176.9	486.5
3:30	↓	28.04	5.68	14.6	4.56	0.13	178.3	485.1
3:35	↓	28.04	5.70	14.6	4.29	0.05	182.2	483.3
3:40	↓	28.04	5.71	14.6	3.04	0.04	183.3	483.2
3:45	↓	28.04	5.71	14.6	3.10	0.04	183.6	483.0

Analysis: (VOC) / SVOCs / (Metals) / (ETPH) / Other- Cyanide
Sample Containers: HCl voas 3 1L unpres Ambers 3 HNO3 Plastic 1 Other 1 NaOH + DUP
Pump: Bladder / Peristalic / Grunfos / Other-

Color: clear
Odor: none
Sheen: none

Turbidity: low
Well Condition: good
Repairs: none

Low-Flow Data Sheet

Project Name: Eversource (Former Rockville MGP Site)
Project Number: 14-0755-044
Static Depth to Water (ft): 22.27'
Depth to Bottom (ft): 102'
Screen Interval: 90-100
Point of intake:

Well: MW-108R
Date: 5/30/2018
Sample time: 12:57
Sampler: mmg
Purged (gal): ~2.75gal

Time (3-5 min.)	Discharge/ Pumping rate (100-400 mL/min)	DTW (ft) (<0.3 ft)	pH (+/- 0.1)	Temp. (°C) (<3%)	Turbidity (NTU) (< 5 NTU or <10%)	DO (mg/L) (<10%) or below 0.5	ORP (mV) (+/- 10 mV)	Specific Cond. (mS/cm) (<3%)
12:00	180	22.21	10.22	16.2	25.42	3.09	69.5	319.0
12:05	↓	22.24	10.45	16.0	20.99	2.61	21.8	316.0
12:10		22.25	10.48	15.9	19.48	2.59	9.8	315.5
12:15		22.25	10.57	15.9	21.37	2.53	-17.2	316.5
12:20		22.27	10.55	15.5	19.68	2.56	-14.2	315.8
12:25		22.27	10.57	15.3	19.10	2.54	-6.5	315.5
12:30		22.27	10.38	15.1	16.99	2.55	-0.4	313.5
12:35		22.27	10.37	15.4	[illegible]	2.49	-2.5	313.3
12:40		22.27	10.44	15.3	17.33	2.69	-0.1	314.3
12:45		22.27	10.45	15.3	15.07	2.65	0.4	314.3
12:50		22.28	10.50	14.8	15.81	2.60	2.1	313.5
12:55	↓	22.28	10.53	15.0	15.78	2.56	1.8	312.7

Analysis: (VOCs) / SVOCs / (Metals) / (ETPH) / Other- cyanide
Sample Containers: HCl voas 3 1L unpres Ambers 3 HNO3 Plastic 1 Other 1 NaOH
Pump: Bladder / (Peristaltic) / Grunfos / Other-

Color: clear
Odor: none
Sheen: none

Turbidity: low
Well Condition: good
Repairs: none

Low-Flow Data Sheet

Project Name: Eversource (Former Rockville MGP Site)
Project Number: 14-0755-044
Static Depth to Water (ft): 12.23'
Depth to Bottom (ft): 20'
Screen interval: 7.5-17.5'
Point of intake:

Well: MW-115
Date: 5/22/2018
Sample time: 9:32A
Sampler: MQ
Purged (gal): ~1.75gal

Time (3-5 min.)	Discharge/ Pumping rate (100-400 mL/min)	DTW (ft) (<0.3 ft)	pH (+/- 0.1)	Temp. (°C) (<3%)	Turbidity (NTU) (< 5 NTU or <10%)	DO (mg/L) (<10%) or below 0.5	ORP (mV) (+/- 10 mV)	Specific Cond. (mS/cm) (<3%)
8:35	120	12.2'	6.83	11.0	31.91	1.52	136.4	545.3
8:40	↓	12.2'	6.43	10.9	29.51	0.84	134.6	527.5
8:45		12.2'	6.43	10.7	69.87	0.61	128.2	517.1
8:50		12.2'	6.44	10.4	23.50	0.55	125.5	501.3
8:55		12.2'	6.44	10.4	58.79	0.44	120.4	493.7
9:00		12.2'	6.47	10.5	16.48	0.40	118.3	479.6
9:05		12.23'	6.49	10.9	15.02	0.36	116.2	472.2
9:10		12.23'	6.49	10.7	16.44	0.34	115.4	457.2
9:15		12.23'	6.49	10.8	12.30	0.30	114.8	444.1
9:20		12.23	6.49	10.9	11.38	0.29	114.5	435.1
9:25		12.23	6.49	10.8	11.51	0.27	114.7	434.8
9:30	↓	12.23	6.49	10.9	11.53	0.27	115.0	434.1

Analysis: (VOCs) / (SVOCs) / (Metals) / (ETPH) / Other- cyanide
Sample Containers: HCl voas 3 1L unpres Ambers 3 HNO3 Plastic 1 Other 1 NaOH
Pump: (Bladder) / Peristaltic / Grunfos / Other-

Color: clear
Odor: none
Sheen: none

Turbidity: low
Well Condition: good
Repairs: n/a

Low-Flow Data Sheet

Project Name: Eversource (Former Rockville MGP Site)
Project Number: 14-0755-044
Static Depth to Water (ft): 11.77
Depth to Bottom (ft): 26'
Screen interval: 19.24'
Point of intake:

Well: 110
Date: 5/22/2018
Sample time: 10:57a
Sampler: mg
Purged (gal): ~4.25gal

Time (3-5 min.)	Discharge/ Pumping rate (100-400 mL/min)	DTW (ft) (<0.3 ft)	pH (+/- 0.1)	Temp. (°C) (<3%)	Turbidity (NTU) (< 5 NTU or <10%)	DO (mg/L) (<10%) or below 0.5	ORP (mV) (+/- 10 mV)	Specific Cond. (mS/cm) (<3%)
10:20	180	11.75'	6.68	10.6	50.68	2.46	172.4	259.8
10:25	↓	11.75'	6.67	10.4	51.43	2.31	172.7	258.9
10:30		11.76'	6.48	10.1	47.22	0.62	172.7	255.1
10:35		11.76'	6.38	10.2	32.07	0.39	174.5	253.4
10:40		11.77'	6.37	10.3	19.54	0.26	167.8	254.2
10:45		11.77'	6.37	10.5	19.38	0.23	166.8	253.6
10:50		11.77'	6.35	10.3	18.21	0.19	165.8	253.0
10:55		11.77	6.36	10.5	19.44	0.16	164.3	253.4
MW08								

Analysis: VOCs / SVOCs / Metals / ETPH / Other- cynac
Sample Containers: HCl voas 3 1L unpres Ambers 3 HNO3 Plastic 1 Other 1 NaOH
Pump: Bladder / Peristaltic / Grunfos / Other-

Color: clear
Odor: none
Sheen: none

Turbidity: low
Well Condition: good
Repairs: N/A

Low-Flow Data Sheet

Project Name: Eversource (Former Rockville MGP Site)
Project Number: 14-0755-044
Static Depth to Water (ft): 11.77
Depth to Bottom (ft): 22.0'
Screen interval: 6-16
Point of Intake:

Well: MW-12S
Date: 5/22/2018
Sample time: 1132
Sampler: MG
Purged (gal): ~3.5 gal

Time (3-5 min.)	Discharge/ Pumping rate (100-400 mL/min)	DTW (ft) (<0.3 ft)	pH (+/- 0.1)	Temp. (°C) (<3%)	Turbidity (NTU) (< 5 NTU or <10%)	DO (mg/L) (<10%) or below 0.5	ORP (mV) (+/- 10 mV)	Specific Cond. (mS/cm) (<3%)
12:55	180	11.72	6.52	11.4	179.4	3.47	211.7	302.4
1:00	↓	11.75	6.39	11.3	6.09	1.12	212.0	291.2
1:05		11.75	6.34	11.0	1.57	0.81	210.0	286.8
1:10		11.76	6.33	11.0	8.77	0.74	209.3	286.7
1:15		11.76	6.32	10.9	2.92	0.67	208.1	286.3
1:20		11.76	6.31	10.9	1.83	0.58	205.6	285.6
1:25		11.77	6.31	10.9	1.43	0.56	204.9	287.4
1:30	↓	11.77	6.31	10.9	1.57	0.58	204.5	288.7

Analysis: (VOCs) / SVOCs / (Metals) / (ETPH) / Other- Cyanide
Sample Containers: HCl voas 3 1L unpres Ambers 3 HNO3 Plastic 1 Other 1 MeOH
Pump: Bladder / (Peristaltic) / Grunfos / Other-

Color: clear
Odor: none
Sheen: none

Turbidity: good /10N
Well Condition: good
Repairs: N/A

Low-Flow Data Sheet

Project Name: Eversource (Former Rockville MGP Site)
Project Number: 14-0755-044
Static Depth to Water (ft): 11.61
Depth to Bottom (ft): 24.5
Screen interval: 17-22
Point of Intake:

Well: 12D
Date: 5/22/2018
Sample time: 3:05
Sampler: MA
Purged (gal): ~9

Time (3-5 min.)	Discharge/ Pumping rate (100-400 mL/min)	DTW (ft) (<0.3 ft)	pH (+/- 0.1)	Temp. (°C) (<3%)	Turbidity (NTU) (< 5 NTU or <10%)	DO (mg/L) (<10%) or below 0.5	ORP (mV) (+/- 10 mV)	Specific Cond. (mS/cm) (<3%)
2:10	180	11.55	6.17	11.8	115.3	1.42	90.5	492.4
2:15	↓	11.56	6.15	11.8	84.62	0.87	87.6	495.0
2:20		11.59	6.15	11.9	81.07	0.61	80.7	501.9
2:25		11.60	6.13	11.8	66.96	0.42	74.5	524.5
2:30		11.61	6.13	11.9	58.53	0.36	72.0	533.2
2:35		11.61	6.12	11.7	30.41	0.31	69.8	546.5
2:40		11.61	6.13	11.5	24.97	0.25	64.5	559.7
2:45		11.61	6.13	11.6	25.97	0.24	65.0	560.6
2:50		11.61	6.13	11.5	25.91	0.22	65.7	562.1

Analysis: (VOCs) / (SVOCs) / (Metals) / (ETPH) / Other- Cyanide
Sample Containers: HCl voas 3 1L unpres Ambers 3 HNO3 Plastic 1 Other 1 NaOH
Pump: Bladder / (Peristaltic) / Grunfos / Other-

Color: Clear
Odor: none
Sheen: none

Turbidity: low
Well Condition: good
Repairs: none

Low-Flow Data Sheet

Project Name: Eversource (Former Rockville MGP Site)
Project Number: 14-0755-044
Static Depth to Water (ft): 11.46'
Depth to Bottom (ft): 19.50'
Screen interval: 10-20'
Point of intake:

Well: MW-145
Date: 5/24/2018
Sample time: 12:44
Sampler: mg
Purged (gal): ~3

Time (3-5 min.)	Discharge/ Pumping rate (100-400 mL/min)	DTW (ft) (<0.3 ft)	pH (+/- 0.1)	Temp. (°C) (<3%)	Turbidity (NTU) (< 5 NTU or <10%)	DO (mg/L) (<10%) or below 0.5	ORP (mV) (+/- 10 mV)	Specific Cond. (mS/cm) (<3%)
11:45	180	11.22	5.94	15.3	23.72	0.87	219.3	7107
11:50	↓	11.43	5.96	14.9	20.76	0.32	207.4	6774
11:55		11.45	5.94	15.4	14.96	0.22	199.2	5662
12:00		11.45	5.95	15.2	12.68	0.20	196.1	5367
12:05		11.46	5.97	15.4	12.70	0.22	190.6	5167
12:10		11.46	5.95	15.1	12.40	0.26	184.7	5006
12:15		11.46	5.99	15.3	12.09	0.35	180.9	4947
12:20		11.46	5.98	15.5	3.09	0.37	176.6	4907
12:25		11.46	5.99	15.4	2.64	0.44	174.0	4895
12:30		11.46	5.99	15.2	3.58	0.46	172.4	5103
12:35		11.46	5.99	15.0	3.38	0.48	171.9	4999
12:40	↓	11.46	5.98	15.1	3.31	0.49	171.6	5132

Analysis: (VOCs) / S(VOCs) / (Metals) / (ETPH) / Other-
Sample Containers: HCl voas 3 1L unpres Ambers 3 HNO3 Plastic 1 Other 1 NaOH
Pump: Bladder / (Peristaltic) / Grunfos / Other-

Color: clear
Odor: none
Sheen: none

Turbidity: low
Well Condition: good
Repairs: none

Low-Flow Data Sheet

Project Name: Eversource (Former Rockville MGP Site)
Project Number: 14-0755-044
Static Depth to Water (ft): 11.02'
Depth to Bottom (ft): 75.6'
Screen Interval: 67-77
Point of Intake:

Well: MW-14D
Date: 5/24/2018
Sample time: 2104
Sampler: MG
Purged (gal): ~3

Time (3-5 min.)	Discharge/ Pumping rate (100-400 mL/min)	DTW (ft) (<0.3 ft)	pH (+/- 0.1)	Temp. (°C) (<3%)	Turbidity (NTU) (< 5 NTU or <10%)	DO (mg/L) (<10%) or below 0.5	ORP (mV) (+/- 10 mV)	Specific Cond. (mS/cm) (<3%)
1:15	180	10.99	6.72	15.6	13.25	0.06	-44.1	907
1:20	↓	11.01	6.64	15.6	17.14	0.09	-69.9	209.7
1:25		11.01	6.67	16.1	32.35	0.07	-71.1	176.1
1:30		11.02	6.67	15.7	16.06	0	-76.9	151.8
1:35		11.02	6.68	16.0	20.23	0	-80.5	151.2
1:40		11.02	6.69	15.9	11.77	0	-85.2	149.2
1:45		11.02	6.69	15.9	10.53	0	-85.5	149.1
1:50		11.02	6.70	15.8	11.13	0	-86.7	148.5
1:55		11.02	6.69	15.6	11.49	0	-86.6	147.8
2:00	↓	11.02	6.69	15.7	11.96	0	-86.7	147.7

Analysis: (VOCs) / SVOCs / (Metals) / (EPH) / Other- cyanide
Sample Containers: HCl voas 3 1L unpres Ambers 3 HNO3 Plastic 1 Other 1 NaOH
Pump: Bladder / (Peristaltic) / Grunfos / Other-

Color: clear
Odor: none
Sheen: none

Turbidity: low
Well Condition: good
Repairs: none

Low-Flow Data Sheet

Project Name: Eversource-Rockville MGP
Project Number: E-0755-44
Static Depth to Water (ft): 11.20
Depth to Bottom (ft): 20.05
Screen interval: 10-20
Point of intake:

Well: [illegible] MW-14S
Date: 5/22/19
Sample time: 17:45
Sampler: TSR
Purged (gal): 2 gal

Time (3-5 min.)	Discharge/ Pumping rate (100-400 mL/min)	DTW (ft) (<0.3 ft)	pH (+/- 0.1)	Temp. (°C) (<3%)	Turbidity (NTU) (< 5 NTU or <10%)	DO (mg/L) (<10%) or below 0.5	ORP (mV) (+/- 10 mV)	Specific Cond. (mS/cm) (<3%)
12:40	140	11.23	6.11	9.27	4.06	6.12	140.4	293
12:45	140	11.23	6.09	9.15	6.52	5.52	144.5	291
12:50	140	11.23	6.11	9.17	0.57	5.63	154.8	293
12:55	140	11.23	6.11	9.17	0.00	5.67	159.3	294
13:00	140	11.23	6.11	9.19	0.00	5.65	161.2	293

Declined @ 13:05

Analysis: VOCs / SVOCs / Metals / ETPH / Other- Cyanide
Sample Containers: HCl voas 3 1L unpres Ambers 3 HNO3 Plastic 1 Other NaOH
Pump: Bladder / Peristaltic / Grunfos / Other-

Color: —
Odor: —
Sheen: —

Turbidity: —
Well Condition: good
Repairs: none

Low-Flow Data Sheet

Project Name: Eversource-Rockville
Project Number: E-0755-44
Static Depth to Water (ft): 10.43
Depth to Bottom (ft): 16.70
Screen interval: 10' (7-17)
Point of intake:

Well: MW-175
Date: 5/16/18
Sample time: 9:35
Sampler: RJC
Purged (gal): 2.5

Time (3-5 min.)	Discharge/ Pumping rate (100-400 mL/min)	DTW (ft) (<0.3 ft)	pH (+/- 0.1)	Temp. (°C) (<3%)	Turbidity (NTU) (< 5 NTU or <10%)	DO (mg/L) (<10%) or below 0.5	ORP (mV) (+/- 10 mV)	Specific Cond. (mS/cm) (<3%)
9:50	140	10.46	6.56	11.66	36.59	10.94	63.6	114
9:55	140	10.46	6.30	11.44	22.15	9.77	94.6	114
9:00	140	10.46	6.27	11.34	10.44	9.51	113.4	112
9:05	140	10.46	6.27	11.24	5.05	9.24	122.6	112
9:10	140	10.46	6.24	11.27	2.27	9.39	130.5	114
9:15	140	10.46	6.34	11.22	1.92	9.21	132.3	114
9:20	140	10.46	6.42	11.24	1.36	9.35	136.3	115
9:25	140	10.46	6.45	11.38	1.14	9.22	139.2	116
9:30	140	10.46	6.46	11.34	1.07	9.23	139.7	116

Analysis: VOCs / SVOCs / Metals / ETPH / Other-
Sample Containers: HCl voas 3 1L unpres Ambers 3 HNO3 Plastic 1 Other NaOH 1
Pump: Bladder / Peristaltic / Grunfos / Other-

Color: clear
Odor: none
Sheen: none

Turbidity: low
Well Condition: good
Repairs: none

Low-Flow Data Sheet

Project Name: Eversource (Former Rockville MGP Site)
Project Number: 14-0755-044
Static Depth to Water (ft): 20.04'
Depth to Bottom (ft): 86.31' (Stdup)
Screen interval: 77-87
Point of intake:

Well: MW-180
Date: 5/30/2018
Sample time: 9:02AM
Sampler: MMG
Purged (gal): ~2 gal

Time (3-5 min.)	Discharge/ Pumping rate (100-400 mL/min)	DTW (ft) (<0.3 ft)	pH (+/- 0.1)	Temp. (°C) (<3%)	Turbidity (NTU) (< 5 NTU or <10%)	DO (mg/L) (<10%) or below 0.5	ORP (mV) (+/- 10 mV)	Specific Cond. (mS/cm) (<3%)
8:15	120	19.95	7.34	16.1	606.11	[illegible]	21.7	407.3
8:20	120	19.97	7.41	16.0	62.31	[illegible]	19.7	409.0
8:25	180	20.04	7.55	16.1	58.62	7.94	11.3	415.2
8:30	180	20.04	7.21	15.3	22.57	0.24	1.1	407.8
8:35	180	20.04	7.41	15.7	17.23	0.07	-18.7	409.5
8:40	180	20.04	7.55	15.8	17.75	0.02	-27.0	408.6
8:45	180	20.04	7.54	15.5	16.41	0.00	-34.5	411.2
8:50	180	20.04	7.52	15.6	16.27	0.00	-34.1	409.6
8:55	180	20.04	7.53	15.4	14.37	0.00	-40.5	413.7
9:00	180	20.04	7.47	15.3	16.93	0.00	-38.7	413.5

Analysis: VOCs / SVOCs / Metals / ETPH / Other- cyanide
Sample Containers: HCl voas 3 1L unpres Ambers 3 HNO3 Plastic 1 Other 1 NaOH
Pump: Bladder / Peristaltic / Grunfos / Other-

Color: clear
Odor: none
Sheen: none

Turbidity: low
Well Condition: good
Repairs: none

Low-Flow Data Sheet

Project Name: Eversource-Rockville MGP
Project Number: E-0755-44
Static Depth to Water (ft): 17.64
Depth to Bottom (ft): 23.79
Screen interval: 14-24'
Point of intake:

Well: MW-19S
Date: 5/12/11N
Sample time: 12:35
Sampler: BPC
Purged (gal): 2.5

Time (3-5 min.)	Discharge/ Pumping rate (100-400 mL/min)	DTW (ft) (<0.3 ft)	pH (+/- 0.1)	Temp. (°C) (<3%)	Turbidity (NTU) (< 5 NTU or <10%)	DO (mg/L) (<10%) or below 0.5	ORP (mV) (+/- 10 mV)	Specific Cond. (mS/cm) (<3%)
11:45	140	17.73	6.01	12.91	22.03	10.56	123.2	241
11:50	140	17.73	5.95	13.09	17.42	10.57	144.3	240
11:55	140	17.73	5.94	12.72	12.86	10.57	162.0	243
12:00	140	17.73	5.94	12.94	10.49	10.51	169.4	242
12:05	140	17.73	5.93	12.95	9.99	12.11	177.6	249
12:10	140	17.73	5.93	12.60	5.99	12.04	182.2	251
12:15	140	17.73	5.94	12.35	5.40	12.04	182.7	252
12:20	140	17.73	5.95	12.55	5.03	11.94	183.3	252

Unpurged 12:25

Analysis: VOCs / SVOCs / Metals / ETPH / Other- Cyanide
Sample Containers: HCl voas 3 1L unpres Ambers 3 HNO3 Plastic 1 Other NaOH
Pump: Bladder / Peristaltic / Grunfos / Other-

Color: Clear
Odor: none
Sheen: none

Turbidity: low
Well Condition: good
Repairs: none

Low-Flow Data Sheet

Project Name: Eversource-Rockville MGP
Project Number: E-0755-44
Static Depth to Water (ft): 20.74
Depth to Bottom (ft): 30.63
Screen interval: 10' 20-30'
Point of intake:

Well: MW-215
Date: 5/24/19
Sample time: 13:50
Sampler: SJC
Purged (gal): 2.5

Time (3-5 min.)	Discharge/ Pumping rate (100-400 mL/min)	DTW (ft) (<0.3 ft)	pH (+/- 0.1)	Temp. (°C) (<3%)	Turbidity (NTU) (< 5 NTU or <10%)	DO (mg/L) (<10%) or below 0.5	ORP (mV) (+/- 10 mV)	Specific Cond. (mS/cm) (<3%)
13:00	140	20.74	6.23	15.71	459.5	8.09	139.1	747
13:05	140	20.74	6.15	15.36	412.1	9.16	146.9	742
13:10	140	20.74	6.15	15.05	541.4	10.91	140.9	742
13:15	140	20.74	6.16	15.30	644.5	9.45	144.9	741
13:20	140	20.74	6.14	15.07	413.2	9.63	207.2	744
13:25	140	20.74	6.13	15.06	173.1	9.16	212.9	742
13:30	140	20.74	6.14	15.04	81.93	9.21	214.8	743
13:35	140	20.74	6.15	14.92	50.60	9.24	216.4	747
13:40	140	20.74	6.15	14.84	33.76	9.13	217.6	743
13:45	140	20.74	6.16	14.69	23.93	9.30	216.3	747

Analysis: VOCs / SVOCs / Metals / ETPH / Other-
Sample Containers: ~~HCl~~ voas 3 1L unpres Ambers 3 HNO3 Plastic 1 Other NaOH
Pump: Bladder / Peristaltic / Grunfos / Other-

* Further centrifuged my silty tubing from well clear

Color: Clear
Odor: none
Sheen: none

Turbidity: low, 11.33
Well Condition: good
Repairs: none

Low-Flow Data Sheet

Project Name: Eversource-Rockville MGP
Project Number: E-0755-44
Static Depth to Water (ft): 33.44
Depth to Bottom (ft): 34.72
Screen interval: 29-39
Point of intake:

Well: MW-23S
Date: 5/30/24
Sample time: 0425
Sampler: BSK
Purged (gal): 4

Time (3-5 min.)	Discharge/ Pumping rate (100-400 mL/min)	DTW (ft) (<0.3 ft)	pH (+/- 0.1)	Temp. (°C) (<3%)	Turbidity (NTU) (< 5 NTU or <10%)	DO (mg/L) (<10%) or below 0.5	ORP (mV) (+/- 10 mV)	Specific Cond. (mS/cm) (<3%)
0425	250	33.83	7.94	14.6	452.3	9.61	125.3	359.2
0430	250	34.25	6.23	13.5	477.7	9.09	140.8	353.4
0435	250	34.40	6.00	13.4	406.2	9.57	135.6	342.1
0440	250	34.32	6.01	13.4	465.6	9.73	130.1	335.7
0445	250	34.32	6.05	13.4	434.7	9.09	123.4	336.1
0450	250	34.32	5.96	13.3	447.4	9.29	126.7	336.1
0455	250	34.32	5.94	13.3	457.2	9.37	124.2	334.8
0900	250	34.32	5.98	13.2	576.7	9.50	123.0	343.3
0905	250	34.32	6.01	13.3	533.8	9.45	121.5	344.1
0910	250	34.32	6.04	13.3	531.7	9.32	118.3	346.5
0915	250	34.32	5.98	13.2	401.2	9.50	122.4	346.1
0920	250	34.32	6.00	13.3	457.0	9.44	121.5	347.2

Analysis: VOCs / SVOCs / Metals / ETPH / Other- Cyanide
Sample Containers: HCl voas 3 1L unpres Ambers 3 HNO3 Plastic 1 Other NaOH
Pump: Bladder / Peristalic / Grunfos / Other-

Color: clear
Odor: none
Sheen: none

Turbidity: 214.3
Well Condition: Good
Repairs: none

Low-Flow Data Sheet

Project Name: Rockville MGP
Project Number: E-0755-44B
Static Depth to Water (ft): 16.47
Depth to Bottom (ft): 100
Screen interval: 90-100
Point of intake: ~95

Well: MW-3BR
Date: 10/24/18
Sample time: 14:03
Sampler: LW
Purged (gal): ~2

YSI Pro+ MicroTPW mS/cm

Time (3-5 min.)	Discharge/ Pumping rate (100-400 mL/min)	DTW (ft) (<0.3 ft)	pH (+/- 0.1)	Temp. (°C) (<3%)	Turbidity (NTU) (< 5 NTU or <10%)	DO (mg/L) (<10%) or below 0.5	ORP (mV) (+/- 10 mV)	Specific Cond. ~~(mS/cm)~~ (<3%)
12:52	~200	16.54	9.41	11.8	1.02	9.12	26.1	303.8
12:55	~200	16.93	9.40	11.9		8.27	26.4	299.1
12:58	~200	18.35	9.40	11.9	0.82	7.33	26.6	294.2
13:01	~100	17.56	9.38	11.8		5.01	28.1	299.8
13:04	~100	17.75	9.35	11.7		2.98	32.0	295.3
13:07	~100	17.94	9.35	11.8		2.95	33.0	295.1
13:10	~100	18.14	9.34	11.8		2.93	34.1	294.9
13:13	~100	18.35	9.33	11.8		2.91	34.7	294.8
13:16	~100	18.55	9.33	11.9	0.35	2.91	35.2	294.7
13:19	~100	18.75	9.32	11.8		2.87	35.8	294.6
13:22	~100	18.94	9.32	11.7		2.86	36.4	294.3
13:25	~100	19.13	9.32	11.6		2.84	37.3	294.2
13:28	~100	19.34	9.32	11.6		2.84	37.6	294.2
13:31	~100	19.53	9.32	11.5		2.84	37.9	294.3
13:34	~100	19.72	9.32	11.5	0.37	2.82	38.3	294.3
13:37	~100	19.81	9.32	11.5		2.82	38.5	294.4
13:40	~100	19.99	9.32	11.5		2.81	38.8	294.3
13:43	~100	20.18	9.32	11.5		2.81	38.6	294.1
13:46	~100	20.37	9.31	11.5		2.80	38.7	294.2
13:49	~100	20.57	9.31	11.6		2.80	38.8	294.1
13:52	~100	20.75	9.31	11.6	0.33	2.80	38.8	294.0
13:55	~100	20.95	9.31	11.6		2.80	38.9	294.0
13:58	~100	21.16	9.31	11.6		2.80	38.9	293.9
14:01	~100	21.37	9.31	11.6		2.79	38.3	293.9

Analysis: VOCs / SVOCs / Metals / ETPH / Other- Cyanide
Sample Containers: HCl voas 3 1L unpres Ambers 3 HNO3 Plastic 1 Other NaOH Plastic - 1
Pump: Bladder / Peristalic / Grunfos / Other-

Color: clear
Odor: none
Sheen: none

Turbidity: clear
Well Condition: good
Repairs: none

4

Low-Flow Data Sheet

Project Name: Rockville MGP
Project Number: E-0755-44B
Static Depth to Water (ft): 13.52 FTOC
Depth to Bottom (ft): 20
Screen interval: 10-20
Point of intake: ~17 FTOC

Well: MW-45R
Date: 10/24/18
Sample time: 9:26
Sampler: LV
Purged (gal): ~1.5 gallons

YSI Pro + MicroTPW

Time (3-5 min.)	Discharge/ Pumping rate (100-400 mL/min)	DTW (ft) (<0.3 ft)	pH (+/- 0.1)	Temp. (°C) (<3%)	Turbidity (NTU) (< 5 NTU or <10%)	DO (mg/L) (<10%) or below 0.5	ORP (mV) (+/- 10 mV)	Specific Cond. ~~(mS/cm)~~ mS/cm (<3%)
837		13.52						
855	~180	13.54	7.69	16.3		2.40	20	366.9
858	~180	13.54	6.92	16.6	1.64	2.14	24.6	330.2
901	~120	13.54	6.59	16.7		1.77	27.7	328.7
904	~120	13.54	6.50	16.8		1.63	29.4	322.6
907	~120	13.54	6.40	16.9	1.18	1.50	31.1	316.4
910	~200	13.54	6.38	17.2		1.60	32.7	315
913	~200	13.54	6.36	17.1		1.31	33.4	310.8
916	~200	13.54	6.34	17.3	0.25	1.20	34.4	315.4
919	~200	13.54	6.32	17.3		1.30	35.1	312.6
921	~200	13.54	6.30	17.3		1.35	36.6	309.1
924	~200	13.54	6.31	17.2		1.34	37.1	308.7

Analysis: VOCs / SVOCs / Metals / ETPH / Other- Cyanide
Sample Containers: HCl voas 3 1L unpres Ambers 3 HNO3 Plastic 1 Other 1 NaOH
Pump: Bladder / Peristalic / Grunfos / Other-

Color: clear
Odor: none
Sheen: none

Turbidity: clear
Well Condition: Good
Repairs: none

Low-Flow Data Sheet

Project Name: Rockville MGP
Project Number: E-0755-44B
Static Depth to Water (ft): 30.06
Depth to Bottom (ft): 43
Screen Interval: 33-43
Point of intake:

Well: MW-7D
Date: 10/25/24
Sample time: 14:10
Sampler: RJC
Purged (gal): 4.5

Time (3-5 min.)	Discharge/ Pumping rate (100-400 mL/min)	DTW (ft) (<0.3 ft)	pH (+/- 0.1)	Temp. (°C) (<3%)	Turbidity (NTU) (< 5 NTU or <10%)	DO (mg/L) (<10%) or below 0.5	ORP (mV) (+/- 10 mV)	Specific Cond. (mS/cm) (<3%)
12:35		30.06	6.94	12.4	374.7	4.05	134.5	635.5
12:40		30.06	6.74	12.6	253.6	6.94	165.4	648.3
12:45		30.06	6.74	12.8	184.1	6.72	179.9	645.6
12:50		30.06	6.74	12.7	117.3	6.51	193.1	647.7
12:55		30.06	6.75	12.1	92.54	6.16	197.7	648.4
13:00		30.06	6.77	12.0	70.81	5.65	204.1	651.4
13:05		30.06	6.77	12.3	59.10	5.41	209.0	649.4
13:10		30.06	6.79	12.3	48.65	5.51	210.4	650.6
13:15		30.06	6.80	13.0	45.11	5.74	209.3	646.4
13:20		30.06	6.91	13.3	40.30	5.39	209.4	649
13:25		30.06	6.77	12.6	32.14	5.76	216.7	649.2
13:30		30.06	6.81	13.2	24.69	5.47	214.7	651
13:35		30.06	6.79	13.5	26.32	5.91	213.7	646
13:40		30.06	6.81	12.6	21.23	5.99	209.1	649.1
13:45		30.06	6.74	12.9	20.83	5.94	207.4	643.3
13:50		30.06	6.77	13.1	17.19	5.61	235.7	644.1
13:55		30.06	6.81	13.3	9.46	5.82	203.7	644
14:00		30.06	6.81	13.2	7.43	5.81	236.3	647
14:05		30.06	6.81	13.3	3.28	5.79	234.3	646

Analysis: VOCs / SVOCs / Metals / ETPH / Other- TCN
Sample Containers: HCl voas 3 1L unpres Ambers 3 HNO3 Plastic 1 Other NaOH
Pump: Bladder / Peristaltic / Grunfos / Other-

Color:
Odor:
Sheen:

Turbidity:
Well Condition:
Repairs:

Low-Flow Data Sheet

Project Name: Rockville MGP
Project Number: E-0755-44B
Static Depth to Water (ft): 22.06
Depth to Bottom (ft): 100
Screen Interval: ~80-100
Point of intake: 95

Well: MW-10BR
Date: 10/24/18
Sample time: 11:34
Sampler: LW
Purged (gal): ~3

Time (3-5 min.)	Discharge/ Pumping rate (100-400 mL/min)	DTW (ft) (<0.3 ft)	pH (+/- 0.1)	Temp. (°C) (<3%)	Turbidity (NTU) (< 5 NTU or <10%)	DO (mg/L) (<10%) or below 0.5	ORP (mV) (+/- 10 mV)	Specific Cond. (mS/cm) (<3%) µS/cm
10:35	~150	22.07	8.54	13.6		2.21	34.1	452.0
10:38	~150	22.08	8.85	13.5	2.70	1.99	32.8	496.2
10:41	~150	22.09	9.01	13.5		1.29	32.6	504.7
10:44	~150	22.10	9.20	13.4		0.77	32.2	512.1
10:47	~150	22.10	9.46	13.3		0.51	31.7	515.0
10:50	~150	22.10	9.70	13.2	1.64	0.39	31.1	516.7
10:53	~150	22.10	9.77	13.2		0.37	31.0	516.7
10:56	~150	22.10	9.79	13.2		0.35	30.2	516.7
10:59	~200	22.10	9.83	13.2		0.31	30.0	516.5
11:02	~300	22.10	9.85	13.1	1.09	0.29	29.9	516.3
11:05	~300	22.10	9.87	13.1		0.28	29.8	516.2
11:08	~300	22.10	9.88	13.1		0.27	29.7	516.1
11:11	~300	22.10	9.90	13.1	0.94	0.25	29.7	516.1
11:14	~300	22.10	9.92	13.0		0.23	29.4	515.8
11:17	~300	22.10	9.93	12.9	0.51	0.21	29.2	515.6
11:20	~300	22.10	9.93	12.9		0.20	29.2	515.6
11:23	~300	22.10	9.94	12.8		0.20	29.1	515.4
11:26	~300	22.10	9.94	12.8		0.20	29.1	515.4
11:29	~300	22.10	9.95	12.8		0.19	29.0	515.3
11:32	~300	22.10	9.95	12.8		0.19	29.0	515.3

Analysis: (VOCs) / (SVOCs) / (Metals) / (ETPH) / Other- Cyan Ox
Sample Containers: HCl voas 3 1L unpres Ambers 3 HNO3 Plastic 1 Other NaOH Plastic - 1
Pump: Bladder / Peristalic / Grunfos / Other-

Color: Clear
Odor: none
Sheen: none

Turbidity: clear
Well Condition: Good
Repairs: none

Low-Flow Data Sheet

Project Name: Rockville MGP
Project Number: E-0755-44B
Static Depth to Water (ft): 18.1
Depth to Bottom (ft): 23.75
Screen Interval: ~~13.75 - 23.75~~ 15.25
Point of intake: ~21

Well: MW-13S
Date: 10/24/18
Sample time: 16:05
Sampler: LW
Purged (gal): ~3 4/

Time (3-5 min.)	Discharge/ Pumping rate (100-400 mL/min)	DTW (ft) (<0.3 ft)	pH (+/- 0.1)	Temp. (°C) (<3%)	Turbidity (NTU) (< 5 NTU or <10%)	DO (mg/L) (<10%) or below 0.5	ORP (mV) (+/- 10 mV)	Specific Cond. ~~(mS/cm)~~ µS/cm (<3%)
15:12	~250	18.10	9.01	15.2	107	9.11	32.8	1124
15:15	~250	18.10	8.87	15.3		8.03	45.1	1133
15:18	~250	18.10	7.76	15.2		7.76	45.8	1135
15:21	~250	18.10	8.44	15.2		6.25	46.0	1132
15:24	~250	18.10	7.93	15.0	90.8	4.51	55.4	1155
15:24	~250	18.10	7.30	15.2		4.26	68.3	1154
15:27	~250	18.10	7.16	15.0		4.20	70.1	1144
15:30	~250	18.10	7.04	15.3	61.7	4.14	72.2	1135
15:33	~250	18.10	6.81	15.4		4.16	73.8	1048
15:36	~250	18.10	6.69	15.4		4.19	76.0	1077
15:39	~250	18.10	6.61	15.2	30.9	4.22	76.8	1062
15:42	~250	18.10	6.56	15.1		4.31	76.8	1035
15:45	~250	18.10	6.50	15.1		4.37	76.8	1014
15:48	~250	18.10	6.47	15.1	10.1	4.55	76.6	981
15:51	~250	18.10	6.45	15.2		4.56	77.9	476
15:54	~250	18.10	6.43	15.1	6.23	4.62	78.2	973
15:57	~250	18.10	6.41	15.1	4.73	4.66	79.3	967
~~16:00~~	~250	18.10	6.41	15.1	4.36	4.68	79.5	962
16:03	~250	18.10	6.40	15.1	3.51	4.75	80.1	958

Analysis: VOCs / SVOCs / Metals / ETPH / Other- Cyanide
Sample Containers: HCl voas 5 1L unpres Ambers 3 HNO3 Plastic 1 Other NaOH plastic
Pump: Bladder / Peristaltic / Grunfos / Other-

Color: clear
Odor: none
Sheen: none

Turbidity: clear
Well Condition: good
Repairs: none

First slug of H_2O very turbid led discharge prior to flow-thru cell.

Low-Flow Data Sheet

Project Name: Rockville MGP
Project Number: E-0755-44B
Static Depth to Water (ft): 18.12
Depth to Bottom (ft): 71
Screen interval: 63-73 ft
Point of intake:

Well: 13D
Date: 10-25-2018
Sample time: 1227
Sampler: WAC
Purged (gal):

Time (3-5 min.)	Discharge/ Pumping rate (100-400 mL/min)	DTW (ft) (<0.3 ft)	pH (+/- 0.1)	Temp. (°C) (<3%)	Turbidity (NTU) (< 5 NTU or <10%)	DO (mg/L) (<10%) or below 0.5	ORP (mV) (+/- 10 mV)	Specific Cond. (mS/cm) (<3%)
1240	300	18.12	10.07	13.7	6.48	9.12	56.1	825
1243	300	18.20	9.77	13.4		9.50	57.4	823
1246	300	18.20	9.58	13.3		9.55	61.1	824
1249	300	18.20	9.27	13.3		9.54	66.6	823
1252	300	18.20	8.97	13.3		9.52	73.5	822
1255	300	18.20	8.88	13.2	3.89	9.58	74.1	826
1258	300	18.21	8.70	13.3		9.42	76.7	823
101	300	18.21	8.61	13.2		9.53	78.5	822
104	300	18.21	8.45	13.4	2.86	9.51	80.9	820
107	300	18.21	8.10	13.4		7.52	79.7	825
110	300	18.21	7.79	13.4		5.57	78.5	830
113	300	18.20	7.42	13.5	2.08	5.36	83.5	830
116	300	18.20	7.19	13.5		5.24	85.8	829
119	300	18.20	7.09	13.5		5.12	86.4	828
122	300	18.20	7.04	13.5		5.15	86.3	828
125	300	18.20	7.02	13.5		5.11	86.2	828

Analysis: VOCs / SVOCs / Metals / ETPH / Other- Cyan.-00
Sample Containers: HCl voas 3 1L unpres Ambers 3 HNO3 Plastic 1 Other (NaOH
Pump: Bladder / Peristalic / Grunfos / Other-

Color:
Odor:
Sheen:

Turbidity:
Well Condition:
Repairs:

Low-Flow Data Sheet

Project Name: Rockville MGP
Project Number: E-0755-448
Static Depth to Water (ft): 10.75
Depth to Bottom (ft): 20 / 19.55
Screen Interval: 10-20
Point of intake: 15

Well: MW-145
Date: 11-12-2018
Sample time: 1025
Sampler: WAC
Purged (gal): 1.2

Time (3-5 min.)	Discharge/ Pumping rate (100-400 mL/min)	DTW (ft) (<0.3 ft)	pH (+/- 0.1)	Temp. (°C) (<3%)	Turbidity (NTU) (< 5 NTU or <10%)	DO (mg/L) (<10%) or below 0.5	ORP (mV) (+/- 10 mV)	Specific Cond. (mS/cm) (<3%)
935	100	10.75	6.26	15.55	1.26	0.72	231.7	3.08
940	100	10.75	6.24	15.36	1.81	0.52	255.3	3.05
945	100	10.78	6.24	15.85	1.92	0.50	283.5	3.02
950	100	10.78	6.23	15.93	2.05	0.66	262.7	2.99
955	100	10.78	6.24	15.91	2.58	0.58	258.3	2.98
1000	100	10.78	6.23	16.00	1.13	0.60	241.8	2.98
1005	100	10.78	6.23	16.23	0.78	0.63	230.2	2.97
1010	100	10.78	6.22	16.56	1.12	0.57	219.4	2.98
1015	100	10.78	6.22	16.53	1.42	0.54	215.2	2.98
1020	100	10.78	6.22	16.51	1.76	0.56	215.5	2.99

Analysis: VOCs / SVOCs / Metals / ETPH / Other- TCN+PAH
Sample Containers: HCl voas 3 1L unpres Ambers 3 HNO3 Plastic 1 Other NaOH Plastic 1
Pump: Bladder / Peristalic / Grunfos / Other-

Color: None
Odor: None
Sheen: None

Turbidity:
Well Condition: Good
Repairs: None

Low-Flow Data Sheet

Project Name: Rockville MGP
Project Number: E-0755-44B
Static Depth to Water (ft): 10.39
Depth to Bottom (ft): 77 / 76.80
Screen interval: 10' 67-77
Point of intake: ~70

Well: MW-14D
Date: 11-12-2018
Sample time: 1235
Sampler: WAC
Purged (gal): ~5.15

Time (3-5 min.)	Discharge/ Pumping rate (100-400 mL/min)	DTW (ft) (<0.3 ft)	pH (+/- 0.1)	Temp. (°C) (<3%)	Turbidity (NTU) (< 5 NTU or <10%)	DO (mg/L) (<10%) or below 0.5	ORP (mV) (+/- 10 mV)	Specific Cond. (mS/cm) (<3%)
1055	200	10.39	6.29	14.11	3.88	0.02	71.9	0.59
1100	200	10.39	6.28	14.12	3.60	0.03	72.0	0.60
1105	300	10.40	6.25	13.81	5.01	0.10	73	0.60
1110	300	10.40	6.23	13.70	4.85	0.03	80.9	0.60
1115	300	10.40	6.23	13.73	5.63	0.01	88.5	0.60
1120	300	10.40	6.22	14.01	9.00	-0.00	89.6	0.60
1125	300	10.40	6.22	13.63	6.31	0	86.0	0.60
1130	300	10.40	6.22	13.54	5.41	0.05	84.7	0.61
1135	300	10.40	6.22	13.53	4.72	0.20	86.3	0.63
1140	300	10.40	6.24	13.51	2.63	0.62	90.4	0.65
1145	300	10.40	6.28	13.55	1.93	1.19	101.3	0.67
1150	300	10.40	6.30	13.48	1.76	1.42	108.8	0.69
1155	300	10.40	6.31	13.47	2.45	1.68	109.2	0.70
1200	300	10.40	6.33	13.52	2.12	1.75	112.4	0.71
1205	300	10.40	6.33	13.49	2.31	1.94	116.3	0.71
1210	300	10.40	6.35	13.58	0.87	2.13	121.2	0.72
1215	300	10.40	6.39	13.55	1.42	2.50	121.0	0.72
1220	300	10.40	6.38	13.55	1.22	2.61	123.5	0.73
1225	300	10.40	6.38	13.54	0.37	2.60	125.6	0.73
1230	300	10.40	6.38	13.55	0.76	2.67	127.4	0.73

Analysis: (VOCs) / SVOCs / (Metals) / ETPH / Other- TCN + PAH
Sample Containers: HCl voas 3 1L unpres Ambers 3 HNO3 Plastic 1 Other NaOH Plastic 1
Pump: Bladder / (Peristaltic) / Grunfos / Other-

Color: None / Clear
Odor: Petroleum
Sheen: Yes

Turbidity:
Well Condition: Good
Repairs: None

Low-Flow Data Sheet

Project Name: Rockville MGP
Project Number: E-0755-44B
Static Depth to Water (ft): 19.83
Depth to Bottom (ft): 83
Screen Interval: 72-82
Point of intake:

Well: MW-10D
Date: 10-24-2015
Sample time: 14:30
Sampler: WAC
Purged (gal):

Time (3-5 min.)	Discharge/ Pumping rate (100-400 mL/min) Sow 0.5 m.n	DTW (ft) (<0.3 ft)	pH (+/- 0.1)	Temp. (°C) (<3%)	Turbidity (NTU) (< 5 NTU or <10%)	DO (mg/L) (<10%) or below 0.5	ORP (mV) (+/- 10 mV)	Specific Cond. (mS/cm) (<3%)
153	~150	19.83	6.71	12.2		1.08	-33.1	249
156	~150	19.83	6.72	12.1		0.99		250.6
159	~150	19.84	6.74	12.2		0.87	-32.3	251.4
202	~150	19.85	6.74	12.2	0.64	0.82	-28.7	252.1
205	~150	19.85	6.74	12.2		0.77	-24.3	252.5
208	~150	19.84	6.74	12.2		0.76	-24.1	252.8
211	~150	19.84	6.73	12.2		0.77	-23.6	253.0
214	~150	19.84	6.73	12.2	0.98	0.76	-21.2	253.3
217	~150	19.85	6.73	12.2		0.74	-20.1	253.8
220	~150	19.85	6.75	12.2		0.71	-16.3	255.5
223	~150	19.85	6.75	12.2	0.87	0.70	-10.2	257.0
226	~150	19.85	6.75	12.2		0.69	-9.8	257.2
229	~150	19.85	6.74	12.2		0.68	-5.3	258.5

Analysis: VOCs / SVOCs / Metals / ETPH / Other-
Sample Containers: HCl voas 3 1L unpres Ambers 3 HNO3 Plastic 1 Other 1
Pump: Bladder / Peristalic / Grunfos / Other-

Color: NONE
Odor: No
Sheen: No

Turbidity:
Well Condition:
Repairs:

MW-Dup

Low-Flow Data Sheet

Project Name: Rockville MGP
Project Number: E-0755-44B
Static Depth to Water (ft): 15.51
Depth to Bottom (ft): NM
Screen interval: 14-24
Point of intake:

Well: 255
Date: 10-24-2018
Sample time: 1044
Sampler: WAC
Purged (gal): ~1.5

Time (3-5 min.)	Discharge/ Pumping rate (100-400 mL/min)	DTW (ft) (<0.3 ft)	pH (+/- 0.1)	Temp. (°C) (<3%)	Turbidity (NTU) (< 5 NTU or <10%)	DO (mg/L) (<10%) or below 0.5	ORP (mV) (+/- 10 mV)	Specific Cond. (mS/cm) (<3%)
1021	~200	15.51	7.81	14.4	1.35	6.65	170.7	53.5
1024	~200	15.52	7.92	15.2		5.68	195.6	54.3
1027	~200	15.52	7.90	15.5		5.51	203.2	54.4
1030	~200	15.52	7.82	15.7	1.23	5.41	213.7	54.5
1033	~200	15.52	7.75	16.2		5.17	219.0	54.6
1036	~200	15.53	7.71	16.5		5.19	222.5	54.3
1039	~200	15.52	7.56	16.6	1.83	5.11	229.5	54.1
1042	~200	15.52	7.44	16.6		4.99	233.9	54.0

Analysis: VOCs / SVOCs / Metals / ETPH / Other- Cyanide
Sample Containers: HCl voas 3 1L unpres Ambers 3 HNO3 Plastic 1 Other
Pump: Bladder / Peristaltic / Grunfos / Other-

Color: None
Odor: None
Sheen: None

Turbidity: ~1.5 NTU
Well Condition: Good
Repairs:

Low-Flow Data Sheet

Project Name: Rockville MGP
Project Number: E-0755-44B
Static Depth to Water (ft): 8.98
Depth to Bottom (ft): 150
Screen interval: 5-15
Point of intake: 12

Well: MW-26S
Date: 10-25-2018
Sample time: 835
Sampler: WAC
Purged (gal): 1

Time (3-5 min.)	Discharge/ Pumping rate (100-400 mL/min)	DTW (ft) (<0.3 ft)	pH (+/- 0.1)	Temp. (°C) (<3%)	Turbidity (NTU) (< 5 NTU or <10%)	DO (mg/L) (<10%) or below 0.5	ORP (mV) (+/- 10 mV)	Specific Cond. ~~(mS/cm)~~ µS/cm (<3%)
808	120	8.98	6.34	14.7	8.77	1.68	77.1	880
811	120	8.98	6.02	15.1		1.04	82.8	876
814	120	8.98	5.98	15.3	9.08	0.78	85.4	875
817	150	8.98	5.78	15.8		0.47	87.2	877
820	150	8.98	5.77	15.5	5.92	0.43	87.5	875
823	150	8.98	5.76	15.8		0.38	87.1	872
826	150	8.98	5.76	15.7	6.26	0.39	87.2	871
829	150	8.98	5.74	15.5		0.39	87.4	877
831	150	8.98	5.74	15.6	4.98	0.36	87.3	871

Analysis: VOCs / SVOCs / Metals / ETPH / Other- CN
Sample Containers: HCl voas 3 1L unpres Ambers 3 HNO3 Plastic 1 Other 1 NaOH
Pump: Bladder / Peristaltic / Grunfos / Other-

Color: _____ Turbidity: _____
Odor: _____ Well Condition: _____
Sheen: _____ Repairs: _____

Low-Flow Data Sheet

Project Name: Rockville MGP
Project Number: E-0755-44B
Static Depth to Water (ft): 10.42
Depth to Bottom (ft):
Screen interval: 60-74
Point of Intake:

Well: 26-D
Date: 10-25-18
Sample time: 10:30
Sampler: WAC
Purged (gal):

Time (3-5 min.)	Discharge/ Pumping rate (100-400 mL/min)	DTW (ft) (<0.3 ft)	pH (+/- 0.1)	Temp. (°C) (<3%)	Turbidity (NTU) (< 5 NTU or <10%)	DO (mg/L) (<10%) or below 0.5	ORP (mV) (+/- 10 mV)	Specific Cond. (mS/cm) (<3%)
941	[illegible]	10.42	12.19	13.5	49.93	0.66	-24	716
944	300	10.42	12.28	13.4		0.27	-35.5	737
947	300	10.42	12.28	13.5	48.79	0.26	-36.5	737
950	300	10.44	12.29	13.4				736
953	300	10.45	12.30	13.4	32.65			736
956	300	10.45	12.29	13.4		0.26	-37.4	736
1000	300	10.45	12.29	13.3	17.19	0.25	-38.8	736
1003	300	10.45	12.29	13.3		0.24	-40.9	735
1006	300	10.45	12.27	13.4	7.47	0.22	-45.8	728
1009	300	10.45	12.21	13.3		.20	-50.4	703
1012	300	10.45	12.12	13.4		0.19	-55.1	689
1015	300	10.45	12.10	13.4	8.55	0.19	-52.7	681

Analysis: VOCs / SVOCs / Metals / ETPH / Other- 3 3 CN
Sample Containers: HCl voas 3 1L unpres Ambers 3 HNO3 Plastic 1 Other 1 NAOH
Pump: Bladder / Peristalic / Grunfos / Other-

Color:
Odor:
Sheen:

Turbidity:
Well Condition:
Repairs:

Low-Flow Data Sheet

Project Name: Rockville MGP
Project Number: E-0755-44B
Static Depth to Water (ft): 9.69'
Depth to Bottom (ft): 74'
Screen interval: 10' (64-74)
Point of intake: ~66'

Well: MW-26D
Date: 11-12-2018
Sample time: 255
Sampler: WAC
Purged (gal): ~5.5

Time (3-5 min.)	Discharge/ Pumping rate (100-400 mL/min)	DTW (ft) (<0.3 ft)	pH (+/- 0.1)	Temp. (°C) (<3%)	Turbidity (NTU) (< 5 NTU or <10%)	DO (mg/L) (<10%) or below 0.5	ORP (mV) (+/- 10 mV)	Specific Cond. (mS/cm) (<3%)
140	300	9.69	11.09	14.37	2.66	0.24	-26.6	0.53
145	300	9.71	11.11	14.14	2.27	0.29	-59.6	0.53
150	300	9.71	11.03	14.14	2.14	0.07	-79.4	0.52
155	300	9.71	10.97	14.17	8.38	0.06	-83.8	0.53
200	300	9.70	10.10	14.05	9.44	0.04	-85.0	0.52
205	300	9.71	9.52	14.05	8.18	0.03	-88.3	0.52
210	300	9.71	9.24	14.05	5.36	0.01	-94.1	0.51
215	300	9.70	9.15	14.01	4.66	0.01	-97.5	0.51
220	300	9.70	9.07	13.99	6.27	0.01	-106.3	0.50
225	300	9.70	8.76	14.01	5.18	0.00	-100.6	0.49
230	300	9.70	8.58	13.98	2.20	0.00	-91.2	0.49
235	300	9.70	8.27	14.00	3.88	0.00	-107.3	0.49
240	300	9.71	8.18	14.00	3.05	0.00	-104.1	0.48
245	300	9.71	8.12	13.93	3.78	0.00	-99.1	0.48
250	300	9.71	8.08	13.93	1.93	0.00	-94.5	0.48

Analysis: VOCs / SVOCs / Metals / ETPH / Other- PAH
Sample Containers: HCl voas ___ 1L unpres Ambers 4 HNO3 Plastic ___ Other Filtered / Unfiltered
Pump: Bladder / Peristaltic / Grunfos / Other-

Color: None / Clear
Odor: None
Sheen: None

Turbidity: ___
Well Condition: Good
Repairs: None

Low-Flow Data Sheet

Project Name: Rockville MGP
Project Number: E-0755-44B
Static Depth to Water (ft): 13.80
Depth to Bottom (ft):
Screen interval: 77-87
Point of intake:

Well: MW-26BR
Date: 10-25-2018
Sample time: 1140
Sampler:
Purged (gal):

Time (3-5 min.)	Discharge/ Pumping rate (100-400 mL/min)	DTW (ft) (<0.3 ft)	pH (+/- 0.1)	Temp. (°C) (<3%)	Turbidity (NTU) (< 5 NTU or <10%)	DO (mg/L) (<10%) or below 0.5	ORP (mV) (+/- 10 mV)	Specific Cond. (mS/cm) (<3%)
1107	300	13.80	11.39	13.6		5.15	6.3	419.6
1110	300	13.79	11.39	13.6		5.18	5.7	417.6
1113	300	13.79	11.38	13.6	17.71	5.16	6.5	418.8
1116	300	13.79	11.35	13.5		5.18	10.7	418.2
1119	300	13.79	11.4	13.5		5.17	10.1	419
1122	300	13.01	11.38	13.4	14.60	5.35	12.3	418.1
1125	300	13.12	11.38	13.4		5.06	13.5	420.1
1128	300	13.15	11.39	13.4	16.67	4.93	14.4	419.8
1131	300	13.17	11.38	13.4		4.89	14.8	417.8
1134	300	13.25	11.37	13.3		4.77	17.9	416.8
1137	300	13.28	11.37	13.2	15.84	4.78	18.9	416.5
1140	300	13.35	11.37	13.3		4.78	18.8	416.6

Analysis: VOCs / SVOCs / Metals / ETPH / Other- NO3
Sample Containers: HCl voas 3 1L unpres Ambers 3 HNO3 Plastic 1 Other 1 NaOH
Pump: Bladder / Peristaltic / Grunfos / Other-

Color:
Odor:
Sheen:

Turbidity:
Well Condition:
Repairs:

Low-Flow Data Sheet

Project Name: Rockville MGP
Project Number: E-0755-44B
Static Depth to Water (ft): 26.40
Depth to Bottom (ft): 34
Screen interval: 24-34
Point of Intake: 30'

Well: MW-07J
Date: 10/5/19
Sample time: 11:40
Sampler: AMC
Purged (gal): 4.75

Time (3-5 min.)	Discharge/ Pumping rate (100-400 mL/min)	DTW (ft) (<0.3 ft)	pH (+/- 0.1)	Temp. (°C) (<3%)	Turbidity (NTU) (< 5 NTU or <10%)	DO (mg/L) (<10%) or below 0.5	ORP (mV) (+/- 10 mV)	Specific Cond. (mS/cm) (<3%)
10:15	250	26.45	6.28	12.2	236.4	6.47	211.4	641
10:20		26.47	6.27	11.9	614.0	6.44	217.4	641
10:25		26.45	6.27	11.8	842.7	6.26	222.3	642
10:30		26.45	6.25	11.7	547.9	6.26	225.1	642
10:35		26.45	6.25	11.9	379.5	6.62	226.1	641
10:40		26.45	6.26	12.2	243.1	6.27	226.3	642
10:45		26.45	6.26	12.1	142.3	6.45	227.0	642
10:50		26.45	6.26	12.1	154.2	6.43	224.0	641
10:55		26.45	6.27	12.0	164.2	6.11	224.1	641
11:00		26.45	6.27	11.7	144.4	6.25	224.6	643
11:05		26.45	6.26	11.9	164.0	6.24	224.5	644
11:10		26.45	6.23	11.4	79.60	6.24	224.1	643
11:15		26.45	6.25	11.4	54.23	6.21	224.6	642
11:20		26.45	6.25	11.9	31.94	6.24	224.1	643
11:25		26.45	6.24	11.9	15.61	6.19	230.8	643
11:30		26.45	6.25	11.9	8.34	6.30	233.4	642
11:35		26.45	6.24	11.9	4.29	6.17	231.7	643

Analysis: VOCs / SVOCs / Metals / ETPH / Other- TCN
Sample Containers: HCl voas 6 1L unpres Ambers 3 HNO3 Plastic 1 Other NWA
Pump: Bladder / Peristalic / Grunfos / Other-

Color: no
Odor: no
Sheen: no

Turbidity: low
Well Condition: normal
Repairs: no

Low-Flow Data Sheet

Project Name: Rockville MGP
Project Number: E-0755-44B
Static Depth to Water (ft): 29.04
Depth to Bottom (ft): 37'
Screen Interval: 27-37'
Point of intake: 33'

Well: MW-24S
Date: 10/25/24
Sample time: 9:10
Sampler: MPC
Purged (gal): 3

Time (3-5 min.)	Discharge/ Pumping rate (100-400 mL/min)	DTW (ft) (<0.3 ft)	pH (+/- 0.1)	Temp. (°C) (<3%)	Turbidity (NTU) (< 5 NTU or <10%)	DO (mg/L) (<10%) or below 0.5	ORP (mV) (+/- 10 mV)	Specific Cond. (mS/cm) (<3%)
9:35	300	29.04	6.17	12.1	901.4	8.44	157.3	433
9:40	300	29.04	5.89	12.2	554.3	8.50	142.4	876
9:45	300	29.04	5.81	12.3	137.0	8.66	146.4	843
9:50	300	29.04	5.77	12.1	36.74	8.56	206.6	967
9:55	300	29.04	5.75	12.0	15.21	8.52	215.6	966
9:00	300	29.04	5.73	12.1	6.24	8.49	221.5	965
9:05	300	29.04	5.72	12.1	3.90	8.49	223.3	959

Analysis: VOCs / SVOCs / Metals / ETPH / Other- Cyanide
Sample Containers: HCl voas 3 1L unpres Ambers 3 HNO3 Plastic 1 Other NaOH 1
Pump: Bladder / Peristalic / Grunfos / Other-

Color: Clear
Odor: none
Sheen: none

Turbidity: low
Well Condition: good
Repairs: none

Low-Flow Data Sheet

Project Name: Rockville MGP
Project Number: E-0755-44B
Static Depth to Water (ft): 7.23
Depth to Bottom (ft): 12
Screen interval: 9.5 (2-12)
Point of intake:

Well: MW-305
Date: 10-24-2018
Sample time: 1226
Sampler: WAC
Purged (gal): ~1 gal

Time (3-5 min.)	Discharge/ Pumping rate (100-400 mL/min)	DTW (ft) (<0.3 ft)	pH (+/- 0.1)	Temp. (°C) (<3%)	Turbidity (NTU) (< 5 NTU or <10%)	DO (mg/L) (<10%) or below 0.5	ORP (mV) (+/- 10 mV)	Specific Cond. (mS/cm) (<3%)
1201	125	7.23	7.67	17.2		7.21	-7.2	206.9
1204	125	7.23	5.95	17.4		0.90	-6.0	84.7
1207	125	7.23	5.88	17.4	2.31	0.84	-6.4	206.5
1210	125	7.23	5.85	17.5		0.65	-6.4	206.8
1213	125	7.23	5.81	17.5		0.45	-6.5	207.3
1216	125	7.23	5.77	17.5		0.43	-6.6	207.3
1219	125	7.23	5.73	17.2		0.38	-6.8	206.7
1221	125	7.23	5.72	17.5	0.48	0.36	-7.1	207.4

Analysis: VOCs / SVOCs / Metals / ETPH / Other- Cyanide
Sample Containers: HCl voas 3 1L unpres Ambers 3 HNO3 Plastic 1 Other 1
Pump: Bladder / Peristalic / Grunfos / Other-

Color: None
Odor: Yes
Sheen: None

Turbidity:
Well Condition: Good
Repairs:

Low-Flow Data Sheet

Project Name: Rockville MGP
Project Number: E-0755-44B
Static Depth to Water (ft): 6.70
Depth to Bottom (ft): 17
Screen interval: Bottom 10'
Point of intake: 9

Well: MW-305
Date: 11-12-2018
Sample time: ~~415~~ 420
Sampler: WAC
Purged (gal): ~1.6

Time (3-5 min.)	Discharge/ Pumping rate (100-400 mL/min)	DTW (ft) (<0.3 ft)	pH (+/- 0.1)	Temp. (°C) (<3%)	Turbidity (NTU) (< 5 NTU or <10%)	DO (mg/L) (<10%) or below 0.5	ORP (mV) (+/- 10 mV)	Specific Cond. (mS/cm) (<3%)
335	100	6.70	6.11	15.06	2.82	1.85	37.4	0.20
340	150	6.70	5.99	15.41	1.56	0.56	30.2	0.20
345	150	6.72	5.97	15.60	0.38	0.34	25.5	0.20
350	150	6.73	5.96	15.84	0.28	0.24	13.7	0.21
355	150	6.74	5.95	16.10	0.33	0.12	-6.5	0.21
400	150	6.74	5.95	16.13	1.10	0.10	-8.9	0.21
405	150	6.74	5.94	16.14	0.22	0.10	-17.4	0.21
410	150	6.73	5.95	16.14	0.01	0.09	-20.2	0.21
415	150	6.74	5.95	16.15	0.07	0.07	-23.5	0.21

Analysis: VOCs / SVOCs / Metals (ETPH) / Other- PAH
Sample Containers: HCl voas ____ 1L unpres Ambers 6 HNO3 Plastic ____ Other Filtered / Unfiltered
Pump: Bladder / Peristalic / Grunfos / Other-

Color: Clear w/ Orange bacterial growth
Odor: Petroleum
Sheen: None
Turbidity: ____
Well Condition: Good
Repairs: None

LNAPL GAUGING FORM

Site: Rockville MGP
Date: 10/9/24
Personnel: BPC
Weather: 50° clear

Well ID	Depth to Product (ft)	Depth to Water (ft)
MW-1S	—	24.96
MW-1D	—	24.80
MW-2S	—	Dry
MW-2SR	—	7.43
MW-2D	—	9.91
MW-2BR	—	9.54
MW-3S	—	15.07
MW-3D	—	17.08
MW-3BR	—	17.37
MW-4S	—	13.54
MW-4D	—	13.30
MW-5S	—	6.05
MW-5D	—	9.73
MW-6S	—	10.49
MW-6D	—	12.14

Well ID	Depth to Product (ft)	Depth to Water (ft)
MW-7S	—	27.20
MW-7D	—	30.08
MW-8S	—	—
MW-8SR	—	6.71
MW-9S	—	15.09
MW-9D	—	19.37
MW-10S	—	20.17
MW-10SR	21.95	22.17
MW-10M	—	21.95
MW-10D	21.90	21.95
MW-10BR	—	20.01
MW-11S		12.21
MW-12S	—	11.99
MW-13S	—	17.99
MW-13D	—	19.17

Well ID	Depth to Product (ft)	Depth to Water (ft)
MW-14S	—	11.97
MW-14D	—	11.17
MW-16S	—	11.21
MW-17S	—	10.51
MW-18D	—	14.99
MW-19S	—	17.75
MW-20S	—	26.00
MW-21S	—	22.99
MW-23S	—	8.38
MW-24S	—	21.62
MW-25S	—	15.51
MW-26S	—	9.96
MW-26D	—	10.40
MW-26BR	—	10.37
MW-27S	—	26.40

Well ID	Depth to Product (ft)	Depth to Water (ft)
MW-28S	—	29.06
MW-30S	—	7.27
PZ-1A	—	6.51
PZ-1BR	—	6.98
PZ-2A	—	2.90
PZ-2B	—	1.64
PZ-2BR	—	2.65
PZ-3A	—	4.39
PZ-3BR	—	3.44

Comments:
mw-3BR measured from stickup pipe - PVC to deck * = oil odor on probe
mw-4SR - 13.52
11D: 11.95 12D: 11.73

Ter on probe in mw-2D, mw-10SR, mw-10D, mw-10M, mw-20S. No measurable thickness except for mw-10SR

Tighe&Bond

APPENDIX D

TABLE 6
Summary of Laboratory Quality Control Data
Rockville Former MGP Site
13 Maple Street
Rockville, Connecticut

Laboratory Report ID	Batch Group	Lab Sample ID	Sample ID	Media	Compound	QA/QC Description	Result Bias	Target Range	Result %	Detected in Sample	DUE Consideration
GCA48712	430854	CA48712, CA48713, CA48714, CA48715, CA48716, CA48717, CA48718	MW-17S, MW-5S, MW-5D, MW-8SR, MW-2SR, MW-2BR, TRIP BLANK	GW	Acetone	Low LCS Recovery	None	70-130	61	No	None
	430789	CA48712, CA48713, CA48714, CA48715, CA48716, CA48717	MW-17S, MW-5S, MW-5D, MW-8SR, MW-2SR, MW-2BR	GW	2-Nitroaniline	High LCS/LSCD Recovery	None	30-130	134/145	No	None
	430789	CA48712, CA48713, CA48714, CA48715, CA48716, CA48717	MW-17S, MW-5S, MW-5D, MW-8SR, MW-2SR, MW-2BR	GW	Pyridine	Low LCS/LSCD Recovery	Low	30-130	18/20	No	A low bias is possible; however, the parameter was consistently not detected above laboratory reporting limits.
	430789	CA48712, CA48713, CA48714, CA48715, CA48716, CA48717	MW-17S, MW-5S, MW-5D, MW-8SR, MW-2SR, MW-2BR	GW	Aniline, Benzidine	Low LCS/LSCD Recovery	Low	30-130	<10/30 10/16	No	A low bias is possible; however, the parameter was consistently not detected above laboratory reporting limits.
	430789	CA48712, CA48713, CA48714, CA48715, CA48716, CA48717	MW-17S, MW-5S, MW-5D, MW-8SR, MW-2SR, MW-2BR	GW	1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 4-Chloroaniline, N-Nitrosodimethylamine	High LCS/LCSD RPD	None	20	23.9 23.1 21 66.7 24	No	None
	430854	CA48712, CA48713, CA48714, CA48715, CA48716, CA48717, CA48718	MW-17S, MW-5S, MW-5D, MW-8SR, MW-2SR, MW-2BR, TRIP BLANK	GW	Acetone	High LCS/LCSD RPD	None	30	31.7	No	None
	431026	CA48712, CA48713, CA48714, CA48715, CA48716, CA48717	MW-17S, MW-5S, MW-5D, MW-8SR, MW-2SR, MW-2BR	GW	Cyanide	High MS Recovery	High	90-110	112	No	None
GCA51710	431609	CA51710	MW-4S	GW	Pentachlorophenol	High LCSD Recover	None	30-130	136	No	None
	431609	CA51710	MW-4S	GW	3,3''-Dichlorobenzidine	High LCSD Recovery	None	30-130	20	No	None
	431761	CA51711, CA51712, CA51713, CA51714, CA51715, CA51716, CA51717, CA51718, CA51719	MW-4D, MW-6S, MW-6D, MW-11S, MW-11D, MW-12S, MW-12D, MW-16S, MW-DUP	GW	2-Nitroaniline	High LCSD Recovery	None	30-130	131	No	None
	431761	CA51711, CA51712, CA51713, CA51714, CA51715, CA51716, CA51717, CA51718, CA51719	MW-4D, MW-6S, MW-6D, MW-11S, MW-11D, MW-12S, MW-12D, MW-16S, MW-DUP	GW	Aniline, Benzidine	Low LCS/LSCD Recovery	low	30-130	<10/<10 <10/<10	No	A low bias is possible; however, the parameter was consistently not detected above laboratory reporting limits.
	431761	CA51711, CA51712, CA51713, CA51714, CA51715, CA51716, CA51717, CA51718, CA51719	MW-4D, MW-6S, MW-6D, MW-11S, MW-11D, MW-12S, MW-12D, MW-16S, MW-DUP	GW	Hexachlorocyclopentadiene	High LCS/LCSD RPD	None	20	20.9	No	None
	431609	CA51710	MW-4S	GW	2-Nitrophenol, 3,3''-Dichlorobenzidine, 3-Nitroaniline, 4-Chloroaniline, 4-Nitrophenol, Bis(2-chloroisopropyl)ether	High LCS/LCSD RPD	None	20	23 131.6 29.6 50 21.7 21.7	No	None
	431609	CA51710	MW-4S	GW	% 2,4,6-Tribromophenol, % 2-Fluorobiphenyl, % 2-Fluorophenol	High LCS/LCSD RPD	Variability	20	31.1 22 25.9	SVOCs (No) Surrogates (Yes)	Variability in the sample results is possible; however, the parameter was consistently not detected above laboratory reporting limits
	431761	CA51711, CA51712, CA51713, CA51714, CA51715, CA51716, CA51717, CA51718, CA51719	MW-4D, MW-6S, MW-6D, MW-11S, MW-11D, MW-12S, MW-12D, MW-16S, MW-DUP	GW	4-Chloroaniline, Benzoic acid	High LCSD Recovery	None	20	20.6 32.1	No	None
	431609	CA51710	MW-4S	GW	%2,4,6-Tribromophenol	High Surrogate Recovery	High	15-110	112	SVOCs (No) Surrogates (Yes)	A high bias is possible; however, SVOCs were not reported in MW-4S at concentrations above laboratory reporting limits.
GCA58993	NA	CA59001	MW-14D	GW	CT ETPH	Poor surrogate recovery	Low	50-150	31	Yes	A slight low bias is possible. CT ETPH was reported at 160 ug/L. Applicable criteria is 250 ug/L.
	432381	CA58993, CA58994, CA58995, CA58996	MW-1S, MW-1D, MW-3S, MW-7S	GW	Bromomethane	High LCS/LSCD	None	70-130	141/134	No	None
	432677	CA58997, CA58998, CA59003	MW-9S, MW-19S, MW-9D	GW	2-Hexanone, 4-Methyl-2-pentanone, Acetone	Low LCS or LSCD Recovery	None	70-130	69 66 66	No	None
	432677	CA58997, CA58998, CA59003	MW-9S, MW-19S, MW-9D	GW	Dichlorodifluoromethane	Low LCS Recovery	None	70-130	65	No	None
GCA61339	432741	CA61339, CA61340, CA61341, CA61342	MW-3BR, MW-18D, MW-23S, MW-10BR	GW	Naphthalene	Lab Blank Contamination	High	ND<0.02	0.04	Yes	A high bias is likely; however, naphthalene was not reported near the applicable criteria in the four samples.
	433222	CA61339, CA61340, CA61341	MW-3BR, MW-18D, MW-23S	GW	Bromomethane	High LCS/LSCD	None	70-130	137/145	No	None
	433254	CA61342, CA61343, CA61344	MW-10BR, EQ BLANK, TRIP BLANK	GW	Acetone	Low LCS/LSCD Recovery	Low	70-130	55/55	No	A low bias is possible; however, the parameter was consistently not detected above laboratory reporting limits.
	433113	CA61343	EQ BLANK	GW	Benzyl butyl phthalate	Low LCSD Recovery	None	30-130	24	No	None
	433254	CA61342, CA61343, CA61344	MW-10BR, EQ BLANK, TRIP BLANK	GW	Dichlorodifluoromethane	Low LCSD Recovery	None	70-130	136	No	None
	433254	CA61342, CA61343, CA61344	MW-10BR, EQ BLANK, TRIP BLANK	GW	Methyl ethyl ketone, Tetrahydrofuran (THF)	Low LCSD Recovery	Low	70-130	59 69	No	A slightly low bias is possible; however, the parameter was consistently not detected above laboratory reporting limits
	432741	CA61339, CA61340, CA61341, CA61342	MW-3BR, MW-18D, MW-23S, MW-10BR	GW	1,2-Dichlorobenzene, 1,3-Dichlorobenzene, N-Nitrosodimethylamine, % 2-Fluorophenol	High LCS/LCSD RPD	Variability	20	21.3 20.7 21.1 26.1	No	Variability in the sample results is possible; however, the parameter was consistently not detected above laboratory reporting limits
	433113	CA61343	EQ BLANK	GW	1,2-Diphenylhydrazine, Benzoic acid, Benzyl butyl phthalate, NNitrosodiphenylamine, % Phenol-d5	High LCS/LCSD RPD	Variability	20	84.5 43.7 110.3 23.6 70.4	No	Slight variability in the sample results is possible; however, the parameter was consistently not detected above laboratory reporting limits
	433113	CA61343	EQ BLANK	GW	Benzo(a)pyrene, % Phenol-d5	High LCS/LCSD RPD	Variability	20	43 56.7	No	Slight variability in the sample results is possible; however, the parameter was consistently not detected above laboratory reporting limits
GCA61367	433254	CA61367	MW-7D	GW	Acetone	Low LCS/LSCD Recovery	Low	70-130	55/55	No	A low bias is possible; however, the parameter was consistently not detected above laboratory reporting limits.
	433254	CA61367	MW-7D	GW	Dichlorodifluoromethane	High LCS/LSCD	None	70-130	136	No	None
	433254	CA61367	MW-7D	GW	Methyl ethyl ketone, Tetrahydrofuran (THF)	Low LCS/LSCD	None	70-130	59 69	No	None
	433113	CA61367	MW-7D	GW	Benzyl butyl phthalate	Low LCSD Recovery	Low	30-130	24	No	A slightly low bias is possible; however, the parameter was consistently not detected above laboratory reporting limits
	433113	CA61367	MW-7D	GW	1,2-Diphenylhydrazine, Benzoic acid, Benzyl butyl phthalate, NNitrosodiphenylamine, % Phenol-d5	High LCS/LCSD RPD	Variability	20	84.2 43.7 110.3 23.6 70.4	No	Slight variability in the sample results is possible; however, the parameter was consistently not detected above laboratory reporting limits
	433113	CA61367	MW-7D	GW	Benzo(a)pyrene, % Phenol-d5	High LCS/LCSD RPD	None	20	43 56.7	No	None

TABLE 6
Summary of Laboratory Quality Control Data
Rockville Former MGP Site
13 Maple Street
Rockville, Connecticut

Laboratory Report ID	Batch Group	Lab Sample ID	Sample ID	Media	Compound	QA/QC Description	Result Bias	Target Range	Result %	Detected in Sample	DUE Consideration
GCB82836	454143	CB82838	MW-10BR	GW	Benzidine	Low LCS Recovery	Low	30-130	<10	No	A low bias is possible; however, the parameter was consistently not detected above laboratory reporting limits.
	454275	CB82836, CB82837, CB82838, CB82839, CB82852	MW-4SR, MW-25S, MW-10BR, MW-30S, TRIP BLANK	GW	Tetrahydrofuran (THF)	Low LCS Recovery	None	70-130	69	No	None
	453740	CB82836, CB82837, CB82839, CB82840, CB82841, CB82842, CB82843, CB82844, CB82845, CB82846, CB82847, CB82848, CB82849, CB82850, CB82851	MW-4SR, MW-25S, MW-30S, MW-3BR, MW-18D, MW-13S, MW-26S, MW-28S, MW-26D, MW-27S, MW-26BR, MW-13D, MW-7D, MW-DUP, EQ BLANK	GW	Hexachloroethane, Pyridine	Low LCS/LCSD Recovery	Low	30-130	18/24 18/17	No	A slightly low bias is possible; however, the parameter was consistently not detected above laboratory reporting limits
	454143	CB82838	MW-10BR	GW	Hexachlorocyclopentadiene	Low LCS/LCSD Recovery	Low	30-130	28/29	No	A slightly low bias is possible; however, the parameter was consistently not detected above laboratory reporting limits
	453740	CB82836, CB82837, CB82839, CB82840, CB82841, CB82842, CB82843, CB82844, CB82845, CB82846, CB82847, CB82848, CB82849, CB82850, CB82851	MW-4SR, MW-25S, MW-30S, MW-3BR, MW-18D, MW-13S, MW-26S, MW-28S, MW-26D, MW-27S, MW-26BR, MW-13D, MW-7D, MW-DUP, EQ BLANK	GW	Hexachlorocyclopentadiene, Pyridine	Low LCSD recovery	Low	30-130	27 29	No	A low bias is possible; however, the parameter was consistently not detected above laboratory reporting limits.
	454467	CB82839, CB82840, CB82841, CB82842, CB82843, CB82844, CB82845	MW-30S, MW-3BR, MW-18D, MW-13S, MW-26S, MW-28S, MW-26D	GW	4-Methyl-2-pentanone, Acetone, Chloromethane, Dichlorodifluoromethane, Tetrahydrofuran (THF)	Low LCSD Recovery	Low	70-130	67 62 62 55 64	No	A slightly low bias is possible; however, the parameter was consistently not detected above laboratory reporting limits
	453740	CB82836, CB82837, CB82839, CB82840, CB82841, CB82842, CB82843, CB82844, CB82845, CB82846, CB82847, CB82848, CB82849, CB82850, CB82851	MW-4SR, MW-25S, MW-30S, MW-3BR, MW-18D, MW-13S, MW-26S, MW-28S, MW-26D, MW-27S, MW-26BR, MW-13D, MW-7D, MW-DUP, EQ BLANK	GW	2,4-Dinitrophenol, N-Nitrosodimethylamine	Low LCSD recovery	Low	30-130	15 23	No	A slightly low bias is possible; however, the parameter was consistently not detected above laboratory reporting limits
	453740	CB82836, CB82837, CB82839, CB82840, CB82841, CB82842, CB82843, CB82844, CB82845, CB82846, CB82847, CB82848, CB82849, CB82850, CB82851	MW-4SR, MW-25S, MW-30S, MW-3BR, MW-18D, MW-13S, MW-26S, MW-28S, MW-26D, MW-27S, MW-26BR, MW-13D, MW-7D, MW-DUP, EQ BLANK	GW	1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 2,4-Dinitrophenol, 3,3'-Dichlorobenzidine 4,6-Dinitro-2-methylphenol, 4-Chloroaniline, Benzidine, Benzo(ghi)perylene, Dibenz(a,h)anthracene, Hexachlorocyclopentadiene, Hexachloroethane, N-Nitrosodimethylamine	High LCS/LCSD RPD	Variability	20	25 33.8 30 110.4 27.6 70.6 28.6 66.7 21.9 20.9 28.6 31.6 29.6	No	Slight variability in the sample results is possible; however, the parameter was consistently not detected above laboratory reporting limits
	454143	CB82838	MW-10BR	GW	3,3''-Dichlorobenzidine, Benzoic acid	High LCS/LCSD RPD	None	20	27.5 56.8	No	None
	453740	CB82836, CB82837, CB82839, CB82840, CB82841, CB82842, CB82843, CB82844, CB82845, CB82846, CB82847, CB82848, CB82849, CB82850, CB82851	MW-4SR, MW-25S, MW-30S, MW-3BR, MW-18D, MW-13S, MW-26S, MW-28S, MW-26D, MW-27S, MW-26BR, MW-13D, MW-7D, MW-DUP, EQ BLANK	GW	Hexachloroethane, % 2-Fluorophenol	High LCS/LCSD RPD	None	20	25.8 33.3	No	None
	454143	CB82838	MW-10BR	GW	2-Methylnaphthalene, Pyridine	High LCS/LCSD RPD	None	20	26.3 24	No	None
	454467	CB82839, CB82840, CB82841, CB82842, CB82843, CB82844, CB82845	MW-30S, MW-3BR, MW-18D, MW-13S, MW-26S, MW-28S, MW-26D	GW	Dichlorodifluoromethane	High LCS/LCSD RPD	None	30	32.1	No	None
GCB96386	456271	CB96386, CB96501	MW-14D, TRIP BLANK	GW	2,2-Dichloropropane, Dichlorodifluoromethane	High LCS/LCSD Recovery	None	70-130	141/143 165/168	No	None
	456620	CB96386, CB96387	MW-14D, TRIP BLANK	GW	2,2-Dichloropropane, Dichlorodifluoromethane, Trichlorofluoromethane	High LCS/LCSD Recovery	None	70-130	96/139 139/161 136/136	No	None
	456158	CB96386, CB96387, CB96388, CB96389, CB96390, CB96391	MW-14D, MW-14S, MW-26D, MW-26D FILTERED, MW-30S, MW-30S FILTERED	GW	% Nitrobenzene-d5	Low LCSD Recovery	None	30-130	28	Yes	None
	456158	CB96386, CB96387, CB96388, CB96389, CB96390, CB96391	MW-14D, MW-14S, MW-26D, MW-26D FILTERED, MW-30S, MW-30S FILTERED	GW	% Nitrobenzene-d5	Low Surrogate Recovery	Low	30-13	22	Yes	A low bias for SVOCs is possible; however, results were consistent with previous sampling events. Four of the six samples had SVOCs at concentrations above applicable criteria, the remaining two samples did not have SVOCs reported at concentrations above laboratory reporting limits
GCA91708	439411	CA91708	SB-33 5-7FT	Soil		Lab Blank Contamination	High	ND<0.3	0.64	Yes	A slightly high bias is possible; however, the sample result was below criteria
	439334	CA91708	SB-33 5-7FT	Soil	CT ETPH	Low Surrogate Recovery	None	60-120	53	Yes	None
	439719	CA91714, CA91715, CA91719, CA91720, CA91721	SB-42 2-4 FT, SB-41 1-3 FT, SB-44 1-3 FT, SB-45 0-2 FT, SB-65 1-3 FT	Soil	2-Hexanone, Methyl ethyl ketone, Methylene chloride	Low LCSD Recovery	None	70-130	66 61 68	No	None
	439785	CA91714, CA91715, CA91717, CA91719, CA91720, CA91721	SB-42 2-4 FT, SB-41 1-3 FT, SB-47 2-4 FT, SB-44 1-3 FT, SB-45 0-2 FT, SB-65 1-3 FT	Soil	2,4-Dinitrophenol	Low LCS/LCSD	Low	60-120	10/<10	No	A slightly low bias is possible; however, the parameter was consistently not detected above laboratory reporting limits
	439785	CA91714, CA91715, CA91717, CA91719, CA91720, CA91721	SB-42 2-4 FT, SB-41 1-3 FT, SB-47 2-4 FT, SB-44 1-3 FT, SB-45 0-2 FT, SB-65 1-3 FT	Soil	4,6-Dinitro-2-methylphenol	Low LCS/LCSD	Low	30-130	23/15	No	A slightly low bias is possible; however, the parameter was consistently not detected above laboratory reporting limits
	439785	CA91714, CA91715, CA91717, CA91719, CA91720, CA91721	SB-42 2-4 FT, SB-41 1-3 FT, SB-47 2-4 FT, SB-44 1-3 FT, SB-45 0-2 FT, SB-65 1-3 FT	Soil	4,6-Dinitro-2-methylphenol	High LCS/LCSD RPD	None	30	60.5	No	None
	440641	CA91711, CA91712	SB-36 2-4 FT, SB-37 2-4 FT	Soil	Anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Chrysene, Indeno(1,2,3-cd)pyrene, % 2-Fluorobiphenyl, % Nitrobenzene-d5, % Terphenyl-d14	High LCS/LCSD RPD	Variability	30	32.3, 30.9, 31.3, 30.9, 31.6, 46.4, 38.4, 49.1	Yes No	Variability in sample results is possible; however, results appear consistent with nearby samples.
	439785	CA91714, CA91715, CA91717, CA91719, CA91720, CA91721	SB-42 2-4 FT, SB-41 1-3 FT, SB-47 2-4 FT, SB-44 1-3 FT, SB-45 0-2 FT, SB-65 1-3 FT	Soil	Benzoic Acid	Low LCS/LSCD and Low MS/MSD recovery	Low	30	<10/<10 <10/<10	No	A low bias is possible; however, the parameter was consistently not detected above laboratory reporting limits.
	439785	CA91714, CA91715, CA91717, CA91719, CA91720, CA91721	SB-42 2-4 FT, SB-41 1-3 FT, SB-47 2-4 FT, SB-44 1-3 FT, SB-45 0-2 FT, SB-65 1-3 FT	Soil	Pyridine	Low LCS/LSCD and Low MS/MSD recovery	Low	30	27/29 29/23	No	A low bias is possible; however, the parameter was consistently not detected above laboratory reporting limits.
	439719	CA91714, CA91715, CA91719, CA91720, CA91721	SB-42 2-4 FT, SB-41 1-3 FT, SB-44 1-3 FT, SB-45 0-2 FT, SB-65 1-3 FT	Soil	Acetone	Low LCS/LSCD and Low MS/MSD recovery	Low	70-130	61/54 65/64	No	A slightly low bias is possible; however, the parameter was consistently not detected above laboratory reporting limits
	439968	CA91708, CA91709, CA91714, CA91719, CA91720, CA91721	SB-33 5-7FT, SB-34 2-4 FT, SB-42 2-4 FT, SB-45 0-2 FT, SB-65 1-3 FT	Soil	Acetone	Low LCS/LSCD and Low MS/MSD recovery	Low	70-130	68/70 59/68	No	A slightly low bias is possible; however, the parameter was consistently not detected above laboratory reporting limits
	Surrogate	CA91709, CA91714, CA91715, CA91717, CA91719, CA91720, CA91721	SB-34 2-4 FT, SB-42 2-4 FT, SB-41 1-3 FT, SB-47 2-4 FT, SB-44 1-3 FT, SB-45 0-2 FT, SB-65 1-3 FT	Soil	Mercury	High Sample/Duplicate RPD	Variability	30	48.4	Yes	Variability in sample results is possible; however, results appear consistent with nearby samples.

TABLE 6
Summary of Laboratory Quality Control Data
Rockville Former MGP Site
13 Maple Street
Rockville, Connecticut

Laboratory Report ID	Batch Group	Lab Sample ID	Sample ID	Media	Compound	QA/QC Description	Result Bias	Target Range	Result %	Detected in Sample	DUE Consideration
GCA94064	439640	CA94064	SB-46 (5-7 FT)	Soil	2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol, Pyridine	Low LCS	Low	30-130	<10/<10 19/25 29/-	No	A slightly low bias is possible; however, the parameter was consistently not detected above laboratory reporting limits
	439590	CA94064, CA94067	SB-46 (5-7 FT), SB-35 (5-7 FT)	Soil	% DCBP Surrogate Rec	High LCS/LCSD RPD	None	30	37	Surrogate: Yes	Variability in PCB sample results is possible; however, results appear consistent with nearby samples.
	439640	CA94064	SB-46 (5-7 FT)	Soil	Benzoic Acid	Low LCS/LSCD and Low MS/MSD recovery	Low	30	<10/<10 <10/<10	No	A slightly low bias is possible; however, the parameter was consistently not detected above laboratory reporting limits
	439971	CA94069	SB-38 (5-7 FT)	Soil	Acetone, Methyl ethyl ketone	Low LCS/LSCD and Low MS/MSD recovery	Low	70-130	55/57 50/50 67/65 64/65	No	A slightly low bias is possible; however, the parameter was consistently not detected above laboratory reporting limits
	439979	CA94064, CA94065, CA94067	SB-46 (5-7 FT), SB-47 (11-13 FT), SB-35 (5-7 FT)	Soil	Acetone	Low LCS/LSCD and Low MS/MSD recovery	Low	70-130	55/57 50/50	No	A slightly low bias is possible; however, the parameter was consistently not detected above laboratory reporting limits
	440153	CA94064, CA94067	SB-46 (5-7 FT), SB-35 (5-7 FT)	Soil	Trichlorofluoromethane	High MS/MSD Recovery	Variability	30 70-130	MSD: 62 RPD: 39	No	Variability in the sample results is possible; however, the parameter was consistently not detected above laboratory reporting limits.
	439657	CA94064, CA94067, CA94069	SB-46 (5-7 FT), SB-35 (5-7 FT), SB-38 (5-7 FT)	Soil	Arsenic, Nickel	High Sample/Duplicate RPD	Variability	30	46.4/43.6	Yes	Variability in sample results is possible. Arsenic was reported in SB-46, SB-36, and SB-38 within ±9 mg/kg of criteria (18.5, 14.8, and 3.86 mg/Kg, receptively). Nickel was reported in the three samples well below criteria.
GCA95004	439944	CA95004	SB-44 (10-12`)	Soil	Mercury	Low LCS/LSCD Recovery	None	80-120	79.4	No	None
	439997	CA95004	SB-44 (10-12`)	Soil	4,6-Dinitro-2-methylphenol	Low LCS/LSCD Recovery	None	30-130	17/30	No	None
	439997	CA95004	SB-44 (10-12`)	Soil	4,6-Dinitro-2-methylphenol	High LCS/LCSD RPD	None	30	55.3	No	None
	439997	CA95004	SB-44 (10-12`)	Soil	2,4-Dinitrophenol, Aniline, Benzoic Acid	Low LCS/LSCD and Low MS/MSD recovery	Low	30-130	<10/19	No	A low bias is possible; however, the parameter was consistently not detected above laboratory reporting limits.
	439941	CA95004, CA95005, CA95006, CA95007, CA95008	SB-44 (10-12`), HA-10 (2-2.5`), HA-11 (1-2`)	Soil	Mercury	High Sample/Duplicate RPD	Variability	30	92.5	Yes	Variability in the sample results is possible; however, results were consistent with other samples and were well below applicable criteria.
	439805	CA95004, CA95005, CA95006, CA95007	SB-44 (10-12`), HA-10 (2-2.5`), HA-11 (1-2`)	Soil	Barium, Copper, Lead	High sample/duplicate RPD	Variability	30	63.1 46.8 42.6	Yes	Variability in the sample results is possible; however, results were consistent with other samples and were well below applicable criteria.
GCA96212	440138	CA96213, CA96214, CA96215, CA96216	SB-51 (10-11 FT), SB-50 (2-4 FT), SB-32 (2-4 FT), SB-48 (2-4 FT)	Soil	Methyl ethyl ketone	Low LCS and Batch MS/MSD recovery	Slightly Low	70-130	66 66/65	No	A slightly low bias is possible; however, the parameter was consistently not detected above laboratory reporting limits
GCA98174	440548	CA98174	SB-43 (0.5-2FT)	Soil	2,4-Dinitrophenol	Low LCS/LSCD Recovery	Low	30-130	15/11	No	A low bias is possible; however, the parameter was consistently not detected above laboratory reporting limits.
	440548	CA98174	SB-43 (0.5-2FT)	Soil	Benzoic Acid	Low LCS/LSCD Recovery	Low	30-130	<10/<10	No	A low bias is possible; however, the parameter was consistently not detected above laboratory reporting limits.
	440548	CA98174	SB-43 (0.5-2FT)	Soil	4,6-Dinitro-2-methylphenol	Low LSCD Recovery	None	30-130	29	No	None
	440548	CA98174	SB-43 (0.5-2FT)	Soil	2,4-Dinitrophenol, Benzidine	High LCS/LCSD RPD	None	30	30.8 31.3	No	None
	440548	CA98174	SB-43 (0.5-2FT)	Soil	Pyridine	The QC recovery is below the lower range but within the method criteria. A low bias for this analyte is possible.	Low	30-130	26/23 32/28	No	A low bias is possible; however, the parameter was consistently not detected above laboratory reporting limits.
GCA98805	440584	CA98805	SB-31 (1-3 FT)	Soil	2,4-Dinitrophenol, Benzoic Acid	Low LCS/LCSD Recovery	Low	30-130	12/<10 <10/<10	No	A low bias is possible; however, the parameter was consistently not detected above laboratory reporting limits.
	440584	CA98807, CA98809	SB-30 (2-4 FT), SB-28 (1-3 FT)	Soil	4,6-Dinitro-2-methylphenol	Low LSCD Recovery	None	30-130	23	No	None
	440922	CA98807, CA98809, CA98810	SB-30 (2-4 FT), SB-28 (1-3 FT), SB-28 (22-24 FT)	Soil	Acetone	Low LSCD Recovery	None	30-130	65	No	None
	441761	CA98805	SB-31 (1-3 FT)	Soil	Methoxychlor	High MS/MSD RPD Recovery	Variability	30	56.1	No	Variability in the sample results is possible; however, the parameter was consistently not detected above laboratory reporting limits
	440577	CA98805, CA98807, CA98809	SB-31 (1-3 FT), SB-30 (2-4 FT), SB-28 (1-3 FT)	Soil	Chromium, Copper, Nickel	High sample/duplicate RPD	Variability	30	47.9 43.1 50.8	Yes	Variability in the sample results is possible; however, the parameter was consistently not detected above laboratory reporting limits
GCA99810	441925	CA99810	SB-29 (3-5 FT)	Soil	4,6-Dinitro-2-methylphenol	Low LCS Recovery	None	30-130	19	No	None
	441925	CA99810	SB-29 (3-5 FT)	Soil	2,4-Dinitrophenol	Low LCS/LSCD Recovery	Low	30-130	<10/17	No	A low bias is possible; however, the parameter was consistently not detected above laboratory reporting limits.
	441925	CA99810	SB-29 (3-5 FT)	Soil	4,6-Dinitro-2-methylphenol	High LCS/LCSD RPD	None	30	66.7	No	None
	441911	CA99813	SB-59 (22-24 FT)	Soil	Acetone	Low LCS and Batch MS/MSD recovery	Low	70-130	69 59/50	No	A low bias is possible; however, the parameter was consistently not detected above laboratory reporting limits.
	441925	CA99810	SB-59 (22-24 FT)	Soil	Benzidine, Benzoic Acid	Low LCS/LSCD and Low MS/MSD recovery	Low	30-130	55/55 23/34 <10/10 <10/22	No	A low bias is possible; however, the parameter was consistently not detected above laboratory reporting limits.
	441911	CA99813	SB-59 (22-24 FT)	Soil	2-Hexanone	Low MSD Recovery	None	70-130	69	No	None
GCB01074	No Issues			Soil							
GCB15818	444065	CB15818, CB15819, CB15820	SB-62 (31-33FT), SB-61 (23-25FT), DUP-101	Soil	CT ETPH	Low LCS recovery	None	60-120	59	No, Yes, No	None
	444794	CB15819	SB-61 (23-25FT)	Soil	Acetone	Low LCS and Batch MS/MSD recovery	Low	70-130	68 60/60	No	A slightly low bias is possible; however, the parameter was consistently not detected above laboratory reporting limits
GCB17425	444516	CB17429	SB-60 (40-42 FT)	Soil	CT ETPH	High LCS/LCSD RPD	None	30	31	No	None
GCB20628	445221	CB20630, CB20631, CB20632, CB20633	SB-40A (5.5-7.5 FT), SB-39 (3-5 FT), SB-53 (3-5 FT), DUP-102	Soil	Barium	High sample/duplicate RPD	Variability	30	33.5	Yes	Variability in the sample results is possible; however, results were consistent with other samples and were well below applicable criteria.
GCB22894	No Issues			Soil							
GCB62410	449891	CB62410	SB-63 (35-37FT)	Soil	Acetone	Low LCS/LSCD and Low MS/MSD recovery	Low	70-130	61/58 58/65	No	A slightly low bias is possible; however, the parameter was consistently not detected above laboratory reporting limits
GCB72216	No Issues			Soil							
GCB20634	445221	CB20634, CB20635, CB20636, CB20637, CB20638, CB20639, CB20640	SED-07, SED-08, SED-09, SED-06A, SED-06B, SED-06C, SED-DUP-1	Sed	Barium	High sample/duplicate RPD	Variability	30	33.5	Yes	Variability in the sample results is possible
GCB20634	445176	CB20634, CB20635, CB20636, CB20640	SED-07, SED-08, SED-09, SED-DUP-1	Sed	2,4-Dinitrophenol	Low LCS/LSCD Recovery	Low	30-130	11/14	No	A slightly low bias is possible; however, the parameter was consistently not detected above laboratory reporting limits
GCB20634	445176	CB20634, CB20635, CB20636, CB20640	SED-07, SED-08, SED-09, SED-DUP-1	Sed	Benzoic Acid	Low LCS/LSCD Recovery	Low	30-130	<10/<10	No	A low bias is possible; however, the parameter was consistently not detected above laboratory reporting limits.
GCB20634	445176	CB20634, CB20635, CB20636, CB20640	SED-07, SED-08, SED-09, SED-DUP-1	Sed	4,6-Dinitro-2-methylphenol	Low LCS Recovery	None	30-130	24	No	None
GCB20634	445176	CB20634, CB20635, CB20636, CB20640	SED-07, SED-08, SED-09, SED-DUP-1	Sed	4,6-Dinitro-2-methylphenol	High LCS/LCSD RPD	None	30	31.6	No	None
GCB20634	445496	CB20634, CB20635, CB20640	SED-07, SED-08, SED-DUP-1	Sed	Acetone	Low MS/MSD Recovery	Low	70-130	69/62	No	A low bias is possible; however, the parameter was consistently not detected above laboratory reporting limits.
GCB20634	445686	CB20636	SED-09	Sed	Acetone	Low LCSD and Batch MS/MSD recovery	Low	70-130	67 64/64	No	A low bias is possible; however, the parameter was consistently not detected above laboratory reporting limits.

Notes
LCS - Laboratory Control Sample
LCSD - LCS Duplicate
MS - Matrix Spike
MSD - MS Duplicate
RPD - Relative Percent Difference

2018

SOIL LABORATORY

ANALYTICAL DATA

PHOENIX
Environmental Laboratories, Inc.

Tuesday, July 31, 2018

Attn: Ms. Lynn Willey
Tighe & Bond
213 Court St, Suite 1100
Middletown, CT 06457

Project ID: ROCKVILLE MGP
Sample ID#s: CA91708 - CA91709, CA91711 - CA91712, CA91714 - CA91715, CA91717, CA91719 - CA91721

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
UT Lab Registration #CT00007
VT Lab Registration #VT11301

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

July 31, 2018

FOR: Attn: Ms. Lynn Willey
Tighe & Bond
213 Court St, Suite 1100
Middletown, CT 06457

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		07/17/18	13:40
Location Code:	TIGHE-DAS	Received by:	LB	07/17/18	15:03
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	15-0755-44B				

Laboratory Data

SDG ID: GCA91708
Phoenix ID: CA91708

Project ID: ROCKVILLE MGP
Client ID: SB-33 5-7 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Silver	< 1.8	1.8	mg/Kg	1	07/19/18	EK	SW6010C	
Arsenic	22.4	0.67	mg/Kg	1	07/19/18	EK	SW6010C	
Barium	66.6	0.34	mg/Kg	1	07/19/18	EK	SW6010C	
Beryllium	0.33	0.27	mg/Kg	1	07/19/18	EK	SW6010C	
Cadmium	0.44	0.34	mg/Kg	1	07/19/18	EK	SW6010C	
Chromium	13.8	0.34	mg/Kg	1	07/19/18	EK	SW6010C	
Copper	34.2	0.34	mg/kg	1	07/19/18	EK	SW6010C	B
Mercury	0.04	0.03	mg/Kg	1	07/19/18	RS	SW7471B	
Nickel	11.0	0.34	mg/Kg	1	07/19/18	EK	SW6010C	
Lead	55.5	0.34	mg/Kg	1	07/19/18	EK	SW6010C	
Antimony	< 3.4	3.4	mg/Kg	1	07/19/18	EK	SW6010C	
Selenium	< 2.1	2.1	mg/Kg	1	07/19/18	EK	SW6010C	
SPLP Silver	< 0.010	0.010	mg/L	1	07/19/18	TH	SW6010C	
SPLP Arsenic	< 0.02	0.02	mg/L	1	07/19/18	EK	SW6010C	
SPLP Barium	< 0.010	0.010	mg/L	1	07/19/18	TH	SW6010C	
SPLP Beryllium	< 0.001	0.001	mg/L	1	07/19/18	TH	SW6010C	
SPLP Cadmium	< 0.005	0.005	mg/L	1	07/19/18	TH	SW6010C	
SPLP Chromium	< 0.010	0.010	mg/L	1	07/19/18	TH	SW6010C	
SPLP Copper	< 0.010	0.010	mg/L	1	07/19/18	TH	SW6010C	
SPLP Mercury	< 0.0005	0.0005	mg/L	1	07/19/18	RS	SW7470A	
SPLP Nickel	< 0.010	0.010	mg/L	1	07/19/18	TH	SW6010C	
SPLP Lead	< 0.010	0.010	mg/L	1	07/19/18	TH	SW6010C	
SPLP Antimony	< 0.02	0.02	mg/L	1	07/19/18	EK	SW6010C	
SPLP Selenium	< 0.020	0.020	mg/L	1	07/19/18	TH	SW6010C	
SPLP Thallium	< 0.005	0.005	mg/L	1	07/19/18	TH	SW6010C	
SPLP Vanadium	< 0.010	0.010	mg/L	1	07/19/18	TH	SW6010C	
SPLP Zinc	0.015	0.010	mg/L	1	07/19/18	EK	SW6010C	
Thallium	< 3.0	3.0	mg/Kg	1	07/19/18	EK	SW6010C	

Ver 1

Project ID: ROCKVILLE MGP
Client ID: SB-33 5-7 FT

Phoenix I.D.: CA91708

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
SPLP Metals Digestion	Completed				07/19/18	IQ/I	SW3010A
Vanadium	31.5	0.34	mg/Kg	1	07/19/18	EK	SW6010C
Zinc	38.1	0.34	mg/Kg	1	07/19/18	EK	SW6010C
Percent Solid	95		%		07/18/18	W	SW846-%Solid
Total Cyanide (SW9010C Distill.)	0.55	0.48	mg/Kg	1	07/19/18	EG	SW9012B
Soil Extraction for PCB	Completed				07/19/18	JA/V	SW3545A
Soil Extraction SVOA PAH	Completed				07/18/18	JJ/V	SW3545A
Extraction of CT ETPH	Completed				07/18/18	NTJ/V	SW3545A
Mercury Digestion	Completed				07/19/18	I/I	SW7471B
SPLP Digestion Mercury	Completed				07/19/18	I/I	SW1312/SW7470A
SPLP Extraction for Metals	Completed				07/18/18	I	SW1312
Total Metals Digest	Completed				07/18/18	L/AG	SW3050B
TPH by GC (Extractable Products)							
Ext. Petroleum H.C. (C9-C36)	1400	260	mg/Kg	5	07/19/18	JRB	CTETPH 8015D
Identification	**		mg/Kg	5	07/19/18	JRB	CTETPH 8015D
QA/QC Surrogates							
% n-Pentacosane	133		%	5	07/19/18	JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	350	ug/Kg	10	07/21/18	AW	SW8082A
PCB-1221	ND	350	ug/Kg	10	07/21/18	AW	SW8082A
PCB-1232	ND	350	ug/Kg	10	07/21/18	AW	SW8082A
PCB-1242	ND	350	ug/Kg	10	07/21/18	AW	SW8082A
PCB-1248	ND	350	ug/Kg	10	07/21/18	AW	SW8082A
PCB-1254	ND	350	ug/Kg	10	07/21/18	AW	SW8082A
PCB-1260	ND	350	ug/Kg	10	07/21/18	AW	SW8082A
PCB-1262	ND	350	ug/Kg	10	07/21/18	AW	SW8082A
PCB-1268	ND	350	ug/Kg	10	07/21/18	AW	SW8082A
QA/QC Surrogates							
% DCBP	98		%	10	07/21/18	AW	30 - 150 %
% TCMX	103		%	10	07/21/18	AW	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
1,1,1-Trichloroethane	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	100	ug/Kg	50	07/19/18	JLI	SW8260C
1,1,2-Trichloroethane	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
1,1-Dichloroethane	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
1,1-Dichloroethene	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
1,1-Dichloropropene	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	360	ug/Kg	50	07/19/18	JLI	SW8260C
1,2,3-Trichloropropane	ND	360	ug/Kg	50	07/19/18	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	360	ug/Kg	50	07/19/18	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	360	ug/Kg	50	07/19/18	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
1,2-Dibromoethane	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
1,2-Dichlorobenzene	ND	360	ug/Kg	50	07/19/18	JLI	SW8260C
1,2-Dichloroethane	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
1,2-Dichloropropane	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C

Ver 1

Project ID: ROCKVILLE MGP
Client ID: SB-33 5-7 FT

Phoenix I.D.: CA91708

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,3,5-Trimethylbenzene	ND	360	ug/Kg	50	07/19/18	JLI	SW8260C
1,3-Dichlorobenzene	ND	360	ug/Kg	50	07/19/18	JLI	SW8260C
1,3-Dichloropropane	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
1,4-Dichlorobenzene	ND	360	ug/Kg	50	07/19/18	JLI	SW8260C
2,2-Dichloropropane	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
2-Chlorotoluene	ND	360	ug/Kg	50	07/19/18	JLI	SW8260C
2-Hexanone	ND	28	ug/Kg	1	07/20/18	JLI	SW8260C
2-Isopropyltoluene	ND	360	ug/Kg	50	07/19/18	JLI	SW8260C
4-Chlorotoluene	ND	360	ug/Kg	50	07/19/18	JLI	SW8260C
4-Methyl-2-pentanone	ND	28	ug/Kg	1	07/20/18	JLI	SW8260C
Acetone	ND	280	ug/Kg	1	07/20/18	JLI	SW8260C
Acrylonitrile	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
Benzene	220	200	ug/Kg	50	07/19/18	JLI	SW8260C
Bromobenzene	ND	360	ug/Kg	50	07/19/18	JLI	SW8260C
Bromochloromethane	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
Bromodichloromethane	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
Bromoform	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
Bromomethane	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
Carbon Disulfide	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
Carbon tetrachloride	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
Chlorobenzene	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
Chloroethane	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
Chloroform	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
Chloromethane	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
cis-1,2-Dichloroethene	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
cis-1,3-Dichloropropene	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
Dibromochloromethane	ND	3.3	ug/Kg	1	07/20/18	JLI	SW8260C
Dibromomethane	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
Dichlorodifluoromethane	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
Ethylbenzene	3.6	3.3	ug/Kg	1	07/20/18	JLI	SW8260C
Hexachlorobutadiene	ND	360	ug/Kg	50	07/19/18	JLI	SW8260C
Isopropylbenzene	ND	360	ug/Kg	50	07/19/18	JLI	SW8260C
m&p-Xylene	19	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
Methyl Ethyl Ketone	ND	33	ug/Kg	1	07/20/18	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	11	ug/Kg	1	07/20/18	JLI	SW8260C
Methylene chloride	ND	11	ug/Kg	1	07/20/18	JLI	SW8260C
Naphthalene	640	360	ug/Kg	50	07/19/18	JLI	SW8260C
n-Butylbenzene	ND	360	ug/Kg	50	07/19/18	JLI	SW8260C
n-Propylbenzene	ND	360	ug/Kg	50	07/19/18	JLI	SW8260C
o-Xylene	22	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
p-Isopropyltoluene	ND	360	ug/Kg	50	07/19/18	JLI	SW8260C
sec-Butylbenzene	ND	360	ug/Kg	50	07/19/18	JLI	SW8260C
Styrene	5.3	4.4	ug/Kg	1	07/20/18	JLI	SW8260C
tert-Butylbenzene	ND	360	ug/Kg	50	07/19/18	JLI	SW8260C
Tetrachloroethene	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
Tetrahydrofuran (THF)	ND	11	ug/Kg	1	07/20/18	JLI	SW8260C
Toluene	400	360	ug/Kg	50	07/19/18	JLI	SW8260C
Total Xylenes	41.0	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
trans-1,2-Dichloroethene	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C

Ver 1

Project ID: ROCKVILLE MGP
Client ID: SB-33 5-7 FT

Phoenix I.D.: CA91708

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
trans-1,3-Dichloropropene	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	720	ug/Kg	50	07/19/18	JLI	SW8260C
Trichloroethene	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
Trichlorofluoromethane	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
Trichlorotrifluoroethane	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
Vinyl chloride	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	99		%	50	07/19/18	JLI	70 - 130 %
% Bromofluorobenzene	101		%	50	07/19/18	JLI	70 - 130 %
% Dibromofluoromethane	100		%	1	07/20/18	JLI	70 - 130 %
% Toluene-d8	95		%	1	07/20/18	JLI	70 - 130 %
Polynuclear Aromatic HC							
2-Methylnaphthalene	1900	1200	ug/Kg	5	07/19/18	KCA	SW8270D
Acenaphthene	ND	1200	ug/Kg	5	07/19/18	KCA	SW8270D
Acenaphthylene	2800	1200	ug/Kg	5	07/19/18	KCA	SW8270D
Anthracene	1400	1200	ug/Kg	5	07/19/18	KCA	SW8270D
Benz(a)anthracene	2700	1000	ug/Kg	5	07/19/18	KCA	SW8270D
Benzo(a)pyrene	4700	1000	ug/Kg	5	07/19/18	KCA	SW8270D
Benzo(b)fluoranthene	3800	1000	ug/Kg	5	07/19/18	KCA	SW8270D
Benzo(ghi)perylene	10000	1000	ug/Kg	5	07/19/18	KCA	SW8270D
Benzo(k)fluoranthene	2200	1000	ug/Kg	5	07/19/18	KCA	SW8270D
Chrysene	3700	1000	ug/Kg	5	07/19/18	KCA	SW8270D
Dibenz(a,h)anthracene	1700	1000	ug/Kg	5	07/19/18	KCA	SW8270D
Fluoranthene	3300	1200	ug/Kg	5	07/19/18	KCA	SW8270D
Fluorene	ND	1200	ug/Kg	5	07/19/18	KCA	SW8270D
Indeno(1,2,3-cd)pyrene	11000	1000	ug/Kg	5	07/19/18	KCA	SW8270D
Naphthalene	1300	1200	ug/Kg	5	07/19/18	KCA	SW8270D
Phenanthrene	4000	1200	ug/Kg	5	07/19/18	KCA	SW8270D
Pyrene	7000	1200	ug/Kg	5	07/19/18	KCA	SW8270D
QA/QC Surrogates							
% 2-Fluorobiphenyl	56		%	5	07/19/18	KCA	30 - 130 %
% Nitrobenzene-d5	57		%	5	07/19/18	KCA	30 - 130 %
% Terphenyl-d14	52		%	5	07/19/18	KCA	30 - 130 %
Field Extraction	Completed				07/17/18		SW5035A

Project ID: ROCKVILLE MGP
Client ID: SB-33 5-7 FT

Phoenix I.D.: CA91708

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

B = Present in blank, no bias suspected.

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Semi-Volatile Comment:
Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

TPH Comment:
**Petroleum hydrocarbon chromatogram contains a multicomponent hydrocarbon distribution in the range of C9 to C36. The sample was quantitated against a C9-C36 alkane hydrocarbon standard.

Volatile Comment:
There was a suppression of the last internal standard in the low level analysis, all affected compounds are reported from the methanol preserved high level analysis which did not exhibit this interference.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services.
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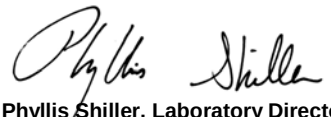

Phyllis Shiller, Laboratory Director
July 31, 2018
Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

July 31, 2018

FOR: Attn: Ms. Lynn Willey
Tighe & Bond
213 Court St, Suite 1100
Middletown, CT 06457

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		07/16/18	11:10
Location Code:	TIGHE-DAS	Received by:	LB	07/17/18	15:03
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	15-0755-44B				

Laboratory Data

SDG ID: GCA91708
Phoenix ID: CA91709

Project ID: ROCKVILLE MGP
Client ID: SB-34 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 1.8	1.8	mg/Kg	1	07/21/18	EK	SW6010C
Arsenic	15.4	0.79	mg/Kg	1	07/21/18	EK	SW6010C
Barium	69.2	0.39	mg/Kg	1	07/21/18	EK	SW6010C
Beryllium	< 0.31	0.31	mg/Kg	1	07/21/18	EK	SW6010C
Cadmium	0.86	0.39	mg/Kg	1	07/21/18	EK	SW6010C
Chromium	16.4	0.39	mg/Kg	1	07/21/18	EK	SW6010C
Copper	32.0	0.39	mg/kg	1	07/21/18	EK	SW6010C
Mercury	0.36	0.03	mg/Kg	1	07/20/18	RS	SW7471B
Nickel	10.9	0.39	mg/Kg	1	07/21/18	EK	SW6010C
Lead	79.4	0.39	mg/Kg	1	07/21/18	EK	SW6010C
Antimony	< 3.9	3.9	mg/Kg	1	07/21/18	EK	SW6010C
Selenium	< 3.6	3.6	mg/Kg	1	07/21/18	EK	SW6010C
SPLP Silver	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Arsenic	< 0.02	0.02	mg/L	1	07/20/18	PS	SW6010C
SPLP Barium	0.016	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Beryllium	< 0.001	0.001	mg/L	1	07/20/18	EK	SW6010C
SPLP Cadmium	< 0.005	0.005	mg/L	1	07/20/18	EK	SW6010C
SPLP Chromium	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Copper	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Mercury	< 0.0005	0.0005	mg/L	1	07/23/18	RS	SW7470A
SPLP Nickel	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Lead	0.013	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Antimony	< 0.02	0.02	mg/L	1	07/20/18	EK	SW6010C
SPLP Selenium	< 0.020	0.020	mg/L	1	07/20/18	EK	SW6010C
SPLP Thallium	< 0.005	0.005	mg/L	1	07/20/18	EK	SW6010C
SPLP Vanadium	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Zinc	0.015	0.010	mg/L	1	07/20/18	EK	SW6010C
Thallium	< 3.5	3.5	mg/Kg	1	07/21/18	EK	SW6010C

Ver 1

Project ID: ROCKVILLE MGP
Client ID: SB-34 2-4 FT

Phoenix I.D.: CA91709

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
SPLP Metals Digestion	Completed				07/20/18	I/I	SW3010A
Vanadium	20.6	0.39	mg/Kg	1	07/21/18	EK	SW6010C
Zinc	48.2	0.39	mg/Kg	1	07/21/18	EK	SW6010C
Percent Solid	86		%		07/19/18	Q	SW846-%Solid
Total Cyanide (SW9010C Distill.)	1.39	0.58	mg/Kg	1	07/23/18	O/GD	SW9012B
Soil Extraction for PCB	Completed				07/27/18	BA/V	SW3545A
Soil Extraction SVOA PAH	Completed				07/20/18	NTJ/V	SW3545A
Extraction of CT ETPH	Completed				07/19/18	JA/V	SW3545A
Mercury Digestion	Completed				07/20/18	I/I	SW7471B
SPLP Digestion Mercury	Completed				07/23/18	I/I	SW1312/SW7470A
SPLP Extraction for Metals	Completed				07/19/18	I	SW1312
Total Metals Digest	Completed				07/20/18	T/AG/BF	SW3050B
TPH by GC (Extractable Products)							
Ext. Petroleum H.C. (C9-C36)	4800	290	mg/Kg	5	07/20/18	JRB	CTETPH 8015D
Identification	**		mg/Kg	5	07/20/18	JRB	CTETPH 8015D
QA/QC Surrogates							
% n-Pentacosane	Diluted Out		%	5	07/20/18	JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	380	ug/Kg	10	07/30/18	AW	SW8082A
PCB-1221	ND	380	ug/Kg	10	07/30/18	AW	SW8082A
PCB-1232	ND	380	ug/Kg	10	07/30/18	AW	SW8082A
PCB-1242	ND	380	ug/Kg	10	07/30/18	AW	SW8082A
PCB-1248	ND	380	ug/Kg	10	07/30/18	AW	SW8082A
PCB-1254	ND	380	ug/Kg	10	07/30/18	AW	SW8082A
PCB-1260	ND	380	ug/Kg	10	07/30/18	AW	SW8082A
PCB-1262	ND	380	ug/Kg	10	07/30/18	AW	SW8082A
PCB-1268	ND	380	ug/Kg	10	07/30/18	AW	SW8082A
QA/QC Surrogates							
% DCBP	57		%	10	07/30/18	AW	30 - 150 %
% TCMX	51		%	10	07/30/18	AW	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
1,1,1-Trichloroethane	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	2.7	ug/Kg	1	07/21/18	JLI	SW8260C
1,1,2-Trichloroethane	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
1,1-Dichloroethane	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
1,1-Dichloroethene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
1,1-Dichloropropene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
1,2,3-Trichloropropane	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
1,2-Dibromoethane	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
1,2-Dichlorobenzene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
1,2-Dichloroethane	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
1,2-Dichloropropane	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C

Ver 1

Project ID: ROCKVILLE MGP
Client ID: SB-34 2-4 FT

Phoenix I.D.: CA91709

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,3,5-Trimethylbenzene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
1,3-Dichlorobenzene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
1,3-Dichloropropane	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
1,4-Dichlorobenzene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
2,2-Dichloropropane	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
2-Chlorotoluene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
2-Hexanone	ND	23	ug/Kg	1	07/21/18	JLI	SW8260C
2-Isopropyltoluene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
4-Chlorotoluene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
4-Methyl-2-pentanone	ND	23	ug/Kg	1	07/21/18	JLI	SW8260C
Acetone	ND	230	ug/Kg	1	07/21/18	JLI	SW8260C
Acrylonitrile	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
Benzene	350	200	ug/Kg	50	07/20/18	JLI	SW8260C
Bromobenzene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
Bromochloromethane	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
Bromodichloromethane	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
Bromoform	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
Bromomethane	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
Carbon Disulfide	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
Carbon tetrachloride	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
Chlorobenzene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
Chloroethane	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
Chloroform	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
Chloromethane	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
cis-1,2-Dichloroethene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
cis-1,3-Dichloropropene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
Dibromochloromethane	ND	2.7	ug/Kg	1	07/21/18	JLI	SW8260C
Dibromomethane	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
Dichlorodifluoromethane	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
Ethylbenzene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
Hexachlorobutadiene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
Isopropylbenzene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
m&p-Xylene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
Methyl Ethyl Ketone	ND	27	ug/Kg	1	07/21/18	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	9.1	ug/Kg	1	07/21/18	JLI	SW8260C
Methylene chloride	ND	9.1	ug/Kg	1	07/21/18	JLI	SW8260C
Naphthalene	2400	530	ug/Kg	50	07/20/18	JLI	SW8260C
n-Butylbenzene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
n-Propylbenzene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
o-Xylene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
p-Isopropyltoluene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
sec-Butylbenzene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
Styrene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
tert-Butylbenzene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
Tetrachloroethene	650	530	ug/Kg	50	07/20/18	JLI	SW8260C
Tetrahydrofuran (THF)	ND	9.1	ug/Kg	1	07/21/18	JLI	SW8260C
Toluene	370	320	ug/Kg	50	07/20/18	JLI	SW8260C
Total Xylenes	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
trans-1,2-Dichloroethene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C

Project ID: ROCKVILLE MGP
Client ID: SB-34 2-4 FT

Phoenix I.D.: CA91709

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
trans-1,3-Dichloropropene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	9.1	ug/Kg	1	07/21/18	JLI	SW8260C
Trichloroethene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
Trichlorofluoromethane	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
Trichlorotrifluoroethane	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
Vinyl chloride	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	101		%	1	07/21/18	JLI	70 - 130 %
% Bromofluorobenzene	98		%	1	07/21/18	JLI	70 - 130 %
% Dibromofluoromethane	106		%	1	07/21/18	JLI	70 - 130 %
% Toluene-d8	102		%	1	07/21/18	JLI	70 - 130 %
Polynuclear Aromatic HC							
2-Methylnaphthalene	4700	2700	ug/Kg	10	07/21/18	KCA	SW8270D
Acenaphthene	ND	2700	ug/Kg	10	07/21/18	KCA	SW8270D
Acenaphthylene	28000	2700	ug/Kg	10	07/21/18	KCA	SW8270D
Anthracene	14000	2700	ug/Kg	10	07/21/18	KCA	SW8270D
Benz(a)anthracene	28000	1300	ug/Kg	10	07/21/18	KCA	SW8270D
Benzo(a)pyrene	16000	1200	ug/Kg	10	07/21/18	KCA	SW8270D
Benzo(b)fluoranthene	23000	1300	ug/Kg	10	07/21/18	KCA	SW8270D
Benzo(ghi)perylene	26000	1200	ug/Kg	10	07/21/18	KCA	SW8270D
Benzo(k)fluoranthene	19000	1300	ug/Kg	10	07/21/18	KCA	SW8270D
Chrysene	37000	1300	ug/Kg	10	07/21/18	KCA	SW8270D
Dibenz(a,h)anthracene	4400	1200	ug/Kg	10	07/21/18	KCA	SW8270D
Fluoranthene	50000	2700	ug/Kg	10	07/21/18	KCA	SW8270D
Fluorene	5800	2700	ug/Kg	10	07/21/18	KCA	SW8270D
Indeno(1,2,3-cd)pyrene	22000	1300	ug/Kg	10	07/21/18	KCA	SW8270D
Naphthalene	6900	2700	ug/Kg	10	07/21/18	KCA	SW8270D
Phenanthrene	45000	2700	ug/Kg	10	07/21/18	KCA	SW8270D
Pyrene	110000	13000	ug/Kg	50	07/23/18	KCA	SW8270D
QA/QC Surrogates							
% 2-Fluorobiphenyl	Diluted Out		%	10	07/21/18	KCA	30 - 130 %
% Nitrobenzene-d5	Diluted Out		%	10	07/21/18	KCA	30 - 130 %
% Terphenyl-d14	Diluted Out		%	10	07/21/18	KCA	30 - 130 %
Field Extraction	Completed				07/16/18		SW5035A

Project ID: ROCKVILLE MGP
Client ID: SB-34 2-4 FT

Phoenix I.D.: CA91709

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Semi-Volatile Comment:
Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

TPH Comment:
**Petroleum hydrocarbon chromatogram contains a multicomponent hydrocarbon distribution in the range of C12 to C36. The sample was quantitated against a C9-C36 alkane hydrocarbon standard.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services.
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Phyllis Shiller, Laboratory Director
July 31, 2018
Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

July 31, 2018

FOR: Attn: Ms. Lynn Willey
Tighe & Bond
213 Court St, Suite 1100
Middletown, CT 06457

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		07/16/18	13:40
Location Code:	TIGHE-DAS	Received by:	LB	07/17/18	15:03
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	15-0755-44B				

Laboratory Data

SDG ID: GCA91708
Phoenix ID: CA91711

Project ID: ROCKVILLE MGP
Client ID: SB-36 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.40	0.40	mg/Kg	1	07/28/18	EK	SW6010C
Arsenic	14.8	0.79	mg/Kg	1	07/28/18	EK	SW6010C
Barium	71.6	0.40	mg/Kg	1	07/28/18	EK	SW6010C
Beryllium	1.38	0.32	mg/Kg	1	07/28/18	EK	SW6010C
Cadmium	1.41	0.40	mg/Kg	1	07/28/18	EK	SW6010C
Chromium	19.0	0.40	mg/Kg	1	07/28/18	EK	SW6010C
Copper	40.7	0.8	mg/kg	1	07/28/18	EK	SW6010C
Mercury	0.44	0.03	mg/Kg	1	07/30/18	RS	SW7471B
Nickel	12.6	0.40	mg/Kg	1	07/28/18	EK	SW6010C
Lead	82.8	0.40	mg/Kg	1	07/28/18	EK	SW6010C
Antimony	< 4.0	4.0	mg/Kg	1	07/28/18	EK	SW6010C
Selenium	< 1.6	1.6	mg/Kg	1	07/28/18	EK	SW6010C
SPLP Silver	< 0.010	0.010	mg/L	1	07/31/18	EK	SW6010C
SPLP Arsenic	0.005	0.004	mg/L	1	07/31/18	EK	SW6010C
SPLP Barium	0.019	0.010	mg/L	1	07/31/18	EK	SW6010C
SPLP Beryllium	< 0.001	0.001	mg/L	1	07/31/18	EK	SW6010C
SPLP Cadmium	< 0.005	0.005	mg/L	1	07/31/18	EK	SW6010C
SPLP Chromium	< 0.010	0.010	mg/L	1	07/31/18	EK	SW6010C
SPLP Copper	< 0.010	0.010	mg/L	1	07/31/18	EK	SW6010C
SPLP Mercury	< 0.0005	0.0005	mg/L	1	07/30/18	RS	SW7470A
SPLP Nickel	< 0.010	0.010	mg/L	1	07/31/18	EK	SW6010C
SPLP Lead	0.015	0.010	mg/L	1	07/31/18	EK	SW6010C
SPLP Antimony	< 0.005	0.005	mg/L	1	07/31/18	EK	SW6010C
SPLP Selenium	< 0.020	0.020	mg/L	1	07/31/18	EK	SW6010C
SPLP Thallium	< 0.005	0.005	mg/L	1	07/31/18	EK	SW6010C
SPLP Vanadium	< 0.010	0.010	mg/L	1	07/31/18	EK	SW6010C
SPLP Zinc	0.086	0.010	mg/L	1	07/31/18	EK	SW6010C
Thallium	< 3.6	3.6	mg/Kg	1	07/28/18	EK	SW6010C

Ver 1

Project ID: ROCKVILLE MGP
Client ID: SB-36 2-4 FT

Phoenix I.D.: CA91711

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
SPLP Metals Digestion	Completed				07/30/18	IQ/I	SW3010A
Vanadium	36.5	0.40	mg/Kg	1	07/28/18	EK	SW6010C
Zinc	140	0.8	mg/Kg	1	07/28/18	EK	SW6010C
Percent Solid	89		%		07/27/18	Q	SW846-%Solid
Total Cyanide (SW9010C Distill.)	10.8	0.51	mg/Kg	1	07/30/18	O/GD	SW9012B
Soil Extraction for PCB	Completed				07/27/18	BA/V	SW3545A
Soil Extraction SVOA PAH	Completed				07/27/18	BJ/CKV	SW3545A
Extraction of CT ETPH	Completed				07/27/18	BJ/VCK	SW3545A
Mercury Digestion	Completed				07/30/18	I/I	SW7471B
SPLP Digestion Mercury	Completed				07/30/18	Q/I/I	SW1312/SW7470A
SPLP Extraction for Metals	Completed				07/27/18	Q	SW1312
Total Metals Digest	Completed				07/27/18	KD/AG	SW3050B
TPH by GC (Extractable Products)							
Ext. Petroleum H.C. (C9-C36)	280	270	mg/Kg	5	07/30/18	AW	CTETPH 8015D
Identification	**		mg/Kg	5	07/30/18	AW	CTETPH 8015D
QA/QC Surrogates							
% n-Pentacosane	79		%	5	07/30/18	AW	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	370	ug/Kg	10	07/30/18	AW	SW8082A
PCB-1221	ND	370	ug/Kg	10	07/30/18	AW	SW8082A
PCB-1232	ND	370	ug/Kg	10	07/30/18	AW	SW8082A
PCB-1242	ND	370	ug/Kg	10	07/30/18	AW	SW8082A
PCB-1248	ND	370	ug/Kg	10	07/30/18	AW	SW8082A
PCB-1254	ND	370	ug/Kg	10	07/30/18	AW	SW8082A
PCB-1260	ND	370	ug/Kg	10	07/30/18	AW	SW8082A
PCB-1262	ND	370	ug/Kg	10	07/30/18	AW	SW8082A
PCB-1268	ND	370	ug/Kg	10	07/30/18	AW	SW8082A
QA/QC Surrogates							
% DCBP	95		%	10	07/30/18	AW	30 - 150 %
% TCMX	84		%	10	07/30/18	AW	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
1,1,1-Trichloroethane	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	100	ug/Kg	50	07/28/18	JLI	SW8260C
1,1,2-Trichloroethane	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
1,1-Dichloroethane	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
1,1-Dichloroethene	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
1,1-Dichloropropene	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	420	ug/Kg	50	07/28/18	JLI	SW8260C
1,2,3-Trichloropropane	ND	420	ug/Kg	50	07/28/18	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	420	ug/Kg	50	07/28/18	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	420	ug/Kg	50	07/28/18	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
1,2-Dibromoethane	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
1,2-Dichlorobenzene	ND	420	ug/Kg	50	07/28/18	JLI	SW8260C
1,2-Dichloroethane	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
1,2-Dichloropropane	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C

Ver 1

Project ID: ROCKVILLE MGP
Client ID: SB-36 2-4 FT

Phoenix I.D.: CA91711

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,3,5-Trimethylbenzene	ND	420	ug/Kg	50	07/28/18	JLI	SW8260C
1,3-Dichlorobenzene	ND	420	ug/Kg	50	07/28/18	JLI	SW8260C
1,3-Dichloropropane	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
1,4-Dichlorobenzene	ND	420	ug/Kg	50	07/28/18	JLI	SW8260C
2,2-Dichloropropane	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
2-Chlorotoluene	ND	420	ug/Kg	50	07/28/18	JLI	SW8260C
2-Hexanone	ND	28	ug/Kg	1	07/28/18	JLI	SW8260C
2-Isopropyltoluene	ND	420	ug/Kg	50	07/28/18	JLI	SW8260C
4-Chlorotoluene	ND	420	ug/Kg	50	07/28/18	JLI	SW8260C
4-Methyl-2-pentanone	ND	28	ug/Kg	1	07/28/18	JLI	SW8260C
Acetone	ND	280	ug/Kg	1	07/28/18	JLI	SW8260C
Acrylonitrile	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
Benzene	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
Bromobenzene	ND	420	ug/Kg	50	07/28/18	JLI	SW8260C
Bromochloromethane	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
Bromodichloromethane	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
Bromoform	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
Bromomethane	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
Carbon Disulfide	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
Carbon tetrachloride	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
Chlorobenzene	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
Chloroethane	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
Chloroform	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
Chloromethane	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
cis-1,2-Dichloroethene	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
cis-1,3-Dichloropropene	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
Dibromochloromethane	ND	3.4	ug/Kg	1	07/28/18	JLI	SW8260C
Dibromomethane	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
Dichlorodifluoromethane	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
Ethylbenzene	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
Hexachlorobutadiene	ND	420	ug/Kg	50	07/28/18	JLI	SW8260C
Isopropylbenzene	ND	420	ug/Kg	50	07/28/18	JLI	SW8260C
m&p-Xylene	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
Methyl Ethyl Ketone	ND	34	ug/Kg	1	07/28/18	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	11	ug/Kg	1	07/28/18	JLI	SW8260C
Methylene chloride	ND	11	ug/Kg	1	07/28/18	JLI	SW8260C
Naphthalene	200	170	ug/Kg	50	07/28/18	JLI	SW8260C
n-Butylbenzene	ND	420	ug/Kg	50	07/28/18	JLI	SW8260C
n-Propylbenzene	ND	420	ug/Kg	50	07/28/18	JLI	SW8260C
o-Xylene	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
p-Isopropyltoluene	ND	420	ug/Kg	50	07/28/18	JLI	SW8260C
sec-Butylbenzene	ND	420	ug/Kg	50	07/28/18	JLI	SW8260C
Styrene	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
tert-Butylbenzene	ND	420	ug/Kg	50	07/28/18	JLI	SW8260C
Tetrachloroethene	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
Tetrahydrofuran (THF)	ND	11	ug/Kg	1	07/28/18	JLI	SW8260C
Toluene	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
Total Xylenes	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
trans-1,2-Dichloroethene	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C

Project ID: ROCKVILLE MGP
Client ID: SB-36 2-4 FT

Phoenix I.D.: CA91711

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
trans-1,3-Dichloropropene	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	850	ug/Kg	50	07/28/18	JLI	SW8260C
Trichloroethene	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
Trichlorofluoromethane	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
Trichlorotrifluoroethane	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
Vinyl chloride	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	100		%	50	07/28/18	JLI	70 - 130 %
% Bromofluorobenzene	97		%	50	07/28/18	JLI	70 - 130 %
% Dibromofluoromethane	99		%	1	07/28/18	JLI	70 - 130 %
% Toluene-d8	94		%	1	07/28/18	JLI	70 - 130 %
Polynuclear Aromatic HC							
2-Methylnaphthalene	570	260	ug/Kg	1	07/28/18	KCA	SW8270D
Acenaphthene	ND	260	ug/Kg	1	07/28/18	KCA	SW8270D
Acenaphthylene	5300	260	ug/Kg	1	07/28/18	KCA	SW8270D
Anthracene	920	260	ug/Kg	1	07/28/18	KCA	SW8270D
Benz(a)anthracene	730	260	ug/Kg	1	07/28/18	KCA	SW8270D
Benzo(a)pyrene	2000	260	ug/Kg	1	07/28/18	KCA	SW8270D
Benzo(b)fluoranthene	1400	260	ug/Kg	1	07/28/18	KCA	SW8270D
Benzo(ghi)perylene	2900	260	ug/Kg	1	07/28/18	KCA	SW8270D
Benzo(k)fluoranthene	1200	260	ug/Kg	1	07/28/18	KCA	SW8270D
Chrysene	1000	260	ug/Kg	1	07/28/18	KCA	SW8270D
Dibenz(a,h)anthracene	420	260	ug/Kg	1	07/28/18	KCA	SW8270D
Fluoranthene	820	260	ug/Kg	1	07/28/18	KCA	SW8270D
Fluorene	730	260	ug/Kg	1	07/28/18	KCA	SW8270D
Indeno(1,2,3-cd)pyrene	2500	260	ug/Kg	1	07/28/18	KCA	SW8270D
Naphthalene	770	260	ug/Kg	1	07/28/18	KCA	SW8270D
Phenanthrene	430	260	ug/Kg	1	07/28/18	KCA	SW8270D
Pyrene	1600	260	ug/Kg	1	07/28/18	KCA	SW8270D
QA/QC Surrogates							
% 2-Fluorobiphenyl	66		%	1	07/28/18	KCA	30 - 130 %
% Nitrobenzene-d5	59		%	1	07/28/18	KCA	30 - 130 %
% Terphenyl-d14	67		%	1	07/28/18	KCA	30 - 130 %
Field Extraction	Completed				07/16/18		SW5035A

Project ID: ROCKVILLE MGP
Client ID: SB-36 2-4 FT

Phoenix I.D.: CA91711

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Volatile Comment:
There was a suppression of the last internal standard in the low level analysis, all affected compounds are reported from the methanol preserved high level analysis which did not exhibit this interference.

Volatile Comment:
Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

TPH Comment:
**Petroleum hydrocarbon chromatogram contains a multicomponent hydrocarbon distribution in the range of C9 to C36. The sample was quantitated against a C9-C36 alkane hydrocarbon standard.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services.
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Phyllis Shiller, Laboratory Director
July 31, 2018
Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

July 31, 2018

FOR: Attn: Ms. Lynn Willey
Tighe & Bond
213 Court St, Suite 1100
Middletown, CT 06457

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		07/16/18	14:00
Location Code:	TIGHE-DAS	Received by:	LB	07/17/18	15:03
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	15-0755-44B				

Laboratory Data

SDG ID: GCA91708
Phoenix ID: CA91712

Project ID: ROCKVILLE MGP
Client ID: SB-37 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.39	0.39	mg/Kg	1	07/28/18	EK	SW6010C
Arsenic	4.48	0.77	mg/Kg	1	07/28/18	EK	SW6010C
Barium	63.5	0.39	mg/Kg	1	07/28/18	EK	SW6010C
Beryllium	0.58	0.31	mg/Kg	1	07/28/18	EK	SW6010C
Cadmium	< 0.39	0.39	mg/Kg	1	07/28/18	EK	SW6010C
Chromium	19.7	0.39	mg/Kg	1	07/28/18	EK	SW6010C
Copper	15.3	0.8	mg/kg	1	07/28/18	EK	SW6010C
Mercury	0.05	0.03	mg/Kg	1	07/30/18	RS	SW7471B
Nickel	10.8	0.39	mg/Kg	1	07/28/18	EK	SW6010C
Lead	20.2	0.39	mg/Kg	1	07/28/18	EK	SW6010C
Antimony	< 3.9	3.9	mg/Kg	1	07/28/18	EK	SW6010C
Selenium	< 1.5	1.5	mg/Kg	1	07/28/18	EK	SW6010C
SPLP Silver	< 0.010	0.010	mg/L	1	07/31/18	EK	SW6010C
SPLP Arsenic	< 0.004	0.004	mg/L	1	07/31/18	EK	SW6010C
SPLP Barium	0.013	0.010	mg/L	1	07/31/18	EK	SW6010C
SPLP Beryllium	< 0.001	0.001	mg/L	1	07/31/18	EK	SW6010C
SPLP Cadmium	< 0.005	0.005	mg/L	1	07/31/18	EK	SW6010C
SPLP Chromium	< 0.010	0.010	mg/L	1	07/31/18	EK	SW6010C
SPLP Copper	< 0.010	0.010	mg/L	1	07/31/18	EK	SW6010C
SPLP Mercury	< 0.0005	0.0005	mg/L	1	07/30/18	RS	SW7470A
SPLP Nickel	< 0.010	0.010	mg/L	1	07/31/18	EK	SW6010C
SPLP Lead	< 0.010	0.010	mg/L	1	07/31/18	EK	SW6010C
SPLP Antimony	< 0.005	0.005	mg/L	1	07/31/18	EK	SW6010C
SPLP Selenium	< 0.020	0.020	mg/L	1	07/31/18	EK	SW6010C
SPLP Thallium	< 0.005	0.005	mg/L	1	07/31/18	EK	SW6010C
SPLP Vanadium	< 0.010	0.010	mg/L	1	07/31/18	EK	SW6010C
SPLP Zinc	< 0.010	0.010	mg/L	1	07/31/18	EK	SW6010C
Thallium	< 3.5	3.5	mg/Kg	1	07/28/18	EK	SW6010C

Ver 1

Project ID: ROCKVILLE MGP
Client ID: SB-37 2-4 FT

Phoenix I.D.: CA91712

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
SPLP Metals Digestion	Completed				07/30/18	IQ/I	SW3010A
Vanadium	35.8	0.39	mg/Kg	1	07/28/18	EK	SW6010C
Zinc	38.8	0.8	mg/Kg	1	07/28/18	EK	SW6010C
Percent Solid	84		%		07/27/18	Q	SW846-%Solid
Total Cyanide (SW9010C Distill.)	< 0.60	0.60	mg/Kg	1	07/30/18	O/GD	SW9012B
Soil Extraction SVOA PAH	Completed				07/27/18	BJ/CKV	SW3545A
Extraction of CT ETPH	Completed				07/27/18	BJ/VCK	SW3545A
Mercury Digestion	Completed				07/30/18	I/I	SW7471B
SPLP Digestion Mercury	Completed				07/30/18	Q/I/I	SW1312/SW7470A
SPLP Extraction for Metals	Completed				07/27/18	Q	SW1312
Total Metals Digest	Completed				07/27/18	KD/AG	SW3050B
TPH by GC (Extractable Products)							
Ext. Petroleum H.C. (C9-C36)	ND	59	mg/Kg	1	07/28/18	JRB	CTETPH 8015D
Identification	ND		mg/Kg	1	07/28/18	JRB	CTETPH 8015D
QA/QC Surrogates							
% n-Pentacosane	78		%	1	07/28/18	JRB	50 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
1,1,1-Trichloroethane	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	4.1	ug/Kg	1	07/28/18	JLI	SW8260C
1,1,2-Trichloroethane	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
1,1-Dichloroethane	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
1,1-Dichloroethene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
1,1-Dichloropropene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
1,2,3-Trichloropropane	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
1,2-Dibromoethane	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
1,2-Dichlorobenzene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
1,2-Dichloroethane	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
1,2-Dichloropropane	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
1,3-Dichlorobenzene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
1,3-Dichloropropane	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
1,4-Dichlorobenzene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
2,2-Dichloropropane	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
2-Chlorotoluene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
2-Hexanone	ND	34	ug/Kg	1	07/28/18	JLI	SW8260C
2-Isopropyltoluene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
4-Chlorotoluene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
4-Methyl-2-pentanone	ND	34	ug/Kg	1	07/28/18	JLI	SW8260C
Acetone	ND	340	ug/Kg	1	07/28/18	JLI	SW8260C
Acrylonitrile	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
Benzene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
Bromobenzene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
Bromochloromethane	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C

Ver 1

Project ID: ROCKVILLE MGP
Client ID: SB-37 2-4 FT

Phoenix I.D.: CA91712

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Bromodichloromethane	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
Bromoform	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
Bromomethane	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
Carbon Disulfide	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
Carbon tetrachloride	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
Chlorobenzene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
Chloroethane	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
Chloroform	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
Chloromethane	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
cis-1,2-Dichloroethene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
cis-1,3-Dichloropropene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
Dibromochloromethane	ND	4.1	ug/Kg	1	07/28/18	JLI	SW8260C
Dibromomethane	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
Dichlorodifluoromethane	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
Ethylbenzene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
Hexachlorobutadiene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
Isopropylbenzene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
m&p-Xylene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
Methyl Ethyl Ketone	ND	41	ug/Kg	1	07/28/18	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	14	ug/Kg	1	07/28/18	JLI	SW8260C
Methylene chloride	ND	14	ug/Kg	1	07/28/18	JLI	SW8260C
Naphthalene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
n-Butylbenzene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
n-Propylbenzene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
o-Xylene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
p-Isopropyltoluene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
sec-Butylbenzene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
Styrene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
tert-Butylbenzene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
Tetrachloroethene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
Tetrahydrofuran (THF)	ND	14	ug/Kg	1	07/28/18	JLI	SW8260C
Toluene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
Total Xylenes	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
trans-1,2-Dichloroethene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
trans-1,3-Dichloropropene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	14	ug/Kg	1	07/28/18	JLI	SW8260C
Trichloroethene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
Trichlorofluoromethane	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
Trichlorotrifluoroethane	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
Vinyl chloride	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	96		%	1	07/28/18	JLI	70 - 130 %
% Bromofluorobenzene	89		%	1	07/28/18	JLI	70 - 130 %
% Dibromofluoromethane	95		%	1	07/28/18	JLI	70 - 130 %
% Toluene-d8	96		%	1	07/28/18	JLI	70 - 130 %
Polynuclear Aromatic HC							
2-Methylnaphthalene	ND	270	ug/Kg	1	07/28/18	KCA	SW8270D
Acenaphthene	ND	270	ug/Kg	1	07/28/18	KCA	SW8270D
Acenaphthylene	ND	270	ug/Kg	1	07/28/18	KCA	SW8270D

Ver 1

Project ID: ROCKVILLE MGP
Client ID: SB-37 2-4 FT

Phoenix I.D.: CA91712

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Anthracene	ND	270	ug/Kg	1	07/28/18	KCA	SW8270D
Benz(a)anthracene	ND	270	ug/Kg	1	07/28/18	KCA	SW8270D
Benzo(a)pyrene	ND	270	ug/Kg	1	07/28/18	KCA	SW8270D
Benzo(b)fluoranthene	ND	270	ug/Kg	1	07/28/18	KCA	SW8270D
Benzo(ghi)perylene	560	270	ug/Kg	1	07/28/18	KCA	SW8270D
Benzo(k)fluoranthene	ND	270	ug/Kg	1	07/28/18	KCA	SW8270D
Chrysene	ND	270	ug/Kg	1	07/28/18	KCA	SW8270D
Dibenz(a,h)anthracene	ND	270	ug/Kg	1	07/28/18	KCA	SW8270D
Fluoranthene	ND	270	ug/Kg	1	07/28/18	KCA	SW8270D
Fluorene	ND	270	ug/Kg	1	07/28/18	KCA	SW8270D
Indeno(1,2,3-cd)pyrene	530	270	ug/Kg	1	07/28/18	KCA	SW8270D
Naphthalene	ND	270	ug/Kg	1	07/28/18	KCA	SW8270D
Phenanthrene	ND	270	ug/Kg	1	07/28/18	KCA	SW8270D
Pyrene	ND	270	ug/Kg	1	07/28/18	KCA	SW8270D
QA/QC Surrogates							
% 2-Fluorobiphenyl	34		%	1	07/28/18	KCA	30 - 130 %
% Nitrobenzene-d5	31		%	1	07/28/18	KCA	30 - 130 %
% Terphenyl-d14	31		%	1	07/28/18	KCA	30 - 130 %
Field Extraction	Completed				07/16/18		SW5035A

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services.
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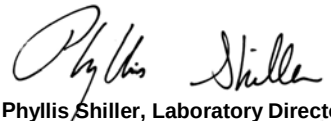

Phyllis Shiller, Laboratory Director
July 31, 2018
Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

July 31, 2018

FOR: Attn: Ms. Lynn Willey
Tighe & Bond
213 Court St, Suite 1100
Middletown, CT 06457

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		07/16/18	14:45
Location Code:	TIGHE-DAS	Received by:	LB	07/17/18	15:03
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	15-0755-44B				

Laboratory Data

SDG ID: GCA91708
Phoenix ID: CA91714

Project ID: ROCKVILLE MGP
Client ID: SB-42 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 1.8	1.8	mg/Kg	1	07/21/18	EK	SW6010C
Arsenic	28.5	0.72	mg/Kg	1	07/21/18	EK	SW6010C
Barium	92.0	0.36	mg/Kg	1	07/21/18	EK	SW6010C
Beryllium	0.35	0.29	mg/Kg	1	07/21/18	EK	SW6010C
Cadmium	0.38	0.36	mg/Kg	1	07/21/18	EK	SW6010C
Chromium	15.5	0.36	mg/Kg	1	07/21/18	EK	SW6010C
Copper	21.5	0.36	mg/kg	1	07/21/18	EK	SW6010C
Mercury	< 0.03	0.03	mg/Kg	1	07/20/18	RS	SW7471B
Nickel	8.87	0.36	mg/Kg	1	07/21/18	EK	SW6010C
Lead	44.6	0.36	mg/Kg	1	07/21/18	EK	SW6010C
Antimony	< 3.6	3.6	mg/Kg	1	07/21/18	EK	SW6010C
Selenium	< 1.4	1.4	mg/Kg	1	07/21/18	EK	SW6010C
SPLP Silver	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Arsenic	< 0.02	0.02	mg/L	1	07/20/18	PS	SW6010C
SPLP Barium	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Beryllium	< 0.001	0.001	mg/L	1	07/20/18	EK	SW6010C
SPLP Cadmium	< 0.005	0.005	mg/L	1	07/20/18	EK	SW6010C
SPLP Chromium	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Copper	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Mercury	< 0.0005	0.0005	mg/L	1	07/23/18	RS	SW7470A
SPLP Nickel	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Lead	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Antimony	< 0.02	0.02	mg/L	1	07/20/18	EK	SW6010C
SPLP Selenium	< 0.020	0.020	mg/L	1	07/20/18	EK	SW6010C
SPLP Thallium	< 0.005	0.005	mg/L	1	07/20/18	EK	SW6010C
SPLP Vanadium	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Zinc	0.027	0.010	mg/L	1	07/20/18	EK	SW6010C
Thallium	< 3.2	3.2	mg/Kg	1	07/21/18	EK	SW6010C

Ver 1

Project ID: ROCKVILLE MGP
Client ID: SB-42 2-4 FT

Phoenix I.D.: CA91714

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
SPLP Metals Digestion	Completed				07/20/18	I/I	SW3010A
Vanadium	24.7	0.36	mg/Kg	1	07/21/18	EK	SW6010C
Zinc	70.6	0.36	mg/Kg	1	07/21/18	EK	SW6010C
Percent Solid	90		%		07/19/18	Q	SW846-%Solid
Total Cyanide (SW9010C Distill.)	0.89	0.56	mg/Kg	1	07/23/18	O/GD	SW9012B
Soil Extraction for PCB	Completed				07/20/18	AA/V	SW3545A
Soil Extraction for SVOA	Completed				07/20/18	JJ/V	SW3545A
Extraction of CT ETPH	Completed				07/19/18	JA/V	SW3545A
Mercury Digestion	Completed				07/20/18	I/I	SW7471B
SPLP Digestion Mercury	Completed				07/23/18	I/I	SW1312/SW7470A
SPLP Extraction for Metals	Completed				07/19/18	I	SW1312
Total Metals Digest	Completed				07/20/18	T/AG/BF	SW3050B
TPH by GC (Extractable Products)							
Ext. Petroleum H.C. (C9-C36)	140	54	mg/Kg	1	07/20/18	JRB	CTETPH 8015D
Identification	**		mg/Kg	1	07/20/18	JRB	CTETPH 8015D
QA/QC Surrogates							
% n-Pentacosane	77		%	1	07/20/18	JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	370	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1221	ND	370	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1232	ND	370	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1242	ND	370	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1248	ND	370	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1254	870	370	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1260	ND	370	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1262	ND	370	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1268	ND	370	ug/Kg	10	07/23/18	AW	SW8082A
QA/QC Surrogates							
% DCBP	79		%	10	07/23/18	AW	30 - 150 %
% TCMX	71		%	10	07/23/18	AW	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
1,1,1-Trichloroethane	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	3.7	ug/Kg	1	07/20/18	JLI	SW8260C
1,1,2-Trichloroethane	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
1,1-Dichloroethane	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
1,1-Dichloroethene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
1,1-Dichloropropene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
1,2,3-Trichloropropane	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
1,2-Dibromoethane	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
1,2-Dichlorobenzene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
1,2-Dichloroethane	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
1,2-Dichloropropane	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C

Ver 1

Project ID: ROCKVILLE MGP
Client ID: SB-42 2-4 FT

Phoenix I.D.: CA91714

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,3,5-Trimethylbenzene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
1,3-Dichlorobenzene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
1,3-Dichloropropane	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
1,4-Dichlorobenzene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
2,2-Dichloropropane	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
2-Chlorotoluene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
2-Hexanone	ND	31	ug/Kg	1	07/20/18	JLI	SW8260C
2-Isopropyltoluene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
4-Chlorotoluene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
4-Methyl-2-pentanone	ND	31	ug/Kg	1	07/20/18	JLI	SW8260C
Acetone	ND	310	ug/Kg	1	07/20/18	JLI	SW8260C
Acrylonitrile	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
Benzene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
Bromobenzene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
Bromochloromethane	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
Bromodichloromethane	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
Bromoform	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
Bromomethane	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
Carbon Disulfide	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
Carbon tetrachloride	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
Chlorobenzene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
Chloroethane	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
Chloroform	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
Chloromethane	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
cis-1,2-Dichloroethene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
cis-1,3-Dichloropropene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
Dibromochloromethane	ND	3.7	ug/Kg	1	07/20/18	JLI	SW8260C
Dibromomethane	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
Dichlorodifluoromethane	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
Ethylbenzene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
Hexachlorobutadiene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
Isopropylbenzene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
m&p-Xylene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
Methyl Ethyl Ketone	ND	37	ug/Kg	1	07/20/18	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	12	ug/Kg	1	07/20/18	JLI	SW8260C
Methylene chloride	ND	12	ug/Kg	1	07/20/18	JLI	SW8260C
Naphthalene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
n-Butylbenzene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
n-Propylbenzene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
o-Xylene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
p-Isopropyltoluene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
sec-Butylbenzene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
Styrene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
tert-Butylbenzene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
Tetrachloroethene	470	360	ug/Kg	50	07/20/18	JLI	SW8260C
Tetrahydrofuran (THF)	ND	12	ug/Kg	1	07/20/18	JLI	SW8260C
Toluene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
Total Xylenes	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
trans-1,2-Dichloroethene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C

Project ID: ROCKVILLE MGP
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Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
trans-1,3-Dichloropropene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	12	ug/Kg	1	07/20/18	JLI	SW8260C
Trichloroethene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
Trichlorofluoromethane	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
Trichlorotrifluoroethane	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
Vinyl chloride	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	99		%	1	07/20/18	JLI	70 - 130 %
% Bromofluorobenzene	93		%	1	07/20/18	JLI	70 - 130 %
% Dibromofluoromethane	94		%	1	07/20/18	JLI	70 - 130 %
% Toluene-d8	102		%	1	07/20/18	JLI	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
1,2,4-Trichlorobenzene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
1,2-Dichlorobenzene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
1,2-Diphenylhydrazine	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
1,3-Dichlorobenzene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
1,4-Dichlorobenzene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2,4,5-Trichlorophenol	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2,4,6-Trichlorophenol	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2,4-Dichlorophenol	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2,4-Dimethylphenol	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2,4-Dinitrophenol	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
2,4-Dinitrotoluene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2,6-Dinitrotoluene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2-Chloronaphthalene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2-Chlorophenol	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2-Methylnaphthalene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2-Methylphenol (o-cresol)	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2-Nitroaniline	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
2-Nitrophenol	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
3,3'-Dichlorobenzidine	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
3-Nitroaniline	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
4,6-Dinitro-2-methylphenol	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
4-Bromophenyl phenyl ether	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
4-Chloro-3-methylphenol	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
4-Chloroaniline	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
4-Chlorophenyl phenyl ether	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
4-Nitroaniline	ND	580	ug/Kg	1	07/21/18	KCA	SW8270D
4-Nitrophenol	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Acenaphthene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Acenaphthylene	1100	260	ug/Kg	1	07/21/18	KCA	SW8270D
Acetophenone	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Aniline	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
Anthracene	370	260	ug/Kg	1	07/21/18	KCA	SW8270D
Benz(a)anthracene	420	260	ug/Kg	1	07/21/18	KCA	SW8270D
Benzidine	ND	200	ug/Kg	1	07/21/18	KCA	SW8270D
Benzo(a)pyrene	620	260	ug/Kg	1	07/21/18	KCA	SW8270D

Ver 1

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Phoenix I.D.: CA91714

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Benzo(b)fluoranthene	570	260	ug/Kg	1	07/21/18	KCA	SW8270D
Benzo(ghi)perylene	1100	260	ug/Kg	1	07/21/18	KCA	SW8270D
Benzo(k)fluoranthene	530	260	ug/Kg	1	07/21/18	KCA	SW8270D
Benzoic acid	ND	730	ug/Kg	1	07/21/18	KCA	SW8270D
Benzyl butyl phthalate	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Bis(2-chloroethoxy)methane	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Bis(2-chloroethyl)ether	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
Bis(2-chloroisopropyl)ether	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Bis(2-ethylhexyl)phthalate	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Carbazole	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
Chrysene	710	260	ug/Kg	1	07/21/18	KCA	SW8270D
Dibenz(a,h)anthracene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Dibenzofuran	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Diethyl phthalate	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Dimethylphthalate	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Di-n-butylphthalate	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
Di-n-octylphthalate	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Fluoranthene	500	260	ug/Kg	1	07/21/18	KCA	SW8270D
Fluorene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Hexachlorobenzene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Hexachlorobutadiene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Hexachlorocyclopentadiene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Hexachloroethane	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Indeno(1,2,3-cd)pyrene	870	260	ug/Kg	1	07/21/18	KCA	SW8270D
Isophorone	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Naphthalene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Nitrobenzene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
N-Nitrosodimethylamine	ND	200	ug/Kg	1	07/21/18	KCA	SW8270D
N-Nitrosodi-n-propylamine	ND	200	ug/Kg	1	07/21/18	KCA	SW8270D
N-Nitrosodiphenylamine	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
Pentachloronitrobenzene	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
Pentachlorophenol	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
Phenanthrene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Phenol	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Pyrene	900	260	ug/Kg	1	07/21/18	KCA	SW8270D
Pyridine	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
QA/QC Surrogates							
% 2,4,6-Tribromophenol	89		%	1	07/21/18	KCA	30 - 130 %
% 2-Fluorobiphenyl	66		%	1	07/21/18	KCA	30 - 130 %
% 2-Fluorophenol	57		%	1	07/21/18	KCA	30 - 130 %
% Nitrobenzene-d5	66		%	1	07/21/18	KCA	30 - 130 %
% Phenol-d5	66		%	1	07/21/18	KCA	30 - 130 %
% Terphenyl-d14	74		%	1	07/21/18	KCA	30 - 130 %
Field Extraction	Completed				07/16/18		SW5035A

Project ID: ROCKVILLE MGP
Client ID: SB-42 2-4 FT

Phoenix I.D.: CA91714

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

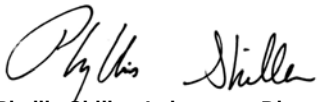
Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

TPH Comment:
**Petroleum hydrocarbon chromatogram contains a multicomponent hydrocarbon distribution in the range of C12 to C36. The sample was quantitated against a C9-C36 alkane hydrocarbon standard.

Semi-Volatile Comment:
Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services.
This report must not be reproduced except in full as defined by the attached chain of custody.



Phyllis Shiller, Laboratory Director
July 31, 2018
Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

July 31, 2018

FOR: Attn: Ms. Lynn Willey
Tighe & Bond
213 Court St, Suite 1100
Middletown, CT 06457

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		07/16/18	15:35
Location Code:	TIGHE-DAS	Received by:	LB	07/17/18	15:03
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	15-0755-44B				

Laboratory Data

SDG ID: GCA91708
Phoenix ID: CA91715

Project ID: ROCKVILLE MGP
Client ID: SB-41 1-3 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 1.8	1.8	mg/Kg	1	07/21/18	EK	SW6010C
Arsenic	6.81	0.79	mg/Kg	1	07/21/18	EK	SW6010C
Barium	75.1	0.40	mg/Kg	1	07/21/18	EK	SW6010C
Beryllium	0.57	0.32	mg/Kg	1	07/21/18	EK	SW6010C
Cadmium	0.47	0.40	mg/Kg	1	07/21/18	EK	SW6010C
Chromium	17.1	0.40	mg/Kg	1	07/21/18	EK	SW6010C
Copper	18.1	0.40	mg/kg	1	07/21/18	EK	SW6010C
Mercury	0.06	0.03	mg/Kg	1	07/20/18	RS	SW7471B
Nickel	9.33	0.40	mg/Kg	1	07/21/18	EK	SW6010C
Lead	30.1	0.40	mg/Kg	1	07/21/18	EK	SW6010C
Antimony	< 4.0	4.0	mg/Kg	1	07/21/18	EK	SW6010C
Selenium	< 1.6	1.6	mg/Kg	1	07/21/18	EK	SW6010C
SPLP Silver	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Arsenic	< 0.02	0.02	mg/L	1	07/20/18	EK	SW6010C
SPLP Barium	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Beryllium	< 0.001	0.001	mg/L	1	07/20/18	EK	SW6010C
SPLP Cadmium	< 0.005	0.005	mg/L	1	07/20/18	EK	SW6010C
SPLP Chromium	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Copper	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Mercury	< 0.0005	0.0005	mg/L	1	07/23/18	RS	SW7470A
SPLP Nickel	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Lead	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Antimony	< 0.02	0.02	mg/L	1	07/20/18	PS	SW6010C
SPLP Selenium	< 0.020	0.020	mg/L	1	07/20/18	EK	SW6010C
SPLP Thallium	< 0.005	0.005	mg/L	1	07/20/18	EK	SW6010C
SPLP Vanadium	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Zinc	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
Thallium	< 3.6	3.6	mg/Kg	1	07/21/18	EK	SW6010C

Ver 1

Project ID: ROCKVILLE MGP
Client ID: SB-41 1-3 FT

Phoenix I.D.: CA91715

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
SPLP Metals Digestion	Completed				07/20/18	I/I	SW3010A
Vanadium	27.9	0.40	mg/Kg	1	07/21/18	EK	SW6010C
Zinc	80.6	0.40	mg/Kg	1	07/21/18	EK	SW6010C
Percent Solid	79		%		07/19/18	Q	SW846-%Solid
Total Cyanide (SW9010C Distill.)	< 0.63	0.63	mg/Kg	1	07/23/18	O/GD	SW9012B
Soil Extraction for PCB	Completed				07/20/18	AA/V	SW3545A
Soil Extraction for SVOA	Completed				07/20/18	JJ/V	SW3545A
Extraction of CT ETPH	Completed				07/20/18	JA/V	SW3545A
Mercury Digestion	Completed				07/20/18	I/I	SW7471B
SPLP Digestion Mercury	Completed				07/23/18	I/I	SW1312/SW7470A
SPLP Extraction for Metals	Completed				07/19/18	I	SW1312
Total Metals Digest	Completed				07/20/18	T/AG/BF	SW3050B
TPH by GC (Extractable Products)							
Ext. Petroleum H.C. (C9-C36)	ND	61	mg/Kg	1	07/21/18	JRB	CTETPH 8015D
Identification	ND		mg/Kg	1	07/21/18	JRB	CTETPH 8015D
QA/QC Surrogates							
% n-Pentacosane	53		%	1	07/21/18	JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	420	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1221	ND	420	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1232	ND	420	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1242	ND	420	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1248	ND	420	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1254	ND	420	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1260	ND	420	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1262	ND	420	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1268	ND	420	ug/Kg	10	07/23/18	AW	SW8082A
QA/QC Surrogates							
% DCBP	84		%	10	07/23/18	AW	30 - 150 %
% TCMX	73		%	10	07/23/18	AW	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
1,1,1-Trichloroethane	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	4.4	ug/Kg	1	07/20/18	JLI	SW8260C
1,1,2-Trichloroethane	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
1,1-Dichloroethane	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
1,1-Dichloroethene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
1,1-Dichloropropene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
1,2,3-Trichloropropane	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
1,2-Dibromoethane	ND	7.0	ug/Kg	1	07/20/18	JLI	SW8260C
1,2-Dichlorobenzene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
1,2-Dichloroethane	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
1,2-Dichloropropane	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C

Ver 1

Project ID: ROCKVILLE MGP
Client ID: SB-41 1-3 FT

Phoenix I.D.: CA91715

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,3,5-Trimethylbenzene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
1,3-Dichlorobenzene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
1,3-Dichloropropane	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
1,4-Dichlorobenzene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
2,2-Dichloropropane	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
2-Chlorotoluene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
2-Hexanone	ND	36	ug/Kg	1	07/20/18	JLI	SW8260C
2-Isopropyltoluene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
4-Chlorotoluene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
4-Methyl-2-pentanone	ND	36	ug/Kg	1	07/20/18	JLI	SW8260C
Acetone	ND	360	ug/Kg	1	07/20/18	JLI	SW8260C
Acrylonitrile	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
Benzene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
Bromobenzene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
Bromochloromethane	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
Bromodichloromethane	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
Bromoform	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
Bromomethane	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
Carbon Disulfide	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
Carbon tetrachloride	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
Chlorobenzene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
Chloroethane	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
Chloroform	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
Chloromethane	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
cis-1,2-Dichloroethene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
cis-1,3-Dichloropropene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
Dibromochloromethane	ND	4.4	ug/Kg	1	07/20/18	JLI	SW8260C
Dibromomethane	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
Dichlorodifluoromethane	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
Ethylbenzene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
Hexachlorobutadiene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
Isopropylbenzene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
m&p-Xylene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
Methyl Ethyl Ketone	ND	44	ug/Kg	1	07/20/18	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	15	ug/Kg	1	07/20/18	JLI	SW8260C
Methylene chloride	ND	15	ug/Kg	1	07/20/18	JLI	SW8260C
Naphthalene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
n-Butylbenzene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
n-Propylbenzene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
o-Xylene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
p-Isopropyltoluene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
sec-Butylbenzene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
Styrene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
tert-Butylbenzene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
Tetrachloroethene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
Tetrahydrofuran (THF)	ND	15	ug/Kg	1	07/20/18	JLI	SW8260C
Toluene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
Total Xylenes	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
trans-1,2-Dichloroethene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C

Project ID: ROCKVILLE MGP
Client ID: SB-41 1-3 FT

Phoenix I.D.: CA91715

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
trans-1,3-Dichloropropene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	15	ug/Kg	1	07/20/18	JLI	SW8260C
Trichloroethene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
Trichlorofluoromethane	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
Trichlorotrifluoroethane	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
Vinyl chloride	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	99		%	1	07/20/18	JLI	70 - 130 %
% Bromofluorobenzene	89		%	1	07/20/18	JLI	70 - 130 %
% Dibromofluoromethane	94		%	1	07/20/18	JLI	70 - 130 %
% Toluene-d8	101		%	1	07/20/18	JLI	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
1,2,4-Trichlorobenzene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
1,2-Dichlorobenzene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
1,2-Diphenylhydrazine	ND	420	ug/Kg	1	07/21/18	KCA	SW8270D
1,3-Dichlorobenzene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
1,4-Dichlorobenzene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
2,4,5-Trichlorophenol	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
2,4,6-Trichlorophenol	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
2,4-Dichlorophenol	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
2,4-Dimethylphenol	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
2,4-Dinitrophenol	ND	420	ug/Kg	1	07/21/18	KCA	SW8270D
2,4-Dinitrotoluene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
2,6-Dinitrotoluene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
2-Chloronaphthalene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
2-Chlorophenol	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
2-Methylnaphthalene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
2-Methylphenol (o-cresol)	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
2-Nitroaniline	ND	420	ug/Kg	1	07/21/18	KCA	SW8270D
2-Nitrophenol	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	420	ug/Kg	1	07/21/18	KCA	SW8270D
3,3'-Dichlorobenzidine	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
3-Nitroaniline	ND	420	ug/Kg	1	07/21/18	KCA	SW8270D
4,6-Dinitro-2-methylphenol	ND	420	ug/Kg	1	07/21/18	KCA	SW8270D
4-Bromophenyl phenyl ether	ND	420	ug/Kg	1	07/21/18	KCA	SW8270D
4-Chloro-3-methylphenol	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
4-Chloroaniline	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
4-Chlorophenyl phenyl ether	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
4-Nitroaniline	ND	670	ug/Kg	1	07/21/18	KCA	SW8270D
4-Nitrophenol	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Acenaphthene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Acenaphthylene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Acetophenone	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Aniline	ND	420	ug/Kg	1	07/21/18	KCA	SW8270D
Anthracene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Benz(a)anthracene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Benzidine	ND	200	ug/Kg	1	07/21/18	KCA	SW8270D
Benzo(a)pyrene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D

Project ID: ROCKVILLE MGP
Client ID: SB-41 1-3 FT

Phoenix I.D.: CA91715

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Benzo(b)fluoranthene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Benzo(ghi)perylene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Benzo(k)fluoranthene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Benzoic acid	ND	830	ug/Kg	1	07/21/18	KCA	SW8270D
Benzyl butyl phthalate	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Bis(2-chloroethoxy)methane	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Bis(2-chloroethyl)ether	ND	420	ug/Kg	1	07/21/18	KCA	SW8270D
Bis(2-chloroisopropyl)ether	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Bis(2-ethylhexyl)phthalate	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Carbazole	ND	420	ug/Kg	1	07/21/18	KCA	SW8270D
Chrysene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Dibenz(a,h)anthracene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Dibenzofuran	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Diethyl phthalate	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Dimethylphthalate	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Di-n-butylphthalate	ND	420	ug/Kg	1	07/21/18	KCA	SW8270D
Di-n-octylphthalate	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Fluoranthene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Fluorene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Hexachlorobenzene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Hexachlorobutadiene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Hexachlorocyclopentadiene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Hexachloroethane	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Indeno(1,2,3-cd)pyrene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Isophorone	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Naphthalene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Nitrobenzene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
N-Nitrosodimethylamine	ND	200	ug/Kg	1	07/21/18	KCA	SW8270D
N-Nitrosodi-n-propylamine	ND	200	ug/Kg	1	07/21/18	KCA	SW8270D
N-Nitrosodiphenylamine	ND	420	ug/Kg	1	07/21/18	KCA	SW8270D
Pentachloronitrobenzene	ND	420	ug/Kg	1	07/21/18	KCA	SW8270D
Pentachlorophenol	ND	420	ug/Kg	1	07/21/18	KCA	SW8270D
Phenanthrene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Phenol	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Pyrene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Pyridine	ND	420	ug/Kg	1	07/21/18	KCA	SW8270D
QA/QC Surrogates							
% 2,4,6-Tribromophenol	75		%	1	07/21/18	KCA	30 - 130 %
% 2-Fluorobiphenyl	51		%	1	07/21/18	KCA	30 - 130 %
% 2-Fluorophenol	52		%	1	07/21/18	KCA	30 - 130 %
% Nitrobenzene-d5	58		%	1	07/21/18	KCA	30 - 130 %
% Phenol-d5	64		%	1	07/21/18	KCA	30 - 130 %
% Terphenyl-d14	66		%	1	07/21/18	KCA	30 - 130 %
Field Extraction	Completed				07/16/18		SW5035A

Project ID: ROCKVILLE MGP
Client ID: SB-41 1-3 FT

Phoenix I.D.: CA91715

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Volatile Comment:
Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

Semi-Volatile Comment:
Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services.
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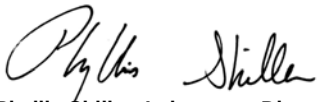

Phyllis Shiller, Laboratory Director
July 31, 2018
Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

July 31, 2018

FOR: Attn: Ms. Lynn Willey
Tighe & Bond
213 Court St, Suite 1100
Middletown, CT 06457

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		07/17/18	7:35
Location Code:	TIGHE-DAS	Received by:	LB	07/17/18	15:03
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	15-0755-44B				

Laboratory Data

SDG ID: GCA91708
Phoenix ID: CA91717

Project ID: ROCKVILLE MGP
Client ID: SB-47 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 1.8	1.8	mg/Kg	1	07/21/18	EK	SW6010C
Arsenic	1.93	0.75	mg/Kg	1	07/21/18	EK	SW6010C
Barium	49.4	0.38	mg/Kg	1	07/21/18	EK	SW6010C
Beryllium	0.35	0.30	mg/Kg	1	07/21/18	EK	SW6010C
Cadmium	< 0.38	0.38	mg/Kg	1	07/21/18	EK	SW6010C
Chromium	12.0	0.38	mg/Kg	1	07/21/18	EK	SW6010C
Copper	9.72	0.38	mg/kg	1	07/21/18	EK	SW6010C
Mercury	< 0.03	0.03	mg/Kg	1	07/20/18	RS	SW7471B
Nickel	7.27	0.38	mg/Kg	1	07/21/18	EK	SW6010C
Lead	13.4	0.38	mg/Kg	1	07/21/18	EK	SW6010C
Antimony	< 3.8	3.8	mg/Kg	1	07/21/18	EK	SW6010C
Selenium	< 1.5	1.5	mg/Kg	1	07/21/18	EK	SW6010C
SPLP Silver	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Arsenic	< 0.02	0.02	mg/L	1	07/20/18	PS	SW6010C
SPLP Barium	0.011	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Beryllium	< 0.001	0.001	mg/L	1	07/20/18	EK	SW6010C
SPLP Cadmium	< 0.005	0.005	mg/L	1	07/20/18	EK	SW6010C
SPLP Chromium	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Copper	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Mercury	< 0.0005	0.0005	mg/L	1	07/23/18	RS	SW7470A
SPLP Nickel	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Lead	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Antimony	< 0.02	0.02	mg/L	1	07/20/18	EK	SW6010C
SPLP Selenium	< 0.020	0.020	mg/L	1	07/20/18	EK	SW6010C
SPLP Thallium	< 0.005	0.005	mg/L	1	07/20/18	EK	SW6010C
SPLP Vanadium	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Zinc	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
Thallium	< 3.4	3.4	mg/Kg	1	07/21/18	EK	SW6010C

Ver 1

Project ID: ROCKVILLE MGP
Client ID: SB-47 2-4 FT

Phoenix I.D.: CA91717

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
SPLP Metals Digestion	Completed				07/20/18	I/I	SW3010A
Vanadium	23.1	0.38	mg/Kg	1	07/21/18	EK	SW6010C
Zinc	20.8	0.38	mg/Kg	1	07/21/18	EK	SW6010C
Percent Solid	91		%		07/19/18	Q	SW846-%Solid
Total Cyanide (SW9010C Distill.)	< 0.55	0.55	mg/Kg	1	07/23/18	O/GD	SW9012B
Soil Extraction for PCB	Completed				07/20/18	AA/V	SW3545A
Soil Extraction for SVOA	Completed				07/20/18	JJ/V	SW3545A
Extraction of CT ETPH	Completed				07/20/18	JA/V	SW3545A
Mercury Digestion	Completed				07/20/18	I/I	SW7471B
SPLP Digestion Mercury	Completed				07/23/18	I/I	SW1312/SW7470A
SPLP Extraction for Metals	Completed				07/19/18	I	SW1312
Total Metals Digest	Completed				07/20/18	T/AG/BF	SW3050B
TPH by GC (Extractable Products)							
Ext. Petroleum H.C. (C9-C36)	ND	54	mg/Kg	1	07/21/18	JRB	CTETPH 8015D
Identification	ND		mg/Kg	1	07/21/18	JRB	CTETPH 8015D
QA/QC Surrogates							
% n-Pentacosane	80		%	1	07/21/18	JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	360	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1221	ND	360	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1232	ND	360	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1242	ND	360	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1248	ND	360	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1254	ND	360	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1260	ND	360	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1262	ND	360	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1268	ND	360	ug/Kg	10	07/23/18	AW	SW8082A
QA/QC Surrogates							
% DCBP	76		%	10	07/23/18	AW	30 - 150 %
% TCMX	64		%	10	07/23/18	AW	30 - 150 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
1,2,4-Trichlorobenzene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
1,2-Dichlorobenzene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
1,2-Diphenylhydrazine	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
1,3-Dichlorobenzene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
1,4-Dichlorobenzene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2,4,5-Trichlorophenol	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2,4,6-Trichlorophenol	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2,4-Dichlorophenol	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2,4-Dimethylphenol	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2,4-Dinitrophenol	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
2,4-Dinitrotoluene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2,6-Dinitrotoluene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2-Chloronaphthalene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2-Chlorophenol	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2-Methylnaphthalene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D

Ver 1

Project ID: ROCKVILLE MGP
Client ID: SB-47 2-4 FT

Phoenix I.D.: CA91717

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2-Methylphenol (o-cresol)	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2-Nitroaniline	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
2-Nitrophenol	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
3,3'-Dichlorobenzidine	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
3-Nitroaniline	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
4,6-Dinitro-2-methylphenol	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
4-Bromophenyl phenyl ether	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
4-Chloro-3-methylphenol	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
4-Chloroaniline	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
4-Chlorophenyl phenyl ether	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
4-Nitroaniline	ND	590	ug/Kg	1	07/21/18	KCA	SW8270D
4-Nitrophenol	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Acenaphthene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Acenaphthylene	370	260	ug/Kg	1	07/21/18	KCA	SW8270D
Acetophenone	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Aniline	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
Anthracene	400	260	ug/Kg	1	07/21/18	KCA	SW8270D
Benz(a)anthracene	730	260	ug/Kg	1	07/21/18	KCA	SW8270D
Benzidine	ND	200	ug/Kg	1	07/21/18	KCA	SW8270D
Benzo(a)pyrene	860	260	ug/Kg	1	07/21/18	KCA	SW8270D
Benzo(b)fluoranthene	710	260	ug/Kg	1	07/21/18	KCA	SW8270D
Benzo(ghi)perylene	840	260	ug/Kg	1	07/21/18	KCA	SW8270D
Benzo(k)fluoranthene	570	260	ug/Kg	1	07/21/18	KCA	SW8270D
Benzoic acid	ND	730	ug/Kg	1	07/21/18	KCA	SW8270D
Benzyl butyl phthalate	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Bis(2-chloroethoxy)methane	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Bis(2-chloroethyl)ether	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
Bis(2-chloroisopropyl)ether	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Bis(2-ethylhexyl)phthalate	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Carbazole	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
Chrysene	730	260	ug/Kg	1	07/21/18	KCA	SW8270D
Dibenz(a,h)anthracene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Dibenzofuran	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Diethyl phthalate	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Dimethylphthalate	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Di-n-butylphthalate	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
Di-n-octylphthalate	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Fluoranthene	1700	260	ug/Kg	1	07/21/18	KCA	SW8270D
Fluorene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Hexachlorobenzene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Hexachlorobutadiene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Hexachlorocyclopentadiene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Hexachloroethane	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Indeno(1,2,3-cd)pyrene	810	260	ug/Kg	1	07/21/18	KCA	SW8270D
Isophorone	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Naphthalene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Nitrobenzene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
N-Nitrosodimethylamine	ND	200	ug/Kg	1	07/21/18	KCA	SW8270D

Project ID: ROCKVILLE MGP
Client ID: SB-47 2-4 FT

Phoenix I.D.: CA91717

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
N-Nitrosodi-n-propylamine	ND	200	ug/Kg	1	07/21/18	KCA	SW8270D
N-Nitrosodiphenylamine	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
Pentachloronitrobenzene	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
Pentachlorophenol	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
Phenanthrene	1300	260	ug/Kg	1	07/21/18	KCA	SW8270D
Phenol	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Pyrene	1600	260	ug/Kg	1	07/21/18	KCA	SW8270D
Pyridine	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
QA/QC Surrogates							
% 2,4,6-Tribromophenol	81		%	1	07/21/18	KCA	30 - 130 %
% 2-Fluorobiphenyl	63		%	1	07/21/18	KCA	30 - 130 %
% 2-Fluorophenol	58		%	1	07/21/18	KCA	30 - 130 %
% Nitrobenzene-d5	65		%	1	07/21/18	KCA	30 - 130 %
% Phenol-d5	64		%	1	07/21/18	KCA	30 - 130 %
% Terphenyl-d14	63		%	1	07/21/18	KCA	30 - 130 %

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Semi-Volatile Comment:
Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services.
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Phyllis Shiller, Laboratory Director
July 31, 2018
Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

July 31, 2018

FOR: Attn: Ms. Lynn Willey
Tighe & Bond
213 Court St, Suite 1100
Middletown, CT 06457

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		07/17/18	9:45
Location Code:	TIGHE-DAS	Received by:	LB	07/17/18	15:03
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	15-0755-44B				

Laboratory Data

SDG ID: GCA91708
Phoenix ID: CA91719

Project ID: ROCKVILLE MGP
Client ID: SB-44 1-3 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 1.8	1.8	mg/Kg	1	07/21/18	EK	SW6010C
Arsenic	6.66	0.72	mg/Kg	1	07/21/18	EK	SW6010C
Barium	81.2	0.36	mg/Kg	1	07/21/18	EK	SW6010C
Beryllium	0.43	0.29	mg/Kg	1	07/21/18	EK	SW6010C
Cadmium	0.42	0.36	mg/Kg	1	07/21/18	EK	SW6010C
Chromium	12.1	0.36	mg/Kg	1	07/21/18	EK	SW6010C
Copper	29.0	0.36	mg/kg	1	07/21/18	EK	SW6010C
Mercury	0.54	0.13	mg/Kg	1	07/20/18	RS	SW7471B
Nickel	9.28	0.36	mg/Kg	1	07/21/18	EK	SW6010C
Lead	31.8	0.36	mg/Kg	1	07/21/18	EK	SW6010C
Antimony	< 3.6	3.6	mg/Kg	1	07/21/18	EK	SW6010C
Selenium	< 1.4	1.4	mg/Kg	1	07/21/18	EK	SW6010C
SPLP Silver	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Arsenic	< 0.02	0.02	mg/L	1	07/20/18	PS	SW6010C
SPLP Barium	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Beryllium	< 0.001	0.001	mg/L	1	07/20/18	EK	SW6010C
SPLP Cadmium	< 0.005	0.005	mg/L	1	07/20/18	EK	SW6010C
SPLP Chromium	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Copper	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Mercury	< 0.0005	0.0005	mg/L	1	07/23/18	RS	SW7470A
SPLP Nickel	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Lead	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Antimony	< 0.02	0.02	mg/L	1	07/20/18	PS	SW6010C
SPLP Selenium	< 0.020	0.020	mg/L	1	07/20/18	EK	SW6010C
SPLP Thallium	< 0.005	0.005	mg/L	1	07/20/18	EK	SW6010C
SPLP Vanadium	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Zinc	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
Thallium	< 3.2	3.2	mg/Kg	1	07/21/18	EK	SW6010C

Ver 1

Project ID: ROCKVILLE MGP
Client ID: SB-44 1-3 FT

Phoenix I.D.: CA91719

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
SPLP Metals Digestion	Completed				07/20/18	I/I	SW3010A
Vanadium	30.8	0.36	mg/Kg	1	07/21/18	EK	SW6010C
Zinc	74.4	0.36	mg/Kg	1	07/21/18	EK	SW6010C
Percent Solid	89		%		07/19/18	Q	SW846-%Solid
Total Cyanide (SW9010C Distill.)	0.82	0.51	mg/Kg	1	07/23/18	O/GD	SW9012B
Soil Extraction for PCB	Completed				07/20/18	AA/V	SW3545A
Soil Extraction for SVOA	Completed				07/20/18	JJ/V	SW3545A
Extraction of CT ETPH	Completed				07/20/18	JA/V	SW3545A
Mercury Digestion	Completed				07/20/18	I/I	SW7471B
SPLP Digestion Mercury	Completed				07/23/18	I/I	SW1312/SW7470A
SPLP Extraction for Metals	Completed				07/19/18	I	SW1312
Total Metals Digest	Completed				07/20/18	T/AG/BF	SW3050B
TPH by GC (Extractable Products)							
Ext. Petroleum H.C. (C9-C36)	140	55	mg/Kg	1	07/21/18	JRB	CTETPH 8015D
Identification	**		mg/Kg	1	07/21/18	JRB	CTETPH 8015D
QA/QC Surrogates							
% n-Pentacosane	82		%	1	07/21/18	JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	370	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1221	ND	370	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1232	ND	370	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1242	ND	370	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1248	ND	370	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1254	ND	370	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1260	ND	370	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1262	ND	370	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1268	ND	370	ug/Kg	10	07/23/18	AW	SW8082A
QA/QC Surrogates							
% DCBP	78		%	10	07/23/18	AW	30 - 150 %
% TCMX	58		%	10	07/23/18	AW	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
1,1,1-Trichloroethane	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	3.6	ug/Kg	1	07/20/18	JLI	SW8260C
1,1,2-Trichloroethane	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
1,1-Dichloroethane	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
1,1-Dichloroethene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
1,1-Dichloropropene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
1,2,3-Trichloropropane	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
1,2-Dibromoethane	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
1,2-Dichlorobenzene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
1,2-Dichloroethane	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
1,2-Dichloropropane	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C

Ver 1

Project ID: ROCKVILLE MGP
Client ID: SB-44 1-3 FT

Phoenix I.D.: CA91719

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,3,5-Trimethylbenzene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
1,3-Dichlorobenzene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
1,3-Dichloropropane	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
1,4-Dichlorobenzene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
2,2-Dichloropropane	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
2-Chlorotoluene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
2-Hexanone	ND	30	ug/Kg	1	07/20/18	JLI	SW8260C
2-Isopropyltoluene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
4-Chlorotoluene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
4-Methyl-2-pentanone	ND	30	ug/Kg	1	07/20/18	JLI	SW8260C
Acetone	ND	300	ug/Kg	1	07/20/18	JLI	SW8260C
Acrylonitrile	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
Benzene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
Bromobenzene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
Bromochloromethane	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
Bromodichloromethane	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
Bromoform	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
Bromomethane	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
Carbon Disulfide	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
Carbon tetrachloride	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
Chlorobenzene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
Chloroethane	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
Chloroform	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
Chloromethane	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
cis-1,2-Dichloroethene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
cis-1,3-Dichloropropene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
Dibromochloromethane	ND	3.6	ug/Kg	1	07/20/18	JLI	SW8260C
Dibromomethane	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
Dichlorodifluoromethane	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
Ethylbenzene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
Hexachlorobutadiene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
Isopropylbenzene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
m&p-Xylene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
Methyl Ethyl Ketone	ND	36	ug/Kg	1	07/20/18	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	12	ug/Kg	1	07/20/18	JLI	SW8260C
Methylene chloride	ND	12	ug/Kg	1	07/20/18	JLI	SW8260C
Naphthalene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
n-Butylbenzene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
n-Propylbenzene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
o-Xylene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
p-Isopropyltoluene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
sec-Butylbenzene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
Styrene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
tert-Butylbenzene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
Tetrachloroethene	550	370	ug/Kg	50	07/20/18	JLI	SW8260C
Tetrahydrofuran (THF)	ND	12	ug/Kg	1	07/20/18	JLI	SW8260C
Toluene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
Total Xylenes	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
trans-1,2-Dichloroethene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C

Ver 1

Project ID: ROCKVILLE MGP
Client ID: SB-44 1-3 FT

Phoenix I.D.: CA91719

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
trans-1,3-Dichloropropene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	12	ug/Kg	1	07/20/18	JLI	SW8260C
Trichloroethene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
Trichlorofluoromethane	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
Trichlorotrifluoroethane	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
Vinyl chloride	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	99		%	1	07/20/18	JLI	70 - 130 %
% Bromofluorobenzene	89		%	1	07/20/18	JLI	70 - 130 %
% Dibromofluoromethane	96		%	1	07/20/18	JLI	70 - 130 %
% Toluene-d8	101		%	1	07/20/18	JLI	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
1,2,4-Trichlorobenzene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
1,2-Dichlorobenzene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
1,2-Diphenylhydrazine	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
1,3-Dichlorobenzene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
1,4-Dichlorobenzene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2,4,5-Trichlorophenol	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2,4,6-Trichlorophenol	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2,4-Dichlorophenol	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2,4-Dimethylphenol	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2,4-Dinitrophenol	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
2,4-Dinitrotoluene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2,6-Dinitrotoluene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2-Chloronaphthalene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2-Chlorophenol	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2-Methylnaphthalene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2-Methylphenol (o-cresol)	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2-Nitroaniline	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
2-Nitrophenol	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
3,3'-Dichlorobenzidine	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
3-Nitroaniline	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
4,6-Dinitro-2-methylphenol	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
4-Bromophenyl phenyl ether	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
4-Chloro-3-methylphenol	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
4-Chloroaniline	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
4-Chlorophenyl phenyl ether	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
4-Nitroaniline	ND	600	ug/Kg	1	07/21/18	KCA	SW8270D
4-Nitrophenol	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Acenaphthene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Acenaphthylene	650	260	ug/Kg	1	07/21/18	KCA	SW8270D
Acetophenone	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Aniline	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
Anthracene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Benz(a)anthracene	720	260	ug/Kg	1	07/21/18	KCA	SW8270D
Benzidine	ND	200	ug/Kg	1	07/21/18	KCA	SW8270D
Benzo(a)pyrene	930	260	ug/Kg	1	07/21/18	KCA	SW8270D

Ver 1

Project ID: ROCKVILLE MGP
Client ID: SB-44 1-3 FT

Phoenix I.D.: CA91719

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Benzo(b)fluoranthene	870	260	ug/Kg	1	07/21/18	KCA	SW8270D
Benzo(ghi)perylene	910	260	ug/Kg	1	07/21/18	KCA	SW8270D
Benzo(k)fluoranthene	890	260	ug/Kg	1	07/21/18	KCA	SW8270D
Benzoic acid	ND	750	ug/Kg	1	07/21/18	KCA	SW8270D
Benzyl butyl phthalate	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Bis(2-chloroethoxy)methane	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Bis(2-chloroethyl)ether	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
Bis(2-chloroisopropyl)ether	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Bis(2-ethylhexyl)phthalate	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Carbazole	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
Chrysene	810	260	ug/Kg	1	07/21/18	KCA	SW8270D
Dibenz(a,h)anthracene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Dibenzofuran	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Diethyl phthalate	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Dimethylphthalate	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Di-n-butylphthalate	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
Di-n-octylphthalate	720	260	ug/Kg	1	07/21/18	KCA	SW8270D
Fluoranthene	800	260	ug/Kg	1	07/21/18	KCA	SW8270D
Fluorene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Hexachlorobenzene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Hexachlorobutadiene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Hexachlorocyclopentadiene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Hexachloroethane	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Indeno(1,2,3-cd)pyrene	890	260	ug/Kg	1	07/21/18	KCA	SW8270D
Isophorone	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Naphthalene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Nitrobenzene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
N-Nitrosodimethylamine	ND	200	ug/Kg	1	07/21/18	KCA	SW8270D
N-Nitrosodi-n-propylamine	ND	200	ug/Kg	1	07/21/18	KCA	SW8270D
N-Nitrosodiphenylamine	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
Pentachloronitrobenzene	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
Pentachlorophenol	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
Phenanthrene	270	260	ug/Kg	1	07/21/18	KCA	SW8270D
Phenol	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Pyrene	990	260	ug/Kg	1	07/21/18	KCA	SW8270D
Pyridine	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
QA/QC Surrogates							
% 2,4,6-Tribromophenol	79		%	1	07/21/18	KCA	30 - 130 %
% 2-Fluorobiphenyl	65		%	1	07/21/18	KCA	30 - 130 %
% 2-Fluorophenol	51		%	1	07/21/18	KCA	30 - 130 %
% Nitrobenzene-d5	68		%	1	07/21/18	KCA	30 - 130 %
% Phenol-d5	63		%	1	07/21/18	KCA	30 - 130 %
% Terphenyl-d14	70		%	1	07/21/18	KCA	30 - 130 %
Field Extraction	Completed				07/17/18		SW5035A

Project ID: ROCKVILLE MGP
Client ID: SB-44 1-3 FT

Phoenix I.D.: CA91719

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

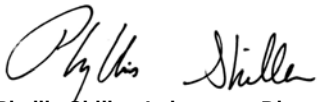
Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Semi-Volatile Comment:
Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

TPH Comment:
**Petroleum hydrocarbon chromatogram contains a multicomponent hydrocarbon distribution in the range of C9 to C36. The sample was quantitated against a C9-C36 alkane hydrocarbon standard.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services.
This report must not be reproduced except in full as defined by the attached chain of custody.



Phyllis Shiller, Laboratory Director
July 31, 2018
Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

July 31, 2018

FOR: Attn: Ms. Lynn Willey
Tighe & Bond
213 Court St, Suite 1100
Middletown, CT 06457

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		07/17/18	11:00
Location Code:	TIGHE-DAS	Received by:	LB	07/17/18	15:03
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	15-0755-44B				

Laboratory Data

SDG ID: GCA91708
Phoenix ID: CA91720

Project ID: ROCKVILLE MGP
Client ID: SB-45 0-2 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 1.8	1.8	mg/Kg	1	07/21/18	EK	SW6010C
Arsenic	2.23	0.82	mg/Kg	1	07/21/18	EK	SW6010C
Barium	76.3	0.41	mg/Kg	1	07/21/18	EK	SW6010C
Beryllium	0.54	0.33	mg/Kg	1	07/21/18	EK	SW6010C
Cadmium	< 0.41	0.41	mg/Kg	1	07/21/18	EK	SW6010C
Chromium	15.6	0.41	mg/Kg	1	07/21/18	EK	SW6010C
Copper	7.74	0.41	mg/kg	1	07/21/18	EK	SW6010C
Mercury	< 0.03	0.03	mg/Kg	1	07/20/18	RS	SW7471B
Nickel	8.89	0.41	mg/Kg	1	07/21/18	EK	SW6010C
Lead	5.52	0.41	mg/Kg	1	07/21/18	EK	SW6010C
Antimony	< 4.1	4.1	mg/Kg	1	07/21/18	EK	SW6010C
Selenium	< 1.6	1.6	mg/Kg	1	07/21/18	EK	SW6010C
SPLP Silver	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Arsenic	< 0.02	0.02	mg/L	1	07/20/18	EK	SW6010C
SPLP Barium	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Beryllium	< 0.001	0.001	mg/L	1	07/20/18	EK	SW6010C
SPLP Cadmium	< 0.005	0.005	mg/L	1	07/20/18	EK	SW6010C
SPLP Chromium	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Copper	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Mercury	< 0.0005	0.0005	mg/L	1	07/23/18	RS	SW7470A
SPLP Nickel	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Lead	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Antimony	< 0.02	0.02	mg/L	1	07/20/18	EK	SW6010C
SPLP Selenium	< 0.020	0.020	mg/L	1	07/20/18	EK	SW6010C
SPLP Thallium	< 0.005	0.005	mg/L	1	07/20/18	EK	SW6010C
SPLP Vanadium	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Zinc	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
Thallium	< 3.7	3.7	mg/Kg	1	07/21/18	EK	SW6010C

Ver 1

Project ID: ROCKVILLE MGP
Client ID: SB-45 0-2 FT

Phoenix I.D.: CA91720

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
SPLP Metals Digestion	Completed				07/20/18	I/I	SW3010A
Vanadium	29.1	0.41	mg/Kg	1	07/21/18	EK	SW6010C
Zinc	28.9	0.41	mg/Kg	1	07/21/18	EK	SW6010C
Percent Solid	81		%		07/19/18	Q	SW846-%Solid
Total Cyanide (SW9010C Distill.)	< 0.56	0.56	mg/Kg	1	07/23/18	O/GD	SW9012B
Soil Extraction for PCB	Completed				07/20/18	AA/V	SW3545A
Soil Extraction for SVOA	Completed				07/20/18	JJ/V	SW3545A
Extraction of CT ETPH	Completed				07/20/18	JA/V	SW3545A
Mercury Digestion	Completed				07/20/18	I/I	SW7471B
SPLP Digestion Mercury	Completed				07/23/18	I/I	SW1312/SW7470A
SPLP Extraction for Metals	Completed				07/19/18	I	SW1312
Total Metals Digest	Completed				07/20/18	T/AG/BF	SW3050B
TPH by GC (Extractable Products)							
Ext. Petroleum H.C. (C9-C36)	ND	62	mg/Kg	1	07/21/18	JRB	CTETPH 8015D
Identification	ND		mg/Kg	1	07/21/18	JRB	CTETPH 8015D
QA/QC Surrogates							
% n-Pentacosane	83		%	1	07/21/18	JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	410	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1221	ND	410	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1232	ND	410	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1242	ND	410	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1248	ND	410	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1254	ND	410	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1260	ND	410	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1262	ND	410	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1268	ND	410	ug/Kg	10	07/23/18	AW	SW8082A
QA/QC Surrogates							
% DCBP	89		%	10	07/23/18	AW	30 - 150 %
% TCMX	72		%	10	07/23/18	AW	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
1,1,1-Trichloroethane	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	100	ug/Kg	50	07/20/18	JLI	SW8260C
1,1,2-Trichloroethane	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
1,1-Dichloroethane	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
1,1-Dichloroethene	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
1,1-Dichloropropene	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	450	ug/Kg	50	07/20/18	JLI	SW8260C
1,2,3-Trichloropropane	ND	450	ug/Kg	50	07/20/18	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	450	ug/Kg	50	07/20/18	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	450	ug/Kg	50	07/20/18	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
1,2-Dibromoethane	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
1,2-Dichlorobenzene	ND	450	ug/Kg	50	07/20/18	JLI	SW8260C
1,2-Dichloroethane	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
1,2-Dichloropropane	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C

Ver 1

Project ID: ROCKVILLE MGP
Client ID: SB-45 0-2 FT

Phoenix I.D.: CA91720

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,3,5-Trimethylbenzene	ND	450	ug/Kg	50	07/20/18	JLI	SW8260C
1,3-Dichlorobenzene	ND	450	ug/Kg	50	07/20/18	JLI	SW8260C
1,3-Dichloropropane	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
1,4-Dichlorobenzene	ND	450	ug/Kg	50	07/20/18	JLI	SW8260C
2,2-Dichloropropane	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
2-Chlorotoluene	ND	450	ug/Kg	50	07/20/18	JLI	SW8260C
2-Hexanone	ND	32	ug/Kg	1	07/20/18	JLI	SW8260C
2-Isopropyltoluene	ND	450	ug/Kg	50	07/20/18	JLI	SW8260C
4-Chlorotoluene	ND	450	ug/Kg	50	07/20/18	JLI	SW8260C
4-Methyl-2-pentanone	ND	32	ug/Kg	1	07/20/18	JLI	SW8260C
Acetone	ND	320	ug/Kg	1	07/20/18	JLI	SW8260C
Acrylonitrile	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
Benzene	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
Bromobenzene	ND	450	ug/Kg	50	07/20/18	JLI	SW8260C
Bromochloromethane	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
Bromodichloromethane	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
Bromoform	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
Bromomethane	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
Carbon Disulfide	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
Carbon tetrachloride	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
Chlorobenzene	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
Chloroethane	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
Chloroform	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
Chloromethane	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
cis-1,2-Dichloroethene	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
cis-1,3-Dichloropropene	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
Dibromochloromethane	ND	3.9	ug/Kg	1	07/20/18	JLI	SW8260C
Dibromomethane	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
Dichlorodifluoromethane	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
Ethylbenzene	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
Hexachlorobutadiene	ND	450	ug/Kg	50	07/20/18	JLI	SW8260C
Isopropylbenzene	ND	450	ug/Kg	50	07/20/18	JLI	SW8260C
m&p-Xylene	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
Methyl Ethyl Ketone	ND	39	ug/Kg	1	07/20/18	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	13	ug/Kg	1	07/20/18	JLI	SW8260C
Methylene chloride	ND	13	ug/Kg	1	07/20/18	JLI	SW8260C
Naphthalene	ND	450	ug/Kg	50	07/20/18	JLI	SW8260C
n-Butylbenzene	ND	450	ug/Kg	50	07/20/18	JLI	SW8260C
n-Propylbenzene	ND	450	ug/Kg	50	07/20/18	JLI	SW8260C
o-Xylene	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
p-Isopropyltoluene	ND	450	ug/Kg	50	07/20/18	JLI	SW8260C
sec-Butylbenzene	ND	450	ug/Kg	50	07/20/18	JLI	SW8260C
Styrene	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
tert-Butylbenzene	ND	450	ug/Kg	50	07/20/18	JLI	SW8260C
Tetrachloroethene	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
Tetrahydrofuran (THF)	ND	13	ug/Kg	1	07/20/18	JLI	SW8260C
Toluene	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
Total Xylenes	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
trans-1,2-Dichloroethene	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C

Project ID: ROCKVILLE MGP
Client ID: SB-45 0-2 FT

Phoenix I.D.: CA91720

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
trans-1,3-Dichloropropene	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	900	ug/Kg	50	07/20/18	JLI	SW8260C
Trichloroethene	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
Trichlorofluoromethane	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
Trichlorotrifluoroethane	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
Vinyl chloride	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	98		%	50	07/20/18	JLI	70 - 130 %
% Bromofluorobenzene	100		%	50	07/20/18	JLI	70 - 130 %
% Dibromofluoromethane	95		%	1	07/20/18	JLI	70 - 130 %
% Toluene-d8	101		%	1	07/20/18	JLI	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
1,2,4-Trichlorobenzene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
1,2-Dichlorobenzene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
1,2-Diphenylhydrazine	ND	410	ug/Kg	1	07/21/18	KCA	SW8270D
1,3-Dichlorobenzene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
1,4-Dichlorobenzene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
2,4,5-Trichlorophenol	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
2,4,6-Trichlorophenol	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
2,4-Dichlorophenol	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
2,4-Dimethylphenol	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
2,4-Dinitrophenol	ND	410	ug/Kg	1	07/21/18	KCA	SW8270D
2,4-Dinitrotoluene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
2,6-Dinitrotoluene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
2-Chloronaphthalene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
2-Chlorophenol	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
2-Methylnaphthalene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
2-Methylphenol (o-cresol)	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
2-Nitroaniline	ND	410	ug/Kg	1	07/21/18	KCA	SW8270D
2-Nitrophenol	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	410	ug/Kg	1	07/21/18	KCA	SW8270D
3,3'-Dichlorobenzidine	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
3-Nitroaniline	ND	410	ug/Kg	1	07/21/18	KCA	SW8270D
4,6-Dinitro-2-methylphenol	ND	410	ug/Kg	1	07/21/18	KCA	SW8270D
4-Bromophenyl phenyl ether	ND	410	ug/Kg	1	07/21/18	KCA	SW8270D
4-Chloro-3-methylphenol	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
4-Chloroaniline	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
4-Chlorophenyl phenyl ether	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
4-Nitroaniline	ND	650	ug/Kg	1	07/21/18	KCA	SW8270D
4-Nitrophenol	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Acenaphthene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Acenaphthylene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Acetophenone	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Aniline	ND	410	ug/Kg	1	07/21/18	KCA	SW8270D
Anthracene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Benz(a)anthracene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Benzidine	ND	200	ug/Kg	1	07/21/18	KCA	SW8270D
Benzo(a)pyrene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D

Project ID: ROCKVILLE MGP
Client ID: SB-45 0-2 FT

Phoenix I.D.: CA91720

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Benzo(b)fluoranthene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Benzo(ghi)perylene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Benzo(k)fluoranthene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Benzoic acid	ND	820	ug/Kg	1	07/21/18	KCA	SW8270D
Benzyl butyl phthalate	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Bis(2-chloroethoxy)methane	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Bis(2-chloroethyl)ether	ND	410	ug/Kg	1	07/21/18	KCA	SW8270D
Bis(2-chloroisopropyl)ether	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Bis(2-ethylhexyl)phthalate	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Carbazole	ND	410	ug/Kg	1	07/21/18	KCA	SW8270D
Chrysene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Dibenz(a,h)anthracene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Dibenzofuran	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Diethyl phthalate	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Dimethylphthalate	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Di-n-butylphthalate	ND	410	ug/Kg	1	07/21/18	KCA	SW8270D
Di-n-octylphthalate	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Fluoranthene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Fluorene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Hexachlorobenzene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Hexachlorobutadiene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Hexachlorocyclopentadiene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Hexachloroethane	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Indeno(1,2,3-cd)pyrene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Isophorone	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Naphthalene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Nitrobenzene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
N-Nitrosodimethylamine	ND	200	ug/Kg	1	07/21/18	KCA	SW8270D
N-Nitrosodi-n-propylamine	ND	200	ug/Kg	1	07/21/18	KCA	SW8270D
N-Nitrosodiphenylamine	ND	410	ug/Kg	1	07/21/18	KCA	SW8270D
Pentachloronitrobenzene	ND	410	ug/Kg	1	07/21/18	KCA	SW8270D
Pentachlorophenol	ND	410	ug/Kg	1	07/21/18	KCA	SW8270D
Phenanthrene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Phenol	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Pyrene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Pyridine	ND	410	ug/Kg	1	07/21/18	KCA	SW8270D
QA/QC Surrogates							
% 2,4,6-Tribromophenol	87		%	1	07/21/18	KCA	30 - 130 %
% 2-Fluorobiphenyl	66		%	1	07/21/18	KCA	30 - 130 %
% 2-Fluorophenol	56		%	1	07/21/18	KCA	30 - 130 %
% Nitrobenzene-d5	63		%	1	07/21/18	KCA	30 - 130 %
% Phenol-d5	60		%	1	07/21/18	KCA	30 - 130 %
% Terphenyl-d14	76		%	1	07/21/18	KCA	30 - 130 %
Field Extraction	Completed				07/17/18		SW5035A

Project ID: ROCKVILLE MGP
Client ID: SB-45 0-2 FT
Phoenix I.D.: CA91720

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Volatile Comment:
There was a suppression of the last internal standard in the low level analysis, all affected compounds are reported from the methanol preserved high level analysis which did not exhibit this interference.

Volatile Comment:
Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

Semi-Volatile Comment:
Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services.
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Phyllis Shiller, Laboratory Director
July 31, 2018
Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

July 31, 2018

FOR: Attn: Ms. Lynn Willey
Tighe & Bond
213 Court St, Suite 1100
Middletown, CT 06457

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		07/17/18	11:50
Location Code:	TIGHE-DAS	Received by:	LB	07/17/18	15:03
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	15-0755-44B				

Laboratory Data

SDG ID: GCA91708
Phoenix ID: CA91721

Project ID: ROCKVILLE MGP
Client ID: SB-65 1-3 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 1.8	1.8	mg/Kg	1	07/21/18	EK	SW6010C
Arsenic	3.17	0.73	mg/Kg	1	07/21/18	EK	SW6010C
Barium	76.8	0.36	mg/Kg	1	07/21/18	EK	SW6010C
Beryllium	0.49	0.29	mg/Kg	1	07/21/18	EK	SW6010C
Cadmium	< 0.36	0.36	mg/Kg	1	07/21/18	EK	SW6010C
Chromium	47.3	0.36	mg/Kg	1	07/21/18	EK	SW6010C
Copper	22.6	0.36	mg/kg	1	07/21/18	EK	SW6010C
Mercury	0.10	0.03	mg/Kg	1	07/20/18	RS	SW7471B
Nickel	9.80	0.36	mg/Kg	1	07/21/18	EK	SW6010C
Lead	79.3	0.36	mg/Kg	1	07/21/18	EK	SW6010C
Antimony	< 3.6	3.6	mg/Kg	1	07/21/18	EK	SW6010C
Selenium	< 1.5	1.5	mg/Kg	1	07/21/18	EK	SW6010C
SPLP Silver	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Arsenic	< 0.02	0.02	mg/L	1	07/20/18	EK	SW6010C
SPLP Barium	0.149	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Beryllium	< 0.001	0.001	mg/L	1	07/20/18	EK	SW6010C
SPLP Cadmium	< 0.005	0.005	mg/L	1	07/20/18	EK	SW6010C
SPLP Chromium	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Copper	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Mercury	< 0.0005	0.0005	mg/L	1	07/23/18	RS	SW7470A
SPLP Nickel	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Lead	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Antimony	< 0.02	0.02	mg/L	1	07/20/18	EK	SW6010C
SPLP Selenium	< 0.020	0.020	mg/L	1	07/20/18	EK	SW6010C
SPLP Thallium	< 0.005	0.005	mg/L	1	07/20/18	EK	SW6010C
SPLP Vanadium	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Zinc	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
Thallium	< 3.3	3.3	mg/Kg	1	07/21/18	EK	SW6010C

Ver 1

Project ID: ROCKVILLE MGP
Client ID: SB-65 1-3 FT

Phoenix I.D.: CA91721

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
SPLP Metals Digestion	Completed				07/20/18	I/I	SW3010A
Vanadium	28.8	0.36	mg/Kg	1	07/21/18	EK	SW6010C
Zinc	35.3	0.36	mg/Kg	1	07/21/18	EK	SW6010C
Percent Solid	88		%		07/19/18	Q	SW846-%Solid
Total Cyanide (SW9010C Distill.)	1.18	0.52	mg/Kg	1	07/23/18	O/GD	SW9012B
Soil Extraction for PCB	Completed				07/20/18	AA/V	SW3545A
Soil Extraction for SVOA	Completed				07/20/18	JJ/V	SW3545A
Extraction of CT ETPH	Completed				07/20/18	JA/V	SW3545A
Mercury Digestion	Completed				07/20/18	I/I	SW7471B
SPLP Digestion Mercury	Completed				07/23/18	I/I	SW1312/SW7470A
SPLP Extraction for Metals	Completed				07/19/18	I	SW1312
Total Metals Digest	Completed				07/20/18	T/AG/BF	SW3050B
TPH by GC (Extractable Products)							
Ext. Petroleum H.C. (C9-C36)	2600	280	mg/Kg	5	07/23/18	JRB	CTETPH 8015D
Identification	**		mg/Kg	5	07/23/18	JRB	CTETPH 8015D
QA/QC Surrogates							
% n-Pentacosane	142		%	5	07/23/18	JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	380	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1221	ND	380	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1232	ND	380	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1242	ND	380	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1248	ND	380	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1254	ND	380	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1260	ND	380	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1262	ND	380	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1268	ND	380	ug/Kg	10	07/23/18	AW	SW8082A
QA/QC Surrogates							
% DCBP	68		%	10	07/23/18	AW	30 - 150 %
% TCMX	59		%	10	07/23/18	AW	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
1,1,1-Trichloroethane	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	100	ug/Kg	50	07/20/18	JLI	SW8260C
1,1,2-Trichloroethane	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
1,1-Dichloroethane	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
1,1-Dichloroethene	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
1,1-Dichloropropene	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	360	ug/Kg	50	07/20/18	JLI	SW8260C
1,2,3-Trichloropropane	ND	360	ug/Kg	50	07/20/18	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	360	ug/Kg	50	07/20/18	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	360	ug/Kg	50	07/20/18	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
1,2-Dibromoethane	ND	7.0	ug/Kg	1	07/20/18	JLI	SW8260C
1,2-Dichlorobenzene	ND	360	ug/Kg	50	07/20/18	JLI	SW8260C
1,2-Dichloroethane	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
1,2-Dichloropropane	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C

Ver 1

Project ID: ROCKVILLE MGP
Client ID: SB-65 1-3 FT

Phoenix I.D.: CA91721

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,3,5-Trimethylbenzene	ND	360	ug/Kg	50	07/20/18	JLI	SW8260C
1,3-Dichlorobenzene	ND	360	ug/Kg	50	07/20/18	JLI	SW8260C
1,3-Dichloropropane	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
1,4-Dichlorobenzene	ND	360	ug/Kg	50	07/20/18	JLI	SW8260C
2,2-Dichloropropane	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
2-Chlorotoluene	ND	360	ug/Kg	50	07/20/18	JLI	SW8260C
2-Hexanone	ND	45	ug/Kg	1	07/20/18	JLI	SW8260C
2-Isopropyltoluene	ND	360	ug/Kg	50	07/20/18	JLI	SW8260C
4-Chlorotoluene	ND	360	ug/Kg	50	07/20/18	JLI	SW8260C
4-Methyl-2-pentanone	ND	45	ug/Kg	1	07/20/18	JLI	SW8260C
Acetone	ND	450	ug/Kg	1	07/20/18	JLI	SW8260C
Acrylonitrile	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
Benzene	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
Bromobenzene	ND	360	ug/Kg	50	07/20/18	JLI	SW8260C
Bromochloromethane	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
Bromodichloromethane	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
Bromoform	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
Bromomethane	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
Carbon Disulfide	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
Carbon tetrachloride	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
Chlorobenzene	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
Chloroethane	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
Chloroform	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
Chloromethane	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
cis-1,2-Dichloroethene	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
cis-1,3-Dichloropropene	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
Dibromochloromethane	ND	5.4	ug/Kg	1	07/20/18	JLI	SW8260C
Dibromomethane	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
Dichlorodifluoromethane	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
Ethylbenzene	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
Hexachlorobutadiene	ND	360	ug/Kg	50	07/20/18	JLI	SW8260C
Isopropylbenzene	ND	360	ug/Kg	50	07/20/18	JLI	SW8260C
m&p-Xylene	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
Methyl Ethyl Ketone	ND	54	ug/Kg	1	07/20/18	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	18	ug/Kg	1	07/20/18	JLI	SW8260C
Methylene chloride	ND	18	ug/Kg	1	07/20/18	JLI	SW8260C
Naphthalene	ND	360	ug/Kg	50	07/20/18	JLI	SW8260C
n-Butylbenzene	ND	360	ug/Kg	50	07/20/18	JLI	SW8260C
n-Propylbenzene	ND	360	ug/Kg	50	07/20/18	JLI	SW8260C
o-Xylene	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
p-Isopropyltoluene	ND	360	ug/Kg	50	07/20/18	JLI	SW8260C
sec-Butylbenzene	ND	360	ug/Kg	50	07/20/18	JLI	SW8260C
Styrene	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
tert-Butylbenzene	ND	360	ug/Kg	50	07/20/18	JLI	SW8260C
Tetrachloroethene	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
Tetrahydrofuran (THF)	ND	18	ug/Kg	1	07/20/18	JLI	SW8260C
Toluene	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
Total Xylenes	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
trans-1,2-Dichloroethene	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C

Ver 1

Project ID: ROCKVILLE MGP
Client ID: SB-65 1-3 FT

Phoenix I.D.: CA91721

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
trans-1,3-Dichloropropene	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	710	ug/Kg	50	07/20/18	JLI	SW8260C
Trichloroethene	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
Trichlorofluoromethane	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
Trichlorotrifluoroethane	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
Vinyl chloride	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	97		%	50	07/20/18	JLI	70 - 130 %
% Bromofluorobenzene	100		%	50	07/20/18	JLI	70 - 130 %
% Dibromofluoromethane	101		%	1	07/20/18	JLI	70 - 130 %
% Toluene-d8	95		%	1	07/20/18	JLI	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
1,2,4-Trichlorobenzene	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
1,2-Dichlorobenzene	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
1,2-Diphenylhydrazine	ND	740	ug/Kg	2	07/24/18	KCA	SW8270D
1,3-Dichlorobenzene	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
1,4-Dichlorobenzene	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
2,4,5-Trichlorophenol	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
2,4,6-Trichlorophenol	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
2,4-Dichlorophenol	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
2,4-Dimethylphenol	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
2,4-Dinitrophenol	ND	740	ug/Kg	2	07/24/18	KCA	SW8270D
2,4-Dinitrotoluene	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
2,6-Dinitrotoluene	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
2-Chloronaphthalene	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
2-Chlorophenol	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
2-Methylnaphthalene	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
2-Methylphenol (o-cresol)	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
2-Nitroaniline	ND	740	ug/Kg	2	07/24/18	KCA	SW8270D
2-Nitrophenol	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	740	ug/Kg	2	07/24/18	KCA	SW8270D
3,3'-Dichlorobenzidine	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
3-Nitroaniline	ND	740	ug/Kg	2	07/24/18	KCA	SW8270D
4,6-Dinitro-2-methylphenol	ND	740	ug/Kg	2	07/24/18	KCA	SW8270D
4-Bromophenyl phenyl ether	ND	740	ug/Kg	2	07/24/18	KCA	SW8270D
4-Chloro-3-methylphenol	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
4-Chloroaniline	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
4-Chlorophenyl phenyl ether	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
4-Nitroaniline	ND	1200	ug/Kg	2	07/24/18	KCA	SW8270D
4-Nitrophenol	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
Acenaphthene	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
Acenaphthylene	8400	520	ug/Kg	2	07/24/18	KCA	SW8270D
Acetophenone	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
Aniline	ND	740	ug/Kg	2	07/24/18	KCA	SW8270D
Anthracene	2100	520	ug/Kg	2	07/24/18	KCA	SW8270D
Benz(a)anthracene	650	520	ug/Kg	2	07/24/18	KCA	SW8270D
Benzidine	ND	300	ug/Kg	2	07/24/18	KCA	SW8270D
Benzo(a)pyrene	2700	520	ug/Kg	2	07/24/18	KCA	SW8270D

Ver 1

Project ID: ROCKVILLE MGP
Client ID: SB-65 1-3 FT

Phoenix I.D.: CA91721

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Benzo(b)fluoranthene	2700	520	ug/Kg	2	07/24/18	KCA	SW8270D
Benzo(ghi)perylene	4400	520	ug/Kg	2	07/24/18	KCA	SW8270D
Benzo(k)fluoranthene	1400	520	ug/Kg	2	07/24/18	KCA	SW8270D
Benzoic acid	ND	1500	ug/Kg	2	07/24/18	KCA	SW8270D
Benzyl butyl phthalate	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
Bis(2-chloroethoxy)methane	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
Bis(2-chloroethyl)ether	ND	740	ug/Kg	2	07/24/18	KCA	SW8270D
Bis(2-chloroisopropyl)ether	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
Bis(2-ethylhexyl)phthalate	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
Carbazole	ND	740	ug/Kg	2	07/24/18	KCA	SW8270D
Chrysene	1300	520	ug/Kg	2	07/24/18	KCA	SW8270D
Dibenz(a,h)anthracene	1200	520	ug/Kg	2	07/24/18	KCA	SW8270D
Dibenzofuran	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
Diethyl phthalate	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
Dimethylphthalate	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
Di-n-butylphthalate	ND	740	ug/Kg	2	07/24/18	KCA	SW8270D
Di-n-octylphthalate	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
Fluoranthene	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
Fluorene	790	520	ug/Kg	2	07/24/18	KCA	SW8270D
Hexachlorobenzene	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
Hexachlorobutadiene	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
Hexachlorocyclopentadiene	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
Hexachloroethane	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
Indeno(1,2,3-cd)pyrene	4100	520	ug/Kg	2	07/24/18	KCA	SW8270D
Isophorone	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
Naphthalene	1700	520	ug/Kg	2	07/24/18	KCA	SW8270D
Nitrobenzene	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
N-Nitrosodimethylamine	ND	200	ug/Kg	2	07/24/18	KCA	SW8270D
N-Nitrosodi-n-propylamine	ND	200	ug/Kg	2	07/24/18	KCA	SW8270D
N-Nitrosodiphenylamine	ND	740	ug/Kg	2	07/24/18	KCA	SW8270D
Pentachloronitrobenzene	ND	740	ug/Kg	2	07/24/18	KCA	SW8270D
Pentachlorophenol	ND	740	ug/Kg	2	07/24/18	KCA	SW8270D
Phenanthrene	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
Phenol	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
Pyrene	930	520	ug/Kg	2	07/24/18	KCA	SW8270D
Pyridine	ND	740	ug/Kg	2	07/24/18	KCA	SW8270D
QA/QC Surrogates							
% 2,4,6-Tribromophenol	58		%	2	07/24/18	KCA	30 - 130 %
% 2-Fluorobiphenyl	42		%	2	07/24/18	KCA	30 - 130 %
% 2-Fluorophenol	43		%	2	07/24/18	KCA	30 - 130 %
% Nitrobenzene-d5	45		%	2	07/24/18	KCA	30 - 130 %
% Phenol-d5	45		%	2	07/24/18	KCA	30 - 130 %
% Terphenyl-d14	35		%	2	07/24/18	KCA	30 - 130 %
Field Extraction	Completed				07/17/18		SW5035A

Project ID: ROCKVILLE MGP
Client ID: SB-65 1-3 FT
Phoenix I.D.: CA91721

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Volatile Comment:
Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

Volatile Comment:
There was a suppression of the last internal standard in the low level analysis, all affected compounds are reported from the methanol preserved high level analysis which did not exhibit this interference.

TPH Comment:
**Petroleum hydrocarbon chromatogram contains a multicomponent hydrocarbon distribution in the range of C9 to C36. The sample was quantitated against a C9-C36 alkane hydrocarbon standard.

Semi-Volatile Comment:
Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services.
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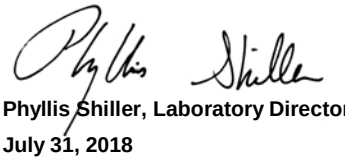

Phyllis Shiller, Laboratory Director
July 31, 2018
Reviewed and Released by: Greg Lawrence, Assistant Lab Director

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QA/QC Report

July 31, 2018

QA/QC Data

SDG I.D.: GCA91708

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 439754 (mg/L), QC Sample No: CA91132 (CA91709, CA91714, CA91715, CA91717, CA91719, CA91720, CA91721)														
ICP Metals - SPLP Extraction														
Antimony	BRL	0.005	0.006	<0.005	NC	103			102			75 - 125	20	
Arsenic	BRL	0.004	0.009	<0.004	NC	101			99.4			75 - 125	20	
Barium	BRL	0.010	0.008	0.009	NC	98.6			98.0			75 - 125	20	
Beryllium	BRL	0.001	<0.001	<0.001	NC	99.7			99.7			75 - 125	20	
Cadmium	BRL	0.005	<0.005	<0.005	NC	103			103			75 - 125	20	
Chromium	BRL	0.010	0.002	0.001	NC	99.7			99.0			75 - 125	20	
Copper	BRL	0.010	0.004	0.004	NC	99.5			99.2			75 - 125	20	
Lead	BRL	0.010	0.003	<0.010	NC	100			100			75 - 125	20	
Nickel	BRL	0.010	0.006	0.003	NC	101			99.7			75 - 125	20	
Selenium	BRL	0.020	<0.020	<0.020	NC	100			98.6			75 - 125	20	
Silver	BRL	0.010	<0.010	<0.010	NC	100			99.9			75 - 125	20	
Thallium	BRL	0.005	<0.005	<0.005	NC	97.2			96.3			75 - 125	20	
Vanadium	BRL	0.010	0.032	0.032	NC	97.1			96.7			75 - 125	20	
Zinc	BRL	0.010	0.005	0.004	NC	102			101			75 - 125	20	
QA/QC Batch 439411 (mg/kg), QC Sample No: CA91307 (CA91708)														
ICP Metals - Soil														
Antimony	BRL	3.0	<4.1	<4.5	NC	113			97.8			75 - 125	30	
Arsenic	BRL	0.60	3.30	3.38	NC	107			94.6			75 - 125	30	
Barium	BRL	0.30	87.8	73.6	17.6	116			89.6			75 - 125	30	
Beryllium	BRL	0.24	0.54	0.63	NC	111			103			75 - 125	30	
Cadmium	BRL	0.30	<0.41	<0.45	NC	100			94.4			75 - 125	30	
Chromium	BRL	0.30	18.6	21.7	15.4	116			102			75 - 125	30	
Copper	0.64	0.30	34.7	34.8	0.30	110			109			75 - 125	30	
Lead	BRL	0.30	13.1	12.4	5.50	107			97.7			75 - 125	30	
Nickel	BRL	0.30	11.5	13.6	16.7	103			98.7			75 - 125	30	
Selenium	BRL	1.2	<1.6	<1.8	NC	113			81.9			75 - 125	30	
Silver	BRL	0.30	<4.1	<0.45	NC	104			90.2			75 - 125	30	
Thallium	BRL	2.7	<3.7	<4.1	NC	104			94.3			75 - 125	30	
Vanadium	BRL	0.30	32.8	34.8	5.90	123			104			75 - 125	30	
Zinc	BRL	0.30	52.5	60.7	14.5	108			99.6			75 - 125	30	
QA/QC Batch 439509 (mg/kg), QC Sample No: CA91307 (CA91708)														
Mercury - Soil	BRL	0.03	<0.03	<0.03	NC	89.8	89.0	0.9	96.0			70 - 130	30	
Comment:														
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.														
QA/QC Batch 439699 (mg/kg), QC Sample No: CA91709 (CA91709, CA91714, CA91715, CA91717, CA91719, CA91720, CA91721)														
Mercury - Soil	BRL	0.03	0.36	0.59	48.4	104	92.6	11.6	84.4			70 - 130	30	r
Comment:														
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.														

QA/QC Data

SDG I.D.: GCA91708

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 440729 (mg/kg), QC Sample No: CA91712 (CA91711, CA91712)													
ICP Metals - Soil													
Antimony	BRL	3.5	<3.9	<4.1	NC	98.9			94.7			75 - 125	30
Arsenic	BRL	0.70	4.48	4.87	8.30	98.4			93.7			75 - 125	30
Barium	BRL	0.35	63.5	60.5	4.80	96.9			99.7			75 - 125	30
Beryllium	BRL	0.28	0.58	0.49	NC	97.4			97.5			75 - 125	30
Cadmium	BRL	0.35	<0.39	<0.41	NC	94.9			94.1			75 - 125	30
Chromium	BRL	0.35	19.7	19.0	3.60	102			98.2			75 - 125	30
Copper	BRL	0.70	15.3	15.5	1.30	95.6			100			75 - 125	30
Lead	BRL	0.35	20.2	26.1	25.5	96.0			95.0			75 - 125	30
Nickel	BRL	0.35	10.8	10.1	6.70	97.5			95.9			75 - 125	30
Selenium	BRL	1.4	<1.5	<1.7	NC	109			81.4			75 - 125	30
Silver	BRL	0.35	<0.39	3.16	NC	101			98.6			75 - 125	30
Thallium	BRL	3.2	<3.5	<3.7	NC	96.7			91.9			75 - 125	30
Vanadium	BRL	0.35	35.8	32.3	10.3	107			97.9			75 - 125	30
Zinc	BRL	0.70	38.8	37.8	2.60	95.4			91.6			75 - 125	30
QA/QC Batch 439804 (mg/kg), QC Sample No: CA91717 (CA91709, CA91714, CA91715, CA91717, CA91719, CA91720, CA91721)													
ICP Metals - Soil													
Antimony	BRL	3.3	<3.8	<3.7	NC	107			92.2			75 - 125	30
Arsenic	BRL	0.67	1.93	1.77	NC	108			90.3			75 - 125	30
Barium	BRL	0.33	49.4	51.2	3.60	112			103			75 - 125	30
Beryllium	BRL	0.27	0.35	0.35	NC	106			94.8			75 - 125	30
Cadmium	BRL	0.33	<0.38	<0.37	NC	101			90.8			75 - 125	30
Chromium	BRL	0.33	12.0	12.9	7.20	113			95.9			75 - 125	30
Copper	BRL	3.3	9.72	9.98	2.60	112			100			75 - 125	30
Lead	BRL	0.33	13.4	14.4	7.20	104			92.6			75 - 125	30
Nickel	BRL	0.33	7.27	7.67	5.40	103			93.9			75 - 125	30
Selenium	BRL	1.3	<1.5	<1.5	NC	118			79.1			75 - 125	30
Silver	BRL	0.33	<1.8	<0.37	NC	118			102			75 - 125	30
Thallium	BRL	3.0	<3.4	<3.3	NC	106			90.6			75 - 125	30
Vanadium	BRL	0.33	23.1	24.5	5.90	118			97.3			75 - 125	30
Zinc	BRL	0.33	20.8	21.2	1.90	106			90.5			75 - 125	30
QA/QC Batch 439518 (mg/L), QC Sample No: CA92748 (CA91708)													
ICP Metals - SPLP Extraction													
Antimony	BRL	0.005	<0.005	<0.005	NC	90.2			100			75 - 125	20
Arsenic	BRL	0.004	<0.004	<0.004	NC	89.1			96.0			75 - 125	20
Barium	BRL	0.010	<0.010	<0.010	NC	88.2			97.0			75 - 125	20
Beryllium	BRL	0.001	<0.001	<0.001	NC	88.0			97.6			75 - 125	20
Cadmium	BRL	0.005	<0.005	<0.005	NC	90.1			98.0			75 - 125	20
Chromium	BRL	0.010	<0.010	<0.010	NC	88.5			96.3			75 - 125	20
Copper	BRL	0.010	<0.010	<0.010	NC	88.6			98.8			75 - 125	20
Lead	BRL	0.010	<0.010	<0.010	NC	89.4			96.8			75 - 125	20
Nickel	BRL	0.010	<0.010	<0.010	NC	88.4			96.2			75 - 125	20
Selenium	BRL	0.020	<0.020	<0.020	NC	89.9			99.2			75 - 125	20
Silver	BRL	0.010	<0.010	<0.010	NC	88.3			95.9			75 - 125	20
Thallium	BRL	0.005	<0.005	<0.005	NC	84.6			91.6			75 - 125	20
Vanadium	BRL	0.010	0.012	0.013	NC	87.0			95.7			75 - 125	20
Zinc	BRL	0.010	<0.010	<0.010	NC	89.6			99.2			75 - 125	20
QA/QC Batch 439515 (mg/L), QC Sample No: CA92953 (CA91708)													
Mercury - Water	BRL	0.0002	<0.0002	<0.0002	NC	89.7			92.6			80 - 120	20

QA/QC Data

SDG I.D.: GCA91708

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
Comment:													
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.													
QA/QC Batch 439704 (mg/L), QC Sample No: CA93877 (CA91709, CA91714, CA91715, CA91717, CA91719, CA91720, CA91721)													
Mercury - Water	BRL	0.0002	<0.0002	<0.0002	NC	92.6			87.1			80 - 120	20
Comment:													
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.													
QA/QC Batch 440835 (mg/kg), QC Sample No: CA99405 (CA91711, CA91712)													
Mercury - Soil	BRL	0.02	<0.03	<0.03	NC	106	98.4	7.4	117			70 - 130	30
Comment:													
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.													
QA/QC Batch 440844 (mg/L), QC Sample No: CA99450 (CA91711, CA91712)													
ICP Metals - SPLP Extraction													
Antimony	BRL	0.005	<0.005	<0.005	NC	103			98.6			75 - 125	20
Arsenic	BRL	0.004	<0.004	<0.004	NC	102			96.1			75 - 125	20
Barium	BRL	0.010	0.013	0.013	NC	103			98.6			75 - 125	20
Beryllium	BRL	0.001	<0.001	<0.001	NC	97.9			95.1			75 - 125	20
Cadmium	BRL	0.005	<0.005	<0.005	NC	104			97.8			75 - 125	20
Chromium	BRL	0.010	<0.010	<0.010	NC	103			97.1			75 - 125	20
Copper	BRL	0.010	<0.010	<0.010	NC	98.9			95.6			75 - 125	20
Lead	BRL	0.010	<0.010	<0.010	NC	103			97.3			75 - 125	20
Nickel	BRL	0.010	0.018	0.015	NC	104			97.6			75 - 125	20
Selenium	BRL	0.020	<0.020	<0.020	NC	104			99.4			75 - 125	20
Silver	BRL	0.010	<0.010	<0.010	NC	97.3			93.9			75 - 125	20
Thallium	BRL	0.005	<0.005	<0.005	NC	104			98.6			75 - 125	20
Vanadium	BRL	0.010	0.012	0.012	NC	97.7			94.0			75 - 125	20
Zinc	BRL	0.010	<0.010	<0.010	NC	104			97.7			75 - 125	20
QA/QC Batch 440839 (mg/L), QC Sample No: CA99730 (CA91711, CA91712)													
Mercury - Water	BRL	0.0002	<0.0002	<0.0002	NC	86.5			98.3			80 - 120	20
Comment:													
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.													

r = This parameter is outside laboratory RPD specified recovery limits.

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QA/QC Report

July 31, 2018

QA/QC Data

SDG I.D.: GCA91708

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 439437 (mg/Kg), QC Sample No: CA91086 50X (CA91708)													
Total Cyanide (SW9010C Distill.)	BRL	0.50	<0.58	0.62	NC	102			106			80 - 120	30
Comment:													
Additional: LCS acceptance range is 80-120% for soils MS acceptance range 75-125% for soils													
QA/QC Batch 439830 (mg/Kg), QC Sample No: CA93881 50X (CA91709, CA91714, CA91715, CA91717, CA91719, CA91720, CA91721)													
Total Cyanide (SW9010C Distill.)	BRL	0.50	0.65	<0.57	NC	99.0			102			80 - 120	30
Comment:													
Additional: LCS acceptance range is 80-120% for soils MS acceptance range 75-125% for soils													
QA/QC Batch 440745 (mg/Kg), QC Sample No: CA99405 50X (CA91711, CA91712)													
Total Cyanide (SW9010C Distill.)	BRL	0.50	<0.55	<0.55	NC	95.4			102			80 - 120	30
Comment:													
Additional: LCS acceptance range is 80-120% for soils MS acceptance range 75-125% for soils													

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QA/QC Report

July 31, 2018

QA/QC Data

SDG I.D.: GCA91708

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 439723 (ug/kg), QC Sample No: CA90365 (CA91708 (50X))										
Volatiles - Soil										
1,1,2,2-Tetrachloroethane	ND	3.0	101	100	1.0	91	92	1.1	70 - 130	30
1,2,3-Trichlorobenzene	ND	5.0	100	94	6.2	94	103	9.1	70 - 130	30
1,2,3-Trichloropropane	ND	5.0	93	93	0.0	85	88	3.5	70 - 130	30
1,2,4-Trichlorobenzene	ND	5.0	102	92	10.3	96	105	9.0	70 - 130	30
1,2,4-Trimethylbenzene	ND	1.0	97	93	4.2	95	99	4.1	70 - 130	30
1,2-Dichlorobenzene	ND	5.0	96	93	3.2	93	97	4.2	70 - 130	30
1,3,5-Trimethylbenzene	ND	1.0	97	94	3.1	94	98	4.2	70 - 130	30
1,3-Dichlorobenzene	ND	5.0	97	92	5.3	95	99	4.1	70 - 130	30
1,4-Dichlorobenzene	ND	5.0	95	91	4.3	93	97	4.2	70 - 130	30
2-Chlorotoluene	ND	5.0	96	93	3.2	93	97	4.2	70 - 130	30
2-Isopropyltoluene	ND	5.0	105	103	1.9	103	107	3.8	70 - 130	30
4-Chlorotoluene	ND	5.0	96	90	6.5	92	96	4.3	70 - 130	30
Benzene	ND	1.0	93	92	1.1	91	93	2.2	70 - 130	30
Bromobenzene	ND	5.0	98	95	3.1	95	98	3.1	70 - 130	30
Hexachlorobutadiene	ND	5.0	99	92	7.3	99	105	5.9	70 - 130	30
Isopropylbenzene	ND	1.0	95	93	2.1	92	96	4.3	70 - 130	30
Naphthalene	ND	5.0	103	99	4.0	92	100	8.3	70 - 130	30
n-Butylbenzene	ND	1.0	99	92	7.3	97	102	5.0	70 - 130	30
n-Propylbenzene	ND	1.0	96	92	4.3	93	97	4.2	70 - 130	30
p-Isopropyltoluene	ND	1.0	99	94	5.2	98	102	4.0	70 - 130	30
sec-Butylbenzene	ND	1.0	100	97	3.0	98	102	4.0	70 - 130	30
tert-Butylbenzene	ND	1.0	96	94	2.1	93	97	4.2	70 - 130	30
Toluene	ND	1.0	93	92	1.1	93	95	2.1	70 - 130	30
trans-1,4-dichloro-2-butene	ND	5.0	116	116	0.0	102	104	1.9	70 - 130	30
% 1,2-dichlorobenzene-d4	98	%	100	100	0.0	99	100	1.0	70 - 130	30
% Bromofluorobenzene	99	%	101	101	0.0	101	101	0.0	70 - 130	30
Comment:										
Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%.										
QA/QC Batch 439334 (mg/Kg), QC Sample No: CA91307 (CA91708)										
TPH by GC (Extractable Products) - Soil										
Ext. Petroleum H.C. (C9-C36)	ND	50	103			73	97	28.2	60 - 120	30
% n-Pentacosane	53	%	108			81	88	8.3	50 - 150	30
Comment:										
The surrogate recovery in the blank is below acceptance criteria, all other samples and QC are within criteria. No bias is suspected.										
Additional surrogate criteria: LCS acceptance range is 60-120% MS acceptance range 50-150%. The ETPH/DRO LCS has been normalized based on the alkane calibration.										
QA/QC Batch 439329 (ug/kg), QC Sample No: CA91994 (CA91708)										
Polynuclear Aromatic HC - Soil										
2-Methylnaphthalene	ND	230	66	62	6.3	70	63	10.5	30 - 130	30

QA/QC Data

SDG I.D.: GCA91708

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Acenaphthene	ND	230	77	71	8.1	75	68	9.8	30 - 130	30	
Acenaphthylene	ND	230	71	65	8.8	67	61	9.4	30 - 130	30	
Anthracene	ND	230	74	71	4.1	71	68	4.3	30 - 130	30	
Benz(a)anthracene	ND	230	75	71	5.5	71	65	8.8	30 - 130	30	
Benzo(a)pyrene	ND	230	72	68	5.7	67	61	9.4	30 - 130	30	
Benzo(b)fluoranthene	ND	230	74	71	4.1	70	65	7.4	30 - 130	30	
Benzo(ghi)perylene	ND	230	71	65	8.8	64	60	6.5	30 - 130	30	
Benzo(k)fluoranthene	ND	230	79	73	7.9	73	67	8.6	30 - 130	30	
Chrysene	ND	230	78	72	8.0	74	68	8.5	30 - 130	30	
Dibenz(a,h)anthracene	ND	230	76	71	6.8	71	63	11.9	30 - 130	30	
Fluoranthene	ND	230	79	73	7.9	71	66	7.3	30 - 130	30	
Fluorene	ND	230	76	70	8.2	73	67	8.6	30 - 130	30	
Indeno(1,2,3-cd)pyrene	ND	230	72	68	5.7	68	62	9.2	30 - 130	30	
Naphthalene	ND	230	63	59	6.6	68	61	10.9	30 - 130	30	
Phenanthrene	ND	230	75	71	5.5	71	66	7.3	30 - 130	30	
Pyrene	ND	230	80	74	7.8	73	69	5.6	30 - 130	30	
% 2-Fluorobiphenyl	68	%	71	67	5.8	76	68	11.1	30 - 130	30	
% Nitrobenzene-d5	57	%	60	59	1.7	71	68	4.3	30 - 130	30	
% Terphenyl-d14	68	%	76	71	6.8	72	68	5.7	30 - 130	30	

Comment:

Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

QA/QC Batch 439719 (ug/kg), QC Sample No: CA93486 (CA91714, CA91715, CA91719, CA91720, CA91721)

Volatiles - Soil

1,1,1,2-Tetrachloroethane	ND	5.0	100	86	15.1	94	97	3.1	70 - 130	30	
1,1,1-Trichloroethane	ND	5.0	96	85	12.2	94	95	1.1	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	3.0	96	81	16.9	87	93	6.7	70 - 130	30	
1,1,2-Trichloroethane	ND	5.0	89	79	11.9	84	87	3.5	70 - 130	30	
1,1-Dichloroethane	ND	5.0	84	74	12.7	82	84	2.4	70 - 130	30	
1,1-Dichloroethene	ND	5.0	93	81	13.8	90	91	1.1	70 - 130	30	
1,1-Dichloropropene	ND	5.0	95	85	11.1	91	94	3.2	70 - 130	30	
1,2,3-Trichlorobenzene	ND	5.0	91	78	15.4	94	72	26.5	70 - 130	30	
1,2,3-Trichloropropane	ND	5.0	87	76	13.5	80	86	7.2	70 - 130	30	
1,2,4-Trichlorobenzene	ND	5.0	91	77	16.7	97	72	29.6	70 - 130	30	
1,2,4-Trimethylbenzene	ND	1.0	96	82	15.7	84	89	5.8	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	5.0	99	86	14.1	97	93	4.2	70 - 130	30	
1,2-Dibromoethane	ND	5.0	95	82	14.7	86	90	4.5	70 - 130	30	
1,2-Dichlorobenzene	ND	5.0	93	80	15.0	94	83	12.4	70 - 130	30	
1,2-Dichloroethane	ND	5.0	91	79	14.1	85	88	3.5	70 - 130	30	
1,2-Dichloropropane	ND	5.0	89	78	13.2	86	87	1.2	70 - 130	30	
1,3,5-Trimethylbenzene	ND	1.0	96	83	14.5	88	93	5.5	70 - 130	30	
1,3-Dichlorobenzene	ND	5.0	94	80	16.1	79	84	6.1	70 - 130	30	
1,3-Dichloropropane	ND	5.0	91	79	14.1	84	87	3.5	70 - 130	30	
1,4-Dichlorobenzene	ND	5.0	92	78	16.5	77	81	5.1	70 - 130	30	
2,2-Dichloropropane	ND	5.0	101	82	20.8	93	94	1.1	70 - 130	30	
2-Chlorotoluene	ND	5.0	95	81	15.9	86	90	4.5	70 - 130	30	
2-Hexanone	ND	25	76	66	14.1	77	73	5.3	70 - 130	30	I
2-Isopropyltoluene	ND	5.0	105	91	14.3	96	102	6.1	70 - 130	30	
4-Chlorotoluene	ND	5.0	93	79	16.3	81	85	4.8	70 - 130	30	
4-Methyl-2-pentanone	ND	25	79	70	12.1	73	76	4.0	70 - 130	30	
Acetone	ND	10	61	54	12.2	65	64	1.6	70 - 130	30	I,m
Acrylonitrile	ND	5.0	84	73	14.0	72	74	2.7	70 - 130	30	

QA/QC Data

SDG I.D.: GCA91708

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
Benzene	ND	1.0	93	81	13.8	88	91	3.4	70 - 130	30
Bromobenzene	ND	5.0	96	82	15.7	85	90	5.7	70 - 130	30
Bromochloromethane	ND	5.0	96	82	15.7	89	91	2.2	70 - 130	30
Bromodichloromethane	ND	5.0	96	85	12.2	91	93	2.2	70 - 130	30
Bromoform	ND	5.0	104	90	14.4	90	95	5.4	70 - 130	30
Bromomethane	ND	5.0	117	89	27.2	111	117	5.3	70 - 130	30
Carbon Disulfide	ND	5.0	109	95	13.7	102	105	2.9	70 - 130	30
Carbon tetrachloride	ND	5.0	99	87	12.9	81	83	2.4	70 - 130	30
Chlorobenzene	ND	5.0	94	81	14.9	86	88	2.3	70 - 130	30
Chloroethane	ND	5.0	102	82	21.7	103	105	1.9	70 - 130	30
Chloroform	ND	5.0	94	82	13.6	90	92	2.2	70 - 130	30
Chloromethane	ND	5.0	95	84	12.3	91	94	3.2	70 - 130	30
cis-1,2-Dichloroethene	ND	5.0	95	84	12.3	90	92	2.2	70 - 130	30
cis-1,3-Dichloropropene	ND	5.0	94	83	12.4	85	88	3.5	70 - 130	30
Dibromochloromethane	ND	3.0	106	92	14.1	96	101	5.1	70 - 130	30
Dibromomethane	ND	5.0	91	81	11.6	85	88	3.5	70 - 130	30
Dichlorodifluoromethane	ND	5.0	127	111	13.4	121	123	1.6	70 - 130	30
Ethylbenzene	ND	1.0	96	83	14.5	90	93	3.3	70 - 130	30
Hexachlorobutadiene	ND	5.0	98	82	17.8	101	87	14.9	70 - 130	30
Isopropylbenzene	ND	1.0	97	82	16.8	90	95	5.4	70 - 130	30
m&p-Xylene	ND	2.0	98	84	15.4	90	92	2.2	70 - 130	30
Methyl ethyl ketone	ND	5.0	71	61	15.2	76	71	6.8	70 - 130	30
Methyl t-butyl ether (MTBE)	ND	1.0	99	84	16.4	94	95	1.1	70 - 130	30
Methylene chloride	ND	5.0	79	68	15.0	76	77	1.3	70 - 130	30
Naphthalene	ND	5.0	94	81	14.9	92	79	15.2	70 - 130	30
n-Butylbenzene	ND	1.0	97	82	16.8	81	87	7.1	70 - 130	30
n-Propylbenzene	ND	1.0	96	83	14.5	86	92	6.7	70 - 130	30
o-Xylene	ND	2.0	96	83	14.5	90	93	3.3	70 - 130	30
p-Isopropyltoluene	ND	1.0	99	84	16.4	86	93	7.8	70 - 130	30
sec-Butylbenzene	ND	1.0	101	87	14.9	92	98	6.3	70 - 130	30
Styrene	ND	5.0	96	83	14.5	84	86	2.4	70 - 130	30
tert-Butylbenzene	ND	1.0	97	84	14.4	90	96	6.5	70 - 130	30
Tetrachloroethene	ND	5.0	95	84	12.3	89	91	2.2	70 - 130	30
Tetrahydrofuran (THF)	ND	5.0	84	74	12.7	77	80	3.8	70 - 130	30
Toluene	ND	1.0	93	82	12.6	88	90	2.2	70 - 130	30
trans-1,2-Dichloroethene	ND	5.0	94	82	13.6	90	93	3.3	70 - 130	30
trans-1,3-Dichloropropene	ND	5.0	92	80	14.0	81	84	3.6	70 - 130	30
trans-1,4-dichloro-2-butene	ND	5.0	108	91	17.1	83	90	8.1	70 - 130	30
Trichloroethene	ND	5.0	96	85	12.2	92	93	1.1	70 - 130	30
Trichlorofluoromethane	ND	5.0	113	97	15.2	109	112	2.7	70 - 130	30
Trichlorotrifluoroethane	ND	5.0	105	91	14.3	102	104	1.9	70 - 130	30
Vinyl chloride	ND	5.0	110	96	13.6	106	109	2.8	70 - 130	30
% 1,2-dichlorobenzene-d4	98	%	100	99	1.0	98	99	1.0	70 - 130	30
% Bromofluorobenzene	100	%	100	100	0.0	100	99	1.0	70 - 130	30
% Dibromofluoromethane	95	%	100	100	0.0	100	99	1.0	70 - 130	30
% Toluene-d8	103	%	98	99	1.0	99	99	0.0	70 - 130	30

Comment:

Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 439591 (mg/Kg), QC Sample No: CA93630 (CA91709)

TPH by GC (Extractable Products) - Soil

Ext. Petroleum H.C. (C9-C36)	ND	50	94	93	1.1	124	146	16.3	60 - 120	30
% n-Pentacosane	81	%	67	61	9.4	82	95	14.7	50 - 150	30

QA/QC Data

SDG I.D.: GCA91708

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Comment:											
Additional surrogate criteria: LCS acceptance range is 60-120% MS acceptance range 50-150%. The ETPH/DRO LCS has been normalized based on the alkane calibration.											
QA/QC Batch 439592 (mg/Kg), QC Sample No: CA93879 (CA91714)											
TPH by GC (Extractable Products) - Soil											
Ext. Petroleum H.C. (C9-C36)	ND	50	88	79	10.8	75	71	5.5	60 - 120	30	
% n-Pentacosane	64	%	91	84	8.0	96	83	14.5	50 - 150	30	
Comment:											
Additional surrogate criteria: LCS acceptance range is 60-120% MS acceptance range 50-150%. The ETPH/DRO LCS has been normalized based on the alkane calibration.											
QA/QC Batch 439968 (ug/kg), QC Sample No: CA94060 (CA91708, CA91709 (50X) , CA91714 (50X) , CA91719 (50X) , CA91720 (50X) , CA91721 (50X))											
Volatiles - Soil											
1,1,1,2-Tetrachloroethane	ND	5.0	100	101	1.0	100	101	1.0	70 - 130	30	
1,1,1-Trichloroethane	ND	5.0	94	95	1.1	90	91	1.1	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	3.0	98	100	2.0	95	93	2.1	70 - 130	30	
1,1,2-Trichloroethane	ND	5.0	92	92	0.0	95	93	2.1	70 - 130	30	
1,1-Dichloroethane	ND	5.0	83	85	2.4	80	80	0.0	70 - 130	30	
1,1-Dichloroethene	ND	5.0	91	92	1.1	76	75	1.3	70 - 130	30	
1,1-Dichloropropene	ND	5.0	94	94	0.0	95	95	0.0	70 - 130	30	
1,2,3-Trichlorobenzene	ND	5.0	96	98	2.1	97	100	3.0	70 - 130	30	
1,2,3-Trichloropropane	ND	5.0	92	93	1.1	86	85	1.2	70 - 130	30	
1,2,4-Trichlorobenzene	ND	5.0	95	99	4.1	99	101	2.0	70 - 130	30	
1,2,4-Trimethylbenzene	ND	1.0	94	96	2.1	95	96	1.0	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	5.0	101	105	3.9	100	97	3.0	70 - 130	30	
1,2-Dibromoethane	ND	5.0	96	97	1.0	97	96	1.0	70 - 130	30	
1,2-Dichlorobenzene	ND	5.0	92	95	3.2	95	95	0.0	70 - 130	30	
1,2-Dichloroethane	ND	5.0	92	93	1.1	93	91	2.2	70 - 130	30	
1,2-Dichloropropane	ND	5.0	90	91	1.1	91	91	0.0	70 - 130	30	
1,3,5-Trimethylbenzene	ND	1.0	94	97	3.1	95	96	1.0	70 - 130	30	
1,3-Dichlorobenzene	ND	5.0	93	96	3.2	97	97	0.0	70 - 130	30	
1,3-Dichloropropane	ND	5.0	92	93	1.1	93	92	1.1	70 - 130	30	
1,4-Dichlorobenzene	ND	5.0	92	94	2.2	94	95	1.1	70 - 130	30	
2,2-Dichloropropane	ND	5.0	98	96	2.1	92	94	2.2	70 - 130	30	
2-Chlorotoluene	ND	5.0	93	95	2.1	94	95	1.1	70 - 130	30	
2-Hexanone	ND	25	80	80	0.0	77	73	5.3	70 - 130	30	
2-Isopropyltoluene	ND	5.0	102	104	1.9	104	105	1.0	70 - 130	30	
4-Chlorotoluene	ND	5.0	92	94	2.2	93	95	2.1	70 - 130	30	
4-Methyl-2-pentanone	ND	25	85	85	0.0	83	79	4.9	70 - 130	30	
Acetone	ND	10	68	70	2.9	59	68	14.2	70 - 130	30	l,m
Acrylonitrile	ND	5.0	87	89	2.3	87	82	5.9	70 - 130	30	
Benzene	ND	1.0	92	92	0.0	92	92	0.0	70 - 130	30	
Bromobenzene	ND	5.0	95	97	2.1	97	97	0.0	70 - 130	30	
Bromochloromethane	ND	5.0	95	95	0.0	93	92	1.1	70 - 130	30	
Bromodichloromethane	ND	5.0	97	98	1.0	96	97	1.0	70 - 130	30	
Bromoform	ND	5.0	107	110	2.8	101	100	1.0	70 - 130	30	
Bromomethane	ND	5.0	109	105	3.7	92	91	1.1	70 - 130	30	
Carbon Disulfide	ND	5.0	105	108	2.8	72	77	6.7	70 - 130	30	
Carbon tetrachloride	ND	5.0	83	83	0.0	75	77	2.6	70 - 130	30	
Chlorobenzene	ND	5.0	93	94	1.1	94	95	1.1	70 - 130	30	
Chloroethane	ND	5.0	97	97	0.0	86	89	3.4	70 - 130	30	
Chloroform	ND	5.0	92	94	2.2	89	89	0.0	70 - 130	30	

QA/QC Data

SDG I.D.: GCA91708

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Chloromethane	ND	5.0	92	92	0.0	80	80	0.0	70 - 130	30	
cis-1,2-Dichloroethene	ND	5.0	94	95	1.1	93	92	1.1	70 - 130	30	
cis-1,3-Dichloropropene	ND	5.0	95	96	1.0	96	96	0.0	70 - 130	30	
Dibromochloromethane	ND	3.0	108	109	0.9	104	105	1.0	70 - 130	30	
Dibromomethane	ND	5.0	93	94	1.1	94	93	1.1	70 - 130	30	
Dichlorodifluoromethane	ND	5.0	112	113	0.9	99	99	0.0	70 - 130	30	
Ethylbenzene	ND	1.0	94	95	1.1	95	96	1.0	70 - 130	30	
Hexachlorobutadiene	ND	5.0	94	98	4.2	103	105	1.9	70 - 130	30	
Isopropylbenzene	ND	1.0	93	95	2.1	93	95	2.1	70 - 130	30	
m&p-Xylene	ND	2.0	95	98	3.1	96	98	2.1	70 - 130	30	
Methyl ethyl ketone	ND	5.0	75	74	1.3	72	68	5.7	70 - 130	30	m
Methyl t-butyl ether (MTBE)	ND	1.0	102	103	1.0	92	89	3.3	70 - 130	30	
Methylene chloride	ND	5.0	79	81	2.5	72	77	6.7	70 - 130	30	
Naphthalene	ND	5.0	98	100	2.0	100	99	1.0	70 - 130	30	
n-Butylbenzene	ND	1.0	94	98	4.2	97	98	1.0	70 - 130	30	
n-Propylbenzene	ND	1.0	92	95	3.2	94	95	1.1	70 - 130	30	
o-Xylene	ND	2.0	94	96	2.1	97	98	1.0	70 - 130	30	
p-Isopropyltoluene	ND	1.0	95	99	4.1	97	99	2.0	70 - 130	30	
sec-Butylbenzene	ND	1.0	97	100	3.0	98	100	2.0	70 - 130	30	
Styrene	ND	5.0	96	98	2.1	98	98	0.0	70 - 130	30	
tert-Butylbenzene	ND	1.0	93	95	2.1	93	96	3.2	70 - 130	30	
Tetrachloroethene	ND	5.0	93	94	1.1	99	100	1.0	70 - 130	30	
Tetrahydrofuran (THF)	ND	5.0	88	88	0.0	85	80	6.1	70 - 130	30	
Toluene	ND	1.0	92	93	1.1	94	95	1.1	70 - 130	30	
trans-1,2-Dichloroethene	ND	5.0	93	95	2.1	83	84	1.2	70 - 130	30	
trans-1,3-Dichloropropene	ND	5.0	95	94	1.1	95	93	2.1	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	5.0	111	113	1.8	103	101	2.0	70 - 130	30	
Trichloroethene	ND	5.0	95	96	1.0	95	97	2.1	70 - 130	30	
Trichlorofluoromethane	ND	5.0	106	107	0.9	94	92	2.2	70 - 130	30	
Trichlorotrifluoroethane	ND	5.0	102	101	1.0	87	82	5.9	70 - 130	30	
Vinyl chloride	ND	5.0	105	105	0.0	87	89	2.3	70 - 130	30	
% 1,2-dichlorobenzene-d4	98	%	99	100	1.0	99	99	0.0	70 - 130	30	
% Bromofluorobenzene	100	%	100	100	0.0	101	100	1.0	70 - 130	30	
% Dibromofluoromethane	96	%	102	101	1.0	99	100	1.0	70 - 130	30	
% Toluene-d8	103	%	99	99	0.0	100	99	1.0	70 - 130	30	

Comment:

Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 439654 (ug/Kg), QC Sample No: CA94225 2X (CA91708)

Polychlorinated Biphenyls - Soil

PCB-1016	ND	33	81	100	21.0	72	70	2.8	40 - 140	30	
PCB-1221	ND	33							40 - 140	30	
PCB-1232	ND	33							40 - 140	30	
PCB-1242	ND	33							40 - 140	30	
PCB-1248	ND	33							40 - 140	30	
PCB-1254	ND	33							40 - 140	30	
PCB-1260	ND	33	89	103	14.6	77	70	9.5	40 - 140	30	
PCB-1262	ND	33							40 - 140	30	
PCB-1268	ND	33							40 - 140	30	
% DCBP (Surrogate Rec)	95	%	105	99	5.9	71	60	16.8	30 - 150	30	
% TCMX (Surrogate Rec)	86	%	88	101	13.8	74	74	0.0	30 - 150	30	

QA/QC Data

SDG I.D.: GCA91708

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 439728 (mg/Kg), QC Sample No: CA94567 (CA91715, CA91717, CA91719, CA91720, CA91721)										
TPH by GC (Extractable Products) - Soil										
Ext. Petroleum H.C. (C9-C36)	ND	50	67	60	11.0	71	64	10.4	60 - 120	30
% n-Pentacosane	70	%	63	64	1.6	70	66	5.9	50 - 150	30
Comment:										
Additional surrogate criteria: LCS acceptance range is 60-120% MS acceptance range 50-150%. The ETPH/DRO LCS has been normalized based on the alkane calibration.										
QA/QC Batch 439787 (ug/kg), QC Sample No: CA94567 (CA91709)										
Polynuclear Aromatic HC - Soil										
2-Methylnaphthalene	ND	230	59	53	10.7	53	55	3.7	30 - 130	30
Acenaphthene	ND	230	59	52	12.6	53	55	3.7	30 - 130	30
Acenaphthylene	ND	230	56	50	11.3	51	52	1.9	30 - 130	30
Anthracene	ND	230	59	53	10.7	49	52	5.9	30 - 130	30
Benz(a)anthracene	ND	230	59	52	12.6	42	46	9.1	30 - 130	30
Benzo(a)pyrene	ND	230	57	50	13.1	41	45	9.3	30 - 130	30
Benzo(b)fluoranthene	ND	230	60	55	8.7	45	46	2.2	30 - 130	30
Benzo(ghi)perylene	ND	230	60	52	14.3	52	55	5.6	30 - 130	30
Benzo(k)fluoranthene	ND	230	59	50	16.5	41	46	11.5	30 - 130	30
Chrysene	ND	230	58	51	12.8	43	48	11.0	30 - 130	30
Dibenz(a,h)anthracene	ND	230	61	53	14.0	59	60	1.7	30 - 130	30
Fluoranthene	ND	230	60	54	10.5	36	45	22.2	30 - 130	30
Fluorene	ND	230	60	52	14.3	56	57	1.8	30 - 130	30
Indeno(1,2,3-cd)pyrene	ND	230	62	54	13.8	52	55	5.6	30 - 130	30
Naphthalene	ND	230	62	56	10.2	58	59	1.7	30 - 130	30
Phenanthrene	ND	230	59	53	10.7	36	45	22.2	30 - 130	30
Pyrene	ND	230	60	54	10.5	39	48	20.7	30 - 130	30
% 2-Fluorobiphenyl	44	%	57	52	9.2	52	52	0.0	30 - 130	30
% Nitrobenzene-d5	39	%	55	49	11.5	65	60	8.0	30 - 130	30
% Terphenyl-d14	40	%	56	52	7.4	56	55	1.8	30 - 130	30
Comment:										
Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)										
QA/QC Batch 439961 (ug/kg), QC Sample No: CA94870 (CA91709)										
Volatiles - Soil										
1,1,1,2-Tetrachloroethane	ND	5.0	96	97	1.0	102	95	7.1	70 - 130	30
1,1,1-Trichloroethane	ND	5.0	97	95	2.1	102	95	7.1	70 - 130	30
1,1,2,2-Tetrachloroethane	ND	3.0	99	100	1.0	105	91	14.3	70 - 130	30
1,1,2-Trichloroethane	ND	5.0	97	95	2.1	100	95	5.1	70 - 130	30
1,1-Dichloroethane	ND	5.0	100	99	1.0	100	94	6.2	70 - 130	30
1,1-Dichloroethene	ND	5.0	98	99	1.0	107	96	10.8	70 - 130	30
1,1-Dichloropropene	ND	5.0	98	99	1.0	106	97	8.9	70 - 130	30
1,2,3-Trichlorobenzene	ND	5.0	93	96	3.2	102	91	11.4	70 - 130	30
1,2,3-Trichloropropane	ND	5.0	92	93	1.1	97	92	5.3	70 - 130	30
1,2,4-Trichlorobenzene	ND	5.0	91	95	4.3	104	90	14.4	70 - 130	30
1,2,4-Trimethylbenzene	ND	1.0	95	98	3.1	105	82	24.6	70 - 130	30
1,2-Dibromo-3-chloropropane	ND	5.0	97	98	1.0	104	103	1.0	70 - 130	30
1,2-Dibromoethane	ND	5.0	95	96	1.0	98	95	3.1	70 - 130	30
1,2-Dichlorobenzene	ND	5.0	92	93	1.1	102	90	12.5	70 - 130	30
1,2-Dichloroethane	ND	5.0	93	93	0.0	94	87	7.7	70 - 130	30
1,2-Dichloropropane	ND	5.0	100	99	1.0	102	95	7.1	70 - 130	30
1,3,5-Trimethylbenzene	ND	1.0	98	100	2.0	107	95	11.9	70 - 130	30

QA/QC Data

SDG I.D.: GCA91708

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
1,3-Dichlorobenzene	ND	5.0	92	94	2.2	102	90	12.5	70 - 130	30
1,3-Dichloropropane	ND	5.0	95	95	0.0	99	93	6.3	70 - 130	30
1,4-Dichlorobenzene	ND	5.0	89	91	2.2	100	87	13.9	70 - 130	30
2,2-Dichloropropane	ND	5.0	100	103	3.0	94	92	2.2	70 - 130	30
2-Chlorotoluene	ND	5.0	95	98	3.1	105	96	9.0	70 - 130	30
2-Hexanone	ND	25	95	95	0.0	87	84	3.5	70 - 130	30
2-Isopropyltoluene	ND	5.0	106	108	1.9	115	107	7.2	70 - 130	30
4-Chlorotoluene	ND	5.0	94	95	1.1	101	90	11.5	70 - 130	30
4-Methyl-2-pentanone	ND	25	99	102	3.0	92	90	2.2	70 - 130	30
Acetone	ND	10	86	88	2.3	79	91	14.1	70 - 130	30
Acrylonitrile	ND	5.0	101	99	2.0	92	88	4.4	70 - 130	30
Bromobenzene	ND	5.0	95	95	0.0	104	95	9.0	70 - 130	30
Bromochloromethane	ND	5.0	97	96	1.0	102	96	6.1	70 - 130	30
Bromodichloromethane	ND	5.0	97	96	1.0	98	93	5.2	70 - 130	30
Bromoform	ND	5.0	96	96	0.0	97	93	4.2	70 - 130	30
Bromomethane	ND	5.0	107	104	2.8	111	103	7.5	70 - 130	30
Carbon Disulfide	ND	5.0	107	109	1.9	110	103	6.6	70 - 130	30
Carbon tetrachloride	ND	5.0	97	99	2.0	101	95	6.1	70 - 130	30
Chlorobenzene	ND	5.0	94	94	0.0	101	93	8.2	70 - 130	30
Chloroethane	ND	5.0	111	110	0.9	115	106	8.1	70 - 130	30
Chloroform	ND	5.0	94	95	1.1	96	92	4.3	70 - 130	30
Chloromethane	ND	5.0	105	105	0.0	99	90	9.5	70 - 130	30
cis-1,2-Dichloroethene	ND	5.0	100	100	0.0	105	102	2.9	70 - 130	30
cis-1,3-Dichloropropene	ND	5.0	101	102	1.0	103	97	6.0	70 - 130	30
Dibromochloromethane	ND	3.0	100	100	0.0	102	98	4.0	70 - 130	30
Dibromomethane	ND	5.0	93	93	0.0	98	91	7.4	70 - 130	30
Dichlorodifluoromethane	ND	5.0	102	106	3.8	106	98	7.8	70 - 130	30
Ethylbenzene	ND	1.0	96	97	1.0	96	89	7.6	70 - 130	30
Hexachlorobutadiene	ND	5.0	92	98	6.3	105	92	13.2	70 - 130	30
Isopropylbenzene	ND	1.0	100	101	1.0	109	102	6.6	70 - 130	30
m&p-Xylene	ND	2.0	94	95	1.1	84	78	7.4	70 - 130	30
Methyl ethyl ketone	ND	5.0	92	91	1.1	77	80	3.8	70 - 130	30
Methyl t-butyl ether (MTBE)	ND	1.0	105	106	0.9	107	103	3.8	70 - 130	30
Methylene chloride	ND	5.0	82	81	1.2	105	101	3.9	70 - 130	30
n-Butylbenzene	ND	1.0	94	100	6.2	109	94	14.8	70 - 130	30
n-Propylbenzene	ND	1.0	96	99	3.1	107	94	12.9	70 - 130	30
o-Xylene	ND	2.0	98	101	3.0	95	87	8.8	70 - 130	30
p-Isopropyltoluene	ND	1.0	98	103	5.0	110	101	8.5	70 - 130	30
sec-Butylbenzene	ND	1.0	101	105	3.9	111	103	7.5	70 - 130	30
Styrene	ND	5.0	100	100	0.0	105	98	6.9	70 - 130	30
tert-Butylbenzene	ND	1.0	100	102	2.0	108	102	5.7	70 - 130	30
Tetrahydrofuran (THF)	ND	5.0	104	106	1.9	88	86	2.3	70 - 130	30
trans-1,2-Dichloroethene	ND	5.0	98	100	2.0	105	99	5.9	70 - 130	30
trans-1,3-Dichloropropene	ND	5.0	96	96	0.0	94	88	6.6	70 - 130	30
trans-1,4-dichloro-2-butene	ND	5.0	109	110	0.9	104	96	8.0	70 - 130	30
Trichloroethene	ND	5.0	96	97	1.0	108	102	5.7	70 - 130	30
Trichlorofluoromethane	ND	5.0	101	102	1.0	101	95	6.1	70 - 130	30
Trichlorotrifluoroethane	ND	5.0	95	100	5.1	108	101	6.7	70 - 130	30
Vinyl chloride	ND	5.0	113	113	0.0	115	106	8.1	70 - 130	30
% 1,2-dichlorobenzene-d4	105	%	99	101	2.0	99	100	1.0	70 - 130	30
% Bromofluorobenzene	92	%	100	99	1.0	96	99	3.1	70 - 130	30
% Dibromofluoromethane	106	%	100	99	1.0	99	99	0.0	70 - 130	30
% Toluene-d8	100	%	102	102	0.0	102	100	2.0	70 - 130	30

QA/QC Data

SDG I.D.: GCA91708

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Comment:											
Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%.											
QA/QC Batch 439789 (ug/Kg), QC Sample No: CA95173 2X (CA91714, CA91715, CA91717, CA91719, CA91720, CA91721)											
Polychlorinated Biphenyls - Soil											
PCB-1016	ND	33	77	72	6.7	79	72	9.3	40 - 140	30	
PCB-1221	ND	33							40 - 140	30	
PCB-1232	ND	33							40 - 140	30	
PCB-1242	ND	33							40 - 140	30	
PCB-1248	ND	33							40 - 140	30	
PCB-1254	ND	33							40 - 140	30	
PCB-1260	ND	33	86	79	8.5	80	76	5.1	40 - 140	30	
PCB-1262	ND	33							40 - 140	30	
PCB-1268	ND	33							40 - 140	30	
% DCBP (Surrogate Rec)	96	%	105	97	7.9	93	86	7.8	30 - 150	30	
% TCMX (Surrogate Rec)	91	%	90	87	3.4	90	83	8.1	30 - 150	30	
QA/QC Batch 439785 (ug/kg), QC Sample No: CA95183 (CA91714, CA91715, CA91717, CA91719, CA91720, CA91721)											
Semivolatiles - Soil											
1,2,4,5-Tetrachlorobenzene	ND	230	56	53	5.5	51	52	1.9	30 - 130	30	
1,2,4-Trichlorobenzene	ND	230	52	51	1.9	55	53	3.7	30 - 130	30	
1,2-Dichlorobenzene	ND	180	46	46	0.0	46	46	0.0	30 - 130	30	
1,2-Diphenylhydrazine	ND	230	53	49	7.8	51	51	0.0	30 - 130	30	
1,3-Dichlorobenzene	ND	230	42	43	2.4	43	42	2.4	30 - 130	30	
1,4-Dichlorobenzene	ND	230	44	44	0.0	44	44	0.0	30 - 130	30	
2,4,5-Trichlorophenol	ND	230	64	59	8.1	57	58	1.7	30 - 130	30	
2,4,6-Trichlorophenol	ND	130	62	58	6.7	56	56	0.0	30 - 130	30	
2,4-Dichlorophenol	ND	130	62	59	5.0	56	57	1.8	30 - 130	30	
2,4-Dimethylphenol	ND	230	63	58	8.3	60	60	0.0	30 - 130	30	
2,4-Dinitrophenol	ND	230	10	<10	NC	36	32	11.8	30 - 130	30	I
2,4-Dinitrotoluene	ND	130	60	58	3.4	57	55	3.6	30 - 130	30	
2,6-Dinitrotoluene	ND	130	60	57	5.1	55	56	1.8	30 - 130	30	
2-Chloronaphthalene	ND	230	56	51	9.3	54	53	1.9	30 - 130	30	
2-Chlorophenol	ND	230	56	50	11.3	53	50	5.8	30 - 130	30	
2-Methylnaphthalene	ND	230	55	50	9.5	52	52	0.0	30 - 130	30	
2-Methylphenol (o-cresol)	ND	230	60	53	12.4	55	56	1.8	30 - 130	30	
2-Nitroaniline	ND	330	88	81	8.3	79	82	3.7	30 - 130	30	
2-Nitrophenol	ND	230	64	56	13.3	63	61	3.2	30 - 130	30	
3&4-Methylphenol (m&p-cresol)	ND	230	62	54	13.8	54	53	1.9	30 - 130	30	
3,3'-Dichlorobenzidine	ND	130	61	57	6.8	58	61	5.0	30 - 130	30	
3-Nitroaniline	ND	330	69	68	1.5	65	64	1.6	30 - 130	30	
4,6-Dinitro-2-methylphenol	ND	230	28	15	60.5	43	39	9.8	30 - 130	30	I,r
4-Bromophenyl phenyl ether	ND	230	59	56	5.2	54	56	3.6	30 - 130	30	
4-Chloro-3-methylphenol	ND	230	66	62	6.3	59	61	3.3	30 - 130	30	
4-Chloroaniline	ND	230	58	58	0.0	57	59	3.4	30 - 130	30	
4-Chlorophenyl phenyl ether	ND	230	56	52	7.4	52	52	0.0	30 - 130	30	
4-Nitroaniline	ND	230	64	58	9.8	58	57	1.7	30 - 130	30	
4-Nitrophenol	ND	230	67	61	9.4	61	61	0.0	30 - 130	30	
Acenaphthene	ND	230	57	53	7.3	54	55	1.8	30 - 130	30	
Acenaphthylene	ND	130	53	50	5.8	50	51	2.0	30 - 130	30	
Acetophenone	ND	230	50	48	4.1	47	47	0.0	30 - 130	30	
Aniline	ND	330	41	39	5.0	43	42	2.4	30 - 130	30	
Anthracene	ND	230	59	54	8.8	52	55	5.6	30 - 130	30	

QA/QC Data

SDG I.D.: GCA91708

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Benz(a)anthracene	ND	230	59	53	10.7	41	49	17.8	30 - 130	30	
Benzidine	ND	330	38	37	2.7	38	45	16.9	30 - 130	30	
Benzo(a)pyrene	ND	130	56	52	7.4	38	44	14.6	30 - 130	30	
Benzo(b)fluoranthene	ND	160	59	57	3.4	42	45	6.9	30 - 130	30	
Benzo(ghi)perylene	ND	230	61	56	8.5	40	45	11.8	30 - 130	30	
Benzo(k)fluoranthene	ND	230	61	55	10.3	41	47	13.6	30 - 130	30	
Benzoic Acid	ND	330	<10	<10	NC	<10	<10	NC	30 - 130	30	l,m
Benzyl butyl phthalate	ND	230	55	51	7.5	50	49	2.0	30 - 130	30	
Bis(2-chloroethoxy)methane	ND	230	54	51	5.7	52	52	0.0	30 - 130	30	
Bis(2-chloroethyl)ether	ND	130	41	41	0.0	42	42	0.0	30 - 130	30	
Bis(2-chloroisopropyl)ether	ND	230	42	39	7.4	40	39	2.5	30 - 130	30	
Bis(2-ethylhexyl)phthalate	ND	230	55	53	3.7	54	55	1.8	30 - 130	30	
Carbazole	ND	230	61	57	6.8	54	56	3.6	30 - 130	30	
Chrysene	ND	230	58	54	7.1	39	45	14.3	30 - 130	30	
Dibenz(a,h)anthracene	ND	130	65	59	9.7	54	57	5.4	30 - 130	30	
Dibenzofuran	ND	230	57	52	9.2	52	52	0.0	30 - 130	30	
Diethyl phthalate	ND	230	59	57	3.4	56	55	1.8	30 - 130	30	
Dimethylphthalate	ND	230	58	54	7.1	55	54	1.8	30 - 130	30	
Di-n-butylphthalate	ND	670	59	55	7.0	51	52	1.9	30 - 130	30	
Di-n-octylphthalate	ND	230	63	59	6.6	58	61	5.0	30 - 130	30	
Fluoranthene	ND	230	62	57	8.4	15	31	69.6	30 - 130	30	m,r
Fluorene	ND	230	56	52	7.4	53	53	0.0	30 - 130	30	
Hexachlorobenzene	ND	130	61	54	12.2	54	57	5.4	30 - 130	30	
Hexachlorobutadiene	ND	230	55	53	3.7	57	55	3.6	30 - 130	30	
Hexachlorocyclopentadiene	ND	230	41	36	13.0	19	17	11.1	30 - 130	30	m
Hexachloroethane	ND	130	47	47	0.0	49	48	2.1	30 - 130	30	
Indeno(1,2,3-cd)pyrene	ND	230	64	60	6.5	42	48	13.3	30 - 130	30	
Isophorone	ND	130	52	48	8.0	51	49	4.0	30 - 130	30	
Naphthalene	ND	230	52	49	5.9	51	51	0.0	30 - 130	30	
Nitrobenzene	ND	130	55	51	7.5	53	52	1.9	30 - 130	30	
N-Nitrosodimethylamine	ND	230	36	36	0.0	38	30	23.5	30 - 130	30	
N-Nitrosodi-n-propylamine	ND	130	59	52	12.6	55	53	3.7	30 - 130	30	
N-Nitrosodiphenylamine	ND	130	58	55	5.3	54	54	0.0	30 - 130	30	
Pentachloronitrobenzene	ND	230	59	54	8.8	51	53	3.8	30 - 130	30	
Pentachlorophenol	ND	230	64	50	24.6	54	54	0.0	30 - 130	30	
Phenanthrene	ND	130	57	52	9.2	30	35	15.4	30 - 130	30	
Phenol	ND	230	55	50	9.5	53	53	0.0	30 - 130	30	
Pyrene	ND	230	64	59	8.1	25	39	43.8	30 - 130	30	m,r
Pyridine	ND	230	27	29	7.1	29	23	23.1	30 - 130	30	l,m
% 2,4,6-Tribromophenol	59	%	66	60	9.5	62	58	6.7	30 - 130	30	
% 2-Fluorobiphenyl	53	%	54	49	9.7	52	51	1.9	30 - 130	30	
% 2-Fluorophenol	48	%	49	49	0.0	50	45	10.5	30 - 130	30	
% Nitrobenzene-d5	53	%	54	52	3.8	54	52	3.8	30 - 130	30	
% Phenol-d5	53	%	57	51	11.1	53	51	3.8	30 - 130	30	
% Terphenyl-d14	59	%	61	56	8.5	49	52	5.9	30 - 130	30	

Comment:

Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

QA/QC Batch 440641 (ug/kg), QC Sample No: CA99009 (CA91711, CA91712)

Polynuclear Aromatic HC - Soil

2-Methylnaphthalene	ND	230	47	62	27.5	62			30 - 130	30	
Acenaphthene	ND	230	51	69	30.0	64			30 - 130	30	

QA/QC Data

SDG I.D.: GCA91708

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Acenaphthylene	ND	230	50	65	26.1	62			30 - 130	30	
Anthracene	ND	230	52	72	32.3	67			30 - 130	30	r
Benz(a)anthracene	ND	230	54	73	29.9	68			30 - 130	30	
Benzo(a)pyrene	ND	230	52	71	30.9	66			30 - 130	30	r
Benzo(b)fluoranthene	ND	230	54	74	31.3	67			30 - 130	30	r
Benzo(ghi)perylene	ND	230	50	67	29.1	65			30 - 130	30	
Benzo(k)fluoranthene	ND	230	54	71	27.2	68			30 - 130	30	
Chrysene	ND	230	52	71	30.9	66			30 - 130	30	r
Dibenz(a,h)anthracene	ND	230	54	72	28.6	70			30 - 130	30	
Fluoranthene	ND	230	53	71	29.0	68			30 - 130	30	
Fluorene	ND	230	52	68	26.7	64			30 - 130	30	
Indeno(1,2,3-cd)pyrene	ND	230	56	77	31.6	72			30 - 130	30	r
Naphthalene	ND	230	48	65	30.1	62			30 - 130	30	
Phenanthrene	ND	230	51	69	30.0	64			30 - 130	30	
Pyrene	ND	230	53	71	29.0	68			30 - 130	30	
% 2-Fluorobiphenyl	70	%	43	69	46.4	65			30 - 130	30	r
% Nitrobenzene-d5	58	%	40	59	38.4	60			30 - 130	30	r
% Terphenyl-d14	65	%	43	71	49.1	68			30 - 130	30	r

Comment:

This batch consists of a Blank, LCS, LCSD and MS.

Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

QA/QC Batch 440643 (mg/Kg), QC Sample No: CA99145 (CA91711, CA91712)

TPH by GC (Extractable Products) - Soil

Ext. Petroleum H.C. (C9-C36)	ND	50	67	63	6.2	75	72	4.1	60 - 120	30	
% n-Pentacosane	68	%	73	67	8.6	76	78	2.6	50 - 150	30	

Comment:

Additional surrogate criteria: LCS acceptance range is 60-120% MS acceptance range 50-150%. The ETPH/DRO LCS has been normalized based on the alkane calibration.

QA/QC Batch 440867 (ug/kg), QC Sample No: CA99219 (CA91711 (50X))

Volatiles - Soil

1,1,2,2-Tetrachloroethane	ND	3.0	107	102	4.8	109	109	0.0	70 - 130	30	
1,2,3-Trichlorobenzene	ND	5.0	106	102	3.8	116	112	3.5	70 - 130	30	
1,2,3-Trichloropropane	ND	5.0	102	98	4.0	107	105	1.9	70 - 130	30	
1,2,4-Trichlorobenzene	ND	5.0	104	99	4.9	110	107	2.8	70 - 130	30	
1,2,4-Trimethylbenzene	ND	1.0	100	97	3.0	109	105	3.7	70 - 130	30	
1,2-Dichlorobenzene	ND	5.0	102	99	3.0	108	104	3.8	70 - 130	30	
1,3,5-Trimethylbenzene	ND	1.0	99	97	2.0	106	103	2.9	70 - 130	30	
1,3-Dichlorobenzene	ND	5.0	102	99	3.0	109	106	2.8	70 - 130	30	
1,4-Dichlorobenzene	ND	5.0	101	98	3.0	107	104	2.8	70 - 130	30	
2-Chlorotoluene	ND	5.0	101	99	2.0	109	104	4.7	70 - 130	30	
2-Isopropyltoluene	ND	5.0	104	103	1.0	112	109	2.7	70 - 130	30	
4-Chlorotoluene	ND	5.0	100	99	1.0	108	104	3.8	70 - 130	30	
Bromobenzene	ND	5.0	101	99	2.0	106	105	0.9	70 - 130	30	
Hexachlorobutadiene	ND	5.0	100	96	4.1	98	102	4.0	70 - 130	30	
Isopropylbenzene	ND	1.0	99	98	1.0	105	103	1.9	70 - 130	30	
Naphthalene	ND	5.0	111	105	5.6	125	120	4.1	70 - 130	30	
n-Butylbenzene	ND	1.0	105	102	2.9	113	110	2.7	70 - 130	30	
n-Propylbenzene	ND	1.0	99	98	1.0	108	103	4.7	70 - 130	30	
p-Isopropyltoluene	ND	1.0	102	100	2.0	111	106	4.6	70 - 130	30	
sec-Butylbenzene	ND	1.0	102	100	2.0	110	109	0.9	70 - 130	30	

QA/QC Data

SDG I.D.: GCA91708

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
tert-Butylbenzene	ND	1.0	97	96	1.0	105	102	2.9	70 - 130	30
trans-1,4-dichloro-2-butene	ND	5.0	101	97	4.0	95	95	0.0	70 - 130	30
% 1,2-dichlorobenzene-d4	98	%	101	100	1.0	105	100	4.9	70 - 130	30
% Bromofluorobenzene	96	%	100	100	0.0	100	101	1.0	70 - 130	30

Comment:

Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 440852 (ug/kg), QC Sample No: CA99223 (CA91711, CA91712)

Volatiles - Soil

1,1,1,2-Tetrachloroethane	ND	5.0	93	95	2.1	94	98	4.2	70 - 130	30
1,1,1-Trichloroethane	ND	5.0	92	92	0.0	94	100	6.2	70 - 130	30
1,1,2,2-Tetrachloroethane	ND	3.0	99	101	2.0	100	106	5.8	70 - 130	30
1,1,2-Trichloroethane	ND	5.0	96	97	1.0	93	96	3.2	70 - 130	30
1,1-Dichloroethane	ND	5.0	97	98	1.0	101	102	1.0	70 - 130	30
1,1-Dichloroethene	ND	5.0	108	103	4.7	113	116	2.6	70 - 130	30
1,1-Dichloropropene	ND	5.0	96	98	2.1	98	104	5.9	70 - 130	30
1,2,3-Trichlorobenzene	ND	5.0	98	99	1.0	85	91	6.8	70 - 130	30
1,2,3-Trichloropropane	ND	5.0	96	99	3.1	97	102	5.0	70 - 130	30
1,2,4-Trichlorobenzene	ND	5.0	94	96	2.1	81	90	10.5	70 - 130	30
1,2,4-Trimethylbenzene	ND	1.0	96	98	2.1	95	101	6.1	70 - 130	30
1,2-Dibromo-3-chloropropane	ND	5.0	91	93	2.2	91	90	1.1	70 - 130	30
1,2-Dibromoethane	ND	5.0	94	96	2.1	94	98	4.2	70 - 130	30
1,2-Dichlorobenzene	ND	5.0	96	99	3.1	92	100	8.3	70 - 130	30
1,2-Dichloroethane	ND	5.0	101	104	2.9	99	104	4.9	70 - 130	30
1,2-Dichloropropane	ND	5.0	98	99	1.0	98	98	0.0	70 - 130	30
1,3,5-Trimethylbenzene	ND	1.0	93	96	3.2	96	102	6.1	70 - 130	30
1,3-Dichlorobenzene	ND	5.0	96	98	2.1	92	99	7.3	70 - 130	30
1,3-Dichloropropane	ND	5.0	96	97	1.0	97	97	0.0	70 - 130	30
1,4-Dichlorobenzene	ND	5.0	95	97	2.1	89	98	9.6	70 - 130	30
2,2-Dichloropropane	ND	5.0	91	91	0.0	89	88	1.1	70 - 130	30
2-Chlorotoluene	ND	5.0	95	96	1.0	97	103	6.0	70 - 130	30
2-Hexanone	ND	25	92	91	1.1	87	89	2.3	70 - 130	30
2-Isopropyltoluene	ND	5.0	100	103	3.0	103	108	4.7	70 - 130	30
4-Chlorotoluene	ND	5.0	95	98	3.1	94	100	6.2	70 - 130	30
4-Methyl-2-pentanone	ND	25	100	99	1.0	95	96	1.0	70 - 130	30
Acetone	ND	10	78	83	6.2	71	75	5.5	70 - 130	30
Acrylonitrile	ND	5.0	90	90	0.0	90	86	4.5	70 - 130	30
Benzene	ND	1.0	96	98	2.1	98	103	5.0	70 - 130	30
Bromobenzene	ND	5.0	96	99	3.1	95	101	6.1	70 - 130	30
Bromochloromethane	ND	5.0	93	93	0.0	93	98	5.2	70 - 130	30
Bromodichloromethane	ND	5.0	95	97	2.1	93	95	2.1	70 - 130	30
Bromoform	ND	5.0	87	87	0.0	83	85	2.4	70 - 130	30
Bromomethane	ND	5.0	110	113	2.7	118	123	4.1	70 - 130	30
Carbon Disulfide	ND	5.0	107	104	2.8	108	114	5.4	70 - 130	30
Carbon tetrachloride	ND	5.0	87	87	0.0	88	92	4.4	70 - 130	30
Chlorobenzene	ND	5.0	96	97	1.0	98	101	3.0	70 - 130	30
Chloroethane	ND	5.0	110	105	4.7	113	119	5.2	70 - 130	30
Chloroform	ND	5.0	90	91	1.1	93	96	3.2	70 - 130	30
Chloromethane	ND	5.0	95	92	3.2	92	94	2.2	70 - 130	30
cis-1,2-Dichloroethene	ND	5.0	96	95	1.0	95	97	2.1	70 - 130	30
cis-1,3-Dichloropropene	ND	5.0	96	96	0.0	90	94	4.3	70 - 130	30
Dibromochloromethane	ND	3.0	95	97	2.1	90	95	5.4	70 - 130	30
Dibromomethane	ND	5.0	97	99	2.0	94	98	4.2	70 - 130	30

QA/QC Data

SDG I.D.: GCA91708

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Dichlorodifluoromethane	ND	5.0	101	99	2.0	98	101	3.0	70 - 130	30	
Ethylbenzene	ND	1.0	94	96	2.1	98	102	4.0	70 - 130	30	
Hexachlorobutadiene	ND	5.0	95	97	2.1	94	101	7.2	70 - 130	30	
Isopropylbenzene	ND	1.0	93	97	4.2	99	105	5.9	70 - 130	30	
m&p-Xylene	ND	2.0	93	93	0.0	94	99	5.2	70 - 130	30	
Methyl ethyl ketone	ND	5.0	92	95	3.2	90	91	1.1	70 - 130	30	
Methyl t-butyl ether (MTBE)	ND	1.0	87	86	1.2	85	84	1.2	70 - 130	30	
Methylene chloride	ND	5.0	104	102	1.9	106	108	1.9	70 - 130	30	
Naphthalene	ND	5.0	103	104	1.0	91	95	4.3	70 - 130	30	
n-Butylbenzene	ND	1.0	99	102	3.0	98	105	6.9	70 - 130	30	
n-Propylbenzene	ND	1.0	94	96	2.1	98	103	5.0	70 - 130	30	
o-Xylene	ND	2.0	94	95	1.1	96	100	4.1	70 - 130	30	
p-Isopropyltoluene	ND	1.0	97	99	2.0	98	105	6.9	70 - 130	30	
sec-Butylbenzene	ND	1.0	97	100	3.0	101	107	5.8	70 - 130	30	
Styrene	ND	5.0	95	95	0.0	94	97	3.1	70 - 130	30	
tert-Butylbenzene	ND	1.0	92	96	4.3	97	102	5.0	70 - 130	30	
Tetrachloroethene	ND	5.0	96	99	3.1	97	105	7.9	70 - 130	30	
Tetrahydrofuran (THF)	ND	5.0	94	95	1.1	93	94	1.1	70 - 130	30	
Toluene	ND	1.0	97	98	1.0	98	101	3.0	70 - 130	30	
trans-1,2-Dichloroethene	ND	5.0	106	103	2.9	108	111	2.7	70 - 130	30	
trans-1,3-Dichloropropene	ND	5.0	89	92	3.3	85	88	3.5	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	5.0	94	96	2.1	82	87	5.9	70 - 130	30	
Trichloroethene	ND	5.0	98	101	3.0	101	105	3.9	70 - 130	30	
Trichlorofluoromethane	ND	5.0	100	100	0.0	107	111	3.7	70 - 130	30	
Trichlorotrifluoroethane	ND	5.0	109	108	0.9	115	120	4.3	70 - 130	30	
Vinyl chloride	ND	5.0	106	105	0.9	110	113	2.7	70 - 130	30	
% 1,2-dichlorobenzene-d4	98	%	100	103	3.0	101	101	0.0	70 - 130	30	
% Bromofluorobenzene	97	%	101	101	0.0	101	100	1.0	70 - 130	30	
% Dibromofluoromethane	98	%	97	99	2.0	97	96	1.0	70 - 130	30	
% Toluene-d8	97	%	103	105	1.9	103	102	1.0	70 - 130	30	

Comment:

Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 440644 (ug/Kg), QC Sample No: CA99736 2X (CA91709, CA91711)

Polychlorinated Biphenyls - Soil

PCB-1016	ND	33	67	54	21.5	39	41	5.0	40 - 140	30	m
PCB-1221	ND	33							40 - 140	30	
PCB-1232	ND	33							40 - 140	30	
PCB-1242	ND	33							40 - 140	30	
PCB-1248	ND	33							40 - 140	30	
PCB-1254	ND	33							40 - 140	30	
PCB-1260	ND	33	87	75	14.8	57	62	8.4	40 - 140	30	
PCB-1262	ND	33							40 - 140	30	
PCB-1268	ND	33							40 - 140	30	
% DCBP (Surrogate Rec)	100	%	114	109	4.5	78	86	9.8	30 - 150	30	
% TCMX (Surrogate Rec)	83	%	98	95	3.1	64	66	3.1	30 - 150	30	

l = This parameter is outside laboratory LCS/LCSD specified recovery limits.
m = This parameter is outside laboratory MS/MSD specified recovery limits.
r = This parameter is outside laboratory RPD specified recovery limits.

QA/QC Data

SDG I.D.: GCA91708

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller, Laboratory Director
July 31, 2018

Tuesday, July 31, 2018

Criteria: CT: GBM, I/C, RC

State: CT

Sample Criteria Exceedances Report

GCA91708 - TIGHE-DAS

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CA91708	$8100SMR	Indeno(1,2,3-cd)pyrene	CT / RSR DEC I/C (mg/kg) / APS Organics	11000	1000	7800	7800	ug/Kg
CA91708	$8100SMR	Dibenz(a,h)anthracene	CT / RSR DEC I/C (mg/kg) / APS Organics	1700	1000	1000	1000	ug/Kg
CA91708	$8100SMR	Benzo(a)pyrene	CT / RSR DEC I/C (mg/kg) / Semivolatiles	4700	1000	1000	1000	ug/Kg
CA91708	$8100SMR	Indeno(1,2,3-cd)pyrene	CT / RSR DEC RES (mg/kg) / APS Organics	11000	1000	1000	1000	ug/Kg
CA91708	$8100SMR	Benzo(ghi)perylene	CT / RSR DEC RES (mg/kg) / APS Organics	10000	1000	8400	8400	ug/Kg
CA91708	$8100SMR	Dibenz(a,h)anthracene	CT / RSR DEC RES (mg/kg) / APS Organics	1700	1000	1000	1000	ug/Kg
CA91708	$8100SMR	Benzo(a)pyrene	CT / RSR DEC RES (mg/kg) / Semivolatiles	4700	1000	1000	1000	ug/Kg
CA91708	$8100SMR	Benzo(b)fluoranthene	CT / RSR DEC RES (mg/kg) / Semivolatiles	3800	1000	1000	1000	ug/Kg
CA91708	$8100SMR	Benz(a)anthracene	CT / RSR DEC RES (mg/kg) / Semivolatiles	2700	1000	1000	1000	ug/Kg
CA91708	$8100SMR	Benzo(ghi)perylene	CT / RSR GB (mg/kg) / APS Organics	10000	1000	1000	1000	ug/Kg
CA91708	$8100SMR	Indeno(1,2,3-cd)pyrene	CT / RSR GB (mg/kg) / APS Organics	11000	1000	1000	1000	ug/Kg
CA91708	$8100SMR	Dibenz(a,h)anthracene	CT / RSR GB (mg/kg) / APS Organics	1700	1000	1000	1000	ug/Kg
CA91708	$8100SMR	Chrysene	CT / RSR GB (mg/kg) / APS Organics	3700	1000	1000	1000	ug/Kg
CA91708	$8100SMR	Benzo(b)fluoranthene	CT / RSR GB (mg/kg) / Semivolatiles	3800	1000	1000	1000	ug/Kg
CA91708	$8100SMR	Benzo(a)pyrene	CT / RSR GB (mg/kg) / Semivolatiles	4700	1000	1000	1000	ug/Kg
CA91708	$8100SMR	Benz(a)anthracene	CT / RSR GB (mg/kg) / Semivolatiles	2700	1000	1000	1000	ug/Kg
CA91708	$8100SMR	Benzo(k)fluoranthene	CT / RSR GB (mg/kg) / Semivolatiles	2200	1000	1000	1000	ug/Kg
CA91708	$8260MAR	Benzene	CT / RSR GB (mg/kg) / Volatiles	220	200	200	200	ug/Kg
CA91708	$ETPH_SMR	Ext. Petroleum H.C. (C9-C36)	CT / RSR DEC RES (mg/kg) / Pest/PCB/TPH	1400	260	500	500	mg/Kg
CA91708	AS-SM	Arsenic	CT / RSR DEC I/C (mg/kg) / Inorganics	22.4	0.67	10	10	mg/Kg
CA91708	AS-SM	Arsenic	CT / RSR DEC RES (mg/kg) / Inorganics	22.4	0.67	10	10	mg/Kg
CA91709	$8100SMR	Indeno(1,2,3-cd)pyrene	CT / RSR DEC I/C (mg/kg) / APS Organics	22000	1300	7800	7800	ug/Kg
CA91709	$8100SMR	Dibenz(a,h)anthracene	CT / RSR DEC I/C (mg/kg) / APS Organics	4400	1200	1000	1000	ug/Kg
CA91709	$8100SMR	Benz(a)anthracene	CT / RSR DEC I/C (mg/kg) / Semivolatiles	28000	1300	7800	7800	ug/Kg
CA91709	$8100SMR	Benzo(a)pyrene	CT / RSR DEC I/C (mg/kg) / Semivolatiles	16000	1200	1000	1000	ug/Kg
CA91709	$8100SMR	Benzo(b)fluoranthene	CT / RSR DEC I/C (mg/kg) / Semivolatiles	23000	1300	7800	7800	ug/Kg
CA91709	$8100SMR	Benzo(ghi)perylene	CT / RSR DEC RES (mg/kg) / APS Organics	26000	1200	8400	8400	ug/Kg
CA91709	$8100SMR	Indeno(1,2,3-cd)pyrene	CT / RSR DEC RES (mg/kg) / APS Organics	22000	1300	1000	1000	ug/Kg
CA91709	$8100SMR	Dibenz(a,h)anthracene	CT / RSR DEC RES (mg/kg) / APS Organics	4400	1200	1000	1000	ug/Kg
CA91709	$8100SMR	Benzo(k)fluoranthene	CT / RSR DEC RES (mg/kg) / Semivolatiles	19000	1300	8400	8400	ug/Kg
CA91709	$8100SMR	Benzo(b)fluoranthene	CT / RSR DEC RES (mg/kg) / Semivolatiles	23000	1300	1000	1000	ug/Kg
CA91709	$8100SMR	Benzo(a)pyrene	CT / RSR DEC RES (mg/kg) / Semivolatiles	16000	1200	1000	1000	ug/Kg
CA91709	$8100SMR	Benz(a)anthracene	CT / RSR DEC RES (mg/kg) / Semivolatiles	28000	1300	1000	1000	ug/Kg
CA91709	$8100SMR	Chrysene	CT / RSR GB (mg/kg) / APS Organics	37000	1300	1000	1000	ug/Kg
CA91709	$8100SMR	Dibenz(a,h)anthracene	CT / RSR GB (mg/kg) / APS Organics	4400	1200	1000	1000	ug/Kg
CA91709	$8100SMR	Indeno(1,2,3-cd)pyrene	CT / RSR GB (mg/kg) / APS Organics	22000	1300	1000	1000	ug/Kg
CA91709	$8100SMR	Benzo(ghi)perylene	CT / RSR GB (mg/kg) / APS Organics	26000	1200	1000	1000	ug/Kg
CA91709	$8100SMR	Benzo(k)fluoranthene	CT / RSR GB (mg/kg) / Semivolatiles	19000	1300	1000	1000	ug/Kg
CA91709	$8100SMR	Pyrene	CT / RSR GB (mg/kg) / Semivolatiles	110000	13000	40000	40000	ug/Kg
CA91709	$8100SMR	Phenanthrene	CT / RSR GB (mg/kg) / Semivolatiles	45000	2700	40000	40000	ug/Kg
CA91709	$8100SMR	Benz(a)anthracene	CT / RSR GB (mg/kg) / Semivolatiles	28000	1300	1000	1000	ug/Kg

Tuesday, July 31, 2018

Criteria: CT: GBM, I/C, RC

State: CT

Sample Criteria Exceedances Report

GCA91708 - TIGHE-DAS

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CA91709	$8100SMR	Benzo(a)pyrene	CT / RSR GB (mg/kg) / Semivolatiles	16000	1200	1000	1000	ug/Kg
CA91709	$8100SMR	Benzo(b)fluoranthene	CT / RSR GB (mg/kg) / Semivolatiles	23000	1300	1000	1000	ug/Kg
CA91709	$8260MAR	Benzene	CT / RSR GB (mg/kg) / Volatiles	350	200	200	200	ug/Kg
CA91709	$ETPH_SMR	Ext. Petroleum H.C. (C9-C36)	CT / RSR DEC I/C (mg/kg) / Pest/PCB/TPH	4800	290	2500	2500	mg/Kg
CA91709	$ETPH_SMR	Ext. Petroleum H.C. (C9-C36)	CT / RSR DEC RES (mg/kg) / Pest/PCB/TPH	4800	290	500	500	mg/Kg
CA91709	$ETPH_SMR	Ext. Petroleum H.C. (C9-C36)	CT / RSR GB (mg/kg) / Pesticides/TPH	4800	290	2500	2500	mg/Kg
CA91709	AS-SM	Arsenic	CT / RSR DEC I/C (mg/kg) / Inorganics	15.4	0.79	10	10	mg/Kg
CA91709	AS-SM	Arsenic	CT / RSR DEC RES (mg/kg) / Inorganics	15.4	0.79	10	10	mg/Kg
CA91711	$8100SMR	Benzo(a)pyrene	CT / RSR DEC I/C (mg/kg) / Semivolatiles	2000	260	1000	1000	ug/Kg
CA91711	$8100SMR	Indeno(1,2,3-cd)pyrene	CT / RSR DEC RES (mg/kg) / APS Organics	2500	260	1000	1000	ug/Kg
CA91711	$8100SMR	Benzo(b)fluoranthene	CT / RSR DEC RES (mg/kg) / Semivolatiles	1400	260	1000	1000	ug/Kg
CA91711	$8100SMR	Benzo(a)pyrene	CT / RSR DEC RES (mg/kg) / Semivolatiles	2000	260	1000	1000	ug/Kg
CA91711	$8100SMR	Benzo(ghi)perylene	CT / RSR GB (mg/kg) / APS Organics	2900	260	1000	1000	ug/Kg
CA91711	$8100SMR	Indeno(1,2,3-cd)pyrene	CT / RSR GB (mg/kg) / APS Organics	2500	260	1000	1000	ug/Kg
CA91711	$8100SMR	Benzo(b)fluoranthene	CT / RSR GB (mg/kg) / Semivolatiles	1400	260	1000	1000	ug/Kg
CA91711	$8100SMR	Benzo(k)fluoranthene	CT / RSR GB (mg/kg) / Semivolatiles	1200	260	1000	1000	ug/Kg
CA91711	$8100SMR	Benzo(a)pyrene	CT / RSR GB (mg/kg) / Semivolatiles	2000	260	1000	1000	ug/Kg
CA91711	AS-SM	Arsenic	CT / RSR DEC I/C (mg/kg) / Inorganics	14.8	0.79	10	10	mg/Kg
CA91711	AS-SM	Arsenic	CT / RSR DEC RES (mg/kg) / Inorganics	14.8	0.79	10	10	mg/Kg
CA91714	$8270-SMR	Benzo(ghi)perylene	CT / RSR GB (mg/kg) / APS Organics	1100	260	1000	1000	ug/Kg
CA91714	AS-SM	Arsenic	CT / RSR DEC I/C (mg/kg) / Inorganics	28.5	0.72	10	10	mg/Kg
CA91714	AS-SM	Arsenic	CT / RSR DEC RES (mg/kg) / Inorganics	28.5	0.72	10	10	mg/Kg
CA91721	$8270-SMR	Dibenz(a,h)anthracene	CT / RSR DEC I/C (mg/kg) / APS Organics	1200	520	1000	1000	ug/Kg
CA91721	$8270-SMR	Benzidine	CT / RSR DEC I/C (mg/kg) / APS Organics	ND	300	200	200	ug/Kg
CA91721	$8270-SMR	Benzo(a)pyrene	CT / RSR DEC I/C (mg/kg) / Semivolatiles	2700	520	1000	1000	ug/Kg
CA91721	$8270-SMR	Indeno(1,2,3-cd)pyrene	CT / RSR DEC RES (mg/kg) / APS Organics	4100	520	1000	1000	ug/Kg
CA91721	$8270-SMR	Benzidine	CT / RSR DEC RES (mg/kg) / APS Organics	ND	300	200	200	ug/Kg
CA91721	$8270-SMR	Dibenz(a,h)anthracene	CT / RSR DEC RES (mg/kg) / APS Organics	1200	520	1000	1000	ug/Kg
CA91721	$8270-SMR	Benzo(a)pyrene	CT / RSR DEC RES (mg/kg) / Semivolatiles	2700	520	1000	1000	ug/Kg
CA91721	$8270-SMR	Benzo(b)fluoranthene	CT / RSR DEC RES (mg/kg) / Semivolatiles	2700	520	1000	1000	ug/Kg
CA91721	$8270-SMR	Dibenz(a,h)anthracene	CT / RSR GB (mg/kg) / APS Organics	1200	520	1000	1000	ug/Kg
CA91721	$8270-SMR	Benzo(ghi)perylene	CT / RSR GB (mg/kg) / APS Organics	4400	520	1000	1000	ug/Kg
CA91721	$8270-SMR	Chrysene	CT / RSR GB (mg/kg) / APS Organics	1300	520	1000	1000	ug/Kg
CA91721	$8270-SMR	Indeno(1,2,3-cd)pyrene	CT / RSR GB (mg/kg) / APS Organics	4100	520	1000	1000	ug/Kg
CA91721	$8270-SMR	Benzo(b)fluoranthene	CT / RSR GB (mg/kg) / Semivolatiles	2700	520	1000	1000	ug/Kg
CA91721	$8270-SMR	Benzo(a)pyrene	CT / RSR GB (mg/kg) / Semivolatiles	2700	520	1000	1000	ug/Kg
CA91721	$8270-SMR	Benzo(k)fluoranthene	CT / RSR GB (mg/kg) / Semivolatiles	1400	520	1000	1000	ug/Kg
CA91721	$ETPH_SMR	Ext. Petroleum H.C. (C9-C36)	CT / RSR DEC I/C (mg/kg) / Pest/PCB/TPH	2600	280	2500	2500	mg/Kg
CA91721	$ETPH_SMR	Ext. Petroleum H.C. (C9-C36)	CT / RSR DEC RES (mg/kg) / Pest/PCB/TPH	2600	280	500	500	mg/Kg
CA91721	$ETPH_SMR	Ext. Petroleum H.C. (C9-C36)	CT / RSR GB (mg/kg) / Pesticides/TPH	2600	280	2500	2500	mg/Kg

Tuesday, July 31, 2018

Criteria: CT: GBM, I/C, RC

State: CT

Sample Criteria Exceedances Report

GCA91708 - TIGHE-DAS

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

REASONABLE CONFIDENCE PROTOCOL
LABORATORY ANALYSIS QA/QC CERTIFICATION FORM

Laboratory Name: Phoenix Environmental Labs, Inc. ***Client:*** Tighe & Bond

Project Location: ROCKVILLE MGP ***Project Number:***

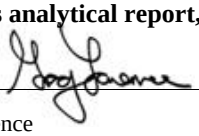
Laboratory Sample ID(s): CA91708, CA91709, CA91711, CA91712, CA91714, CA91715, CA91717, CA91719-CA91721 ***Sampling Date(s):*** 7/16/2018, 7/17/2018

List RCP Methods Used (e.g., 8260, 8270, et cetera) 1311/1312, 6010, 7470/7471, 8082, 8260, 8270, ETPH, 9010/9012

1	**For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP method-specific Reasonable Confidence Protocol documents?**	☑ Yes ☐ No
1A	**Were the method specified preservation and holding time requirements met?**	☑ Yes ☐ No
1B	***VPH and EPH methods only:*** **Was the VPH or EPH method conducted without significant modifications (see section 11.3 of respective RCP methods)**	☐ Yes ☐ No ☑ NA
2	**Were all samples received by the laboratory in a condition consistent with that described on the associated Chain-of-Custody document(s)?**	☑ Yes ☐ No
3	**Were samples received at an appropriate temperature (< 6 Degrees C)?**	☑ Yes ☐ No ☐ NA
4	**Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents acheived? See Sections: ETPH Narration, ICP Narration, Mercury Narration, SVOA Narration, VOA Narration.**	☐ Yes ☑ No
5	**a) Were reporting limits specified or referenced on the chain-of-custody?** **b) Were these reporting limits met?**	☑ Yes ☐ No ☑ Yes ☐ No
6	**For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?**	☐ Yes ☑ No
7	**Are project-specific matrix spikes and laboratory duplicates included in the data set?**	☑ Yes ☐ No

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or 1B is "No", the data package does not meet the requirements for "Reasonable Confidence". This form may not be altered and all questions must be answered.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized Signature:  **Position:** Assistant Lab Director

Printed Name: Greg Lawrence **Date:** Tuesday, July 31, 2018

Name of Laboratory Phoenix Environmental Labs, Inc.

This certification form is to be used for RCP methods only.

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587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
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ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

July 31, 2018

SDG I.D.: GCA91708

SDG Comments

8270 Semi-volatile Organics: CA91708, CA91709, CA91711, CA91712
The client requested a short list for 8270 RCP Semivolatile. Only the PAH constituents are reported as requested on the chain-of-custody.

Cyanide Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument:

LACHAT 07/19/18-1 Eric Geyer, Chemist 07/19/18

CA91708

The samples were distilled in accordance with the method.
The initial calibration met criteria.

The calibration check standards (ICV,CCV) were within 15% of true value and were analyzed at a frequencey of one per ten samples.
The continuing calibration blanks (ICB,CCB) had concentrations less than the reporting level.

The method blank, laboratory control sample (LCS), and matrix spike were distilled with the samples.

LACHAT 07/23/18-1 Dustin Harrison, Greg Danielewski, Chemist 07/23/18

CA91709, CA91714, CA91715, CA91717, CA91719, CA91720, CA91721

The samples were distilled in accordance with the method.
The initial calibration met criteria.

The calibration check standards (ICV,CCV) were within 15% of true value and were analyzed at a frequencey of one per ten samples.
The continuing calibration blanks (ICB,CCB) had concentrations less than the reporting level.

The method blank, laboratory control sample (LCS), and matrix spike were distilled with the samples.

LACHAT 07/30/18-1 Dustin Harrison, Greg Danielewski, Chemist 07/30/18

CA91711, CA91712

The samples were distilled in accordance with the method.
The initial calibration met criteria.

The calibration check standards (ICV,CCV) were within 15% of true value and were analyzed at a frequencey of one per ten samples.
The continuing calibration blanks (ICB,CCB) had concentrations less than the reporting level.

The method blank, laboratory control sample (LCS), and matrix spike were distilled with the samples.

QC (Batch Specific):

Batch 439437 (CA91086)

CA91708

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SDG I.D.: GCA91708

Cyanide Narration

All LCS recoveries were within 80 - 120 with the following exceptions: None.
Additional: LCS acceptance range is 80-120% for soils MS acceptance range 75-125% for soils

Batch 439830 (CA93881)

CA91709, CA91714, CA91715, CA91717, CA91719, CA91720, CA91721

All LCS recoveries were within 80 - 120 with the following exceptions: None.
Additional: LCS acceptance range is 80-120% for soils MS acceptance range 75-125% for soils

Batch 440745 (CA99405)

CA91711, CA91712

All LCS recoveries were within 80 - 120 with the following exceptions: None.
Additional: LCS acceptance range is 80-120% for soils MS acceptance range 75-125% for soils

ETPH Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 439334 (Samples: CA91708): -----

The surrogate recovery in the blank is below acceptance criteria, all other samples and QC are within criteria. No bias is suspected.

The LCS/LCSD RPD exceeds the method criteria for one or more surrogates, therefore there may be variability in the reported result. (% n-Pentacosane)

QC Batch 439592 (Samples: CA91714): -----

The LCS and/or the LCSD recovery is below the method criteria. All of the other QC is acceptable, therefore no significant bias is suspected. (Ext. Petroleum H.C. (C9-C36))

Instrument:

AU-FID1 07/20/18-1 Jeff Bucko, Chemist 07/20/18

CA91709

The initial calibration (ETPH717I) RSD for the compound list was less than 30% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 30% except for the following compounds:
Samples: CA91709
Preceding CC 720A003 - None.
Succeeding CC 720A016 - Pentacosane 39%H (30%)

AU-FID21 07/20/18-1 Jeff Bucko, Chemist 07/20/18

CA91720

The initial calibration (ETPH620I) RSD for the compound list was less than 30% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 30% except for the following compounds:None.

AU-FID21 07/23/18-1 Jeff Bucko, Chemist 07/23/18

CA91721

The initial calibration (ETPH620I) RSD for the compound list was less than 30% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 30% except for the following compounds:None.

AU-FID22 07/20/18-1 Jeff Bucko, Chemist 07/20/18

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RCP Certification Report

July 31, 2018

SDG I.D.: GCA91708

ETPH Narration

CA91715, CA91717, CA91719

The initial calibration (ETPH621I) RSD for the compound list was less than 30% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 30% except for the following compounds:None.

AU-FID22 07/27/18-1 Jeff Bucko, Chemist 07/27/18

CA91712

The initial calibration (ETPH621I) RSD for the compound list was less than 30% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 30% except for the following compounds:None.

AU-FID22 07/30/18-1 Jeff Bucko, Chemist 07/30/18

CA91711

The initial calibration (ETPH621I) RSD for the compound list was less than 30% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 30% except for the following compounds:None.

AU-FID84 07/19/18-1 Jeff Bucko, Chemist 07/19/18

CA91708

The initial calibration (ETPH705I) RSD for the compound list was less than 30% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 30% except for the following compounds:
Samples: CA91708
Preceding CC 719A003 - None.
Succeeding CC 719A015 - Pentacosane 47%H (30%)

AU-XL1 07/19/18-1 Jeff Bucko, Chemist 07/19/18

CA91714

The initial calibration (ETPH605I) RSD for the compound list was less than 30% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 30% except for the following compounds:None.

QC (Batch Specific):

Batch 439334 (CA91307)

CA91708

All LCS recoveries were within 60 - 120 with the following exceptions: None.
The surrogate recovery in the blank is below acceptance criteria, all other samples and QC are within criteria. No bias is suspected.
Additional surrogate criteria: LCS acceptance range is 60-120% MS acceptance range 50-150%. The ETPH/DRO LCS has been normalized based on the alkane calibration.

Batch 439591 (CA93630)

CA91709

All LCS recoveries were within 60 - 120 with the following exceptions: None.
All LCSD recoveries were within 60 - 120 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
Additional surrogate criteria: LCS acceptance range is 60-120% MS acceptance range 50-150%. The ETPH/DRO LCS has been normalized based on the alkane calibration.

Batch 439592 (CA93879)

CA91714

All LCS recoveries were within 60 - 120 with the following exceptions: None.
All LCSD recoveries were within 60 - 120 with the following exceptions: None.

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July 31, 2018

SDG I.D.: GCA91708

ETPH Narration

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
Additional surrogate criteria: LCS acceptance range is 60-120% MS acceptance range 50-150%. The ETPH/DRO LCS has been normalized based on the alkane calibration.

Batch 439728 (CA94567)

CA91715, CA91717, CA91719, CA91720, CA91721

All LCS recoveries were within 60 - 120 with the following exceptions: None.
All LCSD recoveries were within 60 - 120 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
Additional surrogate criteria: LCS acceptance range is 60-120% MS acceptance range 50-150%. The ETPH/DRO LCS has been normalized based on the alkane calibration.

Batch 440643 (CA99145)

CA91711, CA91712

All LCS recoveries were within 60 - 120 with the following exceptions: None.
All LCSD recoveries were within 60 - 120 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
Additional surrogate criteria: LCS acceptance range is 60-120% MS acceptance range 50-150%. The ETPH/DRO LCS has been normalized based on the alkane calibration.

Mercury Narration

Were all QA/QC performance criteria specified in the analytical method achieved? No.

QC Batch 439699 (Samples: CA91709, CA91714, CA91715, CA91717, CA91719, CA91720, CA91721): -----

The Sample/Duplicate RPD exceeds the method criteria, therefore there may be variability in the reported result.

Instrument:

MERLIN 07/19/18 08:13 Rick Schweitzer, Chemist 07/19/18

CA91708

The method preparation blank contains all of the acids and reagents as the samples; the instrument blanks do not.
The initial calibration met all criteria including a standard run at or below the reporting level.
All calibration verification standards (ICV, CCV) met criteria.
All calibration blank verification standards (ICB, CCB) met criteria.
The matrix spike sample is used to identify spectral interference for each batch of samples, if within 85-115%, no interference is observed and no further action is taken.
The following Initial Calibration Verification (ICV) compounds did not meet criteria: None.
The following Continuing Calibration Verification (CCV) compounds did not meet criteria: None.

MERLIN 07/20/18 08:11 Rick Schweitzer, Chemist 07/20/18

CA91709, CA91714, CA91715, CA91717, CA91719, CA91720, CA91721

The method preparation blank contains all of the acids and reagents as the samples; the instrument blanks do not.
The initial calibration met all criteria including a standard run at or below the reporting level.
All calibration verification standards (ICV, CCV) met criteria.
All calibration blank verification standards (ICB, CCB) met criteria.
The matrix spike sample is used to identify spectral interference for each batch of samples, if within 85-115%, no interference is observed and no further action is taken.
The following Initial Calibration Verification (ICV) compounds did not meet criteria: None.
The following Continuing Calibration Verification (CCV) compounds did not meet criteria: None.

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July 31, 2018

SDG I.D.: GCA91708

Mercury Narration

MERLIN 07/23/18 08:10 Rick Schweitzer, Chemist 07/23/18

CA91709, CA91714, CA91715, CA91717, CA91719, CA91720, CA91721

The method preparation blank contains all of the acids and reagents as the samples; the instrument blanks do not.
The initial calibration met all criteria including a standard run at or below the reporting level.
All calibration verification standards (ICV, CCV) met criteria.
All calibration blank verification standards (ICB, CCB) met criteria.
The matrix spike sample is used to identify spectral interference for each batch of samples, if within 85-115%, no interference is observed and no further action is taken.
The following Initial Calibration Verification (ICV) compounds did not meet criteria: None.
The following Continuing Calibration Verification (CCV) compounds did not meet criteria: None.

MERLIN 07/30/18 08:25 Rick Schweitzer, Chemist 07/30/18

CA91711, CA91712

The method preparation blank contains all of the acids and reagents as the samples; the instrument blanks do not.
The initial calibration met all criteria including a standard run at or below the reporting level.
All calibration verification standards (ICV, CCV) met criteria.
All calibration blank verification standards (ICB, CCB) met criteria.
The matrix spike sample is used to identify spectral interference for each batch of samples, if within 85-115%, no interference is observed and no further action is taken.
The following Initial Calibration Verification (ICV) compounds did not meet criteria: None.
The following Continuing Calibration Verification (CCV) compounds did not meet criteria: None.

QC (Batch Specific):

Batch 439509 (CA91307)

CA91708

All LCS recoveries were within 70 - 130 with the following exceptions: None.
All LCSD recoveries were within 70 - 130 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.

Batch 439515 (CA92953)

CA91708

All LCS recoveries were within 80 - 120 with the following exceptions: None.
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.

Batch 439704 (CA93877)

CA91709, CA91714, CA91715, CA91717, CA91719, CA91720, CA91721

All LCS recoveries were within 80 - 120 with the following exceptions: None.
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.

Batch 440835 (CA99405)

CA91711, CA91712

All LCS recoveries were within 70 - 130 with the following exceptions: None.
All LCSD recoveries were within 70 - 130 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

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Certification Report

July 31, 2018

SDG I.D.: GCA91708

Mercury Narration

Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.

Batch 440839 (CA99730)

CA91711, CA91712

All LCS recoveries were within 80 - 120 with the following exceptions: None.
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.

QC (Site Specific):

Batch 439699 (CA91709)

CA91709, CA91714, CA91715, CA91717, CA91719, CA91720, CA91721

All LCS recoveries were within 70 - 130 with the following exceptions: None.
All LCSD recoveries were within 70 - 130 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
All MS recoveries were within 75 - 125 with the following exceptions: None.
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.

ICP Metals Narration

Were all QA/QC performance criteria specified in the analytical method achieved? No.

QC Batch 439411 (Samples: CA91708): -----

A trace amount of an analyte was found in blank. Due to the concentration in the blank relative to the samples, no bias is suspected. (Soil- Copper(CA91708))

Instrument:

ARCOS 07/18/18 09:30 Emily Kolominskaya, Tina Hall, Chemist 07/18/18

CA91708

Additional criteria for CCV and ICSAB:
Sodium and Potassium are poor performing elements, the laboratory's in-house limits are 85-115% (CCV) and 70-130% (ICSAB).The linear range is defined daily by the calibration range.
The following Initial Calibration Verification (ICV) compounds did not meet criteria: None.
The following Continuing Calibration Verification (CCV) compounds did not meet criteria: None.
The following ICP Interference Check (ICSAB) compounds did not meet criteria: None.

ARCOS 07/19/18 10:14 Emily Kolominskaya, Tina Hall, Chemist 07/19/18

CA91708

Additional criteria for CCV and ICSAB:
Sodium and Potassium are poor performing elements, the laboratory's in-house limits are 85-115% (CCV) and 70-130% (ICSAB).The linear range is defined daily by the calibration range.
The following Initial Calibration Verification (ICV) compounds did not meet criteria: None.
The following Continuing Calibration Verification (CCV) compounds did not meet criteria: None.
The following ICP Interference Check (ICSAB) compounds did not meet criteria: None.

ARCOS 07/20/18 11:09 Emily Kolominskaya, Phyllis Shiller, Chemist 07/20/18

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Certification Report

July 31, 2018

SDG I.D.: GCA91708

ICP Metals Narration

CA91709, CA91714, CA91715, CA91717, CA91719, CA91720, CA91721

Additional criteria for CCV and ICSAB:
Sodium and Potassium are poor performing elements, the laboratory's in-house limits are 85-115% (CCV) and 70-130% (ICSAB).The linear range is defined daily by the calibration range.
The following Initial Calibration Verification (ICV) compounds did not meet criteria: None.
The following Continuing Calibration Verification (CCV) compounds did not meet criteria: None.
The following ICP Interference Check (ICSAB) compounds did not meet criteria: None.

ARCOS 07/28/18 07:01 Emily Kolominskaya, Chemist 07/28/18

CA91711, CA91712

Additional criteria for CCV and ICSAB:
Sodium and Potassium are poor performing elements, the laboratory's in-house limits are 85-115% (CCV) and 70-130% (ICSAB).The linear range is defined daily by the calibration range.
The following Initial Calibration Verification (ICV) compounds did not meet criteria: None.
The following Continuing Calibration Verification (CCV) compounds did not meet criteria: None.
The following ICP Interference Check (ICSAB) compounds did not meet criteria: None.

BLUE 07/30/18 09:50 Emily Kolominskaya, Chemist 07/30/18

CA91711, CA91712

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.The linear range is defined daily by the calibration range.
The following Initial Calibration Verification (ICV) compounds did not meet criteria: None.
The following Continuing Calibration Verification (CCV) compounds did not meet criteria: None.
The following ICP Interference Check (ICSAB) compounds did not meet criteria: None.

QC (Batch Specific):

Batch 439411 (CA91307)

CA91708

All LCS recoveries were within 75 - 125 with the following exceptions: None.

Batch 439518 (CA92748)

CA91708

All LCS recoveries were within 75 - 125 with the following exceptions: None.

Batch 439754 (CA91132)

CA91709, CA91714, CA91715, CA91717, CA91719, CA91720, CA91721

All LCS recoveries were within 75 - 125 with the following exceptions: None.

Batch 440844 (CA99450)

CA91711, CA91712

All LCS recoveries were within 75 - 125 with the following exceptions: None.

QC (Site Specific):

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Certification Report

July 31, 2018

SDG I.D.: GCA91708

ICP Metals Narration

Batch 439804 (CA91717)

CA91709, CA91714, CA91715, CA91717, CA91719, CA91720, CA91721

All LCS recoveries were within 75 - 125 with the following exceptions: None.
All MS recoveries were within 75 - 125 with the following exceptions: None.

Batch 440729 (CA91712)

CA91711, CA91712

All LCS recoveries were within 75 - 125 with the following exceptions: None.
All MS recoveries were within 75 - 125 with the following exceptions: None.

PCB Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument:

AU-ECD24 07/23/18-1 Adam Werner, Chemist 07/23/18

CA91714, CA91715, CA91717, CA91719, CA91720, CA91721

The initial calibration (PC705AI) RSD for the compound list was less than 20% except for the following compounds: None.
The initial calibration (PC705BI) RSD for the compound list was less than 20% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 15% except for the following compounds:None.

AU-ECD24 07/30/18-1 Adam Werner, Chemist 07/30/18

CA91709, CA91711

The initial calibration (PC705AI) RSD for the compound list was less than 20% except for the following compounds: None.
The initial calibration (PC705BI) RSD for the compound list was less than 20% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 15% except for the following compounds:None.

AU-ECD3 07/19/18-1 Adam Werner, Chemist 07/19/18

CA91708

The initial calibration (PC605AI) RSD for the compound list was less than 20% except for the following compounds: None.
The initial calibration (PC605BI) RSD for the compound list was less than 20% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 15% except for the following compounds:None.

QC (Batch Specific):

Batch 439654 (CA94225)

CA91708

All LCS recoveries were within 40 - 140 with the following exceptions: None.
All LCSD recoveries were within 40 - 140 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

Batch 439789 (CA95173)

CA91714, CA91715, CA91717, CA91719, CA91720, CA91721

All LCS recoveries were within 40 - 140 with the following exceptions: None.
All LCSD recoveries were within 40 - 140 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

Batch 440644 (CA99736)

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RCP Certification Report

July 31, 2018

SDG I.D.: GCA91708

PCB Narration

CA91709, CA91711

All LCS recoveries were within 40 - 140 with the following exceptions: None.
All LCSD recoveries were within 40 - 140 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

SVOA Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 439785 (Samples: CA91714, CA91715, CA91717, CA91719, CA91720, CA91721): -----

The LCS/LCSD is below the method criteria. The Batch MS/MSD is acceptable. A slight low bias for this analyte is possible. (2,4-Dinitrophenol)

The LCS/LCSD is below the lower range but within the method criteria. The Batch MS/MSD is acceptable. A slight low bias for this analyte is possible.(4,6-Dinitro-2-methylphenol)

The LCS/LCSD RPD exceeds the method criteria for one or more analytes, but these analytes were not reported in the sample(s) so no variability is suspected. (4,6-Dinitro-2-methylphenol)

The QC recoveries for one analyte are below the method criteria. A low bias is likely. (Benzoic Acid)

The QC recoveries for one analyte are below the lower range but within the method criteria. A low bias is possible.(Pyridine)

QC Batch 440641 (Samples: CA91711, CA91712): -----

The LCS/LCSD RPD exceeds the method criteria for one or more analytes and the surrogates. Therefore there may be variability in the reported result. (Anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Chrysene, Indeno(1,2,3-cd)pyrene, % 2-Fluorobiphenyl, % Nitrobenzene-d5, % Terphenyl-d14)

Instrument:

CHEM06 07/27/18-1 Matt Richard, Chemist 07/27/18

CA91711, CA91712

The DDT breakdown and pentachlorophenol & benzidine peak tailing were evaluated in the DFTPP tune and were found to be in control.

Initial Calibration Verification (CHEM06/BN_0627):
100% of target compounds met criteria.
The following compounds had %RSDs >20%: None.
The following compounds did not meet recommended response factors: None.
The following compounds did not meet a minimum response factors: None.

Continuing Calibration Verification (CHEM06/0727_04-BN_0627):
Internal standard areas were within 50 to 200% of the initial calibration with the following exceptions: None.
100% of target compounds met criteria.
The following compounds did not meet % deviation criteria: None.
The following compounds did not meet maximum % deviations: None.
The following compounds did not meet recommended response factors: None.

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RCP Certification Report

July 31, 2018

SDG I.D.: GCA91708

SVOA Narration

The following compounds did not meet minimum response factors: None.

CHEM19 07/19/18-2 Keith Aloisa, Chemist 07/19/18

CA91708

The DDT breakdown and pentachlorophenol & benzidine peak tailing were evaluated in the DFTPP tune and were found to be in control.

Initial Calibration Verification (CHEM19/SPLIT_0717):
95% of target compounds met criteria.
The following compounds had %RSDs >20%: None.
The following compounds did not meet recommended response factors: None.
The following compounds did not meet a minimum response factors: None.

Continuing Calibration Verification (CHEM19/0719_02-SPLIT_0717):
Internal standard areas were within 50 to 200% of the initial calibration with the following exceptions: None.
98% of target compounds met criteria.
The following compounds did not meet % deviation criteria: None.
The following compounds did not meet maximum % deviations: None.
The following compounds did not meet recommended response factors: None.
The following compounds did not meet minimum response factors: None.

CHEM19 07/21/18-1 Matt Richard, Chemist 07/21/18

CA91714, CA91715, CA91717, CA91719, CA91720

The DDT breakdown and pentachlorophenol & benzidine peak tailing were evaluated in the DFTPP tune and were found to be in control.

Initial Calibration Verification (CHEM19/SPLIT_0717):
95% of target compounds met criteria.
The following compounds had %RSDs >20%: 2,4-Dinitrophenol 43% (20%), Benzidine 24% (20%), Pentachlorophenol 22% (20%)
The following compounds did not meet recommended response factors: None.
The following compounds did not meet a minimum response factors: None.

Continuing Calibration Verification (CHEM19/0721_02-SPLIT_0717):
Internal standard areas were within 50 to 200% of the initial calibration with the following exceptions: None.
99% of target compounds met criteria.
The following compounds did not meet % deviation criteria: None.
The following compounds did not meet maximum % deviations: None.
The following compounds did not meet recommended response factors: Bis(2-chloroethyl)ether 0.683 (0.7), Hexachlorobenzene 0.094 (0.1)
The following compounds did not meet minimum response factors: None.

CHEM27 07/23/18-1 Harry Mullin, Chemist 07/23/18

CA91709

Initial Calibration Verification (CHEM27/SPLIT_0722):
98% of target compounds met criteria.
The following compounds had %RSDs >20%: None.
The following compounds did not meet recommended response factors: None.
The following compounds did not meet a minimum response factors: None.

Continuing Calibration Verification (CHEM27/0723_02-SPLIT_0722):

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RCP Certification Report

July 31, 2018

SDG I.D.: GCA91708

SVOA Narration

Internal standard areas were within 50 to 200% of the initial calibration with the following exceptions: None.
100% of target compounds met criteria.
The following compounds did not meet % deviation criteria: None.
The following compounds did not meet maximum % deviations: None.
The following compounds did not meet recommended response factors: None.
The following compounds did not meet minimum response factors: None.

CHEM28 07/23/18-1 Keith Aloisa, Chemist 07/23/18

CA91721

Initial Calibration Verification (CHEM28/SPLIT_0717):
92% of target compounds met criteria.
The following compounds had %RSDs >20%: 2,4-Dinitrophenol 37% (20%), 4,6-Dinitro-2-methylphenol 36% (20%), Benzidine 24% (20%), Benzoic acid 26% (20%), Hexachlorocyclopentadiene 24% (20%), Pentachlorophenol 31% (20%)
The following compounds did not meet recommended response factors: None.
The following compounds did not meet a minimum response factors: None.

Continuing Calibration Verification (CHEM28/0723_06-SPLIT_0717):
Internal standard areas were within 50 to 200% of the initial calibration with the following exceptions: None.
98% of target compounds met criteria.
The following compounds did not meet % deviation criteria: 4-Nitrophenol 32%H (30%), Benzoic acid 73%H (30%)
The following compounds did not meet maximum % deviations: Benzoic acid 73%H (40%)
The following compounds did not meet recommended response factors: None.
The following compounds did not meet minimum response factors: None.

CHEM29 07/21/18-1 Matt Richard, Chemist 07/21/18

CA91709

Initial Calibration Verification (CHEM29/BN_0614):
100% of target compounds met criteria.
The following compounds had %RSDs >20%: None.
The following compounds did not meet recommended response factors: None.
The following compounds did not meet a minimum response factors: None.

Continuing Calibration Verification (CHEM29/0721_08-BN_0614):
Internal standard areas were within 50 to 200% of the initial calibration with the following exceptions: None.
100% of target compounds met criteria.
The following compounds did not meet % deviation criteria: None.
The following compounds did not meet maximum % deviations: None.
The following compounds did not meet recommended response factors: None.
The following compounds did not meet minimum response factors: None.

QC (Batch Specific):

Batch 439329 (CA91994)

CA91708

All LCS recoveries were within 30 - 130 with the following exceptions: None.
All LCSD recoveries were within 30 - 130 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

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RCP Certification Report

July 31, 2018

SDG I.D.: GCA91708

SVOA Narration

Batch 439785 (CA95183)

CA91714, CA91715, CA91717, CA91719, CA91720, CA91721

All LCS recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(10%), 4,6-Dinitro-2-methylphenol(28%), Benzoic Acid(<10%), Pyridine(27%)
All LCSD recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(<10%), 4,6-Dinitro-2-methylphenol(15%), Benzoic Acid(<10%), Pyridine(29%)
All LCS/LCSD RPDs were less than 30% with the following exceptions: 4,6-Dinitro-2-methylphenol(60.5%)
Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

Batch 439787 (CA94567)

CA91709

All LCS recoveries were within 30 - 130 with the following exceptions: None.
All LCSD recoveries were within 30 - 130 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

Batch 440641 (CA99009)

CA91711, CA91712

All LCS recoveries were within 30 - 130 with the following exceptions: None.
All LCSD recoveries were within 30 - 130 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: % 2-Fluorobiphenyl(46.4%), % Nitrobenzene-d5(38.4%), % Terphenyl-d14(49.1%), Anthracene(32.3%), Benzo(a)pyrene(30.9%), Benzo(b)fluoranthene(31.3%), Chrysene(30.9%), Indeno(1,2,3-cd)pyrene(31.6%)
This batch consists of a Blank, LCS, LCSD and MS.
Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

VOA Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 439719 (Samples: CA91714, CA91715, CA91719, CA91720, CA91721): -----

The LCSD recovery is below the method criteria. All of the other QC is acceptable, therefore no significant bias is suspected. (2-Hexanone, Methyl ethyl ketone, Methylene chloride)

The QC recoveries for one analyte are below the lower range but within the method criteria. A slight low bias is likely. (Acetone)

QC Batch 439968 (Samples: CA91708, CA91709, CA91714, CA91719, CA91720, CA91721): -----

The LCS and Batch MS/MSD recoveries are below the lower range but within the method criteria. A slight low bias is possible. (Acetone)

Instrument:

CHEM03 07/19/18-1 Jane Li, Chemist 07/19/18

CA91708

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RCP Certification Report

July 31, 2018

SDG I.D.: GCA91708

VOA Narration

Initial Calibration Verification (CHEM03/VT-L0714):
95% of target compounds met criteria.
The following compounds had %RSDs >20%: trans-1,4-dichloro-2-butene 23% (20%)
The following compounds did not meet recommended response factors: None.
The following compounds did not meet a minimum response factors: None.

Continuing Calibration Verification (CHEM03/0719L02-VT-L0714):
Internal standard areas were within 50 to 200% of the initial calibration with the following exceptions: None.
100% of target compounds met criteria.
The following compounds did not meet % deviation criteria: None.
The following compounds did not meet maximum % deviations: None.
The following compounds did not meet recommended response factors: None.
The following compounds did not meet minimum response factors: None.

CHEM03 07/19/18-2 Jane Li, Chemist 07/19/18

CA91714, CA91715, CA91719, CA91720, CA91721

Initial Calibration Verification (CHEM03/VT-L0714):
95% of target compounds met criteria.
The following compounds had %RSDs >20%: Bromoform 26% (20%), Chloroethane 30% (20%), trans-1,4-dichloro-2-butene 23% (20%), Trichlorofluoromethane 22% (20%)
The following compounds did not meet recommended response factors: Tetrachloroethene 0.186 (0.2)
The following compounds did not meet a minimum response factors: None.

Continuing Calibration Verification (CHEM03/0719L35-VT-L0714):
Internal standard areas were within 50 to 200% of the initial calibration with the following exceptions: None.
99% of target compounds met criteria.
The following compounds did not meet % deviation criteria: Acetone 31%L (30%)
The following compounds did not meet maximum % deviations: None.
The following compounds did not meet recommended response factors: None.
The following compounds did not meet minimum response factors: None.

CHEM03 07/20/18-1 Jane Li, Chemist 07/20/18

CA91708, CA91709, CA91714, CA91719, CA91720, CA91721

Initial Calibration Verification (CHEM03/VT-L0714):
95% of target compounds met criteria.
The following compounds had %RSDs >20%: Bromoform 26% (20%), Chloroethane 30% (20%), trans-1,4-dichloro-2-butene 23% (20%), Trichlorofluoromethane 22% (20%)
The following compounds did not meet recommended response factors: Tetrachloroethene 0.186 (0.2)
The following compounds did not meet a minimum response factors: None.

Continuing Calibration Verification (CHEM03/0720L02-VT-L0714):
Internal standard areas were within 50 to 200% of the initial calibration with the following exceptions: None.
100% of target compounds met criteria.
The following compounds did not meet % deviation criteria: None.
The following compounds did not meet maximum % deviations: None.
The following compounds did not meet recommended response factors: None.
The following compounds did not meet minimum response factors: None.

CHEM14 07/27/18-2 Jane Li, Chemist 07/27/18

CA91711, CA91712

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RCP Certification Report

July 31, 2018

SDG I.D.: GCA91708

VOA Narration

Initial Calibration Verification (CHEM14/VT-0725):
99% of target compounds met criteria.
The following compounds had %RSDs >20%: Acetone 23% (20%)
The following compounds did not meet recommended response factors: Acetone 0.070 (0.1)
The following compounds did not meet a minimum response factors: None.

Continuing Calibration Verification (CHEM14/0727_37-VT-0725):
Internal standard areas were within 50 to 200% of the initial calibration with the following exceptions: None.
100% of target compounds met criteria.
The following compounds did not meet % deviation criteria: None.
The following compounds did not meet maximum % deviations: None.
The following compounds did not meet recommended response factors: None.
The following compounds did not meet minimum response factors: None.

CHEM14 07/28/18-1 Jane Li, Chemist 07/28/18

CA91711

Initial Calibration Verification (CHEM14/VT-0725):
99% of target compounds met criteria.
The following compounds had %RSDs >20%: None.
The following compounds did not meet recommended response factors: None.
The following compounds did not meet a minimum response factors: None.

Continuing Calibration Verification (CHEM14/0728_02-VT-0725):
Internal standard areas were within 50 to 200% of the initial calibration with the following exceptions: None.
100% of target compounds met criteria.
The following compounds did not meet % deviation criteria: None.
The following compounds did not meet maximum % deviations: None.
The following compounds did not meet recommended response factors: None.
The following compounds did not meet minimum response factors: None.

CHEM26 07/21/18-1 Jane Li, Chemist 07/21/18

CA91709

Initial Calibration Verification (CHEM26/VT-0718):
99% of target compounds met criteria.
The following compounds had %RSDs >20%: Methylene chloride 28% (20%)
The following compounds did not meet recommended response factors: None.
The following compounds did not meet a minimum response factors: None.

Continuing Calibration Verification (CHEM26/0721_02-VT-0718):
Internal standard areas were within 50 to 200% of the initial calibration with the following exceptions: None.
100% of target compounds met criteria.
The following compounds did not meet % deviation criteria: None.
The following compounds did not meet maximum % deviations: None.
The following compounds did not meet recommended response factors: None.
The following compounds did not meet minimum response factors: None.

QC (Batch Specific):

Batch 439719 (CA93486)

CA91714, CA91715, CA91719, CA91720, CA91721

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RCP Certification Report

July 31, 2018

SDG I.D.: GCA91708

VOA Narration

All LCS recoveries were within 70 - 130 with the following exceptions: Acetone(61%)
All LCSD recoveries were within 70 - 130 with the following exceptions: 2-Hexanone(66%), Acetone(54%), Methyl ethyl ketone(61%), Methylene chloride(68%)
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%.

Batch 439723 (CA90365)

CA91708

All LCS recoveries were within 70 - 130 with the following exceptions: None.
All LCSD recoveries were within 70 - 130 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%.

Batch 439961 (CA94870)

CA91709

All LCS recoveries were within 70 - 130 with the following exceptions: None.
All LCSD recoveries were within 70 - 130 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%.

Batch 439968 (CA94060)

CA91708, CA91709, CA91714, CA91719, CA91720, CA91721

All LCS recoveries were within 70 - 130 with the following exceptions: Acetone(68%)
All LCSD recoveries were within 70 - 130 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%.

Batch 440852 (CA99223)

CA91711, CA91712

All LCS recoveries were within 70 - 130 with the following exceptions: None.
All LCSD recoveries were within 70 - 130 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%.

Batch 440867 (CA99219)

CA91711

All LCS recoveries were within 70 - 130 with the following exceptions: None.
All LCSD recoveries were within 70 - 130 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%.

Temperature Narration

The samples in this delivery group were received at 5.4°C.
(Note acceptance criteria for relevant matrices is above freezing up to 6°C)

Cooler: Yes [X] No [ ]
Coolant: IPK [ ] ICE [X] No [ ]

PHOENIX
Environmental Laboratories, Inc.

CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Temp 5.4 °C Pg 1 of 2

Contact Options:
[ ] Fax:
[ ] Phone:
[X] Email: LEwing@Tighebond.com

Customer: Tighe + Bond
Address: 213 Court St
Middletown CT

Project: Rexhame MGP
Report to: Lynn Willey
Invoice to: Tighe + Bond

Project P.O: 150755-4413

This section MUST be completed with Bottle Quantities.

Client Sample - Information - Identification

Sampler's Signature: [signature] Date: 7/17/19

Matrix Code:
DW=Drinking Water **GW**=Ground Water **SW**=Surface Water **WW**=Waste Water
RW=Raw Water **SE**=Sediment **SL**=Sludge **S**=Soil **SD**=Solid **W**=Wipe
OIL=Oil **B**=Bulk **L**=Liquid

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	VOC	PAHs	EPH	RCSL metals	SPLP RCSA metals	Total Cyanide	Soil VOA Vials [X] methanol [X] H2O	GL Soil container ( ) 1oz	GL Soil container ( ) 1oz	40 ml VOA Vial [ ] As is [ ] HCl	GL Amber 1000ml [ ] As is [ ] H2SO4	PL As is [ ] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml [ ] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
	~~SB-33 (1-3 ft)~~	S	~~7/16/19~~	~~15:00~~																
91708	SB-33 (5-7 ft)		7/17/19	13:40	X	X	X	X	X	X	3	1								
91709	SB-34 (2-4 ft)		7/16/19	11:10							3	1								
91710	SB-35 (2-4 ft)			11:30							3	1								
91711	SB-36 (2-4 ft)			13:40							3	1								
91712	SB-37 (2-4 ft)			14:00							3	1								
91713	SB-38 (2-4 ft)			14:25							3	1								
91714	SB-42 (2-4 ft)			14:45							3	1								
91715	SB-41 (1-3 ft)			15:35							3	1								
91716	SB-40 (0-2 ft)		7/17/19	7:10							3	1								
91717	SB-47 (2-4 ft)			7:35							3	1								
91718	SB-43 (1-3 ft)			9:30							3	1								

Relinquished by:	Accepted by:	Date:	Time:
[signature]	TRUCK	7/17/19	~~13:00~~
			1503

Comments, Special Requirements or Regulations:
DAS Pricing
Quote: TIO185178A
Please hold samples pending add'l Hannl investigation

Turnaround:
[ ] 1 Day*
[ ] 2 Days*
[ ] 3 Days*
[X] Standard
[ ] Other
* SURCHARGE APPLIES

RI
[ ] Direct Exposure (Residential)
[ ] GW
[ ] Other

CT
[X] RCP Cert
[ ] GW Protection
[ ] SW Protection
[ ] GA Mobility
[ ] GB Mobility
[X] Residential DEC
[X] I/C DEC
[ ] Other

MA
[ ] MCP Certification
[ ] GW-1
[ ] GW-2
[ ] GW-3
[ ] S-1
[ ] S-2
[ ] S-3
[ ] MWRA eSMART
[ ] Other

State where samples were collected: CT

Data Format
[X] Excel
[X] PDF
[ ] GIS/Key
[ ] EQuIS
[X] Other Geotech

Data Package
[ ] Tier II Checklist
[ ] Full Data Package*
[X] Phoenix Std Report
[ ] Other

* SURCHARGE APPLIES

The Connecticut Light and Power Company
d/b/a Eversource Energy
Docket No. 26-05-10
Date Issued September 29, 2026
RSR-032 Attachment 17
Page 221 of 1282

Cooler: Yes [X] No [ ]
Coolant: IPK [ ] ICE [X] No [ ]

CHAIN OF CUSTODY RECORD

Temp 4 °C Pg 1 of 2

PHOENIX Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Contact Options:
[ ] Fax:
[ ] Phone:
[X] Email: LEWilley@tighebond.com

Customer: Tighe + Bond
Address: 213 Court St
Middletown CT

Project: Revere MGP
Report to: Lynn Wiley
Invoice to: Tighe + Bond

Project P.O: 15-0758-44B

This section MUST be completed with Bottle Quantities.

Client Sample - Information - Identification

Sampler's Signature: [signature] Date: 7/17/18

Matrix Code:
DW=Drinking Water **GW**=Ground Water **SW**=Surface Water **WW**=Waste Water
RW=Raw Water **SE**=Sediment **SL**=Sludge **S**=Soil **SD**=Solid **W**=Wipe
OIL=Oil **B**=Bulk **L**=Liquid

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	Soil VOA Vials [X] methanol [X] H2O	GL Soil container ( ) oz	GL Soil container ( ) oz	40 ml VOA Vial [ ] As is [ ] HCl	GL Amber 1000ml [ ] As is [ ] H2SO4	PL As is [ ] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
91719	SB-44 (1-3 ft)	S	7/17/18	9:45	X	X								
91720	SB-45 (0-2 ft)	S	7/17/18	11:00	X	X								
91721	SB-65 (1-3 ft)	S	7/17/18	11:50	X	X								

Relinquished by:	Accepted by:	Date:	Time:
[signature]	TTD UPS	7/17/18	15:03

Comments, Special Requirements or Regulations:

Turnaround:
[ ] 1 Day*
[ ] 2 Days*
[ ] 3 Days*
[X] Standard
[ ] Other
* SURCHARGE APPLIES

RI
[ ] Direct Exposure (Residential)
[ ] GW
[ ] Other

CT
[X] RCP Cert
[ ] GW Protection
[ ] SW Protection
[ ] GA Mobility
[ ] GB Mobility
[X] Residential DEC
[X] I/C DEC
[ ] Other

MA
[ ] MCP Certification
[ ] GW-1
[ ] GW-2
[ ] GW-3
[ ] S-1
[ ] S-2
[ ] S-3
[ ] MWRA eSMART
[ ] Other

State where samples were collected: CT

Data Format
[X] Excel
[X] PDF
[ ] GIS/Key
[ ] EQuIS
[ ] Other G-check

Data Package
[ ] Tier II Checklist
[ ] Full Data Package*
[X] Phoenix Std Report
[ ] Other
* SURCHARGE APPLIES

The Connecticut Light and Power Company
d/b/a Eversource Energy
Docket No. 26-05-10
Date Issued September 29, 2026
RSR-032 Attachment 17
Page 222 of 1282

Client Services

From: Lynn E. Willey <LEWilley@tighebond.com>
Sent: Wednesday, July 18, 2018 10:12 AM
To: Client Services
Cc: Benjamin P. Caswell
Subject: RE: Phoenix Labs - GCA91708, ROCKVILLE MGP - COC Acknowledgement
Attachments: Sample Acknowledgement.pdf

Sarah:

Analyze SB-33 (5-7) (91708) for the requested analysis. HOLD the remaining soil samples with unchecked analysis.

Thank you.
Lynn E. Willey, P.G., LEP | Senior Environmental Scientist
Tighe & Bond | 213 Court Street Suite 1100 | Middletown, CT 06457
| 860.852.5214 | 860-729-7502 (cell)
www.tighebond.com | Follow us on: Twitter Facebook LinkedIn

From: Client Services [mailto:clientservices@phoenixlabs.com]
Sent: Wednesday, July 18, 2018 10:04 AM
To: Lynn E. Willey <LEWilley@tighebond.com>
Cc: Benjamin P. Caswell <BCaswell@tighebond.com>
Subject: RE: Phoenix Labs - GCA91708, ROCKVILLE MGP - COC Acknowledgement

SO these I am leaving on hold. I did add criteria for when you do release.

Sarah Bell
Client Services - Project Manager
Accounts Receivable
Phoenix Environmental Laboratories
587 East Middle Turnpike
Manchester, CT 06040
Ph: 1-860-645-1102

From: Lynn E. Willey [mailto:LEWilley@tighebond.com]
Sent: Wednesday, July 18, 2018 9:54 AM
To: Client Services
Cc: Benjamin P. Caswell
Subject: RE: Phoenix Labs - GCA91708, ROCKVILLE MGP - COC Acknowledgement

Sarah:

Good morning.

We submitted soil samples for a number of boring locations on the attached COCs. The majority of them are on hold at the moment. We had to pre-clear boreholes and will be completing additional samples this week. I need to see if there are deeper impacts before activating the samples that do not have analysis checked.

Also, we will need the GB PMC criteria.

Lynn E. Willey, P.G., LEP | Senior Environmental Scientist
Tighe & Bond | 213 Court Street Suite 1100 | Middletown, CT 06457
| 860.852.5214 | 860-729-7502 (cell)
www.tighebond.com | Follow us on: Twitter Facebook LinkedIn

From: clientservices@phoenixlabs.com [mailto:clientservices@phoenixlabs.com]
Sent: Tuesday, July 17, 2018 8:17 PM
To: Lynn E. Willey <LEWilley@tighebond.com>
Subject: Phoenix Labs - GCA91708, ROCKVILLE MGP - COC Acknowledgement

Lynn,

Price Quote#: TI012517BA

Purchase Order#:15-0755-44B

GCA91708 Criteria:
SOIL(14): CT I/C (I/C Dec), CT RC (Res. Criteria)

Please email client services only if you require criteria different than what is listed.

Delivery group GCA91708 (ROCKVILLE MGP) has been logged in for the following samples:

Phoenix Id	Client Id
CA91708	SB-33 5-7 FT
CA91709	SB-34 2-4 FT
CA91710	SB-35 2-4 FT
CA91711	SB-36 2-4 FT
CA91712	SB-37 2-4 FT
CA91713	SB-38 2-4 FT
CA91714	SB-42 2-4 FT
CA91715	SB- 41 1-3 FT
CA91716	SB-46 0-2 FT
CA91717	SB-47 2-4 FT
CA91718	SB-43 1-3 FT
CA91719	SB-44 1-3 FT
CA91720	SB-45 0-2 FT
CA91721	SB-65 1-3 FT

The samples in this delivery group were received at 5.4°C. (Note acceptance criteria for relevant matrices is above freezing up to 6°C)

If there are any questions regarding this submittal, please call Phoenix Client Services at extension 200.

Phoenix Environmental Laboratories, Inc.

587 East Middle Turnpike
P.O. Box 370
Manchester, CT 06374
Tel. (860) 645-1102
Fax. (860) 645-0823
www.phoenixlabs.com

Please do not reply to this email.

Lynn E. Willey

From: clientservices@phoenixlabs.com
Sent: Tuesday, July 17, 2018 8:17 PM
To: Lynn E. Willey
Subject: Phoenix Labs - GCA91708, ROCKVILLE MGP - COC Acknowledgement
Attachments: Sample Acknowledgement.pdf

Lynn,

Price Quote#: TI012517BA

Purchase Order#:15-0755-44B

GCA91708 Criteria:
SOIL(14): CT I/C (I/C Dec), CT RC (Res. Criteria)

Please email client services only if you require criteria different than what is listed.

Delivery group GCA91708 (ROCKVILLE MGP) has been logged in for the following samples:

Phoenix Id	Client Id
CA91708	SB-33 5-7 FT Add PCB
CA91709	SB-34 2-4 FT - Activate 7/19/18
CA91710	SB-35 2-4 FT HOLD
CA91711	SB-36 2-4 FT
CA91712	SB-37 2-4 FT
CA91713	SB-38 2-4 FT HOLD
CA91714	SB-42 2-4 FT - Activate 7/19/18
CA91715	SB- 41 1-3 FT - Activate 7/19/18
CA91716	SB-46 0-2 FT HOLD
CA91717	SB-47 2-4 FT - Activate 7/19/18
CA91718	SB-43 1-3 FT
CA91719	SB-44 1-3 FT - Activate 7/19/18
CA91720	SB-45 0-2 FT - Activate 7/19/18
CA91721	SB-65 1-3 FT - Activate 7/19/18

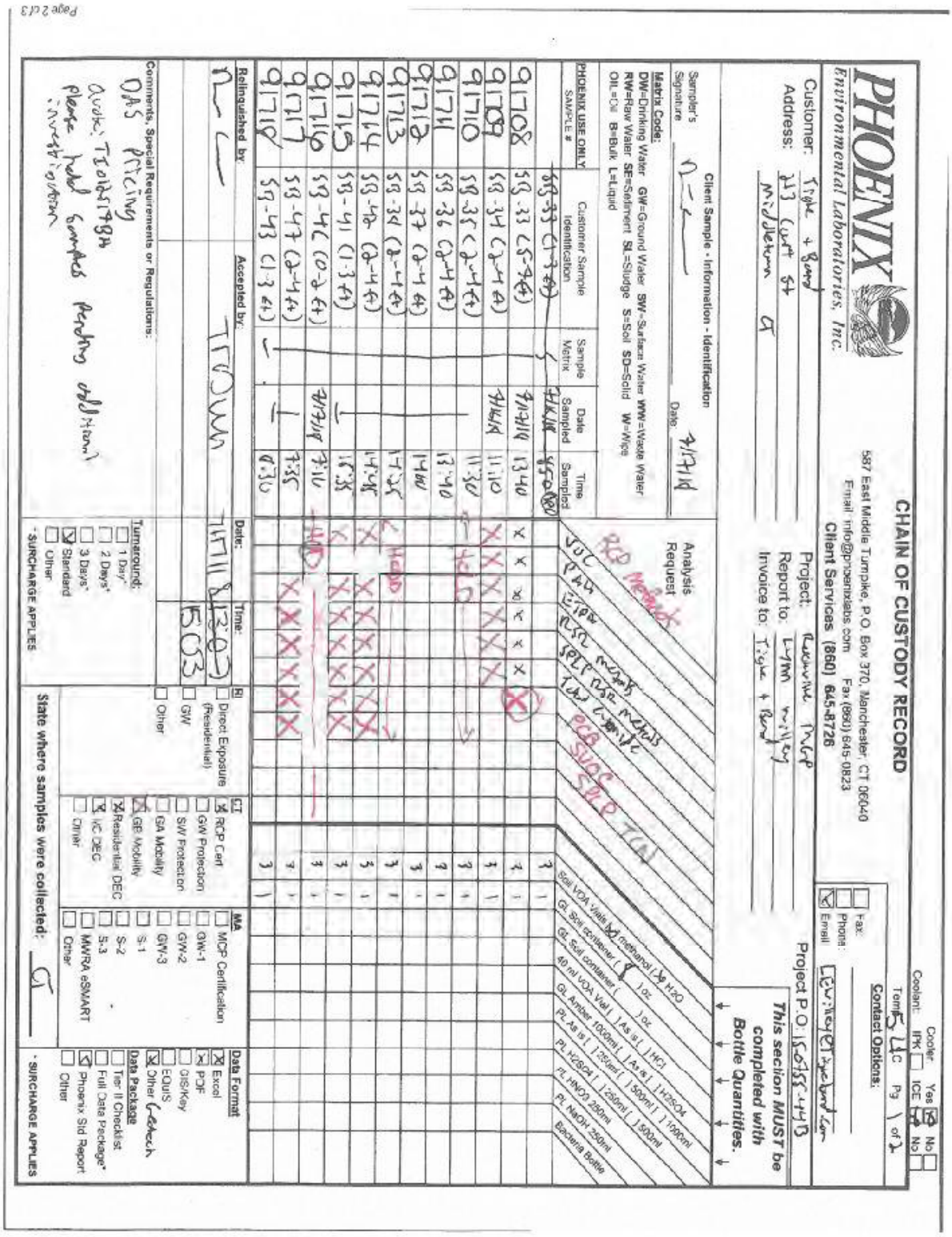


The samples in this delivery group were received at 5.4°C. (Note acceptance criteria for relevant matrices is above freezing up to 6°C)

If there are any questions regarding this submittal, please call Phoenix Client Services at extension 200.

Phoenix Environmental Laboratories, Inc.
587 East Middle Turnpike
P.O. Box 370

1



PHOENIX

CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax: (860) 645-0823
Client Services (860) 645-8726

Environmental Laboratories, Inc.

Cooler: Yes / No — Coolant: IPK / ICE — Temp: 5.4C — Pg 1 of 2

Contact Options: Fax: Phone: Email: [illegible]

Customer: Triple + Road
Address: 213 Court St Middletown CT

Project: Revenue Prog
Report to: Lynn Mullen
Invoice to: Triple + Road

Project P.O.: [illegible]

Client Sample - Information - Identification
Sampler's Signature: [signature] Date: 9/17/19

Matrix Code: DW=Drinking Water GW=Ground Water SW=Surface Water WW=Waste Water RW=Raw Water SE=Settlement SL=Sludge S=Soil SD=Solid W=Wipe OIL=Oil B=Bulk L=Liquid

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled
91708	SG-33 (25-45)	SOIL	9/17/19	13:40
91709	SG-34 (2-4 ft)	SOIL	9/17/19	11:10
91710	SG-35 (2-4 ft)	SOIL	9/17/19	11:30
91711	SG-36 (2-4 ft)	SOIL	9/17/19	13:40
91712	SG-37 (2-4 ft)	SOIL	9/17/19	14:00
91713	SG-38 (2-4 ft)	SOIL	9/17/19	14:25
91714	SG-42 (2-4 ft)	SOIL	9/17/19	14:45
91715	SG-41 (1-3 ft)	SOIL	9/17/19	15:35
91716	SG-40 (0-2 ft)	SOIL	9/17/19	7:10
91717	SG-47 (2-4 ft)	SOIL	9/17/19	7:35
91718	SG-43 (1-3 ft)	SOIL	9/17/19	8:30

Analysis Request

VOC 8260 Method
EPH Extended Range
PCBs Soil Method
SPLP PCBs Soil Method
TAL Dioxins
ECB SVOC SVOC TCLP

Soil VOA Vials [ ] methanol [ ] H2O
GL Soil collection [ ] 1oz [ ] 2oz
GL Soil container [ ] 1oz [ ] 2oz
40 ml VOA Vial [ ] As is [ ] HCl
GL Amber 100ml [ ] As is [ ] 1:1H2SO4
GL Amber 125ml [ ] 250ml [ ] 500ml [ ] 1000ml
PL As is [ ] 250ml [ ] 500ml [ ] 1000ml
PL H2SO4 [ ] 250ml [ ] 500ml [ ] 1000ml
PL HNO3 250ml
PL NaOH 250ml
Bacteria Bottle

Project Information: This section MUST be completed with Bottle Quantities.

Relinquished by: [signature] Date: 9/17/19 Time: 15:30

Accepted by: [signature] Date: 9/17/19 Time: 15:30

Comments, Special Requirements or Regulations:
DAS Pricing
Quote: T20191798
Please hold samples pending additional instruction

Turnaround: ☐ 1 Day* ☐ 2 Days* ☐ 3 Days* ☒ Standard ☐ Other
*SURCHARGE APPLIES

EI: ☐ Direct Exposure (Residential) ☐ GW ☐ Other

CT: ☒ RCP Cert ☐ GW Protection ☐ SW Protection ☐ GA Mobility ☒ GB Mobility ☒ Residential DEC ☐ I/C DEC ☐ Other

MA: ☐ MCP Certification ☐ GW-1 ☐ GW-2 ☐ GW-3 ☐ S-1 ☐ S-2 ☐ S-3 ☐ MWRA eSMART ☐ Other

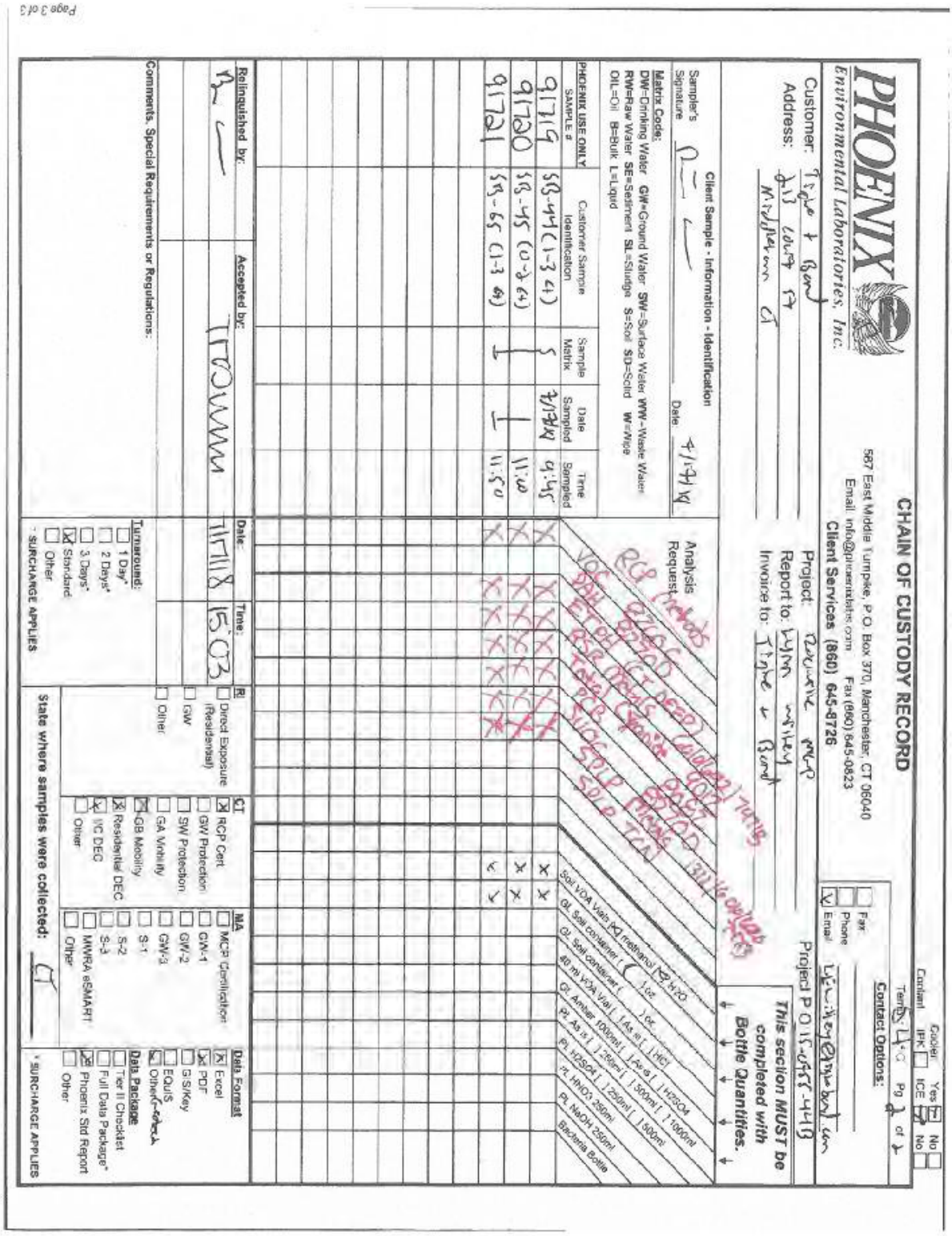
State where samples were collected: CT

Data Format: ☒ Excel ☐ PDF ☐ GIS/Key ☐ EQuIS ☒ Other Geotech

Data Package: ☐ Tier II Checklist ☐ Full Data Package* ☒ Phoenix Std Report ☐ Other

*SURCHARGE APPLIES

Page 2 of 3



PHOENIX

CHAIN OF CUSTODY RECORD

Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Cooler: Yes / No
Cooler IPK / ICE
Temp: 4°C Pg 1 of 2

Contact Options:
Fax
Phone
Email

Customer:
Address:

Project:
Report to:
Invoice to:

Project P.O.#:

This section MUST be completed with Bottle Quantities.

Client Sample - Information - Identification
Sample's Signature
Date 4/14/26

Matrix Codes:
DW=Drinking Water GW=Ground Water SW=Surface Water WW=Waste Water
RW=Raw Water SE=Sediment SL=Sludge S=Soil SD=Solid W=Wipe
OIL=Oil B=Bulk L=Liquid

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled
91719	SS-44(1-3 ft)	S	4/13/26	9:45
91720	SS-45 (0-3 ft)			11:00
91721	SS-45 (1-3 ft)			11:50

Analysis Request

Soil VOA Vials [X] methanol [X] H2O
GL Soil container [ ] 1oz
GL Soil container [ ] 1oz [ ] 4oz
40 ml VOA Vial [ ] As III [ ] HCl
GL Amber 100ml [ ] As V [ ] H2SO4
PL As III [ ] 250ml [ ] 500ml [ ] 1000ml
PL H2SO4 [ ] 250ml [ ] 500ml [ ] 1000ml
PL HNO3 250ml
PL NaOH 250ml
Bacteria Bottle

Relinquished by:
Accepted by:
Date:
Time:

Comments, Special Requirements or Regulations:

Turnaround:
☐ 1 Day*
☐ 2 Days*
☐ 3 Days*
☒ Standard
☐ Other
*SURCHARGE APPLIES

RI
☐ Direct Exposure (Residential)
☐ GW
☐ Other

CT
☒ RCP Cert
☐ GW Protection
☐ SW Protection
☐ GA Mobility
☒ GB Mobility
☒ Residential DEC
☐ I/C DEC
☐ Other

MA
☐ MCP Classification
☐ GW-1
☐ GW-2
☐ GW-3
☐ S-1
☐ S-2
☐ S-3
☐ MWRA eSMART
☐ Other

Data Format
☒ Excel
☒ PDF
☐ GIS/Key
☐ EQuIS
☒ Other

Data Package
☐ Tier II Checklist
☐ Full Data Package*
☒ Phoenix Std Report
☐ Other
* SURCHARGE APPLIES

State where samples were collected:

Client Services

From: Lynn E. Willey <LEWilley@tighebond.com>
Sent: Thursday, July 19, 2018 4:41 PM
To: Client Services
Cc: Benjamin P. Caswell
Subject: RE: Phoenix Labs - GCA91708, ROCKVILLE MGP - COC Acknowledgement
Attachments: 2018-7-17-Tighe-Bond Rockville MGP COC -Additional analyses.pdf

Sarah:

Here is the first batch of the samples to active for Rockville that were collected on Monday 7/16 Tuesday 7/17. I have highlighted them in red. Also see the activation for PCB for SB-33 (5-7) (91708).

Let us know if there are any questions.

Thanks.

Lynn E. Willey, P.G., LEP | Senior Environmental Scientist
Tighe & Bond | 213 Court Street Suite 1100 | Middletown, CT 06457
| 860.852.5214 | 860-729-7502 (cell)
www.tighebond.com | Follow us on: Twitter Facebook LinkedIn

From: Client Services [mailto:clientservices@phoenixlabs.com]
Sent: Wednesday, July 18, 2018 10:04 AM
To: Lynn E. Willey <LEWilley@tighebond.com>
Cc: Benjamin P. Caswell <BCaswell@tighebond.com>
Subject: RE: Phoenix Labs - GCA91708, ROCKVILLE MGP - COC Acknowledgement

SO these I am leaving on hold. I did add criteria for when you do release.

Sarah Bell
Client Services - Project Manager
Accounts Receivable
Phoenix Environmental Laboratories
587 East Middle Turnpike
Manchester, CT 06040
Ph: 1-860-645-1102

From: Lynn E. Willey [mailto:LEWilley@tighebond.com]
Sent: Wednesday, July 18, 2018 9:54 AM
To: Client Services
Cc: Benjamin P. Caswell
Subject: RE: Phoenix Labs - GCA91708, ROCKVILLE MGP - COC Acknowledgement

Sarah:

Good morning.

We submitted soil samples for a number of boring locations on the attached COCs. The majority of them are on hold at the moment. We had to pre-clear boreholes and will be completing additional samples this week. I need to see if there are deeper impacts before activating the samples that do not have analysis checked.

Also, we will need the GB PMC criteria.

Lynn E. Willey, P.G., LEP | Senior Environmental Scientist
Tighe & Bond | 213 Court Street Suite 1100 | Middletown, CT 06457
| 860.852.5214 | 860-729-7502 (cell)
www.tighebond.com | Follow us on: Twitter Facebook LinkedIn

From: clientservices@phoenixlabs.com [mailto:clientservices@phoenixlabs.com]
Sent: Tuesday, July 17, 2018 8:17 PM
To: Lynn E. Willey <LEWilley@tighebond.com>
Subject: Phoenix Labs - GCA91708, ROCKVILLE MGP - COC Acknowledgement

Lynn,

Price Quote#: TI012517BA

Purchase Order#:15-0755-44B

GCA91708 Criteria:
SOIL(14): CT I/C (I/C Dec), CT RC (Res. Criteria)

Please email client services only if you require criteria different than what is listed.

Delivery group GCA91708 (ROCKVILLE MGP) has been logged in for the following samples:

Phoenix Id	Client Id
CA91708	SB-33 5-7 FT
CA91709	SB-34 2-4 FT
CA91710	SB-35 2-4 FT
CA91711	SB-36 2-4 FT
CA91712	SB-37 2-4 FT
CA91713	SB-38 2-4 FT
CA91714	SB-42 2-4 FT
CA91715	SB- 41 1-3 FT
CA91716	SB-46 0-2 FT
CA91717	SB-47 2-4 FT
CA91718	SB-43 1-3 FT
CA91719	SB-44 1-3 FT
CA91720	SB-45 0-2 FT
CA91721	SB-65 1-3 FT

The samples in this delivery group were received at 5.4°C. (Note acceptance criteria for relevant matrices is above

freezing up to 6°C)

If there are any questions regarding this submittal, please call Phoenix Client Services at extension 200.

Phoenix Environmental Laboratories, Inc.
587 East Middle Turnpike
P.O. Box 370
Manchester, CT 06374
Tel. (860) 645-1102
Fax. (860) 645-0823
www.phoenixlabs.com

Please do not reply to this email.

Client Services

From: Lynn E. Willey <LEWilley@tighebond.com>
Sent: Friday, July 27, 2018 10:16 AM
To: Client Services
Cc: Benjamin P. Caswell
Subject: Additional Analyses
Attachments: Rockville MGP -Additional Analysis 7-27-18.pdf

Sarah:

Please see the additional analyses for the attached COCs. They are still in hold time as long as they get analyzed before Tuesday.

Thanks.

Lynn E. Willey, P.G., LEP | Senior Environmental Scientist
Tighe & Bond | 213 Court Street Suite 1100 | Middletown, CT 06457
| 860.852.5214 | 860-729-7502 (cell)
www.tighebond.com | Follow us on: Twitter Facebook LinkedIn



PHOENIX
Environmental Laboratories, Inc.

CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Cooler: IPK ☐ ICE ☐ Yes ☒ No ☐
Temp 4.1c Pg 1 of 2
Contact Options:
☐ Fax
☐ Phone
☒ Email

Customer: Tighe & Bond
Address: 53 Eastern St Middletown CT
Project: Eastview Prop
Report to: Lynn Mullen
Invoice to: Tighe & Bond
Project P.O.: [illegible]
This section MUST be completed with Bottle Quantities.

Client Sample - Information - Identification
Sampler's Signature: [signature]
Date: 9/17/24
Matrix Code: DW=Drinking Water GW=Ground Water SW=Surface Water WW=Waste Water RW=Raw Water SE=Sediment SL=Sludge S=Soil SD=Solid W=Wipe OIL=Oil B=Bulk L=Liquid

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	Analysis Request
91708	SB-33 (2-4)	SOIL	9/17/24	13:40	
91709	SB-34 (2-4)	SOIL	9/17/24	11:10	
91710	SB-35 (2-4)			11:30	
91711	SB-36 (2-4)			13:40	
91712	SB-37 (2-4)			14:00	
91713	SB-38 (2-4)			14:25	
91714	SB-42 (2-4)			14:45	
91715	SB-41 (1-3)			15:35	
91716	SB-42 (0-2)	SOIL	9/17/24	7:15	
91717	SB-42 (2-4)			7:35	
91718	SB-43 (1-3)			8:30	

Analysis Request: RCP Methods; VOC; PAH; 8270 TCL; SPLP Pb, Ba, Cr, Ni; TAL Compounds; PCB Soils; SVOC TCL; Added; Solid VOA Vials [ ] methanol [ ] H2O; GL Soil container [ ] 8oz; GL Soil container [ ] 4oz; 40 ml VOA Vial [ ] As [ ] HCl; GL Amber 1040ml [ ] 250ml [ ] 500ml [ ] H2SO4; PL As [ ] 250ml [ ] 500ml [ ] 1000ml; PL H2SO4 [ ] 250ml [ ] 500ml [ ] 1000ml; PL HNO3 250ml; PL NaOH 250ml; Bacteria Bottle

Relinquished by: [signature] Date: 9/17/24 Time: 15:30
Accepted by: [signature] Date: 9/17/24 Time: 15:30

Comments, Special Requirements or Regulations:
DAS Pricing
Quote: T2018179A
Please hold samples pending additional instruction

Turnaround:
☐ 1 Day*
☐ 2 Days*
☐ 3 Days*
☒ Standard
☐ Other
*SURCHARGE APPLIES

RI
☐ Direct Exposure (Residential)
☐ GW
☐ Other

CT
☒ RCP Certi
☐ GW Protection
☐ SW Protection
☐ GA Mobility
☒ GB Mobility
☒ Residential DEC
☐ I/C DEC
☐ Other

MA
☐ MCP Certification
☐ GW-1
☐ GW-2
☐ GW-3
☐ S-1
☐ S-2
☐ S-3
☐ MWRA eSMART
☐ Other

State where samples were collected: CT

Data Format
☒ Excel
☒ PDF
☐ EQuIS Key
☐ EQuIS
☒ Other Geotech
Data Package
☐ Tier II Checklist
☐ Full Data Package*
☒ Phoenix Std Report
☐ Other
*SURCHARGE APPLIES

PHOENIX
Environmental Laboratories, Inc.

Tuesday, November 27, 2018

Attn: Ms. Lynn Willey
Tighe & Bond
213 Court St, Suite 1100
Middletown, CT 06457

Project ID: ROCKVILLE MGP
Sample ID#s: CA91708 - CA91709, CA91711 - CA91712, CA91714 - CA91715, CA91717, CA91719 - CA91721

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

Enclosed are revised Analysis Report pages. Please replace and discard the original pages. If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
UT Lab Registration #CT00007
VT Lab Registration #VT11301

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Telephone (860) 645-1102 Fax (860) 645-0823

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

November 27, 2018

FOR: Attn: Ms. Lynn Willey
Tighe & Bond
213 Court St, Suite 1100
Middletown, CT 06457

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		07/17/18	13:40
Location Code:	TIGHE-DAS	Received by:	LB	07/17/18	15:03
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	15-0755-44B				

Laboratory Data

SDG ID: GCA91708
Phoenix ID: CA91708

Project ID: ROCKVILLE MGP
Client ID: SB-33 5-7 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Silver	< 1.8	1.8	mg/Kg	1	07/19/18	EK	SW6010C	
Arsenic	22.4	0.67	mg/Kg	1	07/19/18	EK	SW6010C	
Barium	66.6	0.34	mg/Kg	1	07/19/18	EK	SW6010C	
Beryllium	0.33	0.27	mg/Kg	1	07/19/18	EK	SW6010C	
Cadmium	0.44	0.34	mg/Kg	1	07/19/18	EK	SW6010C	
Chromium	13.8	0.34	mg/Kg	1	07/19/18	EK	SW6010C	
Copper	34.2	0.34	mg/kg	1	07/19/18	EK	SW6010C	B
Mercury	0.04	0.03	mg/Kg	1	07/19/18	RS	SW7471B	
Nickel	11.0	0.34	mg/Kg	1	07/19/18	EK	SW6010C	
Lead	55.5	0.34	mg/Kg	1	07/19/18	EK	SW6010C	
Antimony	< 3.4	3.4	mg/Kg	1	07/19/18	EK	SW6010C	
Selenium	< 2.1	2.1	mg/Kg	1	07/19/18	EK	SW6010C	
SPLP Silver	< 0.010	0.010	mg/L	1	07/19/18	TH	SW6010C	
SPLP Arsenic	< 0.02	0.02	mg/L	1	07/19/18	EK	SW6010C	
SPLP Barium	< 0.010	0.010	mg/L	1	07/19/18	TH	SW6010C	
SPLP Beryllium	< 0.001	0.001	mg/L	1	07/19/18	TH	SW6010C	
SPLP Cadmium	< 0.005	0.005	mg/L	1	07/19/18	TH	SW6010C	
SPLP Chromium	< 0.010	0.010	mg/L	1	07/19/18	TH	SW6010C	
SPLP Copper	< 0.010	0.010	mg/L	1	07/19/18	TH	SW6010C	
SPLP Mercury	< 0.0005	0.0005	mg/L	1	07/19/18	RS	SW7470A	
SPLP Nickel	< 0.010	0.010	mg/L	1	07/19/18	TH	SW6010C	
SPLP Lead	< 0.010	0.010	mg/L	1	07/19/18	TH	SW6010C	
SPLP Antimony	< 0.02	0.02	mg/L	1	07/19/18	EK	SW6010C	
SPLP Selenium	< 0.020	0.020	mg/L	1	07/19/18	TH	SW6010C	
SPLP Thallium	< 0.005	0.005	mg/L	1	07/19/18	TH	SW6010C	
SPLP Vanadium	< 0.010	0.010	mg/L	1	07/19/18	TH	SW6010C	
SPLP Zinc	0.015	0.010	mg/L	1	07/19/18	EK	SW6010C	
Thallium	< 3.0	3.0	mg/Kg	1	07/19/18	EK	SW6010C	

Ver 2

Project ID: ROCKVILLE MGP
Client ID: SB-33 5-7 FT

Phoenix I.D.: CA91708

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
SPLP Metals Digestion	Completed				07/19/18	IQ/I	SW3010A
Vanadium	31.5	0.34	mg/Kg	1	07/19/18	EK	SW6010C
Zinc	38.1	0.34	mg/Kg	1	07/19/18	EK	SW6010C
Percent Solid	95		%		07/18/18	W	SW846-%Solid
Total Cyanide (SW9010C Distill.)	0.55	0.48	mg/Kg	1	07/19/18	EG	SW9012B
Soil Extraction for PCB	Completed				07/19/18	JA/V	SW3545A
Soil Extraction SVOA PAH	Completed				07/18/18	JJ/V	SW3545A
Extraction of CT ETPH	Completed				07/18/18	NTJ/V	SW3545A
Mercury Digestion	Completed				07/19/18	I/I	SW7471B
SPLP Digestion Mercury	Completed				07/19/18	I/I	SW1312/SW7470A
SPLP Extraction for Metals	Completed				07/18/18	I	SW1312
Total Metals Digest	Completed				07/18/18	L/AG	SW3050B
TPH by GC (Extractable Products)							
Ext. Petroleum H.C. (C9-C36)	1400	260	mg/Kg	5	07/19/18	JRB	CTETPH 8015D
Identification	**		mg/Kg	5	07/19/18	JRB	CTETPH 8015D
QA/QC Surrogates							
% n-Pentacosane	133		%	5	07/19/18	JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	350	ug/Kg	10	07/21/18	AW	SW8082A
PCB-1221	ND	350	ug/Kg	10	07/21/18	AW	SW8082A
PCB-1232	ND	350	ug/Kg	10	07/21/18	AW	SW8082A
PCB-1242	ND	350	ug/Kg	10	07/21/18	AW	SW8082A
PCB-1248	ND	350	ug/Kg	10	07/21/18	AW	SW8082A
PCB-1254	ND	350	ug/Kg	10	07/21/18	AW	SW8082A
PCB-1260	ND	350	ug/Kg	10	07/21/18	AW	SW8082A
PCB-1262	ND	350	ug/Kg	10	07/21/18	AW	SW8082A
PCB-1268	ND	350	ug/Kg	10	07/21/18	AW	SW8082A
QA/QC Surrogates							
% DCBP	98		%	10	07/21/18	AW	30 - 150 %
% TCMX	103		%	10	07/21/18	AW	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
1,1,1-Trichloroethane	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	100	ug/Kg	50	07/19/18	JLI	SW8260C
1,1,2-Trichloroethane	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
1,1-Dichloroethane	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
1,1-Dichloroethene	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
1,1-Dichloropropene	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	360	ug/Kg	50	07/19/18	JLI	SW8260C
1,2,3-Trichloropropane	ND	360	ug/Kg	50	07/19/18	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	360	ug/Kg	50	07/19/18	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	360	ug/Kg	50	07/19/18	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
1,2-Dibromoethane	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
1,2-Dichlorobenzene	ND	360	ug/Kg	50	07/19/18	JLI	SW8260C
1,2-Dichloroethane	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
1,2-Dichloropropane	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C

Ver 2

Project ID: ROCKVILLE MGP
Client ID: SB-33 5-7 FT

Phoenix I.D.: CA91708

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,3,5-Trimethylbenzene	ND	360	ug/Kg	50	07/19/18	JLI	SW8260C
1,3-Dichlorobenzene	ND	360	ug/Kg	50	07/19/18	JLI	SW8260C
1,3-Dichloropropane	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
1,4-Dichlorobenzene	ND	360	ug/Kg	50	07/19/18	JLI	SW8260C
2,2-Dichloropropane	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
2-Chlorotoluene	ND	360	ug/Kg	50	07/19/18	JLI	SW8260C
2-Hexanone	ND	28	ug/Kg	1	07/20/18	JLI	SW8260C
2-Isopropyltoluene	ND	360	ug/Kg	50	07/19/18	JLI	SW8260C
4-Chlorotoluene	ND	360	ug/Kg	50	07/19/18	JLI	SW8260C
4-Methyl-2-pentanone	ND	28	ug/Kg	1	07/20/18	JLI	SW8260C
Acetone	ND	280	ug/Kg	1	07/20/18	JLI	SW8260C
Acrylonitrile	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
Benzene	220	200	ug/Kg	50	07/19/18	JLI	SW8260C
Bromobenzene	ND	360	ug/Kg	50	07/19/18	JLI	SW8260C
Bromochloromethane	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
Bromodichloromethane	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
Bromoform	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
Bromomethane	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
Carbon Disulfide	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
Carbon tetrachloride	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
Chlorobenzene	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
Chloroethane	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
Chloroform	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
Chloromethane	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
cis-1,2-Dichloroethene	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
cis-1,3-Dichloropropene	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
Dibromochloromethane	ND	3.3	ug/Kg	1	07/20/18	JLI	SW8260C
Dibromomethane	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
Dichlorodifluoromethane	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
Ethylbenzene	3.6	3.3	ug/Kg	1	07/20/18	JLI	SW8260C
Hexachlorobutadiene	ND	360	ug/Kg	50	07/19/18	JLI	SW8260C
Isopropylbenzene	ND	360	ug/Kg	50	07/19/18	JLI	SW8260C
m&p-Xylene	19	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
Methyl Ethyl Ketone	ND	33	ug/Kg	1	07/20/18	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	11	ug/Kg	1	07/20/18	JLI	SW8260C
Methylene chloride	ND	11	ug/Kg	1	07/20/18	JLI	SW8260C
Naphthalene	640	360	ug/Kg	50	07/19/18	JLI	SW8260C
n-Butylbenzene	ND	360	ug/Kg	50	07/19/18	JLI	SW8260C
n-Propylbenzene	ND	360	ug/Kg	50	07/19/18	JLI	SW8260C
o-Xylene	22	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
p-Isopropyltoluene	ND	360	ug/Kg	50	07/19/18	JLI	SW8260C
sec-Butylbenzene	ND	360	ug/Kg	50	07/19/18	JLI	SW8260C
Styrene	5.3	4.4	ug/Kg	1	07/20/18	JLI	SW8260C
tert-Butylbenzene	ND	360	ug/Kg	50	07/19/18	JLI	SW8260C
Tetrachloroethene	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
Tetrahydrofuran (THF)	ND	11	ug/Kg	1	07/20/18	JLI	SW8260C
Toluene	400	360	ug/Kg	50	07/19/18	JLI	SW8260C
Total Xylenes	41.0	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
trans-1,2-Dichloroethene	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C

Project ID: ROCKVILLE MGP
Client ID: SB-33 5-7 FT

Phoenix I.D.: CA91708

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
trans-1,3-Dichloropropene	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	720	ug/Kg	50	07/19/18	JLI	SW8260C
Trichloroethene	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
Trichlorofluoromethane	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
Trichlorotrifluoroethane	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
Vinyl chloride	ND	5.5	ug/Kg	1	07/20/18	JLI	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	99		%	50	07/19/18	JLI	70 - 130 %
% Bromofluorobenzene	101		%	50	07/19/18	JLI	70 - 130 %
% Dibromofluoromethane	100		%	1	07/20/18	JLI	70 - 130 %
% Toluene-d8	95		%	1	07/20/18	JLI	70 - 130 %
Polynuclear Aromatic HC							
2-Methylnaphthalene	1900	1200	ug/Kg	5	07/19/18	KCA	SW8270D
Acenaphthene	ND	1200	ug/Kg	5	07/19/18	KCA	SW8270D
Acenaphthylene	2800	1200	ug/Kg	5	07/19/18	KCA	SW8270D
Anthracene	1400	1200	ug/Kg	5	07/19/18	KCA	SW8270D
Benz(a)anthracene	2700	1000	ug/Kg	5	07/19/18	KCA	SW8270D
Benzo(a)pyrene	4700	1000	ug/Kg	5	07/19/18	KCA	SW8270D
Benzo(b)fluoranthene	3800	1000	ug/Kg	5	07/19/18	KCA	SW8270D
Benzo(ghi)perylene	10000	1000	ug/Kg	5	07/19/18	KCA	SW8270D
Benzo(k)fluoranthene	2200	1000	ug/Kg	5	07/19/18	KCA	SW8270D
Chrysene	3700	1000	ug/Kg	5	07/19/18	KCA	SW8270D
Dibenz(a,h)anthracene	1700	1000	ug/Kg	5	07/19/18	KCA	SW8270D
Fluoranthene	3300	1200	ug/Kg	5	07/19/18	KCA	SW8270D
Fluorene	ND	1200	ug/Kg	5	07/19/18	KCA	SW8270D
Indeno(1,2,3-cd)pyrene	11000	1000	ug/Kg	5	07/19/18	KCA	SW8270D
Naphthalene	1300	1200	ug/Kg	5	07/19/18	KCA	SW8270D
Phenanthrene	4000	1200	ug/Kg	5	07/19/18	KCA	SW8270D
Pyrene	7000	1200	ug/Kg	5	07/19/18	KCA	SW8270D
QA/QC Surrogates							
% 2-Fluorobiphenyl	56		%	5	07/19/18	KCA	30 - 130 %
% Nitrobenzene-d5	57		%	5	07/19/18	KCA	30 - 130 %
% Terphenyl-d14	52		%	5	07/19/18	KCA	30 - 130 %
Field Extraction	Completed				07/17/18		SW5035A

Project ID: ROCKVILLE MGP
Client ID: SB-33 5-7 FT

Phoenix I.D.: CA91708

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

B = Present in blank, no bias suspected.

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Semi-Volatile Comment:
Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

TPH Comment:
**Petroleum hydrocarbon chromatogram contains a multicomponent hydrocarbon distribution in the range of C9 to C36. The sample was quantitated against a C9-C36 alkane hydrocarbon standard.

Volatile Comment:
There was a suppression of the last internal standard in the low level analysis, all affected compounds are reported from the methanol preserved high level analysis which did not exhibit this interference.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services.
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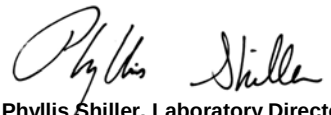

Phyllis Shiller, Laboratory Director
November 27, 2018
Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

November 27, 2018

FOR: Attn: Ms. Lynn Willey
Tighe & Bond
213 Court St, Suite 1100
Middletown, CT 06457

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		07/16/18	11:10
Location Code:	TIGHE-DAS	Received by:	LB	07/17/18	15:03
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	15-0755-44B				

Laboratory Data

SDG ID: GCA91708
Phoenix ID: CA91709

Project ID: ROCKVILLE MGP
Client ID: SB-34 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 1.8	1.8	mg/Kg	1	07/21/18	EK	SW6010C
Arsenic	15.4	0.79	mg/Kg	1	07/21/18	EK	SW6010C
Barium	69.2	0.39	mg/Kg	1	07/21/18	EK	SW6010C
Beryllium	< 0.31	0.31	mg/Kg	1	07/21/18	EK	SW6010C
Cadmium	0.86	0.39	mg/Kg	1	07/21/18	EK	SW6010C
Chromium	16.4	0.39	mg/Kg	1	07/21/18	EK	SW6010C
Copper	32.0	0.39	mg/kg	1	07/21/18	EK	SW6010C
Mercury	0.36	0.03	mg/Kg	1	07/20/18	RS	SW7471B
Nickel	10.9	0.39	mg/Kg	1	07/21/18	EK	SW6010C
Lead	79.4	0.39	mg/Kg	1	07/21/18	EK	SW6010C
Antimony	< 3.9	3.9	mg/Kg	1	07/21/18	EK	SW6010C
Selenium	< 3.6	3.6	mg/Kg	1	07/21/18	EK	SW6010C
SPLP Silver	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Arsenic	< 0.02	0.02	mg/L	1	07/20/18	PS	SW6010C
SPLP Barium	0.016	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Beryllium	< 0.001	0.001	mg/L	1	07/20/18	EK	SW6010C
SPLP Cadmium	< 0.005	0.005	mg/L	1	07/20/18	EK	SW6010C
SPLP Chromium	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Copper	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Mercury	< 0.0005	0.0005	mg/L	1	07/23/18	RS	SW7470A
SPLP Nickel	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Lead	0.013	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Antimony	< 0.02	0.02	mg/L	1	07/20/18	EK	SW6010C
SPLP Selenium	< 0.020	0.020	mg/L	1	07/20/18	EK	SW6010C
SPLP Thallium	< 0.005	0.005	mg/L	1	07/20/18	EK	SW6010C
SPLP Vanadium	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Zinc	0.015	0.010	mg/L	1	07/20/18	EK	SW6010C
Thallium	< 3.5	3.5	mg/Kg	1	07/21/18	EK	SW6010C

Ver 2

Project ID: ROCKVILLE MGP
Client ID: SB-34 2-4 FT

Phoenix I.D.: CA91709

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
SPLP Metals Digestion	Completed				07/20/18	I/I	SW3010A
Vanadium	20.6	0.39	mg/Kg	1	07/21/18	EK	SW6010C
Zinc	48.2	0.39	mg/Kg	1	07/21/18	EK	SW6010C
Percent Solid	86		%		07/19/18	Q	SW846-%Solid
Total Cyanide (SW9010C Distill.)	1.39	0.58	mg/Kg	1	07/23/18	O/GD	SW9012B
Soil Extraction for PCB	Completed				07/27/18	BA/V	SW3545A
Soil Extraction SVOA PAH	Completed				07/20/18	NTJ/V	SW3545A
Extraction of CT ETPH	Completed				07/19/18	JA/V	SW3545A
Mercury Digestion	Completed				07/20/18	I/I	SW7471B
SPLP Digestion Mercury	Completed				07/23/18	I/I	SW1312/SW7470A
SPLP Extraction for Metals	Completed				07/19/18	I	SW1312
Total Metals Digest	Completed				07/20/18	T/AG/BF	SW3050B
TPH by GC (Extractable Products)							
Ext. Petroleum H.C. (C9-C36)	4800	290	mg/Kg	5	07/20/18	JRB	CTETPH 8015D
Identification	**		mg/Kg	5	07/20/18	JRB	CTETPH 8015D
QA/QC Surrogates							
% n-Pentacosane	Diluted Out		%	5	07/20/18	JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	380	ug/Kg	10	07/30/18	AW	SW8082A
PCB-1221	ND	380	ug/Kg	10	07/30/18	AW	SW8082A
PCB-1232	ND	380	ug/Kg	10	07/30/18	AW	SW8082A
PCB-1242	ND	380	ug/Kg	10	07/30/18	AW	SW8082A
PCB-1248	ND	380	ug/Kg	10	07/30/18	AW	SW8082A
PCB-1254	ND	380	ug/Kg	10	07/30/18	AW	SW8082A
PCB-1260	ND	380	ug/Kg	10	07/30/18	AW	SW8082A
PCB-1262	ND	380	ug/Kg	10	07/30/18	AW	SW8082A
PCB-1268	ND	380	ug/Kg	10	07/30/18	AW	SW8082A
QA/QC Surrogates							
% DCBP	57		%	10	07/30/18	AW	30 - 150 %
% TCMX	51		%	10	07/30/18	AW	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
1,1,1-Trichloroethane	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	2.7	ug/Kg	1	07/21/18	JLI	SW8260C
1,1,2-Trichloroethane	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
1,1-Dichloroethane	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
1,1-Dichloroethene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
1,1-Dichloropropene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
1,2,3-Trichloropropane	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
1,2-Dibromoethane	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
1,2-Dichlorobenzene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
1,2-Dichloroethane	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
1,2-Dichloropropane	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C

Ver 2

Project ID: ROCKVILLE MGP
Client ID: SB-34 2-4 FT

Phoenix I.D.: CA91709

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,3,5-Trimethylbenzene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
1,3-Dichlorobenzene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
1,3-Dichloropropane	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
1,4-Dichlorobenzene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
2,2-Dichloropropane	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
2-Chlorotoluene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
2-Hexanone	ND	23	ug/Kg	1	07/21/18	JLI	SW8260C
2-Isopropyltoluene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
4-Chlorotoluene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
4-Methyl-2-pentanone	ND	23	ug/Kg	1	07/21/18	JLI	SW8260C
Acetone	ND	230	ug/Kg	1	07/21/18	JLI	SW8260C
Acrylonitrile	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
Benzene	350	200	ug/Kg	50	07/20/18	JLI	SW8260C
Bromobenzene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
Bromochloromethane	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
Bromodichloromethane	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
Bromoform	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
Bromomethane	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
Carbon Disulfide	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
Carbon tetrachloride	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
Chlorobenzene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
Chloroethane	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
Chloroform	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
Chloromethane	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
cis-1,2-Dichloroethene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
cis-1,3-Dichloropropene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
Dibromochloromethane	ND	2.7	ug/Kg	1	07/21/18	JLI	SW8260C
Dibromomethane	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
Dichlorodifluoromethane	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
Ethylbenzene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
Hexachlorobutadiene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
Isopropylbenzene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
m&p-Xylene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
Methyl Ethyl Ketone	ND	27	ug/Kg	1	07/21/18	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	9.1	ug/Kg	1	07/21/18	JLI	SW8260C
Methylene chloride	ND	9.1	ug/Kg	1	07/21/18	JLI	SW8260C
Naphthalene	2400	530	ug/Kg	50	07/20/18	JLI	SW8260C
n-Butylbenzene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
n-Propylbenzene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
o-Xylene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
p-Isopropyltoluene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
sec-Butylbenzene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
Styrene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
tert-Butylbenzene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
Tetrachloroethene	650	530	ug/Kg	50	07/20/18	JLI	SW8260C
Tetrahydrofuran (THF)	ND	9.1	ug/Kg	1	07/21/18	JLI	SW8260C
Toluene	370	320	ug/Kg	50	07/20/18	JLI	SW8260C
Total Xylenes	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
trans-1,2-Dichloroethene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C

Project ID: ROCKVILLE MGP
Client ID: SB-34 2-4 FT

Phoenix I.D.: CA91709

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
trans-1,3-Dichloropropene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	9.1	ug/Kg	1	07/21/18	JLI	SW8260C
Trichloroethene	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
Trichlorofluoromethane	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
Trichlorotrifluoroethane	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
Vinyl chloride	ND	4.5	ug/Kg	1	07/21/18	JLI	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	101		%	1	07/21/18	JLI	70 - 130 %
% Bromofluorobenzene	98		%	1	07/21/18	JLI	70 - 130 %
% Dibromofluoromethane	106		%	1	07/21/18	JLI	70 - 130 %
% Toluene-d8	102		%	1	07/21/18	JLI	70 - 130 %
Polynuclear Aromatic HC							
2-Methylnaphthalene	4700	2700	ug/Kg	10	07/21/18	KCA	SW8270D
Acenaphthene	ND	2700	ug/Kg	10	07/21/18	KCA	SW8270D
Acenaphthylene	28000	2700	ug/Kg	10	07/21/18	KCA	SW8270D
Anthracene	14000	2700	ug/Kg	10	07/21/18	KCA	SW8270D
Benz(a)anthracene	28000	1300	ug/Kg	10	07/21/18	KCA	SW8270D
Benzo(a)pyrene	16000	1200	ug/Kg	10	07/21/18	KCA	SW8270D
Benzo(b)fluoranthene	23000	1300	ug/Kg	10	07/21/18	KCA	SW8270D
Benzo(ghi)perylene	26000	1200	ug/Kg	10	07/21/18	KCA	SW8270D
Benzo(k)fluoranthene	19000	1300	ug/Kg	10	07/21/18	KCA	SW8270D
Chrysene	37000	1300	ug/Kg	10	07/21/18	KCA	SW8270D
Dibenz(a,h)anthracene	4400	1200	ug/Kg	10	07/21/18	KCA	SW8270D
Fluoranthene	50000	2700	ug/Kg	10	07/21/18	KCA	SW8270D
Fluorene	5800	2700	ug/Kg	10	07/21/18	KCA	SW8270D
Indeno(1,2,3-cd)pyrene	22000	1300	ug/Kg	10	07/21/18	KCA	SW8270D
Naphthalene	6900	2700	ug/Kg	10	07/21/18	KCA	SW8270D
Phenanthrene	45000	2700	ug/Kg	10	07/21/18	KCA	SW8270D
Pyrene	110000	13000	ug/Kg	50	07/23/18	KCA	SW8270D
QA/QC Surrogates							
% 2-Fluorobiphenyl	Diluted Out		%	10	07/21/18	KCA	30 - 130 %
% Nitrobenzene-d5	Diluted Out		%	10	07/21/18	KCA	30 - 130 %
% Terphenyl-d14	Diluted Out		%	10	07/21/18	KCA	30 - 130 %
Field Extraction	Completed				07/16/18		SW5035A

Project ID: ROCKVILLE MGP
Client ID: SB-34 2-4 FT

Phoenix I.D.: CA91709

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Semi-Volatile Comment:
Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

TPH Comment:
**Petroleum hydrocarbon chromatogram contains a multicomponent hydrocarbon distribution in the range of C12 to C36. The sample was quantitated against a C9-C36 alkane hydrocarbon standard.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services.
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Phyllis Shiller, Laboratory Director
November 27, 2018
Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

November 27, 2018

FOR: Attn: Ms. Lynn Willey
Tighe & Bond
213 Court St, Suite 1100
Middletown, CT 06457

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		07/16/18	13:40
Location Code:	TIGHE-DAS	Received by:	LB	07/17/18	15:03
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	15-0755-44B				

Laboratory Data

SDG ID: GCA91708
Phoenix ID: CA91711

Project ID: ROCKVILLE MGP
Client ID: SB-36 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.40	0.40	mg/Kg	1	07/28/18	EK	SW6010C
Arsenic	14.8	0.79	mg/Kg	1	07/28/18	EK	SW6010C
Barium	71.6	0.40	mg/Kg	1	07/28/18	EK	SW6010C
Beryllium	1.38	0.32	mg/Kg	1	07/28/18	EK	SW6010C
Cadmium	1.41	0.40	mg/Kg	1	07/28/18	EK	SW6010C
Chromium	19.0	0.40	mg/Kg	1	07/28/18	EK	SW6010C
Copper	40.7	0.8	mg/kg	1	07/28/18	EK	SW6010C
Mercury	0.44	0.03	mg/Kg	1	07/30/18	RS	SW7471B
Nickel	12.6	0.40	mg/Kg	1	07/28/18	EK	SW6010C
Lead	82.8	0.40	mg/Kg	1	07/28/18	EK	SW6010C
Antimony	< 4.0	4.0	mg/Kg	1	07/28/18	EK	SW6010C
Selenium	< 1.6	1.6	mg/Kg	1	07/28/18	EK	SW6010C
SPLP Silver	< 0.010	0.010	mg/L	1	07/31/18	EK	SW6010C
SPLP Arsenic	0.005	0.004	mg/L	1	07/31/18	EK	SW6010C
SPLP Barium	0.019	0.010	mg/L	1	07/31/18	EK	SW6010C
SPLP Beryllium	< 0.001	0.001	mg/L	1	07/31/18	EK	SW6010C
SPLP Cadmium	< 0.005	0.005	mg/L	1	07/31/18	EK	SW6010C
SPLP Chromium	< 0.010	0.010	mg/L	1	07/31/18	EK	SW6010C
SPLP Copper	< 0.010	0.010	mg/L	1	07/31/18	EK	SW6010C
SPLP Mercury	< 0.0005	0.0005	mg/L	1	07/30/18	RS	SW7470A
SPLP Nickel	< 0.010	0.010	mg/L	1	07/31/18	EK	SW6010C
SPLP Lead	0.015	0.010	mg/L	1	07/31/18	EK	SW6010C
SPLP Antimony	< 0.005	0.005	mg/L	1	07/31/18	EK	SW6010C
SPLP Selenium	< 0.020	0.020	mg/L	1	07/31/18	EK	SW6010C
SPLP Thallium	< 0.005	0.005	mg/L	1	07/31/18	EK	SW6010C
SPLP Vanadium	< 0.010	0.010	mg/L	1	07/31/18	EK	SW6010C
SPLP Zinc	0.086	0.010	mg/L	1	07/31/18	EK	SW6010C
Thallium	< 3.6	3.6	mg/Kg	1	07/28/18	EK	SW6010C

Ver 2

Project ID: ROCKVILLE MGP
Client ID: SB-36 2-4 FT

Phoenix I.D.: CA91711

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
SPLP Metals Digestion	Completed				07/30/18	IQ/I	SW3010A
Vanadium	36.5	0.40	mg/Kg	1	07/28/18	EK	SW6010C
Zinc	140	0.8	mg/Kg	1	07/28/18	EK	SW6010C
Percent Solid	89		%		07/27/18	Q	SW846-%Solid
Total Cyanide (SW9010C Distill.)	10.8	0.51	mg/Kg	1	07/30/18	O/GD	SW9012B
Soil Extraction for PCB	Completed				07/27/18	BA/V	SW3545A
Soil Extraction SVOA PAH	Completed				07/27/18	BJ/CKV	SW3545A
Extraction of CT ETPH	Completed				07/27/18	BJ/VCK	SW3545A
Mercury Digestion	Completed				07/30/18	I/I	SW7471B
SPLP Digestion Mercury	Completed				07/30/18	Q/I/I	SW1312/SW7470A
SPLP Extraction for Metals	Completed				07/27/18	Q	SW1312
Total Metals Digest	Completed				07/27/18	KD/AG	SW3050B
TPH by GC (Extractable Products)							
Ext. Petroleum H.C. (C9-C36)	280	270	mg/Kg	5	07/30/18	AW	CTETPH 8015D
Identification	**		mg/Kg	5	07/30/18	AW	CTETPH 8015D
QA/QC Surrogates							
% n-Pentacosane	79		%	5	07/30/18	AW	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	370	ug/Kg	10	07/30/18	AW	SW8082A
PCB-1221	ND	370	ug/Kg	10	07/30/18	AW	SW8082A
PCB-1232	ND	370	ug/Kg	10	07/30/18	AW	SW8082A
PCB-1242	ND	370	ug/Kg	10	07/30/18	AW	SW8082A
PCB-1248	ND	370	ug/Kg	10	07/30/18	AW	SW8082A
PCB-1254	ND	370	ug/Kg	10	07/30/18	AW	SW8082A
PCB-1260	ND	370	ug/Kg	10	07/30/18	AW	SW8082A
PCB-1262	ND	370	ug/Kg	10	07/30/18	AW	SW8082A
PCB-1268	ND	370	ug/Kg	10	07/30/18	AW	SW8082A
QA/QC Surrogates							
% DCBP	95		%	10	07/30/18	AW	30 - 150 %
% TCMX	84		%	10	07/30/18	AW	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
1,1,1-Trichloroethane	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	100	ug/Kg	50	07/28/18	JLI	SW8260C
1,1,2-Trichloroethane	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
1,1-Dichloroethane	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
1,1-Dichloroethene	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
1,1-Dichloropropene	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	420	ug/Kg	50	07/28/18	JLI	SW8260C
1,2,3-Trichloropropane	ND	420	ug/Kg	50	07/28/18	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	420	ug/Kg	50	07/28/18	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	420	ug/Kg	50	07/28/18	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
1,2-Dibromoethane	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
1,2-Dichlorobenzene	ND	420	ug/Kg	50	07/28/18	JLI	SW8260C
1,2-Dichloroethane	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
1,2-Dichloropropane	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C

Ver 2

Project ID: ROCKVILLE MGP
Client ID: SB-36 2-4 FT

Phoenix I.D.: CA91711

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,3,5-Trimethylbenzene	ND	420	ug/Kg	50	07/28/18	JLI	SW8260C
1,3-Dichlorobenzene	ND	420	ug/Kg	50	07/28/18	JLI	SW8260C
1,3-Dichloropropane	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
1,4-Dichlorobenzene	ND	420	ug/Kg	50	07/28/18	JLI	SW8260C
2,2-Dichloropropane	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
2-Chlorotoluene	ND	420	ug/Kg	50	07/28/18	JLI	SW8260C
2-Hexanone	ND	28	ug/Kg	1	07/28/18	JLI	SW8260C
2-Isopropyltoluene	ND	420	ug/Kg	50	07/28/18	JLI	SW8260C
4-Chlorotoluene	ND	420	ug/Kg	50	07/28/18	JLI	SW8260C
4-Methyl-2-pentanone	ND	28	ug/Kg	1	07/28/18	JLI	SW8260C
Acetone	ND	280	ug/Kg	1	07/28/18	JLI	SW8260C
Acrylonitrile	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
Benzene	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
Bromobenzene	ND	420	ug/Kg	50	07/28/18	JLI	SW8260C
Bromochloromethane	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
Bromodichloromethane	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
Bromoform	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
Bromomethane	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
Carbon Disulfide	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
Carbon tetrachloride	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
Chlorobenzene	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
Chloroethane	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
Chloroform	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
Chloromethane	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
cis-1,2-Dichloroethene	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
cis-1,3-Dichloropropene	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
Dibromochloromethane	ND	3.4	ug/Kg	1	07/28/18	JLI	SW8260C
Dibromomethane	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
Dichlorodifluoromethane	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
Ethylbenzene	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
Hexachlorobutadiene	ND	420	ug/Kg	50	07/28/18	JLI	SW8260C
Isopropylbenzene	ND	420	ug/Kg	50	07/28/18	JLI	SW8260C
m&p-Xylene	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
Methyl Ethyl Ketone	ND	34	ug/Kg	1	07/28/18	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	11	ug/Kg	1	07/28/18	JLI	SW8260C
Methylene chloride	ND	11	ug/Kg	1	07/28/18	JLI	SW8260C
Naphthalene	200	170	ug/Kg	50	07/28/18	JLI	SW8260C
n-Butylbenzene	ND	420	ug/Kg	50	07/28/18	JLI	SW8260C
n-Propylbenzene	ND	420	ug/Kg	50	07/28/18	JLI	SW8260C
o-Xylene	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
p-Isopropyltoluene	ND	420	ug/Kg	50	07/28/18	JLI	SW8260C
sec-Butylbenzene	ND	420	ug/Kg	50	07/28/18	JLI	SW8260C
Styrene	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
tert-Butylbenzene	ND	420	ug/Kg	50	07/28/18	JLI	SW8260C
Tetrachloroethene	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
Tetrahydrofuran (THF)	ND	11	ug/Kg	1	07/28/18	JLI	SW8260C
Toluene	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
Total Xylenes	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
trans-1,2-Dichloroethene	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C

Project ID: ROCKVILLE MGP
Client ID: SB-36 2-4 FT

Phoenix I.D.: CA91711

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
trans-1,3-Dichloropropene	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	850	ug/Kg	50	07/28/18	JLI	SW8260C
Trichloroethene	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
Trichlorofluoromethane	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
Trichlorotrifluoroethane	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
Vinyl chloride	ND	5.7	ug/Kg	1	07/28/18	JLI	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	100		%	50	07/28/18	JLI	70 - 130 %
% Bromofluorobenzene	97		%	50	07/28/18	JLI	70 - 130 %
% Dibromofluoromethane	99		%	1	07/28/18	JLI	70 - 130 %
% Toluene-d8	94		%	1	07/28/18	JLI	70 - 130 %
Polynuclear Aromatic HC							
2-Methylnaphthalene	570	260	ug/Kg	1	07/28/18	KCA	SW8270D
Acenaphthene	ND	260	ug/Kg	1	07/28/18	KCA	SW8270D
Acenaphthylene	5300	260	ug/Kg	1	07/28/18	KCA	SW8270D
Anthracene	920	260	ug/Kg	1	07/28/18	KCA	SW8270D
Benz(a)anthracene	730	260	ug/Kg	1	07/28/18	KCA	SW8270D
Benzo(a)pyrene	2000	260	ug/Kg	1	07/28/18	KCA	SW8270D
Benzo(b)fluoranthene	1400	260	ug/Kg	1	07/28/18	KCA	SW8270D
Benzo(ghi)perylene	2900	260	ug/Kg	1	07/28/18	KCA	SW8270D
Benzo(k)fluoranthene	1200	260	ug/Kg	1	07/28/18	KCA	SW8270D
Chrysene	1000	260	ug/Kg	1	07/28/18	KCA	SW8270D
Dibenz(a,h)anthracene	420	260	ug/Kg	1	07/28/18	KCA	SW8270D
Fluoranthene	820	260	ug/Kg	1	07/28/18	KCA	SW8270D
Fluorene	730	260	ug/Kg	1	07/28/18	KCA	SW8270D
Indeno(1,2,3-cd)pyrene	2500	260	ug/Kg	1	07/28/18	KCA	SW8270D
Naphthalene	770	260	ug/Kg	1	07/28/18	KCA	SW8270D
Phenanthrene	430	260	ug/Kg	1	07/28/18	KCA	SW8270D
Pyrene	1600	260	ug/Kg	1	07/28/18	KCA	SW8270D
QA/QC Surrogates							
% 2-Fluorobiphenyl	66		%	1	07/28/18	KCA	30 - 130 %
% Nitrobenzene-d5	59		%	1	07/28/18	KCA	30 - 130 %
% Terphenyl-d14	67		%	1	07/28/18	KCA	30 - 130 %
Field Extraction	Completed				07/16/18		SW5035A

Project ID: ROCKVILLE MGP
Client ID: SB-36 2-4 FT

Phoenix I.D.: CA91711

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Volatile Comment:
There was a suppression of the last internal standard in the low level analysis, all affected compounds are reported from the methanol preserved high level analysis which did not exhibit this interference.

Volatile Comment:
Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

TPH Comment:
**Petroleum hydrocarbon chromatogram contains a multicomponent hydrocarbon distribution in the range of C9 to C36. The sample was quantitated against a C9-C36 alkane hydrocarbon standard.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services.
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Phyllis Shiller, Laboratory Director
November 27, 2018
Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

November 27, 2018

FOR: Attn: Ms. Lynn Willey
Tighe & Bond
213 Court St, Suite 1100
Middletown, CT 06457

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		07/16/18	14:00
Location Code:	TIGHE-DAS	Received by:	LB	07/17/18	15:03
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	15-0755-44B				

Laboratory Data

SDG ID: GCA91708
Phoenix ID: CA91712

Project ID: ROCKVILLE MGP
Client ID: SB-37 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.39	0.39	mg/Kg	1	07/28/18	EK	SW6010C
Arsenic	4.48	0.77	mg/Kg	1	07/28/18	EK	SW6010C
Barium	63.5	0.39	mg/Kg	1	07/28/18	EK	SW6010C
Beryllium	0.58	0.31	mg/Kg	1	07/28/18	EK	SW6010C
Cadmium	< 0.39	0.39	mg/Kg	1	07/28/18	EK	SW6010C
Chromium	19.7	0.39	mg/Kg	1	07/28/18	EK	SW6010C
Copper	15.3	0.8	mg/kg	1	07/28/18	EK	SW6010C
Mercury	0.05	0.03	mg/Kg	1	07/30/18	RS	SW7471B
Nickel	10.8	0.39	mg/Kg	1	07/28/18	EK	SW6010C
Lead	20.2	0.39	mg/Kg	1	07/28/18	EK	SW6010C
Antimony	< 3.9	3.9	mg/Kg	1	07/28/18	EK	SW6010C
Selenium	< 1.5	1.5	mg/Kg	1	07/28/18	EK	SW6010C
SPLP Silver	< 0.010	0.010	mg/L	1	07/31/18	EK	SW6010C
SPLP Arsenic	< 0.004	0.004	mg/L	1	07/31/18	EK	SW6010C
SPLP Barium	0.013	0.010	mg/L	1	07/31/18	EK	SW6010C
SPLP Beryllium	< 0.001	0.001	mg/L	1	07/31/18	EK	SW6010C
SPLP Cadmium	< 0.005	0.005	mg/L	1	07/31/18	EK	SW6010C
SPLP Chromium	< 0.010	0.010	mg/L	1	07/31/18	EK	SW6010C
SPLP Copper	< 0.010	0.010	mg/L	1	07/31/18	EK	SW6010C
SPLP Mercury	< 0.0005	0.0005	mg/L	1	07/30/18	RS	SW7470A
SPLP Nickel	< 0.010	0.010	mg/L	1	07/31/18	EK	SW6010C
SPLP Lead	< 0.010	0.010	mg/L	1	07/31/18	EK	SW6010C
SPLP Antimony	< 0.005	0.005	mg/L	1	07/31/18	EK	SW6010C
SPLP Selenium	< 0.020	0.020	mg/L	1	07/31/18	EK	SW6010C
SPLP Thallium	< 0.005	0.005	mg/L	1	07/31/18	EK	SW6010C
SPLP Vanadium	< 0.010	0.010	mg/L	1	07/31/18	EK	SW6010C
SPLP Zinc	< 0.010	0.010	mg/L	1	07/31/18	EK	SW6010C
Thallium	< 3.5	3.5	mg/Kg	1	07/28/18	EK	SW6010C

Ver 2

Project ID: ROCKVILLE MGP
Client ID: SB-37 2-4 FT

Phoenix I.D.: CA91712

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
SPLP Metals Digestion	Completed				07/30/18	IQ/I	SW3010A
Vanadium	35.8	0.39	mg/Kg	1	07/28/18	EK	SW6010C
Zinc	38.8	0.8	mg/Kg	1	07/28/18	EK	SW6010C
Percent Solid	84		%		07/27/18	Q	SW846-%Solid
Total Cyanide (SW9010C Distill.)	< 0.60	0.60	mg/Kg	1	07/30/18	O/GD	SW9012B
Soil Extraction SVOA PAH	Completed				07/27/18	BJ/CKV	SW3545A
Extraction of CT ETPH	Completed				07/27/18	BJ/VCK	SW3545A
Mercury Digestion	Completed				07/30/18	I/I	SW7471B
SPLP Digestion Mercury	Completed				07/30/18	Q/I/I	SW1312/SW7470A
SPLP Extraction for Metals	Completed				07/27/18	Q	SW1312
Total Metals Digest	Completed				07/27/18	KD/AG	SW3050B
TPH by GC (Extractable Products)							
Ext. Petroleum H.C. (C9-C36)	ND	59	mg/Kg	1	07/28/18	JRB	CTETPH 8015D
Identification	ND		mg/Kg	1	07/28/18	JRB	CTETPH 8015D
QA/QC Surrogates							
% n-Pentacosane	78		%	1	07/28/18	JRB	50 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
1,1,1-Trichloroethane	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	4.1	ug/Kg	1	07/28/18	JLI	SW8260C
1,1,2-Trichloroethane	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
1,1-Dichloroethane	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
1,1-Dichloroethene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
1,1-Dichloropropene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
1,2,3-Trichloropropane	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
1,2-Dibromoethane	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
1,2-Dichlorobenzene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
1,2-Dichloroethane	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
1,2-Dichloropropane	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
1,3-Dichlorobenzene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
1,3-Dichloropropane	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
1,4-Dichlorobenzene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
2,2-Dichloropropane	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
2-Chlorotoluene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
2-Hexanone	ND	34	ug/Kg	1	07/28/18	JLI	SW8260C
2-Isopropyltoluene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
4-Chlorotoluene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
4-Methyl-2-pentanone	ND	34	ug/Kg	1	07/28/18	JLI	SW8260C
Acetone	ND	340	ug/Kg	1	07/28/18	JLI	SW8260C
Acrylonitrile	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
Benzene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
Bromobenzene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
Bromochloromethane	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C

Ver 2

Project ID: ROCKVILLE MGP
Client ID: SB-37 2-4 FT

Phoenix I.D.: CA91712

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Bromodichloromethane	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
Bromoform	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
Bromomethane	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
Carbon Disulfide	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
Carbon tetrachloride	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
Chlorobenzene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
Chloroethane	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
Chloroform	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
Chloromethane	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
cis-1,2-Dichloroethene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
cis-1,3-Dichloropropene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
Dibromochloromethane	ND	4.1	ug/Kg	1	07/28/18	JLI	SW8260C
Dibromomethane	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
Dichlorodifluoromethane	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
Ethylbenzene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
Hexachlorobutadiene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
Isopropylbenzene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
m&p-Xylene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
Methyl Ethyl Ketone	ND	41	ug/Kg	1	07/28/18	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	14	ug/Kg	1	07/28/18	JLI	SW8260C
Methylene chloride	ND	14	ug/Kg	1	07/28/18	JLI	SW8260C
Naphthalene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
n-Butylbenzene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
n-Propylbenzene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
o-Xylene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
p-Isopropyltoluene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
sec-Butylbenzene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
Styrene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
tert-Butylbenzene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
Tetrachloroethene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
Tetrahydrofuran (THF)	ND	14	ug/Kg	1	07/28/18	JLI	SW8260C
Toluene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
Total Xylenes	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
trans-1,2-Dichloroethene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
trans-1,3-Dichloropropene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	14	ug/Kg	1	07/28/18	JLI	SW8260C
Trichloroethene	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
Trichlorofluoromethane	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
Trichlorotrifluoroethane	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
Vinyl chloride	ND	6.8	ug/Kg	1	07/28/18	JLI	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	96		%	1	07/28/18	JLI	70 - 130 %
% Bromofluorobenzene	89		%	1	07/28/18	JLI	70 - 130 %
% Dibromofluoromethane	95		%	1	07/28/18	JLI	70 - 130 %
% Toluene-d8	96		%	1	07/28/18	JLI	70 - 130 %
Polynuclear Aromatic HC							
2-Methylnaphthalene	ND	270	ug/Kg	1	07/28/18	KCA	SW8270D
Acenaphthene	ND	270	ug/Kg	1	07/28/18	KCA	SW8270D
Acenaphthylene	ND	270	ug/Kg	1	07/28/18	KCA	SW8270D

Ver 2

Project ID: ROCKVILLE MGP
Client ID: SB-37 2-4 FT

Phoenix I.D.: CA91712

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Anthracene	ND	270	ug/Kg	1	07/28/18	KCA	SW8270D
Benz(a)anthracene	ND	270	ug/Kg	1	07/28/18	KCA	SW8270D
Benzo(a)pyrene	ND	270	ug/Kg	1	07/28/18	KCA	SW8270D
Benzo(b)fluoranthene	ND	270	ug/Kg	1	07/28/18	KCA	SW8270D
Benzo(ghi)perylene	560	270	ug/Kg	1	07/28/18	KCA	SW8270D
Benzo(k)fluoranthene	ND	270	ug/Kg	1	07/28/18	KCA	SW8270D
Chrysene	ND	270	ug/Kg	1	07/28/18	KCA	SW8270D
Dibenz(a,h)anthracene	ND	270	ug/Kg	1	07/28/18	KCA	SW8270D
Fluoranthene	ND	270	ug/Kg	1	07/28/18	KCA	SW8270D
Fluorene	ND	270	ug/Kg	1	07/28/18	KCA	SW8270D
Indeno(1,2,3-cd)pyrene	530	270	ug/Kg	1	07/28/18	KCA	SW8270D
Naphthalene	ND	270	ug/Kg	1	07/28/18	KCA	SW8270D
Phenanthrene	ND	270	ug/Kg	1	07/28/18	KCA	SW8270D
Pyrene	ND	270	ug/Kg	1	07/28/18	KCA	SW8270D
QA/QC Surrogates							
% 2-Fluorobiphenyl	34		%	1	07/28/18	KCA	30 - 130 %
% Nitrobenzene-d5	31		%	1	07/28/18	KCA	30 - 130 %
% Terphenyl-d14	31		%	1	07/28/18	KCA	30 - 130 %
Field Extraction	Completed				07/16/18		SW5035A

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services.
This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director
November 27, 2018
Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

November 27, 2018

FOR: Attn: Ms. Lynn Willey
Tighe & Bond
213 Court St, Suite 1100
Middletown, CT 06457

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		07/16/18	14:45
Location Code:	TIGHE-DAS	Received by:	LB	07/17/18	15:03
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	15-0755-44B				

Laboratory Data

SDG ID: GCA91708
Phoenix ID: CA91714

Project ID: ROCKVILLE MGP
Client ID: SB-42 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 1.8	1.8	mg/Kg	1	07/21/18	EK	SW6010C
Arsenic	28.5	0.72	mg/Kg	1	07/21/18	EK	SW6010C
Barium	92.0	0.36	mg/Kg	1	07/21/18	EK	SW6010C
Beryllium	0.35	0.29	mg/Kg	1	07/21/18	EK	SW6010C
Cadmium	0.38	0.36	mg/Kg	1	07/21/18	EK	SW6010C
Chromium	15.5	0.36	mg/Kg	1	07/21/18	EK	SW6010C
Copper	21.5	0.36	mg/kg	1	07/21/18	EK	SW6010C
Mercury	< 0.03	0.03	mg/Kg	1	07/20/18	RS	SW7471B
Nickel	8.87	0.36	mg/Kg	1	07/21/18	EK	SW6010C
Lead	44.6	0.36	mg/Kg	1	07/21/18	EK	SW6010C
Antimony	< 3.6	3.6	mg/Kg	1	07/21/18	EK	SW6010C
Selenium	< 1.4	1.4	mg/Kg	1	07/21/18	EK	SW6010C
SPLP Silver	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Arsenic	< 0.02	0.02	mg/L	1	07/20/18	PS	SW6010C
SPLP Barium	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Beryllium	< 0.001	0.001	mg/L	1	07/20/18	EK	SW6010C
SPLP Cadmium	< 0.005	0.005	mg/L	1	07/20/18	EK	SW6010C
SPLP Chromium	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Copper	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Mercury	< 0.0005	0.0005	mg/L	1	07/23/18	RS	SW7470A
SPLP Nickel	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Lead	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Antimony	< 0.02	0.02	mg/L	1	07/20/18	EK	SW6010C
SPLP Selenium	< 0.020	0.020	mg/L	1	07/20/18	EK	SW6010C
SPLP Thallium	< 0.005	0.005	mg/L	1	07/20/18	EK	SW6010C
SPLP Vanadium	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Zinc	0.027	0.010	mg/L	1	07/20/18	EK	SW6010C
Thallium	< 3.2	3.2	mg/Kg	1	07/21/18	EK	SW6010C

Ver 2

Project ID: ROCKVILLE MGP
Client ID: SB-42 2-4 FT

Phoenix I.D.: CA91714

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
SPLP Metals Digestion	Completed				07/20/18	I/I	SW3010A
Vanadium	24.7	0.36	mg/Kg	1	07/21/18	EK	SW6010C
Zinc	70.6	0.36	mg/Kg	1	07/21/18	EK	SW6010C
Percent Solid	90		%		07/19/18	Q	SW846-%Solid
Total Cyanide (SW9010C Distill.)	0.89	0.56	mg/Kg	1	07/23/18	O/GD	SW9012B
Soil Extraction for PCB	Completed				07/20/18	AA/V	SW3545A
Soil Extraction for SVOA	Completed				07/20/18	JJ/V	SW3545A
Extraction of CT ETPH	Completed				07/19/18	JA/V	SW3545A
Mercury Digestion	Completed				07/20/18	I/I	SW7471B
SPLP Digestion Mercury	Completed				07/23/18	I/I	SW1312/SW7470A
SPLP Extraction for Metals	Completed				07/19/18	I	SW1312
Total Metals Digest	Completed				07/20/18	T/AG/BF	SW3050B
TPH by GC (Extractable Products)							
Ext. Petroleum H.C. (C9-C36)	140	54	mg/Kg	1	07/20/18	JRB	CTETPH 8015D
Identification	**		mg/Kg	1	07/20/18	JRB	CTETPH 8015D
QA/QC Surrogates							
% n-Pentacosane	77		%	1	07/20/18	JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	370	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1221	ND	370	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1232	ND	370	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1242	ND	370	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1248	ND	370	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1254	870	370	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1260	ND	370	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1262	ND	370	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1268	ND	370	ug/Kg	10	07/23/18	AW	SW8082A
QA/QC Surrogates							
% DCBP	79		%	10	07/23/18	AW	30 - 150 %
% TCMX	71		%	10	07/23/18	AW	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
1,1,1-Trichloroethane	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	3.7	ug/Kg	1	07/20/18	JLI	SW8260C
1,1,2-Trichloroethane	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
1,1-Dichloroethane	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
1,1-Dichloroethene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
1,1-Dichloropropene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
1,2,3-Trichloropropane	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
1,2-Dibromoethane	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
1,2-Dichlorobenzene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
1,2-Dichloroethane	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
1,2-Dichloropropane	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C

Ver 2

Project ID: ROCKVILLE MGP
Client ID: SB-42 2-4 FT

Phoenix I.D.: CA91714

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,3,5-Trimethylbenzene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
1,3-Dichlorobenzene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
1,3-Dichloropropane	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
1,4-Dichlorobenzene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
2,2-Dichloropropane	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
2-Chlorotoluene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
2-Hexanone	ND	31	ug/Kg	1	07/20/18	JLI	SW8260C
2-Isopropyltoluene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
4-Chlorotoluene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
4-Methyl-2-pentanone	ND	31	ug/Kg	1	07/20/18	JLI	SW8260C
Acetone	ND	310	ug/Kg	1	07/20/18	JLI	SW8260C
Acrylonitrile	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
Benzene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
Bromobenzene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
Bromochloromethane	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
Bromodichloromethane	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
Bromoform	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
Bromomethane	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
Carbon Disulfide	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
Carbon tetrachloride	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
Chlorobenzene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
Chloroethane	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
Chloroform	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
Chloromethane	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
cis-1,2-Dichloroethene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
cis-1,3-Dichloropropene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
Dibromochloromethane	ND	3.7	ug/Kg	1	07/20/18	JLI	SW8260C
Dibromomethane	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
Dichlorodifluoromethane	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
Ethylbenzene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
Hexachlorobutadiene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
Isopropylbenzene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
m&p-Xylene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
Methyl Ethyl Ketone	ND	37	ug/Kg	1	07/20/18	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	12	ug/Kg	1	07/20/18	JLI	SW8260C
Methylene chloride	ND	12	ug/Kg	1	07/20/18	JLI	SW8260C
Naphthalene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
n-Butylbenzene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
n-Propylbenzene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
o-Xylene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
p-Isopropyltoluene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
sec-Butylbenzene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
Styrene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
tert-Butylbenzene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
Tetrachloroethene	470	360	ug/Kg	50	07/20/18	JLI	SW8260C
Tetrahydrofuran (THF)	ND	12	ug/Kg	1	07/20/18	JLI	SW8260C
Toluene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
Total Xylenes	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
trans-1,2-Dichloroethene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C

Project ID: ROCKVILLE MGP
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Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
trans-1,3-Dichloropropene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	12	ug/Kg	1	07/20/18	JLI	SW8260C
Trichloroethene	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
Trichlorofluoromethane	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
Trichlorotrifluoroethane	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
Vinyl chloride	ND	6.2	ug/Kg	1	07/20/18	JLI	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	99		%	1	07/20/18	JLI	70 - 130 %
% Bromofluorobenzene	93		%	1	07/20/18	JLI	70 - 130 %
% Dibromofluoromethane	94		%	1	07/20/18	JLI	70 - 130 %
% Toluene-d8	102		%	1	07/20/18	JLI	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
1,2,4-Trichlorobenzene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
1,2-Dichlorobenzene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
1,2-Diphenylhydrazine	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
1,3-Dichlorobenzene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
1,4-Dichlorobenzene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2,4,5-Trichlorophenol	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2,4,6-Trichlorophenol	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2,4-Dichlorophenol	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2,4-Dimethylphenol	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2,4-Dinitrophenol	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
2,4-Dinitrotoluene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2,6-Dinitrotoluene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2-Chloronaphthalene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2-Chlorophenol	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2-Methylnaphthalene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2-Methylphenol (o-cresol)	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2-Nitroaniline	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
2-Nitrophenol	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
3,3'-Dichlorobenzidine	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
3-Nitroaniline	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
4,6-Dinitro-2-methylphenol	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
4-Bromophenyl phenyl ether	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
4-Chloro-3-methylphenol	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
4-Chloroaniline	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
4-Chlorophenyl phenyl ether	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
4-Nitroaniline	ND	580	ug/Kg	1	07/21/18	KCA	SW8270D
4-Nitrophenol	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Acenaphthene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Acenaphthylene	1100	260	ug/Kg	1	07/21/18	KCA	SW8270D
Acetophenone	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Aniline	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
Anthracene	370	260	ug/Kg	1	07/21/18	KCA	SW8270D
Benz(a)anthracene	420	260	ug/Kg	1	07/21/18	KCA	SW8270D
Benzidine	ND	200	ug/Kg	1	07/21/18	KCA	SW8270D
Benzo(a)pyrene	620	260	ug/Kg	1	07/21/18	KCA	SW8270D

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Phoenix I.D.: CA91714

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Benzo(b)fluoranthene	570	260	ug/Kg	1	07/21/18	KCA	SW8270D
Benzo(ghi)perylene	1100	260	ug/Kg	1	07/21/18	KCA	SW8270D
Benzo(k)fluoranthene	530	260	ug/Kg	1	07/21/18	KCA	SW8270D
Benzoic acid	ND	730	ug/Kg	1	07/21/18	KCA	SW8270D
Benzyl butyl phthalate	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Bis(2-chloroethoxy)methane	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Bis(2-chloroethyl)ether	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
Bis(2-chloroisopropyl)ether	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Bis(2-ethylhexyl)phthalate	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Carbazole	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
Chrysene	710	260	ug/Kg	1	07/21/18	KCA	SW8270D
Dibenz(a,h)anthracene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Dibenzofuran	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Diethyl phthalate	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Dimethylphthalate	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Di-n-butylphthalate	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
Di-n-octylphthalate	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Fluoranthene	500	260	ug/Kg	1	07/21/18	KCA	SW8270D
Fluorene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Hexachlorobenzene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Hexachlorobutadiene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Hexachlorocyclopentadiene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Hexachloroethane	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Indeno(1,2,3-cd)pyrene	870	260	ug/Kg	1	07/21/18	KCA	SW8270D
Isophorone	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Naphthalene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Nitrobenzene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
N-Nitrosodimethylamine	ND	200	ug/Kg	1	07/21/18	KCA	SW8270D
N-Nitrosodi-n-propylamine	ND	200	ug/Kg	1	07/21/18	KCA	SW8270D
N-Nitrosodiphenylamine	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
Pentachloronitrobenzene	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
Pentachlorophenol	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
Phenanthrene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Phenol	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Pyrene	900	260	ug/Kg	1	07/21/18	KCA	SW8270D
Pyridine	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
QA/QC Surrogates							
% 2,4,6-Tribromophenol	89		%	1	07/21/18	KCA	30 - 130 %
% 2-Fluorobiphenyl	66		%	1	07/21/18	KCA	30 - 130 %
% 2-Fluorophenol	57		%	1	07/21/18	KCA	30 - 130 %
% Nitrobenzene-d5	66		%	1	07/21/18	KCA	30 - 130 %
% Phenol-d5	66		%	1	07/21/18	KCA	30 - 130 %
% Terphenyl-d14	74		%	1	07/21/18	KCA	30 - 130 %
Field Extraction	Completed				07/16/18		SW5035A

Project ID: ROCKVILLE MGP
Client ID: SB-42 2-4 FT

Phoenix I.D.: CA91714

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

TPH Comment:
**Petroleum hydrocarbon chromatogram contains a multicomponent hydrocarbon distribution in the range of C12 to C36. The sample was quantitated against a C9-C36 alkane hydrocarbon standard.

Semi-Volatile Comment:
Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services.
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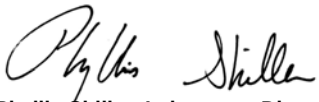

Phyllis Shiller, Laboratory Director
November 27, 2018
Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

November 27, 2018

FOR: Attn: Ms. Lynn Willey
Tighe & Bond
213 Court St, Suite 1100
Middletown, CT 06457

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		07/16/18	15:35
Location Code:	TIGHE-DAS	Received by:	LB	07/17/18	15:03
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	15-0755-44B				

Laboratory Data

SDG ID: GCA91708
Phoenix ID: CA91715

Project ID: ROCKVILLE MGP
Client ID: SB-41 1-3 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 1.8	1.8	mg/Kg	1	07/21/18	EK	SW6010C
Arsenic	6.81	0.79	mg/Kg	1	07/21/18	EK	SW6010C
Barium	75.1	0.40	mg/Kg	1	07/21/18	EK	SW6010C
Beryllium	0.57	0.32	mg/Kg	1	07/21/18	EK	SW6010C
Cadmium	0.47	0.40	mg/Kg	1	07/21/18	EK	SW6010C
Chromium	17.1	0.40	mg/Kg	1	07/21/18	EK	SW6010C
Copper	18.1	0.40	mg/kg	1	07/21/18	EK	SW6010C
Mercury	0.06	0.03	mg/Kg	1	07/20/18	RS	SW7471B
Nickel	9.33	0.40	mg/Kg	1	07/21/18	EK	SW6010C
Lead	30.1	0.40	mg/Kg	1	07/21/18	EK	SW6010C
Antimony	< 4.0	4.0	mg/Kg	1	07/21/18	EK	SW6010C
Selenium	< 1.6	1.6	mg/Kg	1	07/21/18	EK	SW6010C
SPLP Silver	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Arsenic	< 0.02	0.02	mg/L	1	07/20/18	EK	SW6010C
SPLP Barium	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Beryllium	< 0.001	0.001	mg/L	1	07/20/18	EK	SW6010C
SPLP Cadmium	< 0.005	0.005	mg/L	1	07/20/18	EK	SW6010C
SPLP Chromium	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Copper	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Mercury	< 0.0005	0.0005	mg/L	1	07/23/18	RS	SW7470A
SPLP Nickel	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Lead	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Antimony	< 0.02	0.02	mg/L	1	07/20/18	PS	SW6010C
SPLP Selenium	< 0.020	0.020	mg/L	1	07/20/18	EK	SW6010C
SPLP Thallium	< 0.005	0.005	mg/L	1	07/20/18	EK	SW6010C
SPLP Vanadium	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Zinc	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
Thallium	< 3.6	3.6	mg/Kg	1	07/21/18	EK	SW6010C

Ver 2

Project ID: ROCKVILLE MGP
Client ID: SB-41 1-3 FT

Phoenix I.D.: CA91715

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
SPLP Metals Digestion	Completed				07/20/18	I/I	SW3010A
Vanadium	27.9	0.40	mg/Kg	1	07/21/18	EK	SW6010C
Zinc	80.6	0.40	mg/Kg	1	07/21/18	EK	SW6010C
Percent Solid	79		%		07/19/18	Q	SW846-%Solid
Total Cyanide (SW9010C Distill.)	< 0.63	0.63	mg/Kg	1	07/23/18	O/GD	SW9012B
Soil Extraction for PCB	Completed				07/20/18	AA/V	SW3545A
Soil Extraction for SVOA	Completed				07/20/18	JJ/V	SW3545A
Extraction of CT ETPH	Completed				07/20/18	JA/V	SW3545A
Mercury Digestion	Completed				07/20/18	I/I	SW7471B
SPLP Digestion Mercury	Completed				07/23/18	I/I	SW1312/SW7470A
SPLP Extraction for Metals	Completed				07/19/18	I	SW1312
Total Metals Digest	Completed				07/20/18	T/AG/BF	SW3050B
TPH by GC (Extractable Products)							
Ext. Petroleum H.C. (C9-C36)	ND	61	mg/Kg	1	07/21/18	JRB	CTETPH 8015D
Identification	ND		mg/Kg	1	07/21/18	JRB	CTETPH 8015D
QA/QC Surrogates							
% n-Pentacosane	53		%	1	07/21/18	JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	420	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1221	ND	420	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1232	ND	420	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1242	ND	420	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1248	ND	420	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1254	ND	420	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1260	ND	420	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1262	ND	420	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1268	ND	420	ug/Kg	10	07/23/18	AW	SW8082A
QA/QC Surrogates							
% DCBP	84		%	10	07/23/18	AW	30 - 150 %
% TCMX	73		%	10	07/23/18	AW	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
1,1,1-Trichloroethane	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	4.4	ug/Kg	1	07/20/18	JLI	SW8260C
1,1,2-Trichloroethane	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
1,1-Dichloroethane	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
1,1-Dichloroethene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
1,1-Dichloropropene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
1,2,3-Trichloropropane	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
1,2-Dibromoethane	ND	7.0	ug/Kg	1	07/20/18	JLI	SW8260C
1,2-Dichlorobenzene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
1,2-Dichloroethane	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
1,2-Dichloropropane	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C

Ver 2

Project ID: ROCKVILLE MGP
Client ID: SB-41 1-3 FT

Phoenix I.D.: CA91715

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,3,5-Trimethylbenzene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
1,3-Dichlorobenzene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
1,3-Dichloropropane	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
1,4-Dichlorobenzene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
2,2-Dichloropropane	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
2-Chlorotoluene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
2-Hexanone	ND	36	ug/Kg	1	07/20/18	JLI	SW8260C
2-Isopropyltoluene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
4-Chlorotoluene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
4-Methyl-2-pentanone	ND	36	ug/Kg	1	07/20/18	JLI	SW8260C
Acetone	ND	360	ug/Kg	1	07/20/18	JLI	SW8260C
Acrylonitrile	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
Benzene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
Bromobenzene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
Bromochloromethane	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
Bromodichloromethane	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
Bromoform	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
Bromomethane	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
Carbon Disulfide	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
Carbon tetrachloride	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
Chlorobenzene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
Chloroethane	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
Chloroform	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
Chloromethane	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
cis-1,2-Dichloroethene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
cis-1,3-Dichloropropene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
Dibromochloromethane	ND	4.4	ug/Kg	1	07/20/18	JLI	SW8260C
Dibromomethane	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
Dichlorodifluoromethane	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
Ethylbenzene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
Hexachlorobutadiene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
Isopropylbenzene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
m&p-Xylene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
Methyl Ethyl Ketone	ND	44	ug/Kg	1	07/20/18	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	15	ug/Kg	1	07/20/18	JLI	SW8260C
Methylene chloride	ND	15	ug/Kg	1	07/20/18	JLI	SW8260C
Naphthalene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
n-Butylbenzene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
n-Propylbenzene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
o-Xylene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
p-Isopropyltoluene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
sec-Butylbenzene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
Styrene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
tert-Butylbenzene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
Tetrachloroethene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
Tetrahydrofuran (THF)	ND	15	ug/Kg	1	07/20/18	JLI	SW8260C
Toluene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
Total Xylenes	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
trans-1,2-Dichloroethene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C

Project ID: ROCKVILLE MGP
Client ID: SB-41 1-3 FT

Phoenix I.D.: CA91715

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
trans-1,3-Dichloropropene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	15	ug/Kg	1	07/20/18	JLI	SW8260C
Trichloroethene	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
Trichlorofluoromethane	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
Trichlorotrifluoroethane	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
Vinyl chloride	ND	7.3	ug/Kg	1	07/20/18	JLI	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	99		%	1	07/20/18	JLI	70 - 130 %
% Bromofluorobenzene	89		%	1	07/20/18	JLI	70 - 130 %
% Dibromofluoromethane	94		%	1	07/20/18	JLI	70 - 130 %
% Toluene-d8	101		%	1	07/20/18	JLI	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
1,2,4-Trichlorobenzene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
1,2-Dichlorobenzene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
1,2-Diphenylhydrazine	ND	420	ug/Kg	1	07/21/18	KCA	SW8270D
1,3-Dichlorobenzene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
1,4-Dichlorobenzene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
2,4,5-Trichlorophenol	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
2,4,6-Trichlorophenol	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
2,4-Dichlorophenol	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
2,4-Dimethylphenol	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
2,4-Dinitrophenol	ND	420	ug/Kg	1	07/21/18	KCA	SW8270D
2,4-Dinitrotoluene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
2,6-Dinitrotoluene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
2-Chloronaphthalene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
2-Chlorophenol	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
2-Methylnaphthalene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
2-Methylphenol (o-cresol)	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
2-Nitroaniline	ND	420	ug/Kg	1	07/21/18	KCA	SW8270D
2-Nitrophenol	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	420	ug/Kg	1	07/21/18	KCA	SW8270D
3,3'-Dichlorobenzidine	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
3-Nitroaniline	ND	420	ug/Kg	1	07/21/18	KCA	SW8270D
4,6-Dinitro-2-methylphenol	ND	420	ug/Kg	1	07/21/18	KCA	SW8270D
4-Bromophenyl phenyl ether	ND	420	ug/Kg	1	07/21/18	KCA	SW8270D
4-Chloro-3-methylphenol	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
4-Chloroaniline	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
4-Chlorophenyl phenyl ether	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
4-Nitroaniline	ND	670	ug/Kg	1	07/21/18	KCA	SW8270D
4-Nitrophenol	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Acenaphthene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Acenaphthylene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Acetophenone	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Aniline	ND	420	ug/Kg	1	07/21/18	KCA	SW8270D
Anthracene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Benz(a)anthracene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Benzidine	ND	200	ug/Kg	1	07/21/18	KCA	SW8270D
Benzo(a)pyrene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D

Project ID: ROCKVILLE MGP
Client ID: SB-41 1-3 FT

Phoenix I.D.: CA91715

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Benzo(b)fluoranthene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Benzo(ghi)perylene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Benzo(k)fluoranthene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Benzoic acid	ND	830	ug/Kg	1	07/21/18	KCA	SW8270D
Benzyl butyl phthalate	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Bis(2-chloroethoxy)methane	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Bis(2-chloroethyl)ether	ND	420	ug/Kg	1	07/21/18	KCA	SW8270D
Bis(2-chloroisopropyl)ether	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Bis(2-ethylhexyl)phthalate	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Carbazole	ND	420	ug/Kg	1	07/21/18	KCA	SW8270D
Chrysene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Dibenz(a,h)anthracene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Dibenzofuran	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Diethyl phthalate	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Dimethylphthalate	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Di-n-butylphthalate	ND	420	ug/Kg	1	07/21/18	KCA	SW8270D
Di-n-octylphthalate	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Fluoranthene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Fluorene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Hexachlorobenzene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Hexachlorobutadiene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Hexachlorocyclopentadiene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Hexachloroethane	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Indeno(1,2,3-cd)pyrene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Isophorone	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Naphthalene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Nitrobenzene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
N-Nitrosodimethylamine	ND	200	ug/Kg	1	07/21/18	KCA	SW8270D
N-Nitrosodi-n-propylamine	ND	200	ug/Kg	1	07/21/18	KCA	SW8270D
N-Nitrosodiphenylamine	ND	420	ug/Kg	1	07/21/18	KCA	SW8270D
Pentachloronitrobenzene	ND	420	ug/Kg	1	07/21/18	KCA	SW8270D
Pentachlorophenol	ND	420	ug/Kg	1	07/21/18	KCA	SW8270D
Phenanthrene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Phenol	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Pyrene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Pyridine	ND	420	ug/Kg	1	07/21/18	KCA	SW8270D
QA/QC Surrogates							
% 2,4,6-Tribromophenol	75		%	1	07/21/18	KCA	30 - 130 %
% 2-Fluorobiphenyl	51		%	1	07/21/18	KCA	30 - 130 %
% 2-Fluorophenol	52		%	1	07/21/18	KCA	30 - 130 %
% Nitrobenzene-d5	58		%	1	07/21/18	KCA	30 - 130 %
% Phenol-d5	64		%	1	07/21/18	KCA	30 - 130 %
% Terphenyl-d14	66		%	1	07/21/18	KCA	30 - 130 %
Field Extraction	Completed				07/16/18		SW5035A

Project ID: ROCKVILLE MGP
Client ID: SB-41 1-3 FT

Phoenix I.D.: CA91715

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Volatile Comment:
Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

Semi-Volatile Comment:
Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services.
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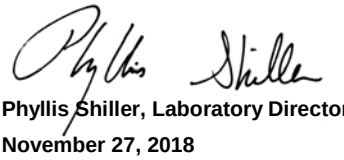

Phyllis Shiller, Laboratory Director
November 27, 2018
Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

November 27, 2018

FOR: Attn: Ms. Lynn Willey
Tighe & Bond
213 Court St, Suite 1100
Middletown, CT 06457

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		07/17/18	7:35
Location Code:	TIGHE-DAS	Received by:	LB	07/17/18	15:03
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	15-0755-44B				

Laboratory Data

SDG ID: GCA91708
Phoenix ID: CA91717

Project ID: ROCKVILLE MGP
Client ID: SB-47 2-4 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 1.8	1.8	mg/Kg	1	07/21/18	EK	SW6010C
Arsenic	1.93	0.75	mg/Kg	1	07/21/18	EK	SW6010C
Barium	49.4	0.38	mg/Kg	1	07/21/18	EK	SW6010C
Beryllium	0.35	0.30	mg/Kg	1	07/21/18	EK	SW6010C
Cadmium	< 0.38	0.38	mg/Kg	1	07/21/18	EK	SW6010C
Chromium	12.0	0.38	mg/Kg	1	07/21/18	EK	SW6010C
Copper	9.72	0.38	mg/kg	1	07/21/18	EK	SW6010C
Mercury	< 0.03	0.03	mg/Kg	1	07/20/18	RS	SW7471B
Nickel	7.27	0.38	mg/Kg	1	07/21/18	EK	SW6010C
Lead	13.4	0.38	mg/Kg	1	07/21/18	EK	SW6010C
Antimony	< 3.8	3.8	mg/Kg	1	07/21/18	EK	SW6010C
Selenium	< 1.5	1.5	mg/Kg	1	07/21/18	EK	SW6010C
SPLP Silver	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Arsenic	< 0.02	0.02	mg/L	1	07/20/18	PS	SW6010C
SPLP Barium	0.011	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Beryllium	< 0.001	0.001	mg/L	1	07/20/18	EK	SW6010C
SPLP Cadmium	< 0.005	0.005	mg/L	1	07/20/18	EK	SW6010C
SPLP Chromium	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Copper	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Mercury	< 0.0005	0.0005	mg/L	1	07/23/18	RS	SW7470A
SPLP Nickel	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Lead	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Antimony	< 0.02	0.02	mg/L	1	07/20/18	EK	SW6010C
SPLP Selenium	< 0.020	0.020	mg/L	1	07/20/18	EK	SW6010C
SPLP Thallium	< 0.005	0.005	mg/L	1	07/20/18	EK	SW6010C
SPLP Vanadium	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Zinc	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
Thallium	< 3.4	3.4	mg/Kg	1	07/21/18	EK	SW6010C

Ver 2

Project ID: ROCKVILLE MGP
Client ID: SB-47 2-4 FT

Phoenix I.D.: CA91717

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
SPLP Metals Digestion	Completed				07/20/18	I/I	SW3010A
Vanadium	23.1	0.38	mg/Kg	1	07/21/18	EK	SW6010C
Zinc	20.8	0.38	mg/Kg	1	07/21/18	EK	SW6010C
Percent Solid	91		%		07/19/18	Q	SW846-%Solid
Total Cyanide (SW9010C Distill.)	< 0.55	0.55	mg/Kg	1	07/23/18	O/GD	SW9012B
Soil Extraction for PCB	Completed				07/20/18	AA/V	SW3545A
Soil Extraction for SVOA	Completed				07/20/18	JJ/V	SW3545A
Extraction of CT ETPH	Completed				07/20/18	JA/V	SW3545A
Mercury Digestion	Completed				07/20/18	I/I	SW7471B
SPLP Digestion Mercury	Completed				07/23/18	I/I	SW1312/SW7470A
SPLP Extraction for Metals	Completed				07/19/18	I	SW1312
Total Metals Digest	Completed				07/20/18	T/AG/BF	SW3050B
TPH by GC (Extractable Products)							
Ext. Petroleum H.C. (C9-C36)	ND	54	mg/Kg	1	07/21/18	JRB	CTETPH 8015D
Identification	ND		mg/Kg	1	07/21/18	JRB	CTETPH 8015D
QA/QC Surrogates							
% n-Pentacosane	80		%	1	07/21/18	JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	360	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1221	ND	360	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1232	ND	360	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1242	ND	360	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1248	ND	360	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1254	ND	360	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1260	ND	360	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1262	ND	360	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1268	ND	360	ug/Kg	10	07/23/18	AW	SW8082A
QA/QC Surrogates							
% DCBP	76		%	10	07/23/18	AW	30 - 150 %
% TCMX	64		%	10	07/23/18	AW	30 - 150 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
1,2,4-Trichlorobenzene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
1,2-Dichlorobenzene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
1,2-Diphenylhydrazine	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
1,3-Dichlorobenzene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
1,4-Dichlorobenzene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2,4,5-Trichlorophenol	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2,4,6-Trichlorophenol	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2,4-Dichlorophenol	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2,4-Dimethylphenol	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2,4-Dinitrophenol	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
2,4-Dinitrotoluene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2,6-Dinitrotoluene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2-Chloronaphthalene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2-Chlorophenol	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2-Methylnaphthalene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D

Ver 2

Project ID: ROCKVILLE MGP
Client ID: SB-47 2-4 FT

Phoenix I.D.: CA91717

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2-Methylphenol (o-cresol)	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2-Nitroaniline	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
2-Nitrophenol	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
3,3'-Dichlorobenzidine	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
3-Nitroaniline	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
4,6-Dinitro-2-methylphenol	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
4-Bromophenyl phenyl ether	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
4-Chloro-3-methylphenol	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
4-Chloroaniline	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
4-Chlorophenyl phenyl ether	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
4-Nitroaniline	ND	590	ug/Kg	1	07/21/18	KCA	SW8270D
4-Nitrophenol	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Acenaphthene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Acenaphthylene	370	260	ug/Kg	1	07/21/18	KCA	SW8270D
Acetophenone	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Aniline	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
Anthracene	400	260	ug/Kg	1	07/21/18	KCA	SW8270D
Benz(a)anthracene	730	260	ug/Kg	1	07/21/18	KCA	SW8270D
Benzidine	ND	200	ug/Kg	1	07/21/18	KCA	SW8270D
Benzo(a)pyrene	860	260	ug/Kg	1	07/21/18	KCA	SW8270D
Benzo(b)fluoranthene	710	260	ug/Kg	1	07/21/18	KCA	SW8270D
Benzo(ghi)perylene	840	260	ug/Kg	1	07/21/18	KCA	SW8270D
Benzo(k)fluoranthene	570	260	ug/Kg	1	07/21/18	KCA	SW8270D
Benzoic acid	ND	730	ug/Kg	1	07/21/18	KCA	SW8270D
Benzyl butyl phthalate	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Bis(2-chloroethoxy)methane	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Bis(2-chloroethyl)ether	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
Bis(2-chloroisopropyl)ether	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Bis(2-ethylhexyl)phthalate	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Carbazole	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
Chrysene	730	260	ug/Kg	1	07/21/18	KCA	SW8270D
Dibenz(a,h)anthracene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Dibenzofuran	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Diethyl phthalate	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Dimethylphthalate	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Di-n-butylphthalate	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
Di-n-octylphthalate	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Fluoranthene	1700	260	ug/Kg	1	07/21/18	KCA	SW8270D
Fluorene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Hexachlorobenzene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Hexachlorobutadiene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Hexachlorocyclopentadiene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Hexachloroethane	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Indeno(1,2,3-cd)pyrene	810	260	ug/Kg	1	07/21/18	KCA	SW8270D
Isophorone	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Naphthalene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Nitrobenzene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
N-Nitrosodimethylamine	ND	200	ug/Kg	1	07/21/18	KCA	SW8270D

Project ID: ROCKVILLE MGP
Client ID: SB-47 2-4 FT

Phoenix I.D.: CA91717

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
N-Nitrosodi-n-propylamine	ND	200	ug/Kg	1	07/21/18	KCA	SW8270D
N-Nitrosodiphenylamine	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
Pentachloronitrobenzene	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
Pentachlorophenol	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
Phenanthrene	1300	260	ug/Kg	1	07/21/18	KCA	SW8270D
Phenol	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Pyrene	1600	260	ug/Kg	1	07/21/18	KCA	SW8270D
Pyridine	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
QA/QC Surrogates							
% 2,4,6-Tribromophenol	81		%	1	07/21/18	KCA	30 - 130 %
% 2-Fluorobiphenyl	63		%	1	07/21/18	KCA	30 - 130 %
% 2-Fluorophenol	58		%	1	07/21/18	KCA	30 - 130 %
% Nitrobenzene-d5	65		%	1	07/21/18	KCA	30 - 130 %
% Phenol-d5	64		%	1	07/21/18	KCA	30 - 130 %
% Terphenyl-d14	63		%	1	07/21/18	KCA	30 - 130 %

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Semi-Volatile Comment:
Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services.
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Phyllis Shiller, Laboratory Director
November 27, 2018
Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

November 27, 2018

FOR: Attn: Ms. Lynn Willey
Tighe & Bond
213 Court St, Suite 1100
Middletown, CT 06457

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		07/17/18	9:45
Location Code:	TIGHE-DAS	Received by:	LB	07/17/18	15:03
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	15-0755-44B				

Laboratory Data

SDG ID: GCA91708
Phoenix ID: CA91719

Project ID: ROCKVILLE MGP
Client ID: SB-44 1-3 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 1.8	1.8	mg/Kg	1	07/21/18	EK	SW6010C
Arsenic	6.66	0.72	mg/Kg	1	07/21/18	EK	SW6010C
Barium	81.2	0.36	mg/Kg	1	07/21/18	EK	SW6010C
Beryllium	0.43	0.29	mg/Kg	1	07/21/18	EK	SW6010C
Cadmium	0.42	0.36	mg/Kg	1	07/21/18	EK	SW6010C
Chromium	12.1	0.36	mg/Kg	1	07/21/18	EK	SW6010C
Copper	29.0	0.36	mg/kg	1	07/21/18	EK	SW6010C
Mercury	0.54	0.13	mg/Kg	1	07/20/18	RS	SW7471B
Nickel	9.28	0.36	mg/Kg	1	07/21/18	EK	SW6010C
Lead	31.8	0.36	mg/Kg	1	07/21/18	EK	SW6010C
Antimony	< 3.6	3.6	mg/Kg	1	07/21/18	EK	SW6010C
Selenium	< 1.4	1.4	mg/Kg	1	07/21/18	EK	SW6010C
SPLP Silver	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Arsenic	< 0.02	0.02	mg/L	1	07/20/18	PS	SW6010C
SPLP Barium	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Beryllium	< 0.001	0.001	mg/L	1	07/20/18	EK	SW6010C
SPLP Cadmium	< 0.005	0.005	mg/L	1	07/20/18	EK	SW6010C
SPLP Chromium	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Copper	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Mercury	< 0.0005	0.0005	mg/L	1	07/23/18	RS	SW7470A
SPLP Nickel	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Lead	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Antimony	< 0.02	0.02	mg/L	1	07/20/18	PS	SW6010C
SPLP Selenium	< 0.020	0.020	mg/L	1	07/20/18	EK	SW6010C
SPLP Thallium	< 0.005	0.005	mg/L	1	07/20/18	EK	SW6010C
SPLP Vanadium	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Zinc	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
Thallium	< 3.2	3.2	mg/Kg	1	07/21/18	EK	SW6010C

Ver 2

Project ID: ROCKVILLE MGP
Client ID: SB-44 1-3 FT

Phoenix I.D.: CA91719

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
SPLP Metals Digestion	Completed				07/20/18	I/I	SW3010A
Vanadium	30.8	0.36	mg/Kg	1	07/21/18	EK	SW6010C
Zinc	74.4	0.36	mg/Kg	1	07/21/18	EK	SW6010C
Percent Solid	89		%		07/19/18	Q	SW846-%Solid
Total Cyanide (SW9010C Distill.)	0.82	0.51	mg/Kg	1	07/23/18	O/GD	SW9012B
Soil Extraction for PCB	Completed				07/20/18	AA/V	SW3545A
Soil Extraction for SVOA	Completed				07/20/18	JJ/V	SW3545A
Extraction of CT ETPH	Completed				07/20/18	JA/V	SW3545A
Mercury Digestion	Completed				07/20/18	I/I	SW7471B
SPLP Digestion Mercury	Completed				07/23/18	I/I	SW1312/SW7470A
SPLP Extraction for Metals	Completed				07/19/18	I	SW1312
Total Metals Digest	Completed				07/20/18	T/AG/BF	SW3050B
TPH by GC (Extractable Products)							
Ext. Petroleum H.C. (C9-C36)	140	55	mg/Kg	1	07/21/18	JRB	CTETPH 8015D
Identification	**		mg/Kg	1	07/21/18	JRB	CTETPH 8015D
QA/QC Surrogates							
% n-Pentacosane	82		%	1	07/21/18	JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	370	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1221	ND	370	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1232	ND	370	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1242	ND	370	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1248	ND	370	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1254	ND	370	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1260	ND	370	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1262	ND	370	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1268	ND	370	ug/Kg	10	07/23/18	AW	SW8082A
QA/QC Surrogates							
% DCBP	78		%	10	07/23/18	AW	30 - 150 %
% TCMX	58		%	10	07/23/18	AW	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
1,1,1-Trichloroethane	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	3.6	ug/Kg	1	07/20/18	JLI	SW8260C
1,1,2-Trichloroethane	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
1,1-Dichloroethane	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
1,1-Dichloroethene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
1,1-Dichloropropene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
1,2,3-Trichloropropane	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
1,2-Dibromoethane	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
1,2-Dichlorobenzene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
1,2-Dichloroethane	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
1,2-Dichloropropane	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C

Ver 2

Project ID: ROCKVILLE MGP
Client ID: SB-44 1-3 FT

Phoenix I.D.: CA91719

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,3,5-Trimethylbenzene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
1,3-Dichlorobenzene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
1,3-Dichloropropane	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
1,4-Dichlorobenzene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
2,2-Dichloropropane	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
2-Chlorotoluene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
2-Hexanone	ND	30	ug/Kg	1	07/20/18	JLI	SW8260C
2-Isopropyltoluene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
4-Chlorotoluene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
4-Methyl-2-pentanone	ND	30	ug/Kg	1	07/20/18	JLI	SW8260C
Acetone	ND	300	ug/Kg	1	07/20/18	JLI	SW8260C
Acrylonitrile	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
Benzene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
Bromobenzene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
Bromochloromethane	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
Bromodichloromethane	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
Bromoform	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
Bromomethane	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
Carbon Disulfide	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
Carbon tetrachloride	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
Chlorobenzene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
Chloroethane	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
Chloroform	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
Chloromethane	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
cis-1,2-Dichloroethene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
cis-1,3-Dichloropropene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
Dibromochloromethane	ND	3.6	ug/Kg	1	07/20/18	JLI	SW8260C
Dibromomethane	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
Dichlorodifluoromethane	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
Ethylbenzene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
Hexachlorobutadiene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
Isopropylbenzene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
m&p-Xylene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
Methyl Ethyl Ketone	ND	36	ug/Kg	1	07/20/18	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	12	ug/Kg	1	07/20/18	JLI	SW8260C
Methylene chloride	ND	12	ug/Kg	1	07/20/18	JLI	SW8260C
Naphthalene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
n-Butylbenzene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
n-Propylbenzene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
o-Xylene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
p-Isopropyltoluene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
sec-Butylbenzene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
Styrene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
tert-Butylbenzene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
Tetrachloroethene	550	370	ug/Kg	50	07/20/18	JLI	SW8260C
Tetrahydrofuran (THF)	ND	12	ug/Kg	1	07/20/18	JLI	SW8260C
Toluene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
Total Xylenes	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
trans-1,2-Dichloroethene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C

Project ID: ROCKVILLE MGP
Client ID: SB-44 1-3 FT

Phoenix I.D.: CA91719

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
trans-1,3-Dichloropropene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	12	ug/Kg	1	07/20/18	JLI	SW8260C
Trichloroethene	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
Trichlorofluoromethane	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
Trichlorotrifluoroethane	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
Vinyl chloride	ND	6.1	ug/Kg	1	07/20/18	JLI	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	99		%	1	07/20/18	JLI	70 - 130 %
% Bromofluorobenzene	89		%	1	07/20/18	JLI	70 - 130 %
% Dibromofluoromethane	96		%	1	07/20/18	JLI	70 - 130 %
% Toluene-d8	101		%	1	07/20/18	JLI	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
1,2,4-Trichlorobenzene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
1,2-Dichlorobenzene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
1,2-Diphenylhydrazine	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
1,3-Dichlorobenzene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
1,4-Dichlorobenzene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2,4,5-Trichlorophenol	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2,4,6-Trichlorophenol	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2,4-Dichlorophenol	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2,4-Dimethylphenol	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2,4-Dinitrophenol	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
2,4-Dinitrotoluene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2,6-Dinitrotoluene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2-Chloronaphthalene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2-Chlorophenol	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2-Methylnaphthalene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2-Methylphenol (o-cresol)	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
2-Nitroaniline	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
2-Nitrophenol	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
3,3'-Dichlorobenzidine	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
3-Nitroaniline	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
4,6-Dinitro-2-methylphenol	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
4-Bromophenyl phenyl ether	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
4-Chloro-3-methylphenol	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
4-Chloroaniline	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
4-Chlorophenyl phenyl ether	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
4-Nitroaniline	ND	600	ug/Kg	1	07/21/18	KCA	SW8270D
4-Nitrophenol	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Acenaphthene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Acenaphthylene	650	260	ug/Kg	1	07/21/18	KCA	SW8270D
Acetophenone	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Aniline	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
Anthracene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Benz(a)anthracene	720	260	ug/Kg	1	07/21/18	KCA	SW8270D
Benzidine	ND	200	ug/Kg	1	07/21/18	KCA	SW8270D
Benzo(a)pyrene	930	260	ug/Kg	1	07/21/18	KCA	SW8270D

Project ID: ROCKVILLE MGP
Client ID: SB-44 1-3 FT

Phoenix I.D.: CA91719

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Benzo(b)fluoranthene	870	260	ug/Kg	1	07/21/18	KCA	SW8270D
Benzo(ghi)perylene	910	260	ug/Kg	1	07/21/18	KCA	SW8270D
Benzo(k)fluoranthene	890	260	ug/Kg	1	07/21/18	KCA	SW8270D
Benzoic acid	ND	750	ug/Kg	1	07/21/18	KCA	SW8270D
Benzyl butyl phthalate	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Bis(2-chloroethoxy)methane	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Bis(2-chloroethyl)ether	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
Bis(2-chloroisopropyl)ether	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Bis(2-ethylhexyl)phthalate	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Carbazole	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
Chrysene	810	260	ug/Kg	1	07/21/18	KCA	SW8270D
Dibenz(a,h)anthracene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Dibenzofuran	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Diethyl phthalate	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Dimethylphthalate	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Di-n-butylphthalate	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
Di-n-octylphthalate	720	260	ug/Kg	1	07/21/18	KCA	SW8270D
Fluoranthene	800	260	ug/Kg	1	07/21/18	KCA	SW8270D
Fluorene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Hexachlorobenzene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Hexachlorobutadiene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Hexachlorocyclopentadiene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Hexachloroethane	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Indeno(1,2,3-cd)pyrene	890	260	ug/Kg	1	07/21/18	KCA	SW8270D
Isophorone	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Naphthalene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Nitrobenzene	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
N-Nitrosodimethylamine	ND	200	ug/Kg	1	07/21/18	KCA	SW8270D
N-Nitrosodi-n-propylamine	ND	200	ug/Kg	1	07/21/18	KCA	SW8270D
N-Nitrosodiphenylamine	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
Pentachloronitrobenzene	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
Pentachlorophenol	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
Phenanthrene	270	260	ug/Kg	1	07/21/18	KCA	SW8270D
Phenol	ND	260	ug/Kg	1	07/21/18	KCA	SW8270D
Pyrene	990	260	ug/Kg	1	07/21/18	KCA	SW8270D
Pyridine	ND	370	ug/Kg	1	07/21/18	KCA	SW8270D
QA/QC Surrogates							
% 2,4,6-Tribromophenol	79		%	1	07/21/18	KCA	30 - 130 %
% 2-Fluorobiphenyl	65		%	1	07/21/18	KCA	30 - 130 %
% 2-Fluorophenol	51		%	1	07/21/18	KCA	30 - 130 %
% Nitrobenzene-d5	68		%	1	07/21/18	KCA	30 - 130 %
% Phenol-d5	63		%	1	07/21/18	KCA	30 - 130 %
% Terphenyl-d14	70		%	1	07/21/18	KCA	30 - 130 %
Field Extraction	Completed				07/17/18		SW5035A

Project ID: ROCKVILLE MGP
Client ID: SB-44 1-3 FT

Phoenix I.D.: CA91719

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Semi-Volatile Comment:
Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

TPH Comment:
**Petroleum hydrocarbon chromatogram contains a multicomponent hydrocarbon distribution in the range of C9 to C36. The sample was quantitated against a C9-C36 alkane hydrocarbon standard.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services.
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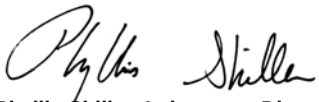

Phyllis Shiller, Laboratory Director
November 27, 2018
Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

November 27, 2018

FOR: Attn: Ms. Lynn Willey
Tighe & Bond
213 Court St, Suite 1100
Middletown, CT 06457

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		07/17/18	11:00
Location Code:	TIGHE-DAS	Received by:	LB	07/17/18	15:03
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	15-0755-44B				

Laboratory Data

SDG ID: GCA91708
Phoenix ID: CA91720

Project ID: ROCKVILLE MGP
Client ID: SB-45 0-2 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 1.8	1.8	mg/Kg	1	07/21/18	EK	SW6010C
Arsenic	2.23	0.82	mg/Kg	1	07/21/18	EK	SW6010C
Barium	76.3	0.41	mg/Kg	1	07/21/18	EK	SW6010C
Beryllium	0.54	0.33	mg/Kg	1	07/21/18	EK	SW6010C
Cadmium	< 0.41	0.41	mg/Kg	1	07/21/18	EK	SW6010C
Chromium	15.6	0.41	mg/Kg	1	07/21/18	EK	SW6010C
Copper	7.74	0.41	mg/kg	1	07/21/18	EK	SW6010C
Mercury	< 0.03	0.03	mg/Kg	1	07/20/18	RS	SW7471B
Nickel	8.89	0.41	mg/Kg	1	07/21/18	EK	SW6010C
Lead	5.52	0.41	mg/Kg	1	07/21/18	EK	SW6010C
Antimony	< 4.1	4.1	mg/Kg	1	07/21/18	EK	SW6010C
Selenium	< 1.6	1.6	mg/Kg	1	07/21/18	EK	SW6010C
SPLP Silver	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Arsenic	< 0.02	0.02	mg/L	1	07/20/18	EK	SW6010C
SPLP Barium	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Beryllium	< 0.001	0.001	mg/L	1	07/20/18	EK	SW6010C
SPLP Cadmium	< 0.005	0.005	mg/L	1	07/20/18	EK	SW6010C
SPLP Chromium	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Copper	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Mercury	< 0.0005	0.0005	mg/L	1	07/23/18	RS	SW7470A
SPLP Nickel	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Lead	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Antimony	< 0.02	0.02	mg/L	1	07/20/18	EK	SW6010C
SPLP Selenium	< 0.020	0.020	mg/L	1	07/20/18	EK	SW6010C
SPLP Thallium	< 0.005	0.005	mg/L	1	07/20/18	EK	SW6010C
SPLP Vanadium	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Zinc	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
Thallium	< 3.7	3.7	mg/Kg	1	07/21/18	EK	SW6010C

Ver 2

Project ID: ROCKVILLE MGP
Client ID: SB-45 0-2 FT

Phoenix I.D.: CA91720

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
SPLP Metals Digestion	Completed				07/20/18	I/I	SW3010A
Vanadium	29.1	0.41	mg/Kg	1	07/21/18	EK	SW6010C
Zinc	28.9	0.41	mg/Kg	1	07/21/18	EK	SW6010C
Percent Solid	81		%		07/19/18	Q	SW846-%Solid
Total Cyanide (SW9010C Distill.)	< 0.56	0.56	mg/Kg	1	07/23/18	O/GD	SW9012B
Soil Extraction for PCB	Completed				07/20/18	AA/V	SW3545A
Soil Extraction for SVOA	Completed				07/20/18	JJ/V	SW3545A
Extraction of CT ETPH	Completed				07/20/18	JA/V	SW3545A
Mercury Digestion	Completed				07/20/18	I/I	SW7471B
SPLP Digestion Mercury	Completed				07/23/18	I/I	SW1312/SW7470A
SPLP Extraction for Metals	Completed				07/19/18	I	SW1312
Total Metals Digest	Completed				07/20/18	T/AG/BF	SW3050B
TPH by GC (Extractable Products)							
Ext. Petroleum H.C. (C9-C36)	ND	62	mg/Kg	1	07/21/18	JRB	CTETPH 8015D
Identification	ND		mg/Kg	1	07/21/18	JRB	CTETPH 8015D
QA/QC Surrogates							
% n-Pentacosane	83		%	1	07/21/18	JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	410	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1221	ND	410	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1232	ND	410	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1242	ND	410	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1248	ND	410	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1254	ND	410	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1260	ND	410	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1262	ND	410	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1268	ND	410	ug/Kg	10	07/23/18	AW	SW8082A
QA/QC Surrogates							
% DCBP	89		%	10	07/23/18	AW	30 - 150 %
% TCMX	72		%	10	07/23/18	AW	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
1,1,1-Trichloroethane	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	100	ug/Kg	50	07/20/18	JLI	SW8260C
1,1,2-Trichloroethane	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
1,1-Dichloroethane	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
1,1-Dichloroethene	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
1,1-Dichloropropene	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	450	ug/Kg	50	07/20/18	JLI	SW8260C
1,2,3-Trichloropropane	ND	450	ug/Kg	50	07/20/18	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	450	ug/Kg	50	07/20/18	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	450	ug/Kg	50	07/20/18	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
1,2-Dibromoethane	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
1,2-Dichlorobenzene	ND	450	ug/Kg	50	07/20/18	JLI	SW8260C
1,2-Dichloroethane	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
1,2-Dichloropropane	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C

Ver 2

Project ID: ROCKVILLE MGP
Client ID: SB-45 0-2 FT

Phoenix I.D.: CA91720

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,3,5-Trimethylbenzene	ND	450	ug/Kg	50	07/20/18	JLI	SW8260C
1,3-Dichlorobenzene	ND	450	ug/Kg	50	07/20/18	JLI	SW8260C
1,3-Dichloropropane	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
1,4-Dichlorobenzene	ND	450	ug/Kg	50	07/20/18	JLI	SW8260C
2,2-Dichloropropane	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
2-Chlorotoluene	ND	450	ug/Kg	50	07/20/18	JLI	SW8260C
2-Hexanone	ND	32	ug/Kg	1	07/20/18	JLI	SW8260C
2-Isopropyltoluene	ND	450	ug/Kg	50	07/20/18	JLI	SW8260C
4-Chlorotoluene	ND	450	ug/Kg	50	07/20/18	JLI	SW8260C
4-Methyl-2-pentanone	ND	32	ug/Kg	1	07/20/18	JLI	SW8260C
Acetone	ND	320	ug/Kg	1	07/20/18	JLI	SW8260C
Acrylonitrile	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
Benzene	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
Bromobenzene	ND	450	ug/Kg	50	07/20/18	JLI	SW8260C
Bromochloromethane	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
Bromodichloromethane	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
Bromoform	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
Bromomethane	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
Carbon Disulfide	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
Carbon tetrachloride	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
Chlorobenzene	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
Chloroethane	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
Chloroform	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
Chloromethane	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
cis-1,2-Dichloroethene	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
cis-1,3-Dichloropropene	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
Dibromochloromethane	ND	3.9	ug/Kg	1	07/20/18	JLI	SW8260C
Dibromomethane	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
Dichlorodifluoromethane	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
Ethylbenzene	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
Hexachlorobutadiene	ND	450	ug/Kg	50	07/20/18	JLI	SW8260C
Isopropylbenzene	ND	450	ug/Kg	50	07/20/18	JLI	SW8260C
m&p-Xylene	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
Methyl Ethyl Ketone	ND	39	ug/Kg	1	07/20/18	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	13	ug/Kg	1	07/20/18	JLI	SW8260C
Methylene chloride	ND	13	ug/Kg	1	07/20/18	JLI	SW8260C
Naphthalene	ND	450	ug/Kg	50	07/20/18	JLI	SW8260C
n-Butylbenzene	ND	450	ug/Kg	50	07/20/18	JLI	SW8260C
n-Propylbenzene	ND	450	ug/Kg	50	07/20/18	JLI	SW8260C
o-Xylene	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
p-Isopropyltoluene	ND	450	ug/Kg	50	07/20/18	JLI	SW8260C
sec-Butylbenzene	ND	450	ug/Kg	50	07/20/18	JLI	SW8260C
Styrene	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
tert-Butylbenzene	ND	450	ug/Kg	50	07/20/18	JLI	SW8260C
Tetrachloroethene	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
Tetrahydrofuran (THF)	ND	13	ug/Kg	1	07/20/18	JLI	SW8260C
Toluene	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
Total Xylenes	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
trans-1,2-Dichloroethene	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C

Project ID: ROCKVILLE MGP
Client ID: SB-45 0-2 FT

Phoenix I.D.: CA91720

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
trans-1,3-Dichloropropene	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	900	ug/Kg	50	07/20/18	JLI	SW8260C
Trichloroethene	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
Trichlorofluoromethane	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
Trichlorotrifluoroethane	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
Vinyl chloride	ND	6.5	ug/Kg	1	07/20/18	JLI	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	98		%	50	07/20/18	JLI	70 - 130 %
% Bromofluorobenzene	100		%	50	07/20/18	JLI	70 - 130 %
% Dibromofluoromethane	95		%	1	07/20/18	JLI	70 - 130 %
% Toluene-d8	101		%	1	07/20/18	JLI	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
1,2,4-Trichlorobenzene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
1,2-Dichlorobenzene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
1,2-Diphenylhydrazine	ND	410	ug/Kg	1	07/21/18	KCA	SW8270D
1,3-Dichlorobenzene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
1,4-Dichlorobenzene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
2,4,5-Trichlorophenol	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
2,4,6-Trichlorophenol	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
2,4-Dichlorophenol	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
2,4-Dimethylphenol	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
2,4-Dinitrophenol	ND	410	ug/Kg	1	07/21/18	KCA	SW8270D
2,4-Dinitrotoluene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
2,6-Dinitrotoluene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
2-Chloronaphthalene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
2-Chlorophenol	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
2-Methylnaphthalene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
2-Methylphenol (o-cresol)	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
2-Nitroaniline	ND	410	ug/Kg	1	07/21/18	KCA	SW8270D
2-Nitrophenol	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	410	ug/Kg	1	07/21/18	KCA	SW8270D
3,3'-Dichlorobenzidine	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
3-Nitroaniline	ND	410	ug/Kg	1	07/21/18	KCA	SW8270D
4,6-Dinitro-2-methylphenol	ND	410	ug/Kg	1	07/21/18	KCA	SW8270D
4-Bromophenyl phenyl ether	ND	410	ug/Kg	1	07/21/18	KCA	SW8270D
4-Chloro-3-methylphenol	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
4-Chloroaniline	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
4-Chlorophenyl phenyl ether	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
4-Nitroaniline	ND	650	ug/Kg	1	07/21/18	KCA	SW8270D
4-Nitrophenol	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Acenaphthene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Acenaphthylene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Acetophenone	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Aniline	ND	410	ug/Kg	1	07/21/18	KCA	SW8270D
Anthracene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Benz(a)anthracene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Benzidine	ND	200	ug/Kg	1	07/21/18	KCA	SW8270D
Benzo(a)pyrene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D

Project ID: ROCKVILLE MGP
Client ID: SB-45 0-2 FT

Phoenix I.D.: CA91720

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Benzo(b)fluoranthene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Benzo(ghi)perylene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Benzo(k)fluoranthene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Benzoic acid	ND	820	ug/Kg	1	07/21/18	KCA	SW8270D
Benzyl butyl phthalate	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Bis(2-chloroethoxy)methane	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Bis(2-chloroethyl)ether	ND	410	ug/Kg	1	07/21/18	KCA	SW8270D
Bis(2-chloroisopropyl)ether	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Bis(2-ethylhexyl)phthalate	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Carbazole	ND	410	ug/Kg	1	07/21/18	KCA	SW8270D
Chrysene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Dibenz(a,h)anthracene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Dibenzofuran	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Diethyl phthalate	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Dimethylphthalate	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Di-n-butylphthalate	ND	410	ug/Kg	1	07/21/18	KCA	SW8270D
Di-n-octylphthalate	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Fluoranthene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Fluorene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Hexachlorobenzene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Hexachlorobutadiene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Hexachlorocyclopentadiene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Hexachloroethane	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Indeno(1,2,3-cd)pyrene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Isophorone	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Naphthalene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Nitrobenzene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
N-Nitrosodimethylamine	ND	200	ug/Kg	1	07/21/18	KCA	SW8270D
N-Nitrosodi-n-propylamine	ND	200	ug/Kg	1	07/21/18	KCA	SW8270D
N-Nitrosodiphenylamine	ND	410	ug/Kg	1	07/21/18	KCA	SW8270D
Pentachloronitrobenzene	ND	410	ug/Kg	1	07/21/18	KCA	SW8270D
Pentachlorophenol	ND	410	ug/Kg	1	07/21/18	KCA	SW8270D
Phenanthrene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Phenol	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Pyrene	ND	290	ug/Kg	1	07/21/18	KCA	SW8270D
Pyridine	ND	410	ug/Kg	1	07/21/18	KCA	SW8270D
QA/QC Surrogates							
% 2,4,6-Tribromophenol	87		%	1	07/21/18	KCA	30 - 130 %
% 2-Fluorobiphenyl	66		%	1	07/21/18	KCA	30 - 130 %
% 2-Fluorophenol	56		%	1	07/21/18	KCA	30 - 130 %
% Nitrobenzene-d5	63		%	1	07/21/18	KCA	30 - 130 %
% Phenol-d5	60		%	1	07/21/18	KCA	30 - 130 %
% Terphenyl-d14	76		%	1	07/21/18	KCA	30 - 130 %
Field Extraction	Completed				07/17/18		SW5035A

Project ID: ROCKVILLE MGP
Client ID: SB-45 0-2 FT

Phoenix I.D.: CA91720

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Volatile Comment:
There was a suppression of the last internal standard in the low level analysis, all affected compounds are reported from the methanol preserved high level analysis which did not exhibit this interference.

Volatile Comment:
Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

Semi-Volatile Comment:
Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services.
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Phyllis Shiller, Laboratory Director
November 27, 2018
Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

November 27, 2018

FOR: Attn: Ms. Lynn Willey
Tighe & Bond
213 Court St, Suite 1100
Middletown, CT 06457

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		07/17/18	11:50
Location Code:	TIGHE-DAS	Received by:	LB	07/17/18	15:03
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	15-0755-44B				

Laboratory Data

SDG ID: GCA91708
Phoenix ID: CA91721

Project ID: ROCKVILLE MGP
Client ID: SB-65 1-3 FT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 1.8	1.8	mg/Kg	1	07/21/18	EK	SW6010C
Arsenic	3.17	0.73	mg/Kg	1	07/21/18	EK	SW6010C
Barium	76.8	0.36	mg/Kg	1	07/21/18	EK	SW6010C
Beryllium	0.49	0.29	mg/Kg	1	07/21/18	EK	SW6010C
Cadmium	< 0.36	0.36	mg/Kg	1	07/21/18	EK	SW6010C
Chromium	47.3	0.36	mg/Kg	1	07/21/18	EK	SW6010C
Copper	22.6	0.36	mg/kg	1	07/21/18	EK	SW6010C
Mercury	0.10	0.03	mg/Kg	1	07/20/18	RS	SW7471B
Nickel	9.80	0.36	mg/Kg	1	07/21/18	EK	SW6010C
Lead	79.3	0.36	mg/Kg	1	07/21/18	EK	SW6010C
Antimony	< 3.6	3.6	mg/Kg	1	07/21/18	EK	SW6010C
Selenium	< 1.5	1.5	mg/Kg	1	07/21/18	EK	SW6010C
SPLP Silver	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Arsenic	< 0.02	0.02	mg/L	1	07/20/18	EK	SW6010C
SPLP Barium	0.149	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Beryllium	< 0.001	0.001	mg/L	1	07/20/18	EK	SW6010C
SPLP Cadmium	< 0.005	0.005	mg/L	1	07/20/18	EK	SW6010C
SPLP Chromium	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Copper	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Mercury	< 0.0005	0.0005	mg/L	1	07/23/18	RS	SW7470A
SPLP Nickel	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Lead	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Antimony	< 0.02	0.02	mg/L	1	07/20/18	EK	SW6010C
SPLP Selenium	< 0.020	0.020	mg/L	1	07/20/18	EK	SW6010C
SPLP Thallium	< 0.005	0.005	mg/L	1	07/20/18	EK	SW6010C
SPLP Vanadium	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Zinc	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
Thallium	< 3.3	3.3	mg/Kg	1	07/21/18	EK	SW6010C

Ver 2

Project ID: ROCKVILLE MGP
Client ID: SB-65 1-3 FT

Phoenix I.D.: CA91721

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
SPLP Metals Digestion	Completed				07/20/18	I/I	SW3010A
Vanadium	28.8	0.36	mg/Kg	1	07/21/18	EK	SW6010C
Zinc	35.3	0.36	mg/Kg	1	07/21/18	EK	SW6010C
Percent Solid	88		%		07/19/18	Q	SW846-%Solid
Total Cyanide (SW9010C Distill.)	1.18	0.52	mg/Kg	1	07/23/18	O/GD	SW9012B
Soil Extraction for PCB	Completed				07/20/18	AA/V	SW3545A
Soil Extraction for SVOA	Completed				07/20/18	JJ/V	SW3545A
Extraction of CT ETPH	Completed				07/20/18	JA/V	SW3545A
Mercury Digestion	Completed				07/20/18	I/I	SW7471B
SPLP Digestion Mercury	Completed				07/23/18	I/I	SW1312/SW7470A
SPLP Extraction for Metals	Completed				07/19/18	I	SW1312
Total Metals Digest	Completed				07/20/18	T/AG/BF	SW3050B
TPH by GC (Extractable Products)							
Ext. Petroleum H.C. (C9-C36)	2600	280	mg/Kg	5	07/23/18	JRB	CTETPH 8015D
Identification	**		mg/Kg	5	07/23/18	JRB	CTETPH 8015D
QA/QC Surrogates							
% n-Pentacosane	142		%	5	07/23/18	JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	380	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1221	ND	380	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1232	ND	380	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1242	ND	380	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1248	ND	380	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1254	ND	380	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1260	ND	380	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1262	ND	380	ug/Kg	10	07/23/18	AW	SW8082A
PCB-1268	ND	380	ug/Kg	10	07/23/18	AW	SW8082A
QA/QC Surrogates							
% DCBP	68		%	10	07/23/18	AW	30 - 150 %
% TCMX	59		%	10	07/23/18	AW	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
1,1,1-Trichloroethane	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	100	ug/Kg	50	07/20/18	JLI	SW8260C
1,1,2-Trichloroethane	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
1,1-Dichloroethane	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
1,1-Dichloroethene	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
1,1-Dichloropropene	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	360	ug/Kg	50	07/20/18	JLI	SW8260C
1,2,3-Trichloropropane	ND	360	ug/Kg	50	07/20/18	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	360	ug/Kg	50	07/20/18	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	360	ug/Kg	50	07/20/18	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
1,2-Dibromoethane	ND	7.0	ug/Kg	1	07/20/18	JLI	SW8260C
1,2-Dichlorobenzene	ND	360	ug/Kg	50	07/20/18	JLI	SW8260C
1,2-Dichloroethane	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
1,2-Dichloropropane	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C

Ver 2

Project ID: ROCKVILLE MGP
Client ID: SB-65 1-3 FT

Phoenix I.D.: CA91721

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,3,5-Trimethylbenzene	ND	360	ug/Kg	50	07/20/18	JLI	SW8260C
1,3-Dichlorobenzene	ND	360	ug/Kg	50	07/20/18	JLI	SW8260C
1,3-Dichloropropane	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
1,4-Dichlorobenzene	ND	360	ug/Kg	50	07/20/18	JLI	SW8260C
2,2-Dichloropropane	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
2-Chlorotoluene	ND	360	ug/Kg	50	07/20/18	JLI	SW8260C
2-Hexanone	ND	45	ug/Kg	1	07/20/18	JLI	SW8260C
2-Isopropyltoluene	ND	360	ug/Kg	50	07/20/18	JLI	SW8260C
4-Chlorotoluene	ND	360	ug/Kg	50	07/20/18	JLI	SW8260C
4-Methyl-2-pentanone	ND	45	ug/Kg	1	07/20/18	JLI	SW8260C
Acetone	ND	450	ug/Kg	1	07/20/18	JLI	SW8260C
Acrylonitrile	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
Benzene	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
Bromobenzene	ND	360	ug/Kg	50	07/20/18	JLI	SW8260C
Bromochloromethane	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
Bromodichloromethane	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
Bromoform	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
Bromomethane	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
Carbon Disulfide	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
Carbon tetrachloride	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
Chlorobenzene	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
Chloroethane	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
Chloroform	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
Chloromethane	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
cis-1,2-Dichloroethene	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
cis-1,3-Dichloropropene	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
Dibromochloromethane	ND	5.4	ug/Kg	1	07/20/18	JLI	SW8260C
Dibromomethane	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
Dichlorodifluoromethane	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
Ethylbenzene	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
Hexachlorobutadiene	ND	360	ug/Kg	50	07/20/18	JLI	SW8260C
Isopropylbenzene	ND	360	ug/Kg	50	07/20/18	JLI	SW8260C
m&p-Xylene	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
Methyl Ethyl Ketone	ND	54	ug/Kg	1	07/20/18	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	18	ug/Kg	1	07/20/18	JLI	SW8260C
Methylene chloride	ND	18	ug/Kg	1	07/20/18	JLI	SW8260C
Naphthalene	ND	360	ug/Kg	50	07/20/18	JLI	SW8260C
n-Butylbenzene	ND	360	ug/Kg	50	07/20/18	JLI	SW8260C
n-Propylbenzene	ND	360	ug/Kg	50	07/20/18	JLI	SW8260C
o-Xylene	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
p-Isopropyltoluene	ND	360	ug/Kg	50	07/20/18	JLI	SW8260C
sec-Butylbenzene	ND	360	ug/Kg	50	07/20/18	JLI	SW8260C
Styrene	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
tert-Butylbenzene	ND	360	ug/Kg	50	07/20/18	JLI	SW8260C
Tetrachloroethene	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
Tetrahydrofuran (THF)	ND	18	ug/Kg	1	07/20/18	JLI	SW8260C
Toluene	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
Total Xylenes	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
trans-1,2-Dichloroethene	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C

Ver 2

Project ID: ROCKVILLE MGP
Client ID: SB-65 1-3 FT

Phoenix I.D.: CA91721

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
trans-1,3-Dichloropropene	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	710	ug/Kg	50	07/20/18	JLI	SW8260C
Trichloroethene	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
Trichlorofluoromethane	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
Trichlorotrifluoroethane	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
Vinyl chloride	ND	8.9	ug/Kg	1	07/20/18	JLI	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	97		%	50	07/20/18	JLI	70 - 130 %
% Bromofluorobenzene	100		%	50	07/20/18	JLI	70 - 130 %
% Dibromofluoromethane	101		%	1	07/20/18	JLI	70 - 130 %
% Toluene-d8	95		%	1	07/20/18	JLI	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
1,2,4-Trichlorobenzene	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
1,2-Dichlorobenzene	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
1,2-Diphenylhydrazine	ND	740	ug/Kg	2	07/24/18	KCA	SW8270D
1,3-Dichlorobenzene	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
1,4-Dichlorobenzene	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
2,4,5-Trichlorophenol	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
2,4,6-Trichlorophenol	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
2,4-Dichlorophenol	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
2,4-Dimethylphenol	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
2,4-Dinitrophenol	ND	740	ug/Kg	2	07/24/18	KCA	SW8270D
2,4-Dinitrotoluene	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
2,6-Dinitrotoluene	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
2-Chloronaphthalene	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
2-Chlorophenol	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
2-Methylnaphthalene	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
2-Methylphenol (o-cresol)	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
2-Nitroaniline	ND	740	ug/Kg	2	07/24/18	KCA	SW8270D
2-Nitrophenol	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	740	ug/Kg	2	07/24/18	KCA	SW8270D
3,3'-Dichlorobenzidine	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
3-Nitroaniline	ND	740	ug/Kg	2	07/24/18	KCA	SW8270D
4,6-Dinitro-2-methylphenol	ND	740	ug/Kg	2	07/24/18	KCA	SW8270D
4-Bromophenyl phenyl ether	ND	740	ug/Kg	2	07/24/18	KCA	SW8270D
4-Chloro-3-methylphenol	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
4-Chloroaniline	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
4-Chlorophenyl phenyl ether	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
4-Nitroaniline	ND	1200	ug/Kg	2	07/24/18	KCA	SW8270D
4-Nitrophenol	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
Acenaphthene	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
Acenaphthylene	8400	520	ug/Kg	2	07/24/18	KCA	SW8270D
Acetophenone	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
Aniline	ND	740	ug/Kg	2	07/24/18	KCA	SW8270D
Anthracene	2100	520	ug/Kg	2	07/24/18	KCA	SW8270D
Benz(a)anthracene	650	520	ug/Kg	2	07/24/18	KCA	SW8270D
Benzidine	ND	300	ug/Kg	2	07/24/18	KCA	SW8270D
Benzo(a)pyrene	2700	520	ug/Kg	2	07/24/18	KCA	SW8270D

Project ID: ROCKVILLE MGP
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Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Benzo(b)fluoranthene	2700	520	ug/Kg	2	07/24/18	KCA	SW8270D
Benzo(ghi)perylene	4400	520	ug/Kg	2	07/24/18	KCA	SW8270D
Benzo(k)fluoranthene	1400	520	ug/Kg	2	07/24/18	KCA	SW8270D
Benzoic acid	ND	1500	ug/Kg	2	07/24/18	KCA	SW8270D
Benzyl butyl phthalate	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
Bis(2-chloroethoxy)methane	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
Bis(2-chloroethyl)ether	ND	740	ug/Kg	2	07/24/18	KCA	SW8270D
Bis(2-chloroisopropyl)ether	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
Bis(2-ethylhexyl)phthalate	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
Carbazole	ND	740	ug/Kg	2	07/24/18	KCA	SW8270D
Chrysene	1300	520	ug/Kg	2	07/24/18	KCA	SW8270D
Dibenz(a,h)anthracene	1200	520	ug/Kg	2	07/24/18	KCA	SW8270D
Dibenzofuran	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
Diethyl phthalate	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
Dimethylphthalate	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
Di-n-butylphthalate	ND	740	ug/Kg	2	07/24/18	KCA	SW8270D
Di-n-octylphthalate	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
Fluoranthene	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
Fluorene	790	520	ug/Kg	2	07/24/18	KCA	SW8270D
Hexachlorobenzene	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
Hexachlorobutadiene	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
Hexachlorocyclopentadiene	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
Hexachloroethane	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
Indeno(1,2,3-cd)pyrene	4100	520	ug/Kg	2	07/24/18	KCA	SW8270D
Isophorone	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
Naphthalene	1700	520	ug/Kg	2	07/24/18	KCA	SW8270D
Nitrobenzene	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
N-Nitrosodimethylamine	ND	200	ug/Kg	2	07/24/18	KCA	SW8270D
N-Nitrosodi-n-propylamine	ND	200	ug/Kg	2	07/24/18	KCA	SW8270D
N-Nitrosodiphenylamine	ND	740	ug/Kg	2	07/24/18	KCA	SW8270D
Pentachloronitrobenzene	ND	740	ug/Kg	2	07/24/18	KCA	SW8270D
Pentachlorophenol	ND	740	ug/Kg	2	07/24/18	KCA	SW8270D
Phenanthrene	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
Phenol	ND	520	ug/Kg	2	07/24/18	KCA	SW8270D
Pyrene	930	520	ug/Kg	2	07/24/18	KCA	SW8270D
Pyridine	ND	740	ug/Kg	2	07/24/18	KCA	SW8270D
QA/QC Surrogates							
% 2,4,6-Tribromophenol	58		%	2	07/24/18	KCA	30 - 130 %
% 2-Fluorobiphenyl	42		%	2	07/24/18	KCA	30 - 130 %
% 2-Fluorophenol	43		%	2	07/24/18	KCA	30 - 130 %
% Nitrobenzene-d5	45		%	2	07/24/18	KCA	30 - 130 %
% Phenol-d5	45		%	2	07/24/18	KCA	30 - 130 %
% Terphenyl-d14	35		%	2	07/24/18	KCA	30 - 130 %
Field Extraction	Completed				07/17/18		SW5035A

Project ID: ROCKVILLE MGP
Client ID: SB-65 1-3 FT
Phoenix I.D.: CA91721

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Volatile Comment:
Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

Volatile Comment:
There was a suppression of the last internal standard in the low level analysis, all affected compounds are reported from the methanol preserved high level analysis which did not exhibit this interference.

TPH Comment:
**Petroleum hydrocarbon chromatogram contains a multicomponent hydrocarbon distribution in the range of C9 to C36. The sample was quantitated against a C9-C36 alkane hydrocarbon standard.

Semi-Volatile Comment:
Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services.
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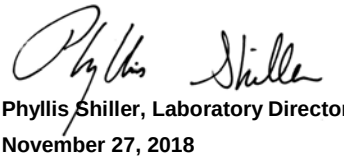

Phyllis Shiller, Laboratory Director
November 27, 2018
Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
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QA/QC Report

November 27, 2018

QA/QC Data

SDG I.D.: GCA91708

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 439509 (mg/kg), QC Sample No: CA91307 (CA91708)														
Mercury - Soil	BRL	0.03	<0.03	<0.03	NC	89.8	89.0	0.9	96.0			70 - 130	30	
Comment:														
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.														
QA/QC Batch 439699 (mg/kg), QC Sample No: CA91709 (CA91709, CA91714, CA91715, CA91717, CA91719, CA91720, CA91721)														
Mercury - Soil	BRL	0.03	0.36	0.59	48.4	104	92.6	11.6	84.4			70 - 130	30	r
Comment:														
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.														
QA/QC Batch 439515 (mg/L), QC Sample No: CA92953 (CA91708)														
Mercury - Water	BRL	0.0002	<0.0002	<0.0002	NC	89.7			92.6			80 - 120	20	
Comment:														
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.														
QA/QC Batch 439704 (mg/L), QC Sample No: CA93877 (CA91709, CA91714, CA91715, CA91717, CA91719, CA91720, CA91721)														
Mercury - Water	BRL	0.0002	<0.0002	<0.0002	NC	92.6			87.1			80 - 120	20	
Comment:														
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.														
QA/QC Batch 440835 (mg/kg), QC Sample No: CA99405 (CA91711, CA91712)														
Mercury - Soil	BRL	0.02	<0.03	<0.03	NC	106	98.4	7.4	117			70 - 130	30	
Comment:														
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.														
QA/QC Batch 440839 (mg/L), QC Sample No: CA99730 (CA91711, CA91712)														
Mercury - Water	BRL	0.0002	<0.0002	<0.0002	NC	86.5			98.3			80 - 120	20	
Comment:														
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.														
QA/QC Batch 439754 (mg/L), QC Sample No: CA91132 (CA91709, CA91714, CA91715, CA91717, CA91719, CA91720, CA91721)														
ICP Metals - SPLP Extraction														
Antimony	BRL	0.005	0.006	<0.005	NC	103			102			75 - 125	20	
Arsenic	BRL	0.004	0.009	<0.004	NC	101			99.4			75 - 125	20	
Barium	BRL	0.010	0.008	0.009	NC	98.6			98.0			75 - 125	20	
Beryllium	BRL	0.001	<0.001	<0.001	NC	99.7			99.7			75 - 125	20	
Cadmium	BRL	0.005	<0.005	<0.005	NC	103			103			75 - 125	20	
Chromium	BRL	0.010	0.002	0.001	NC	99.7			99.0			75 - 125	20	
Copper	BRL	0.010	0.004	0.004	NC	99.5			99.2			75 - 125	20	
Lead	BRL	0.010	0.003	<0.010	NC	100			100			75 - 125	20	
Nickel	BRL	0.010	0.006	0.003	NC	101			99.7			75 - 125	20	
Selenium	BRL	0.020	<0.020	<0.020	NC	100			98.6			75 - 125	20	
Silver	BRL	0.010	<0.010	<0.010	NC	100			99.9			75 - 125	20	
Thallium	BRL	0.005	<0.005	<0.005	NC	97.2			96.3			75 - 125	20	
Vanadium	BRL	0.010	0.032	0.032	NC	97.1			96.7			75 - 125	20	
Zinc	BRL	0.010	0.005	0.004	NC	102			101			75 - 125	20	

QA/QC Data

SDG I.D.: GCA91708

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 439411 (mg/kg), QC Sample No: CA91307 (CA91708)													
ICP Metals - Soil													
Antimony	BRL	3.0	<4.1	<4.5	NC	113			97.8			75 - 125	30
Arsenic	BRL	0.60	3.30	3.38	NC	107			94.6			75 - 125	30
Barium	BRL	0.30	87.8	73.6	17.6	116			89.6			75 - 125	30
Beryllium	BRL	0.24	0.54	0.63	NC	111			103			75 - 125	30
Cadmium	BRL	0.30	<0.41	<0.45	NC	100			94.4			75 - 125	30
Chromium	BRL	0.30	18.6	21.7	15.4	116			102			75 - 125	30
Copper	0.64	0.30	34.7	34.8	0.30	110			109			75 - 125	30
Lead	BRL	0.30	13.1	12.4	5.50	107			97.7			75 - 125	30
Nickel	BRL	0.30	11.5	13.6	16.7	103			98.7			75 - 125	30
Selenium	BRL	1.2	<1.6	<1.8	NC	113			81.9			75 - 125	30
Silver	BRL	0.30	<4.1	<0.45	NC	104			90.2			75 - 125	30
Thallium	BRL	2.7	<3.7	<4.1	NC	104			94.3			75 - 125	30
Vanadium	BRL	0.30	32.8	34.8	5.90	123			104			75 - 125	30
Zinc	BRL	0.30	52.5	60.7	14.5	108			99.6			75 - 125	30
QA/QC Batch 440729 (mg/kg), QC Sample No: CA91712 (CA91711, CA91712)													
ICP Metals - Soil													
Antimony	BRL	3.5	<3.9	<4.1	NC	98.9			94.7			75 - 125	30
Arsenic	BRL	0.70	4.48	4.87	8.30	98.4			93.7			75 - 125	30
Barium	BRL	0.35	63.5	60.5	4.80	96.9			99.7			75 - 125	30
Beryllium	BRL	0.28	0.58	0.49	NC	97.4			97.5			75 - 125	30
Cadmium	BRL	0.35	<0.39	<0.41	NC	94.9			94.1			75 - 125	30
Chromium	BRL	0.35	19.7	19.0	3.60	102			98.2			75 - 125	30
Copper	BRL	0.70	15.3	15.5	1.30	95.6			100			75 - 125	30
Lead	BRL	0.35	20.2	26.1	25.5	96.0			95.0			75 - 125	30
Nickel	BRL	0.35	10.8	10.1	6.70	97.5			95.9			75 - 125	30
Selenium	BRL	1.4	<1.5	<1.7	NC	109			81.4			75 - 125	30
Silver	BRL	0.35	<0.39	3.16	NC	101			98.6			75 - 125	30
Thallium	BRL	3.2	<3.5	<3.7	NC	96.7			91.9			75 - 125	30
Vanadium	BRL	0.35	35.8	32.3	10.3	107			97.9			75 - 125	30
Zinc	BRL	0.70	38.8	37.8	2.60	95.4			91.6			75 - 125	30
QA/QC Batch 439804 (mg/kg), QC Sample No: CA91717 (CA91709, CA91714, CA91715, CA91717, CA91719, CA91720, CA91721)													
ICP Metals - Soil													
Antimony	BRL	3.3	<3.8	<3.7	NC	107			92.2			75 - 125	30
Arsenic	BRL	0.67	1.93	1.77	NC	108			90.3			75 - 125	30
Barium	BRL	0.33	49.4	51.2	3.60	112			103			75 - 125	30
Beryllium	BRL	0.27	0.35	0.35	NC	106			94.8			75 - 125	30
Cadmium	BRL	0.33	<0.38	<0.37	NC	101			90.8			75 - 125	30
Chromium	BRL	0.33	12.0	12.9	7.20	113			95.9			75 - 125	30
Copper	BRL	3.3	9.72	9.98	2.60	112			100			75 - 125	30
Lead	BRL	0.33	13.4	14.4	7.20	104			92.6			75 - 125	30
Nickel	BRL	0.33	7.27	7.67	5.40	103			93.9			75 - 125	30
Selenium	BRL	1.3	<1.5	<1.5	NC	118			79.1			75 - 125	30
Silver	BRL	0.33	<1.8	<0.37	NC	118			102			75 - 125	30
Thallium	BRL	3.0	<3.4	<3.3	NC	106			90.6			75 - 125	30
Vanadium	BRL	0.33	23.1	24.5	5.90	118			97.3			75 - 125	30
Zinc	BRL	0.33	20.8	21.2	1.90	106			90.5			75 - 125	30
QA/QC Batch 439518 (mg/L), QC Sample No: CA92748 (CA91708)													
ICP Metals - SPLP Extraction													
Antimony	BRL	0.005	<0.005	<0.005	NC	90.2			100			75 - 125	20

QA/QC Data

SDG I.D.: GCA91708

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
Arsenic	BRL	0.004	<0.004	<0.004	NC	89.1			96.0			75 - 125	20
Barium	BRL	0.010	<0.010	<0.010	NC	88.2			97.0			75 - 125	20
Beryllium	BRL	0.001	<0.001	<0.001	NC	88.0			97.6			75 - 125	20
Cadmium	BRL	0.005	<0.005	<0.005	NC	90.1			98.0			75 - 125	20
Chromium	BRL	0.010	<0.010	<0.010	NC	88.5			96.3			75 - 125	20
Copper	BRL	0.010	<0.010	<0.010	NC	88.6			98.8			75 - 125	20
Lead	BRL	0.010	<0.010	<0.010	NC	89.4			96.8			75 - 125	20
Nickel	BRL	0.010	<0.010	<0.010	NC	88.4			96.2			75 - 125	20
Selenium	BRL	0.020	<0.020	<0.020	NC	89.9			99.2			75 - 125	20
Silver	BRL	0.010	<0.010	<0.010	NC	88.3			95.9			75 - 125	20
Thallium	BRL	0.005	<0.005	<0.005	NC	84.6			91.6			75 - 125	20
Vanadium	BRL	0.010	0.012	0.013	NC	87.0			95.7			75 - 125	20
Zinc	BRL	0.010	<0.010	<0.010	NC	89.6			99.2			75 - 125	20
QA/QC Batch 440844 (mg/L), QC Sample No: CA99450 (CA91711, CA91712)													
ICP Metals - SPLP Extraction													
Antimony	BRL	0.005	<0.005	<0.005	NC	103			98.6			75 - 125	20
Arsenic	BRL	0.004	<0.004	<0.004	NC	102			96.1			75 - 125	20
Barium	BRL	0.010	0.013	0.013	NC	103			98.6			75 - 125	20
Beryllium	BRL	0.001	<0.001	<0.001	NC	97.9			95.1			75 - 125	20
Cadmium	BRL	0.005	<0.005	<0.005	NC	104			97.8			75 - 125	20
Chromium	BRL	0.010	<0.010	<0.010	NC	103			97.1			75 - 125	20
Copper	BRL	0.010	<0.010	<0.010	NC	98.9			95.6			75 - 125	20
Lead	BRL	0.010	<0.010	<0.010	NC	103			97.3			75 - 125	20
Nickel	BRL	0.010	0.018	0.015	NC	104			97.6			75 - 125	20
Selenium	BRL	0.020	<0.020	<0.020	NC	104			99.4			75 - 125	20
Silver	BRL	0.010	<0.010	<0.010	NC	97.3			93.9			75 - 125	20
Thallium	BRL	0.005	<0.005	<0.005	NC	104			98.6			75 - 125	20
Vanadium	BRL	0.010	0.012	0.012	NC	97.7			94.0			75 - 125	20
Zinc	BRL	0.010	<0.010	<0.010	NC	104			97.7			75 - 125	20

r = This parameter is outside laboratory RPD specified recovery limits.

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QA/QC Report

November 27, 2018

QA/QC Data

SDG I.D.: GCA91708

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 439437 (mg/Kg), QC Sample No: CA91086 50X (CA91708)													
Total Cyanide (SW9010C Distill.)	BRL	0.50	<0.58	0.62	NC	102			106			80 - 120	30
Comment:													
Additional: LCS acceptance range is 80-120% for soils MS acceptance range 75-125% for soils													
QA/QC Batch 439830 (mg/Kg), QC Sample No: CA93881 50X (CA91709, CA91714, CA91715, CA91717, CA91719, CA91720, CA91721)													
Total Cyanide (SW9010C Distill.)	BRL	0.50	0.65	<0.57	NC	99.0			102			80 - 120	30
Comment:													
Additional: LCS acceptance range is 80-120% for soils MS acceptance range 75-125% for soils													
QA/QC Batch 440745 (mg/Kg), QC Sample No: CA99405 50X (CA91711, CA91712)													
Total Cyanide (SW9010C Distill.)	BRL	0.50	<0.55	<0.55	NC	95.4			102			80 - 120	30
Comment:													
Additional: LCS acceptance range is 80-120% for soils MS acceptance range 75-125% for soils													

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QA/QC Report

November 27, 2018

QA/QC Data

SDG I.D.: GCA91708

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 439334 (mg/Kg), QC Sample No: CA91307 (CA91708)										
TPH by GC (Extractable Products) - Soil										
Ext. Petroleum H.C. (C9-C36)	ND	50	103			73	97	28.2	60 - 120	30
% n-Pentacosane	53	%	108			81	88	8.3	50 - 150	30
Comment:										
The surrogate recovery in the blank is below acceptance criteria, all other samples and QC are within criteria. No bias is suspected.										
Additional surrogate criteria: LCS acceptance range is 60-120% MS acceptance range 50-150%. The ETPH/DRO LCS has been normalized based on the alkane calibration.										
QA/QC Batch 439591 (mg/Kg), QC Sample No: CA93630 (CA91709)										
TPH by GC (Extractable Products) - Soil										
Ext. Petroleum H.C. (C9-C36)	ND	50	94	93	1.1	124	146	16.3	60 - 120	30
% n-Pentacosane	81	%	67	61	9.4	82	95	14.7	50 - 150	30
Comment:										
Additional surrogate criteria: LCS acceptance range is 60-120% MS acceptance range 50-150%. The ETPH/DRO LCS has been normalized based on the alkane calibration.										
QA/QC Batch 439592 (mg/Kg), QC Sample No: CA93879 (CA91714)										
TPH by GC (Extractable Products) - Soil										
Ext. Petroleum H.C. (C9-C36)	ND	50	88	79	10.8	75	71	5.5	60 - 120	30
% n-Pentacosane	64	%	91	84	8.0	96	83	14.5	50 - 150	30
Comment:										
Additional surrogate criteria: LCS acceptance range is 60-120% MS acceptance range 50-150%. The ETPH/DRO LCS has been normalized based on the alkane calibration.										
QA/QC Batch 439728 (mg/Kg), QC Sample No: CA94567 (CA91715, CA91717, CA91719, CA91720, CA91721)										
TPH by GC (Extractable Products) - Soil										
Ext. Petroleum H.C. (C9-C36)	ND	50	67	60	11.0	71	64	10.4	60 - 120	30
% n-Pentacosane	70	%	63	64	1.6	70	66	5.9	50 - 150	30
Comment:										
Additional surrogate criteria: LCS acceptance range is 60-120% MS acceptance range 50-150%. The ETPH/DRO LCS has been normalized based on the alkane calibration.										
QA/QC Batch 440643 (mg/Kg), QC Sample No: CA99145 (CA91711, CA91712)										
TPH by GC (Extractable Products) - Soil										
Ext. Petroleum H.C. (C9-C36)	ND	50	67	63	6.2	75	72	4.1	60 - 120	30
% n-Pentacosane	68	%	73	67	8.6	76	78	2.6	50 - 150	30
Comment:										
Additional surrogate criteria: LCS acceptance range is 60-120% MS acceptance range 50-150%. The ETPH/DRO LCS has been normalized based on the alkane calibration.										
QA/QC Batch 439654 (ug/Kg), QC Sample No: CA94225 2X (CA91708)										
Polychlorinated Biphenyls - Soil										
PCB-1016	ND	33	81	100	21.0	72	70	2.8	40 - 140	30
PCB-1221	ND	33							40 - 140	30

QA/QC Data

SDG I.D.: GCA91708

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
PCB-1232	ND	33							40 - 140	30	
PCB-1242	ND	33							40 - 140	30	
PCB-1248	ND	33							40 - 140	30	
PCB-1254	ND	33							40 - 140	30	
PCB-1260	ND	33	89	103	14.6	77	70	9.5	40 - 140	30	
PCB-1262	ND	33							40 - 140	30	
PCB-1268	ND	33							40 - 140	30	
% DCBP (Surrogate Rec)	95	%	105	99	5.9	71	60	16.8	30 - 150	30	
% TCMX (Surrogate Rec)	86	%	88	101	13.8	74	74	0.0	30 - 150	30	
QA/QC Batch 439789 (ug/Kg), QC Sample No: CA95173 2X (CA91714, CA91715, CA91717, CA91719, CA91720, CA91721)											
Polychlorinated Biphenyls - Soil											
PCB-1016	ND	33	77	72	6.7	79	72	9.3	40 - 140	30	
PCB-1221	ND	33							40 - 140	30	
PCB-1232	ND	33							40 - 140	30	
PCB-1242	ND	33							40 - 140	30	
PCB-1248	ND	33							40 - 140	30	
PCB-1254	ND	33							40 - 140	30	
PCB-1260	ND	33	86	79	8.5	80	76	5.1	40 - 140	30	
PCB-1262	ND	33							40 - 140	30	
PCB-1268	ND	33							40 - 140	30	
% DCBP (Surrogate Rec)	96	%	105	97	7.9	93	86	7.8	30 - 150	30	
% TCMX (Surrogate Rec)	91	%	90	87	3.4	90	83	8.1	30 - 150	30	
QA/QC Batch 440644 (ug/Kg), QC Sample No: CA99736 2X (CA91709, CA91711)											
Polychlorinated Biphenyls - Soil											
PCB-1016	ND	33	67	54	21.5	39	41	5.0	40 - 140	30	m
PCB-1221	ND	33							40 - 140	30	
PCB-1232	ND	33							40 - 140	30	
PCB-1242	ND	33							40 - 140	30	
PCB-1248	ND	33							40 - 140	30	
PCB-1254	ND	33							40 - 140	30	
PCB-1260	ND	33	87	75	14.8	57	62	8.4	40 - 140	30	
PCB-1262	ND	33							40 - 140	30	
PCB-1268	ND	33							40 - 140	30	
% DCBP (Surrogate Rec)	100	%	114	109	4.5	78	86	9.8	30 - 150	30	
% TCMX (Surrogate Rec)	83	%	98	95	3.1	64	66	3.1	30 - 150	30	
QA/QC Batch 439329 (ug/kg), QC Sample No: CA91994 (CA91708)											
Polynuclear Aromatic HC - Soil											
2-Methylnaphthalene	ND	230	66	62	6.3	70	63	10.5	30 - 130	30	
Acenaphthene	ND	230	77	71	8.1	75	68	9.8	30 - 130	30	
Acenaphthylene	ND	230	71	65	8.8	67	61	9.4	30 - 130	30	
Anthracene	ND	230	74	71	4.1	71	68	4.3	30 - 130	30	
Benz(a)anthracene	ND	230	75	71	5.5	71	65	8.8	30 - 130	30	
Benzo(a)pyrene	ND	230	72	68	5.7	67	61	9.4	30 - 130	30	
Benzo(b)fluoranthene	ND	230	74	71	4.1	70	65	7.4	30 - 130	30	
Benzo(ghi)perylene	ND	230	71	65	8.8	64	60	6.5	30 - 130	30	
Benzo(k)fluoranthene	ND	230	79	73	7.9	73	67	8.6	30 - 130	30	
Chrysene	ND	230	78	72	8.0	74	68	8.5	30 - 130	30	
Dibenz(a,h)anthracene	ND	230	76	71	6.8	71	63	11.9	30 - 130	30	
Fluoranthene	ND	230	79	73	7.9	71	66	7.3	30 - 130	30	
Fluorene	ND	230	76	70	8.2	73	67	8.6	30 - 130	30	
Indeno(1,2,3-cd)pyrene	ND	230	72	68	5.7	68	62	9.2	30 - 130	30	

QA/QC Data

SDG I.D.: GCA91708

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
Naphthalene	ND	230	63	59	6.6	68	61	10.9	30 - 130	30
Phenanthrene	ND	230	75	71	5.5	71	66	7.3	30 - 130	30
Pyrene	ND	230	80	74	7.8	73	69	5.6	30 - 130	30
% 2-Fluorobiphenyl	68	%	71	67	5.8	76	68	11.1	30 - 130	30
% Nitrobenzene-d5	57	%	60	59	1.7	71	68	4.3	30 - 130	30
% Terphenyl-d14	68	%	76	71	6.8	72	68	5.7	30 - 130	30

Comment:

Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

QA/QC Batch 439787 (ug/kg), QC Sample No: CA94567 (CA91709)

Polynuclear Aromatic HC - Soil

2-Methylnaphthalene	ND	230	59	53	10.7	53	55	3.7	30 - 130	30
Acenaphthene	ND	230	59	52	12.6	53	55	3.7	30 - 130	30
Acenaphthylene	ND	230	56	50	11.3	51	52	1.9	30 - 130	30
Anthracene	ND	230	59	53	10.7	49	52	5.9	30 - 130	30
Benz(a)anthracene	ND	230	59	52	12.6	42	46	9.1	30 - 130	30
Benzo(a)pyrene	ND	230	57	50	13.1	41	45	9.3	30 - 130	30
Benzo(b)fluoranthene	ND	230	60	55	8.7	45	46	2.2	30 - 130	30
Benzo(ghi)perylene	ND	230	60	52	14.3	52	55	5.6	30 - 130	30
Benzo(k)fluoranthene	ND	230	59	50	16.5	41	46	11.5	30 - 130	30
Chrysene	ND	230	58	51	12.8	43	48	11.0	30 - 130	30
Dibenz(a,h)anthracene	ND	230	61	53	14.0	59	60	1.7	30 - 130	30
Fluoranthene	ND	230	60	54	10.5	36	45	22.2	30 - 130	30
Fluorene	ND	230	60	52	14.3	56	57	1.8	30 - 130	30
Indeno(1,2,3-cd)pyrene	ND	230	62	54	13.8	52	55	5.6	30 - 130	30
Naphthalene	ND	230	62	56	10.2	58	59	1.7	30 - 130	30
Phenanthrene	ND	230	59	53	10.7	36	45	22.2	30 - 130	30
Pyrene	ND	230	60	54	10.5	39	48	20.7	30 - 130	30
% 2-Fluorobiphenyl	44	%	57	52	9.2	52	52	0.0	30 - 130	30
% Nitrobenzene-d5	39	%	55	49	11.5	65	60	8.0	30 - 130	30
% Terphenyl-d14	40	%	56	52	7.4	56	55	1.8	30 - 130	30

Comment:

Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

QA/QC Batch 439785 (ug/kg), QC Sample No: CA95183 (CA91714, CA91715, CA91717, CA91719, CA91720, CA91721)

Semivolatiles - Soil

1,2,4,5-Tetrachlorobenzene	ND	230	56	53	5.5	51	52	1.9	30 - 130	30
1,2,4-Trichlorobenzene	ND	230	52	51	1.9	55	53	3.7	30 - 130	30
1,2-Dichlorobenzene	ND	180	46	46	0.0	46	46	0.0	30 - 130	30
1,2-Diphenylhydrazine	ND	230	53	49	7.8	51	51	0.0	30 - 130	30
1,3-Dichlorobenzene	ND	230	42	43	2.4	43	42	2.4	30 - 130	30
1,4-Dichlorobenzene	ND	230	44	44	0.0	44	44	0.0	30 - 130	30
2,4,5-Trichlorophenol	ND	230	64	59	8.1	57	58	1.7	30 - 130	30
2,4,6-Trichlorophenol	ND	130	62	58	6.7	56	56	0.0	30 - 130	30
2,4-Dichlorophenol	ND	130	62	59	5.0	56	57	1.8	30 - 130	30
2,4-Dimethylphenol	ND	230	63	58	8.3	60	60	0.0	30 - 130	30
2,4-Dinitrophenol	ND	230	10	<10	NC	36	32	11.8	30 - 130	30
2,4-Dinitrotoluene	ND	130	60	58	3.4	57	55	3.6	30 - 130	30
2,6-Dinitrotoluene	ND	130	60	57	5.1	55	56	1.8	30 - 130	30
2-Chloronaphthalene	ND	230	56	51	9.3	54	53	1.9	30 - 130	30
2-Chlorophenol	ND	230	56	50	11.3	53	50	5.8	30 - 130	30
2-Methylnaphthalene	ND	230	55	50	9.5	52	52	0.0	30 - 130	30

QA/QC Data

SDG I.D.: GCA91708

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
2-Methylphenol (o-cresol)	ND	230	60	53	12.4	55	56	1.8	30 - 130	30	
2-Nitroaniline	ND	330	88	81	8.3	79	82	3.7	30 - 130	30	
2-Nitrophenol	ND	230	64	56	13.3	63	61	3.2	30 - 130	30	
3&4-Methylphenol (m&p-cresol)	ND	230	62	54	13.8	54	53	1.9	30 - 130	30	
3,3'-Dichlorobenzidine	ND	130	61	57	6.8	58	61	5.0	30 - 130	30	
3-Nitroaniline	ND	330	69	68	1.5	65	64	1.6	30 - 130	30	
4,6-Dinitro-2-methylphenol	ND	230	28	15	60.5	43	39	9.8	30 - 130	30	l,r
4-Bromophenyl phenyl ether	ND	230	59	56	5.2	54	56	3.6	30 - 130	30	
4-Chloro-3-methylphenol	ND	230	66	62	6.3	59	61	3.3	30 - 130	30	
4-Chloroaniline	ND	230	58	58	0.0	57	59	3.4	30 - 130	30	
4-Chlorophenyl phenyl ether	ND	230	56	52	7.4	52	52	0.0	30 - 130	30	
4-Nitroaniline	ND	230	64	58	9.8	58	57	1.7	30 - 130	30	
4-Nitrophenol	ND	230	67	61	9.4	61	61	0.0	30 - 130	30	
Acenaphthene	ND	230	57	53	7.3	54	55	1.8	30 - 130	30	
Acenaphthylene	ND	130	53	50	5.8	50	51	2.0	30 - 130	30	
Acetophenone	ND	230	50	48	4.1	47	47	0.0	30 - 130	30	
Aniline	ND	330	41	39	5.0	43	42	2.4	30 - 130	30	
Anthracene	ND	230	59	54	8.8	52	55	5.6	30 - 130	30	
Benz(a)anthracene	ND	230	59	53	10.7	41	49	17.8	30 - 130	30	
Benzidine	ND	330	38	37	2.7	38	45	16.9	30 - 130	30	
Benzo(a)pyrene	ND	130	56	52	7.4	38	44	14.6	30 - 130	30	
Benzo(b)fluoranthene	ND	160	59	57	3.4	42	45	6.9	30 - 130	30	
Benzo(ghi)perylene	ND	230	61	56	8.5	40	45	11.8	30 - 130	30	
Benzo(k)fluoranthene	ND	230	61	55	10.3	41	47	13.6	30 - 130	30	
Benzoic Acid	ND	330	<10	<10	NC	<10	<10	NC	30 - 130	30	l,m
Benzyl butyl phthalate	ND	230	55	51	7.5	50	49	2.0	30 - 130	30	
Bis(2-chloroethoxy)methane	ND	230	54	51	5.7	52	52	0.0	30 - 130	30	
Bis(2-chloroethyl)ether	ND	130	41	41	0.0	42	42	0.0	30 - 130	30	
Bis(2-chloroisopropyl)ether	ND	230	42	39	7.4	40	39	2.5	30 - 130	30	
Bis(2-ethylhexyl)phthalate	ND	230	55	53	3.7	54	55	1.8	30 - 130	30	
Carbazole	ND	230	61	57	6.8	54	56	3.6	30 - 130	30	
Chrysene	ND	230	58	54	7.1	39	45	14.3	30 - 130	30	
Dibenz(a,h)anthracene	ND	130	65	59	9.7	54	57	5.4	30 - 130	30	
Dibenzofuran	ND	230	57	52	9.2	52	52	0.0	30 - 130	30	
Diethyl phthalate	ND	230	59	57	3.4	56	55	1.8	30 - 130	30	
Dimethylphthalate	ND	230	58	54	7.1	55	54	1.8	30 - 130	30	
Di-n-butylphthalate	ND	670	59	55	7.0	51	52	1.9	30 - 130	30	
Di-n-octylphthalate	ND	230	63	59	6.6	58	61	5.0	30 - 130	30	
Fluoranthene	ND	230	62	57	8.4	15	31	69.6	30 - 130	30	m,r
Fluorene	ND	230	56	52	7.4	53	53	0.0	30 - 130	30	
Hexachlorobenzene	ND	130	61	54	12.2	54	57	5.4	30 - 130	30	
Hexachlorobutadiene	ND	230	55	53	3.7	57	55	3.6	30 - 130	30	
Hexachlorocyclopentadiene	ND	230	41	36	13.0	19	17	11.1	30 - 130	30	m
Hexachloroethane	ND	130	47	47	0.0	49	48	2.1	30 - 130	30	
Indeno(1,2,3-cd)pyrene	ND	230	64	60	6.5	42	48	13.3	30 - 130	30	
Isophorone	ND	130	52	48	8.0	51	49	4.0	30 - 130	30	
Naphthalene	ND	230	52	49	5.9	51	51	0.0	30 - 130	30	
Nitrobenzene	ND	130	55	51	7.5	53	52	1.9	30 - 130	30	
N-Nitrosodimethylamine	ND	230	36	36	0.0	38	30	23.5	30 - 130	30	
N-Nitrosodi-n-propylamine	ND	130	59	52	12.6	55	53	3.7	30 - 130	30	
N-Nitrosodiphenylamine	ND	130	58	55	5.3	54	54	0.0	30 - 130	30	
Pentachloronitrobenzene	ND	230	59	54	8.8	51	53	3.8	30 - 130	30	
Pentachlorophenol	ND	230	64	50	24.6	54	54	0.0	30 - 130	30	

QA/QC Data

SDG I.D.: GCA91708

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Phenanthrene	ND	130	57	52	9.2	30	35	15.4	30 - 130	30	
Phenol	ND	230	55	50	9.5	53	53	0.0	30 - 130	30	
Pyrene	ND	230	64	59	8.1	25	39	43.8	30 - 130	30	m,r
Pyridine	ND	230	27	29	7.1	29	23	23.1	30 - 130	30	l,m
% 2,4,6-Tribromophenol	59	%	66	60	9.5	62	58	6.7	30 - 130	30	
% 2-Fluorobiphenyl	53	%	54	49	9.7	52	51	1.9	30 - 130	30	
% 2-Fluorophenol	48	%	49	49	0.0	50	45	10.5	30 - 130	30	
% Nitrobenzene-d5	53	%	54	52	3.8	54	52	3.8	30 - 130	30	
% Phenol-d5	53	%	57	51	11.1	53	51	3.8	30 - 130	30	
% Terphenyl-d14	59	%	61	56	8.5	49	52	5.9	30 - 130	30	

Comment:

Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

QA/QC Batch 440641 (ug/kg), QC Sample No: CA99009 (CA91711, CA91712)

Polynuclear Aromatic HC - Soil

2-Methylnaphthalene	ND	230	52	62	17.5	62			30 - 130	30	
Acenaphthene	ND	230	56	69	20.8	64			30 - 130	30	
Acenaphthylene	ND	230	55	65	16.7	62			30 - 130	30	
Anthracene	ND	230	58	72	21.5	67			30 - 130	30	
Benz(a)anthracene	ND	230	59	73	21.2	68			30 - 130	30	
Benzo(a)pyrene	ND	230	57	71	21.9	66			30 - 130	30	
Benzo(b)fluoranthene	ND	230	60	74	20.9	67			30 - 130	30	
Benzo(ghi)perylene	ND	230	55	67	19.7	65			30 - 130	30	
Benzo(k)fluoranthene	ND	230	59	71	18.5	68			30 - 130	30	
Chrysene	ND	230	57	71	21.9	66			30 - 130	30	
Dibenz(a,h)anthracene	ND	230	60	72	18.2	70			30 - 130	30	
Fluoranthene	ND	230	58	71	20.2	68			30 - 130	30	
Fluorene	ND	230	57	68	17.6	64			30 - 130	30	
Indeno(1,2,3-cd)pyrene	ND	230	61	77	23.2	72			30 - 130	30	
Naphthalene	ND	230	52	65	22.2	62			30 - 130	30	
Phenanthrene	ND	230	57	69	19.0	64			30 - 130	30	
Pyrene	ND	230	59	71	18.5	68			30 - 130	30	
% 2-Fluorobiphenyl	70	%	47	69	37.9	65			30 - 130	30	r
% Nitrobenzene-d5	58	%	44	59	29.1	60			30 - 130	30	
% Terphenyl-d14	65	%	47	71	40.7	68			30 - 130	30	r

Comment:

This batch consists of a Blank, LCS, LCSD and MS.

Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

QA/QC Batch 439723 (ug/kg), QC Sample No: CA90365 (CA91708 (50X))

Volatiles - Soil

1,1,2,2-Tetrachloroethane	ND	3.0	101	100	1.0	91	92	1.1	70 - 130	30	
1,2,3-Trichlorobenzene	ND	5.0	100	94	6.2	94	103	9.1	70 - 130	30	
1,2,3-Trichloropropane	ND	5.0	93	93	0.0	85	88	3.5	70 - 130	30	
1,2,4-Trichlorobenzene	ND	5.0	102	92	10.3	96	105	9.0	70 - 130	30	
1,2,4-Trimethylbenzene	ND	1.0	97	93	4.2	95	99	4.1	70 - 130	30	
1,2-Dichlorobenzene	ND	5.0	96	93	3.2	93	97	4.2	70 - 130	30	
1,3,5-Trimethylbenzene	ND	1.0	97	94	3.1	94	98	4.2	70 - 130	30	
1,3-Dichlorobenzene	ND	5.0	97	92	5.3	95	99	4.1	70 - 130	30	
1,4-Dichlorobenzene	ND	5.0	95	91	4.3	93	97	4.2	70 - 130	30	
2-Chlorotoluene	ND	5.0	96	93	3.2	93	97	4.2	70 - 130	30	

QA/QC Data

SDG I.D.: GCA91708

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
2-Isopropyltoluene	ND	5.0	105	103	1.9	103	107	3.8	70 - 130	30	
4-Chlorotoluene	ND	5.0	96	90	6.5	92	96	4.3	70 - 130	30	
Benzene	ND	1.0	93	92	1.1	91	93	2.2	70 - 130	30	
Bromobenzene	ND	5.0	98	95	3.1	95	98	3.1	70 - 130	30	
Hexachlorobutadiene	ND	5.0	99	92	7.3	99	105	5.9	70 - 130	30	
Isopropylbenzene	ND	1.0	95	93	2.1	92	96	4.3	70 - 130	30	
Naphthalene	ND	5.0	103	99	4.0	92	100	8.3	70 - 130	30	
n-Butylbenzene	ND	1.0	99	92	7.3	97	102	5.0	70 - 130	30	
n-Propylbenzene	ND	1.0	96	92	4.3	93	97	4.2	70 - 130	30	
p-Isopropyltoluene	ND	1.0	99	94	5.2	98	102	4.0	70 - 130	30	
sec-Butylbenzene	ND	1.0	100	97	3.0	98	102	4.0	70 - 130	30	
tert-Butylbenzene	ND	1.0	96	94	2.1	93	97	4.2	70 - 130	30	
Toluene	ND	1.0	93	92	1.1	93	95	2.1	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	5.0	116	116	0.0	102	104	1.9	70 - 130	30	
% 1,2-dichlorobenzene-d4	98	%	100	100	0.0	99	100	1.0	70 - 130	30	
% Bromofluorobenzene	99	%	101	101	0.0	101	101	0.0	70 - 130	30	

Comment:

Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 439719 (ug/kg), QC Sample No: CA93486 (CA91714, CA91715, CA91719, CA91720, CA91721)

Volatiles - Soil

1,1,1,2-Tetrachloroethane	ND	5.0	100	86	15.1	94	97	3.1	70 - 130	30	
1,1,1-Trichloroethane	ND	5.0	96	85	12.2	94	95	1.1	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	3.0	96	81	16.9	87	93	6.7	70 - 130	30	
1,1,2-Trichloroethane	ND	5.0	89	79	11.9	84	87	3.5	70 - 130	30	
1,1-Dichloroethane	ND	5.0	84	74	12.7	82	84	2.4	70 - 130	30	
1,1-Dichloroethene	ND	5.0	93	81	13.8	90	91	1.1	70 - 130	30	
1,1-Dichloropropene	ND	5.0	95	85	11.1	91	94	3.2	70 - 130	30	
1,2,3-Trichlorobenzene	ND	5.0	91	78	15.4	94	72	26.5	70 - 130	30	
1,2,3-Trichloropropane	ND	5.0	87	76	13.5	80	86	7.2	70 - 130	30	
1,2,4-Trichlorobenzene	ND	5.0	91	77	16.7	97	72	29.6	70 - 130	30	
1,2,4-Trimethylbenzene	ND	1.0	96	82	15.7	84	89	5.8	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	5.0	99	86	14.1	97	93	4.2	70 - 130	30	
1,2-Dibromoethane	ND	5.0	95	82	14.7	86	90	4.5	70 - 130	30	
1,2-Dichlorobenzene	ND	5.0	93	80	15.0	94	83	12.4	70 - 130	30	
1,2-Dichloroethane	ND	5.0	91	79	14.1	85	88	3.5	70 - 130	30	
1,2-Dichloropropane	ND	5.0	89	78	13.2	86	87	1.2	70 - 130	30	
1,3,5-Trimethylbenzene	ND	1.0	96	83	14.5	88	93	5.5	70 - 130	30	
1,3-Dichlorobenzene	ND	5.0	94	80	16.1	79	84	6.1	70 - 130	30	
1,3-Dichloropropane	ND	5.0	91	79	14.1	84	87	3.5	70 - 130	30	
1,4-Dichlorobenzene	ND	5.0	92	78	16.5	77	81	5.1	70 - 130	30	
2,2-Dichloropropane	ND	5.0	101	82	20.8	93	94	1.1	70 - 130	30	
2-Chlorotoluene	ND	5.0	95	81	15.9	86	90	4.5	70 - 130	30	
2-Hexanone	ND	25	76	66	14.1	77	73	5.3	70 - 130	30	l
2-Isopropyltoluene	ND	5.0	105	91	14.3	96	102	6.1	70 - 130	30	
4-Chlorotoluene	ND	5.0	93	79	16.3	81	85	4.8	70 - 130	30	
4-Methyl-2-pentanone	ND	25	79	70	12.1	73	76	4.0	70 - 130	30	
Acetone	ND	10	61	54	12.2	65	64	1.6	70 - 130	30	l,m
Acrylonitrile	ND	5.0	84	73	14.0	72	74	2.7	70 - 130	30	
Benzene	ND	1.0	93	81	13.8	88	91	3.4	70 - 130	30	
Bromobenzene	ND	5.0	96	82	15.7	85	90	5.7	70 - 130	30	
Bromochloromethane	ND	5.0	96	82	15.7	89	91	2.2	70 - 130	30	
Bromodichloromethane	ND	5.0	96	85	12.2	91	93	2.2	70 - 130	30	

QA/QC Data

SDG I.D.: GCA91708

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Bromoform	ND	5.0	104	90	14.4	90	95	5.4	70 - 130	30	
Bromomethane	ND	5.0	117	89	27.2	111	117	5.3	70 - 130	30	
Carbon Disulfide	ND	5.0	109	95	13.7	102	105	2.9	70 - 130	30	
Carbon tetrachloride	ND	5.0	99	87	12.9	81	83	2.4	70 - 130	30	
Chlorobenzene	ND	5.0	94	81	14.9	86	88	2.3	70 - 130	30	
Chloroethane	ND	5.0	102	82	21.7	103	105	1.9	70 - 130	30	
Chloroform	ND	5.0	94	82	13.6	90	92	2.2	70 - 130	30	
Chloromethane	ND	5.0	95	84	12.3	91	94	3.2	70 - 130	30	
cis-1,2-Dichloroethene	ND	5.0	95	84	12.3	90	92	2.2	70 - 130	30	
cis-1,3-Dichloropropene	ND	5.0	94	83	12.4	85	88	3.5	70 - 130	30	
Dibromochloromethane	ND	3.0	106	92	14.1	96	101	5.1	70 - 130	30	
Dibromomethane	ND	5.0	91	81	11.6	85	88	3.5	70 - 130	30	
Dichlorodifluoromethane	ND	5.0	127	111	13.4	121	123	1.6	70 - 130	30	
Ethylbenzene	ND	1.0	96	83	14.5	90	93	3.3	70 - 130	30	
Hexachlorobutadiene	ND	5.0	98	82	17.8	101	87	14.9	70 - 130	30	
Isopropylbenzene	ND	1.0	97	82	16.8	90	95	5.4	70 - 130	30	
m&p-Xylene	ND	2.0	98	84	15.4	90	92	2.2	70 - 130	30	
Methyl ethyl ketone	ND	5.0	71	61	15.2	76	71	6.8	70 - 130	30	I
Methyl t-butyl ether (MTBE)	ND	1.0	99	84	16.4	94	95	1.1	70 - 130	30	
Methylene chloride	ND	5.0	79	68	15.0	76	77	1.3	70 - 130	30	I
Naphthalene	ND	5.0	94	81	14.9	92	79	15.2	70 - 130	30	
n-Butylbenzene	ND	1.0	97	82	16.8	81	87	7.1	70 - 130	30	
n-Propylbenzene	ND	1.0	96	83	14.5	86	92	6.7	70 - 130	30	
o-Xylene	ND	2.0	96	83	14.5	90	93	3.3	70 - 130	30	
p-Isopropyltoluene	ND	1.0	99	84	16.4	86	93	7.8	70 - 130	30	
sec-Butylbenzene	ND	1.0	101	87	14.9	92	98	6.3	70 - 130	30	
Styrene	ND	5.0	96	83	14.5	84	86	2.4	70 - 130	30	
tert-Butylbenzene	ND	1.0	97	84	14.4	90	96	6.5	70 - 130	30	
Tetrachloroethene	ND	5.0	95	84	12.3	89	91	2.2	70 - 130	30	
Tetrahydrofuran (THF)	ND	5.0	84	74	12.7	77	80	3.8	70 - 130	30	
Toluene	ND	1.0	93	82	12.6	88	90	2.2	70 - 130	30	
trans-1,2-Dichloroethene	ND	5.0	94	82	13.6	90	93	3.3	70 - 130	30	
trans-1,3-Dichloropropene	ND	5.0	92	80	14.0	81	84	3.6	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	5.0	108	91	17.1	83	90	8.1	70 - 130	30	
Trichloroethene	ND	5.0	96	85	12.2	92	93	1.1	70 - 130	30	
Trichlorofluoromethane	ND	5.0	113	97	15.2	109	112	2.7	70 - 130	30	
Trichlorotrifluoroethane	ND	5.0	105	91	14.3	102	104	1.9	70 - 130	30	
Vinyl chloride	ND	5.0	110	96	13.6	106	109	2.8	70 - 130	30	
% 1,2-dichlorobenzene-d4	98	%	100	99	1.0	98	99	1.0	70 - 130	30	
% Bromofluorobenzene	100	%	100	100	0.0	100	99	1.0	70 - 130	30	
% Dibromofluoromethane	95	%	100	100	0.0	100	99	1.0	70 - 130	30	
% Toluene-d8	103	%	98	99	1.0	99	99	0.0	70 - 130	30	

Comment:

Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 439968 (ug/kg), QC Sample No: CA94060 (CA91708, CA91709 (50X) , CA91714 (50X) , CA91719 (50X) , CA91720 (50X) , CA91721 (50X))

Volatiles - Soil

1,1,1,2-Tetrachloroethane	ND	5.0	100	101	1.0	100	101	1.0	70 - 130	30	
1,1,1-Trichloroethane	ND	5.0	94	95	1.1	90	91	1.1	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	3.0	98	100	2.0	95	93	2.1	70 - 130	30	
1,1,2-Trichloroethane	ND	5.0	92	92	0.0	95	93	2.1	70 - 130	30	
1,1-Dichloroethane	ND	5.0	83	85	2.4	80	80	0.0	70 - 130	30	

QA/QC Data

SDG I.D.: GCA91708

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
1,1-Dichloroethene	ND	5.0	91	92	1.1	76	75	1.3	70 - 130	30	
1,1-Dichloropropene	ND	5.0	94	94	0.0	95	95	0.0	70 - 130	30	
1,2,3-Trichlorobenzene	ND	5.0	96	98	2.1	97	100	3.0	70 - 130	30	
1,2,3-Trichloropropane	ND	5.0	92	93	1.1	86	85	1.2	70 - 130	30	
1,2,4-Trichlorobenzene	ND	5.0	95	99	4.1	99	101	2.0	70 - 130	30	
1,2,4-Trimethylbenzene	ND	1.0	94	96	2.1	95	96	1.0	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	5.0	101	105	3.9	100	97	3.0	70 - 130	30	
1,2-Dibromoethane	ND	5.0	96	97	1.0	97	96	1.0	70 - 130	30	
1,2-Dichlorobenzene	ND	5.0	92	95	3.2	95	95	0.0	70 - 130	30	
1,2-Dichloroethane	ND	5.0	92	93	1.1	93	91	2.2	70 - 130	30	
1,2-Dichloropropane	ND	5.0	90	91	1.1	91	91	0.0	70 - 130	30	
1,3,5-Trimethylbenzene	ND	1.0	94	97	3.1	95	96	1.0	70 - 130	30	
1,3-Dichlorobenzene	ND	5.0	93	96	3.2	97	97	0.0	70 - 130	30	
1,3-Dichloropropane	ND	5.0	92	93	1.1	93	92	1.1	70 - 130	30	
1,4-Dichlorobenzene	ND	5.0	92	94	2.2	94	95	1.1	70 - 130	30	
2,2-Dichloropropane	ND	5.0	98	96	2.1	92	94	2.2	70 - 130	30	
2-Chlorotoluene	ND	5.0	93	95	2.1	94	95	1.1	70 - 130	30	
2-Hexanone	ND	25	80	80	0.0	77	73	5.3	70 - 130	30	
2-Isopropyltoluene	ND	5.0	102	104	1.9	104	105	1.0	70 - 130	30	
4-Chlorotoluene	ND	5.0	92	94	2.2	93	95	2.1	70 - 130	30	
4-Methyl-2-pentanone	ND	25	85	85	0.0	83	79	4.9	70 - 130	30	
Acetone	ND	10	68	70	2.9	59	68	14.2	70 - 130	30	l,m
Acrylonitrile	ND	5.0	87	89	2.3	87	82	5.9	70 - 130	30	
Benzene	ND	1.0	92	92	0.0	92	92	0.0	70 - 130	30	
Bromobenzene	ND	5.0	95	97	2.1	97	97	0.0	70 - 130	30	
Bromochloromethane	ND	5.0	95	95	0.0	93	92	1.1	70 - 130	30	
Bromodichloromethane	ND	5.0	97	98	1.0	96	97	1.0	70 - 130	30	
Bromoform	ND	5.0	107	110	2.8	101	100	1.0	70 - 130	30	
Bromomethane	ND	5.0	109	105	3.7	92	91	1.1	70 - 130	30	
Carbon Disulfide	ND	5.0	105	108	2.8	72	77	6.7	70 - 130	30	
Carbon tetrachloride	ND	5.0	83	83	0.0	75	77	2.6	70 - 130	30	
Chlorobenzene	ND	5.0	93	94	1.1	94	95	1.1	70 - 130	30	
Chloroethane	ND	5.0	97	97	0.0	86	89	3.4	70 - 130	30	
Chloroform	ND	5.0	92	94	2.2	89	89	0.0	70 - 130	30	
Chloromethane	ND	5.0	92	92	0.0	80	80	0.0	70 - 130	30	
cis-1,2-Dichloroethene	ND	5.0	94	95	1.1	93	92	1.1	70 - 130	30	
cis-1,3-Dichloropropene	ND	5.0	95	96	1.0	96	96	0.0	70 - 130	30	
Dibromochloromethane	ND	3.0	108	109	0.9	104	105	1.0	70 - 130	30	
Dibromomethane	ND	5.0	93	94	1.1	94	93	1.1	70 - 130	30	
Dichlorodifluoromethane	ND	5.0	112	113	0.9	99	99	0.0	70 - 130	30	
Ethylbenzene	ND	1.0	94	95	1.1	95	96	1.0	70 - 130	30	
Hexachlorobutadiene	ND	5.0	94	98	4.2	103	105	1.9	70 - 130	30	
Isopropylbenzene	ND	1.0	93	95	2.1	93	95	2.1	70 - 130	30	
m&p-Xylene	ND	2.0	95	98	3.1	96	98	2.1	70 - 130	30	
Methyl ethyl ketone	ND	5.0	75	74	1.3	72	68	5.7	70 - 130	30	m
Methyl t-butyl ether (MTBE)	ND	1.0	102	103	1.0	92	89	3.3	70 - 130	30	
Methylene chloride	ND	5.0	79	81	2.5	72	77	6.7	70 - 130	30	
Naphthalene	ND	5.0	98	100	2.0	100	99	1.0	70 - 130	30	
n-Butylbenzene	ND	1.0	94	98	4.2	97	98	1.0	70 - 130	30	
n-Propylbenzene	ND	1.0	92	95	3.2	94	95	1.1	70 - 130	30	
o-Xylene	ND	2.0	94	96	2.1	97	98	1.0	70 - 130	30	
p-Isopropyltoluene	ND	1.0	95	99	4.1	97	99	2.0	70 - 130	30	
sec-Butylbenzene	ND	1.0	97	100	3.0	98	100	2.0	70 - 130	30	

QA/QC Data

SDG I.D.: GCA91708

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
Styrene	ND	5.0	96	98	2.1	98	98	0.0	70 - 130	30
tert-Butylbenzene	ND	1.0	93	95	2.1	93	96	3.2	70 - 130	30
Tetrachloroethene	ND	5.0	93	94	1.1	99	100	1.0	70 - 130	30
Tetrahydrofuran (THF)	ND	5.0	88	88	0.0	85	80	6.1	70 - 130	30
Toluene	ND	1.0	92	93	1.1	94	95	1.1	70 - 130	30
trans-1,2-Dichloroethene	ND	5.0	93	95	2.1	83	84	1.2	70 - 130	30
trans-1,3-Dichloropropene	ND	5.0	95	94	1.1	95	93	2.1	70 - 130	30
trans-1,4-dichloro-2-butene	ND	5.0	111	113	1.8	103	101	2.0	70 - 130	30
Trichloroethene	ND	5.0	95	96	1.0	95	97	2.1	70 - 130	30
Trichlorofluoromethane	ND	5.0	106	107	0.9	94	92	2.2	70 - 130	30
Trichlorotrifluoroethane	ND	5.0	102	101	1.0	87	82	5.9	70 - 130	30
Vinyl chloride	ND	5.0	105	105	0.0	87	89	2.3	70 - 130	30
% 1,2-dichlorobenzene-d4	98	%	99	100	1.0	99	99	0.0	70 - 130	30
% Bromofluorobenzene	100	%	100	100	0.0	101	100	1.0	70 - 130	30
% Dibromofluoromethane	96	%	102	101	1.0	99	100	1.0	70 - 130	30
% Toluene-d8	103	%	99	99	0.0	100	99	1.0	70 - 130	30

Comment:

Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 439961 (ug/kg), QC Sample No: CA94870 (CA91709)

Volatiles - Soil

1,1,1,2-Tetrachloroethane	ND	5.0	96	97	1.0	102	95	7.1	70 - 130	30
1,1,1-Trichloroethane	ND	5.0	97	95	2.1	102	95	7.1	70 - 130	30
1,1,2,2-Tetrachloroethane	ND	3.0	99	100	1.0	105	91	14.3	70 - 130	30
1,1,2-Trichloroethane	ND	5.0	97	95	2.1	100	95	5.1	70 - 130	30
1,1-Dichloroethane	ND	5.0	100	99	1.0	100	94	6.2	70 - 130	30
1,1-Dichloroethene	ND	5.0	98	99	1.0	107	96	10.8	70 - 130	30
1,1-Dichloropropene	ND	5.0	98	99	1.0	106	97	8.9	70 - 130	30
1,2,3-Trichlorobenzene	ND	5.0	93	96	3.2	102	91	11.4	70 - 130	30
1,2,3-Trichloropropane	ND	5.0	92	93	1.1	97	92	5.3	70 - 130	30
1,2,4-Trichlorobenzene	ND	5.0	91	95	4.3	104	90	14.4	70 - 130	30
1,2,4-Trimethylbenzene	ND	1.0	95	98	3.1	105	82	24.6	70 - 130	30
1,2-Dibromo-3-chloropropane	ND	5.0	97	98	1.0	104	103	1.0	70 - 130	30
1,2-Dibromoethane	ND	5.0	95	96	1.0	98	95	3.1	70 - 130	30
1,2-Dichlorobenzene	ND	5.0	92	93	1.1	102	90	12.5	70 - 130	30
1,2-Dichloroethane	ND	5.0	93	93	0.0	94	87	7.7	70 - 130	30
1,2-Dichloropropane	ND	5.0	100	99	1.0	102	95	7.1	70 - 130	30
1,3,5-Trimethylbenzene	ND	1.0	98	100	2.0	107	95	11.9	70 - 130	30
1,3-Dichlorobenzene	ND	5.0	92	94	2.2	102	90	12.5	70 - 130	30
1,3-Dichloropropane	ND	5.0	95	95	0.0	99	93	6.3	70 - 130	30
1,4-Dichlorobenzene	ND	5.0	89	91	2.2	100	87	13.9	70 - 130	30
2,2-Dichloropropane	ND	5.0	100	103	3.0	94	92	2.2	70 - 130	30
2-Chlorotoluene	ND	5.0	95	98	3.1	105	96	9.0	70 - 130	30
2-Hexanone	ND	25	95	95	0.0	87	84	3.5	70 - 130	30
2-Isopropyltoluene	ND	5.0	106	108	1.9	115	107	7.2	70 - 130	30
4-Chlorotoluene	ND	5.0	94	95	1.1	101	90	11.5	70 - 130	30
4-Methyl-2-pentanone	ND	25	99	102	3.0	92	90	2.2	70 - 130	30
Acetone	ND	10	86	88	2.3	79	91	14.1	70 - 130	30
Acrylonitrile	ND	5.0	101	99	2.0	92	88	4.4	70 - 130	30
Bromobenzene	ND	5.0	95	95	0.0	104	95	9.0	70 - 130	30
Bromochloromethane	ND	5.0	97	96	1.0	102	96	6.1	70 - 130	30
Bromodichloromethane	ND	5.0	97	96	1.0	98	93	5.2	70 - 130	30
Bromoform	ND	5.0	96	96	0.0	97	93	4.2	70 - 130	30

QA/QC Data

SDG I.D.: GCA91708

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
Bromomethane	ND	5.0	107	104	2.8	111	103	7.5	70 - 130	30
Carbon Disulfide	ND	5.0	107	109	1.9	110	103	6.6	70 - 130	30
Carbon tetrachloride	ND	5.0	97	99	2.0	101	95	6.1	70 - 130	30
Chlorobenzene	ND	5.0	94	94	0.0	101	93	8.2	70 - 130	30
Chloroethane	ND	5.0	111	110	0.9	115	106	8.1	70 - 130	30
Chloroform	ND	5.0	94	95	1.1	96	92	4.3	70 - 130	30
Chloromethane	ND	5.0	105	105	0.0	99	90	9.5	70 - 130	30
cis-1,2-Dichloroethene	ND	5.0	100	100	0.0	105	102	2.9	70 - 130	30
cis-1,3-Dichloropropene	ND	5.0	101	102	1.0	103	97	6.0	70 - 130	30
Dibromochloromethane	ND	3.0	100	100	0.0	102	98	4.0	70 - 130	30
Dibromomethane	ND	5.0	93	93	0.0	98	91	7.4	70 - 130	30
Dichlorodifluoromethane	ND	5.0	102	106	3.8	106	98	7.8	70 - 130	30
Ethylbenzene	ND	1.0	96	97	1.0	96	89	7.6	70 - 130	30
Hexachlorobutadiene	ND	5.0	92	98	6.3	105	92	13.2	70 - 130	30
Isopropylbenzene	ND	1.0	100	101	1.0	109	102	6.6	70 - 130	30
m&p-Xylene	ND	2.0	94	95	1.1	84	78	7.4	70 - 130	30
Methyl ethyl ketone	ND	5.0	92	91	1.1	77	80	3.8	70 - 130	30
Methyl t-butyl ether (MTBE)	ND	1.0	105	106	0.9	107	103	3.8	70 - 130	30
Methylene chloride	ND	5.0	82	81	1.2	105	101	3.9	70 - 130	30
n-Butylbenzene	ND	1.0	94	100	6.2	109	94	14.8	70 - 130	30
n-Propylbenzene	ND	1.0	96	99	3.1	107	94	12.9	70 - 130	30
o-Xylene	ND	2.0	98	101	3.0	95	87	8.8	70 - 130	30
p-Isopropyltoluene	ND	1.0	98	103	5.0	110	101	8.5	70 - 130	30
sec-Butylbenzene	ND	1.0	101	105	3.9	111	103	7.5	70 - 130	30
Styrene	ND	5.0	100	100	0.0	105	98	6.9	70 - 130	30
tert-Butylbenzene	ND	1.0	100	102	2.0	108	102	5.7	70 - 130	30
Tetrahydrofuran (THF)	ND	5.0	104	106	1.9	88	86	2.3	70 - 130	30
trans-1,2-Dichloroethene	ND	5.0	98	100	2.0	105	99	5.9	70 - 130	30
trans-1,3-Dichloropropene	ND	5.0	96	96	0.0	94	88	6.6	70 - 130	30
trans-1,4-dichloro-2-butene	ND	5.0	109	110	0.9	104	96	8.0	70 - 130	30
Trichloroethene	ND	5.0	96	97	1.0	108	102	5.7	70 - 130	30
Trichlorofluoromethane	ND	5.0	101	102	1.0	101	95	6.1	70 - 130	30
Trichlorotrifluoroethane	ND	5.0	95	100	5.1	108	101	6.7	70 - 130	30
Vinyl chloride	ND	5.0	113	113	0.0	115	106	8.1	70 - 130	30
% 1,2-dichlorobenzene-d4	105	%	99	101	2.0	99	100	1.0	70 - 130	30
% Bromofluorobenzene	92	%	100	99	1.0	96	99	3.1	70 - 130	30
% Dibromofluoromethane	106	%	100	99	1.0	99	99	0.0	70 - 130	30
% Toluene-d8	100	%	102	102	0.0	102	100	2.0	70 - 130	30

Comment:

Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 440867 (ug/kg), QC Sample No: CA99219 (CA91711 (50X))

Volatiles - Soil

1,1,2,2-Tetrachloroethane	ND	3.0	107	102	4.8	109	109	0.0	70 - 130	30
1,2,3-Trichlorobenzene	ND	5.0	106	102	3.8	116	112	3.5	70 - 130	30
1,2,3-Trichloropropane	ND	5.0	102	98	4.0	107	105	1.9	70 - 130	30
1,2,4-Trichlorobenzene	ND	5.0	104	99	4.9	110	107	2.8	70 - 130	30
1,2,4-Trimethylbenzene	ND	1.0	100	97	3.0	109	105	3.7	70 - 130	30
1,2-Dichlorobenzene	ND	5.0	102	99	3.0	108	104	3.8	70 - 130	30
1,3,5-Trimethylbenzene	ND	1.0	99	97	2.0	106	103	2.9	70 - 130	30
1,3-Dichlorobenzene	ND	5.0	102	99	3.0	109	106	2.8	70 - 130	30
1,4-Dichlorobenzene	ND	5.0	101	98	3.0	107	104	2.8	70 - 130	30
2-Chlorotoluene	ND	5.0	101	99	2.0	109	104	4.7	70 - 130	30

QA/QC Data

SDG I.D.: GCA91708

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
2-Isopropyltoluene	ND	5.0	104	103	1.0	112	109	2.7	70 - 130	30
4-Chlorotoluene	ND	5.0	100	99	1.0	108	104	3.8	70 - 130	30
Bromobenzene	ND	5.0	101	99	2.0	106	105	0.9	70 - 130	30
Hexachlorobutadiene	ND	5.0	100	96	4.1	98	102	4.0	70 - 130	30
Isopropylbenzene	ND	1.0	99	98	1.0	105	103	1.9	70 - 130	30
Naphthalene	ND	5.0	111	105	5.6	125	120	4.1	70 - 130	30
n-Butylbenzene	ND	1.0	105	102	2.9	113	110	2.7	70 - 130	30
n-Propylbenzene	ND	1.0	99	98	1.0	108	103	4.7	70 - 130	30
p-Isopropyltoluene	ND	1.0	102	100	2.0	111	106	4.6	70 - 130	30
sec-Butylbenzene	ND	1.0	102	100	2.0	110	109	0.9	70 - 130	30
tert-Butylbenzene	ND	1.0	97	96	1.0	105	102	2.9	70 - 130	30
trans-1,4-dichloro-2-butene	ND	5.0	101	97	4.0	95	95	0.0	70 - 130	30
% 1,2-dichlorobenzene-d4	98	%	101	100	1.0	105	100	4.9	70 - 130	30
% Bromofluorobenzene	96	%	100	100	0.0	100	101	1.0	70 - 130	30

Comment:

Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 440852 (ug/kg), QC Sample No: CA99223 (CA91711, CA91712)

Volatiles - Soil

1,1,1,2-Tetrachloroethane	ND	5.0	93	95	2.1	94	98	4.2	70 - 130	30
1,1,1-Trichloroethane	ND	5.0	92	92	0.0	94	100	6.2	70 - 130	30
1,1,2,2-Tetrachloroethane	ND	3.0	99	101	2.0	100	106	5.8	70 - 130	30
1,1,2-Trichloroethane	ND	5.0	96	97	1.0	93	96	3.2	70 - 130	30
1,1-Dichloroethane	ND	5.0	97	98	1.0	101	102	1.0	70 - 130	30
1,1-Dichloroethene	ND	5.0	108	103	4.7	113	116	2.6	70 - 130	30
1,1-Dichloropropene	ND	5.0	96	98	2.1	98	104	5.9	70 - 130	30
1,2,3-Trichlorobenzene	ND	5.0	98	99	1.0	85	91	6.8	70 - 130	30
1,2,3-Trichloropropane	ND	5.0	96	99	3.1	97	102	5.0	70 - 130	30
1,2,4-Trichlorobenzene	ND	5.0	94	96	2.1	81	90	10.5	70 - 130	30
1,2,4-Trimethylbenzene	ND	1.0	96	98	2.1	95	101	6.1	70 - 130	30
1,2-Dibromo-3-chloropropane	ND	5.0	91	93	2.2	91	90	1.1	70 - 130	30
1,2-Dibromoethane	ND	5.0	94	96	2.1	94	98	4.2	70 - 130	30
1,2-Dichlorobenzene	ND	5.0	96	99	3.1	92	100	8.3	70 - 130	30
1,2-Dichloroethane	ND	5.0	101	104	2.9	99	104	4.9	70 - 130	30
1,2-Dichloropropane	ND	5.0	98	99	1.0	98	98	0.0	70 - 130	30
1,3,5-Trimethylbenzene	ND	1.0	93	96	3.2	96	102	6.1	70 - 130	30
1,3-Dichlorobenzene	ND	5.0	96	98	2.1	92	99	7.3	70 - 130	30
1,3-Dichloropropane	ND	5.0	96	97	1.0	97	97	0.0	70 - 130	30
1,4-Dichlorobenzene	ND	5.0	95	97	2.1	89	98	9.6	70 - 130	30
2,2-Dichloropropane	ND	5.0	91	91	0.0	89	88	1.1	70 - 130	30
2-Chlorotoluene	ND	5.0	95	96	1.0	97	103	6.0	70 - 130	30
2-Hexanone	ND	25	92	91	1.1	87	89	2.3	70 - 130	30
2-Isopropyltoluene	ND	5.0	100	103	3.0	103	108	4.7	70 - 130	30
4-Chlorotoluene	ND	5.0	95	98	3.1	94	100	6.2	70 - 130	30
4-Methyl-2-pentanone	ND	25	100	99	1.0	95	96	1.0	70 - 130	30
Acetone	ND	10	78	83	6.2	71	75	5.5	70 - 130	30
Acrylonitrile	ND	5.0	90	90	0.0	90	86	4.5	70 - 130	30
Benzene	ND	1.0	96	98	2.1	98	103	5.0	70 - 130	30
Bromobenzene	ND	5.0	96	99	3.1	95	101	6.1	70 - 130	30
Bromochloromethane	ND	5.0	93	93	0.0	93	98	5.2	70 - 130	30
Bromodichloromethane	ND	5.0	95	97	2.1	93	95	2.1	70 - 130	30
Bromoform	ND	5.0	87	87	0.0	83	85	2.4	70 - 130	30
Bromomethane	ND	5.0	110	113	2.7	118	123	4.1	70 - 130	30

QA/QC Data

SDG I.D.: GCA91708

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
Carbon Disulfide	ND	5.0	107	104	2.8	108	114	5.4	70 - 130	30
Carbon tetrachloride	ND	5.0	87	87	0.0	88	92	4.4	70 - 130	30
Chlorobenzene	ND	5.0	96	97	1.0	98	101	3.0	70 - 130	30
Chloroethane	ND	5.0	110	105	4.7	113	119	5.2	70 - 130	30
Chloroform	ND	5.0	90	91	1.1	93	96	3.2	70 - 130	30
Chloromethane	ND	5.0	95	92	3.2	92	94	2.2	70 - 130	30
cis-1,2-Dichloroethene	ND	5.0	96	95	1.0	95	97	2.1	70 - 130	30
cis-1,3-Dichloropropene	ND	5.0	96	96	0.0	90	94	4.3	70 - 130	30
Dibromochloromethane	ND	3.0	95	97	2.1	90	95	5.4	70 - 130	30
Dibromomethane	ND	5.0	97	99	2.0	94	98	4.2	70 - 130	30
Dichlorodifluoromethane	ND	5.0	101	99	2.0	98	101	3.0	70 - 130	30
Ethylbenzene	ND	1.0	94	96	2.1	98	102	4.0	70 - 130	30
Hexachlorobutadiene	ND	5.0	95	97	2.1	94	101	7.2	70 - 130	30
Isopropylbenzene	ND	1.0	93	97	4.2	99	105	5.9	70 - 130	30
m&p-Xylene	ND	2.0	93	93	0.0	94	99	5.2	70 - 130	30
Methyl ethyl ketone	ND	5.0	92	95	3.2	90	91	1.1	70 - 130	30
Methyl t-butyl ether (MTBE)	ND	1.0	87	86	1.2	85	84	1.2	70 - 130	30
Methylene chloride	ND	5.0	104	102	1.9	106	108	1.9	70 - 130	30
Naphthalene	ND	5.0	103	104	1.0	91	95	4.3	70 - 130	30
n-Butylbenzene	ND	1.0	99	102	3.0	98	105	6.9	70 - 130	30
n-Propylbenzene	ND	1.0	94	96	2.1	98	103	5.0	70 - 130	30
o-Xylene	ND	2.0	94	95	1.1	96	100	4.1	70 - 130	30
p-Isopropyltoluene	ND	1.0	97	99	2.0	98	105	6.9	70 - 130	30
sec-Butylbenzene	ND	1.0	97	100	3.0	101	107	5.8	70 - 130	30
Styrene	ND	5.0	95	95	0.0	94	97	3.1	70 - 130	30
tert-Butylbenzene	ND	1.0	92	96	4.3	97	102	5.0	70 - 130	30
Tetrachloroethene	ND	5.0	96	99	3.1	97	105	7.9	70 - 130	30
Tetrahydrofuran (THF)	ND	5.0	94	95	1.1	93	94	1.1	70 - 130	30
Toluene	ND	1.0	97	98	1.0	98	101	3.0	70 - 130	30
trans-1,2-Dichloroethene	ND	5.0	106	103	2.9	108	111	2.7	70 - 130	30
trans-1,3-Dichloropropene	ND	5.0	89	92	3.3	85	88	3.5	70 - 130	30
trans-1,4-dichloro-2-butene	ND	5.0	94	96	2.1	82	87	5.9	70 - 130	30
Trichloroethene	ND	5.0	98	101	3.0	101	105	3.9	70 - 130	30
Trichlorofluoromethane	ND	5.0	100	100	0.0	107	111	3.7	70 - 130	30
Trichlorotrifluoroethane	ND	5.0	109	108	0.9	115	120	4.3	70 - 130	30
Vinyl chloride	ND	5.0	106	105	0.9	110	113	2.7	70 - 130	30
% 1,2-dichlorobenzene-d4	98	%	100	103	3.0	101	101	0.0	70 - 130	30
% Bromofluorobenzene	97	%	101	101	0.0	101	100	1.0	70 - 130	30
% Dibromofluoromethane	98	%	97	99	2.0	97	96	1.0	70 - 130	30
% Toluene-d8	97	%	103	105	1.9	103	102	1.0	70 - 130	30

Comment:

Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%.

l = This parameter is outside laboratory LCS/LCSD specified recovery limits.
m = This parameter is outside laboratory MS/MSD specified recovery limits.
r = This parameter is outside laboratory RPD specified recovery limits.

QA/QC Data

SDG I.D.: GCA91708

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller, Laboratory Director
November 27, 2018

Tuesday, November 27, 2018

Criteria: CT: GBM, I/C, RC

State: CT

Sample Criteria Exceedances Report

GCA91708 - TIGHE-DAS

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CA91708	$8100SMR	Indeno(1,2,3-cd)pyrene	CT / RSR DEC I/C (mg/kg) / APS Organics	11000	1000	7800	7800	ug/Kg
CA91708	$8100SMR	Dibenz(a,h)anthracene	CT / RSR DEC I/C (mg/kg) / APS Organics	1700	1000	1000	1000	ug/Kg
CA91708	$8100SMR	Benzo(a)pyrene	CT / RSR DEC I/C (mg/kg) / Semivolatiles	4700	1000	1000	1000	ug/Kg
CA91708	$8100SMR	Indeno(1,2,3-cd)pyrene	CT / RSR DEC RES (mg/kg) / APS Organics	11000	1000	1000	1000	ug/Kg
CA91708	$8100SMR	Benzo(ghi)perylene	CT / RSR DEC RES (mg/kg) / APS Organics	10000	1000	8400	8400	ug/Kg
CA91708	$8100SMR	Dibenz(a,h)anthracene	CT / RSR DEC RES (mg/kg) / APS Organics	1700	1000	1000	1000	ug/Kg
CA91708	$8100SMR	Benzo(a)pyrene	CT / RSR DEC RES (mg/kg) / Semivolatiles	4700	1000	1000	1000	ug/Kg
CA91708	$8100SMR	Benzo(b)fluoranthene	CT / RSR DEC RES (mg/kg) / Semivolatiles	3800	1000	1000	1000	ug/Kg
CA91708	$8100SMR	Benz(a)anthracene	CT / RSR DEC RES (mg/kg) / Semivolatiles	2700	1000	1000	1000	ug/Kg
CA91708	$8100SMR	Benzo(ghi)perylene	CT / RSR GB (mg/kg) / APS Organics	10000	1000	1000	1000	ug/Kg
CA91708	$8100SMR	Indeno(1,2,3-cd)pyrene	CT / RSR GB (mg/kg) / APS Organics	11000	1000	1000	1000	ug/Kg
CA91708	$8100SMR	Dibenz(a,h)anthracene	CT / RSR GB (mg/kg) / APS Organics	1700	1000	1000	1000	ug/Kg
CA91708	$8100SMR	Chrysene	CT / RSR GB (mg/kg) / APS Organics	3700	1000	1000	1000	ug/Kg
CA91708	$8100SMR	Benzo(b)fluoranthene	CT / RSR GB (mg/kg) / Semivolatiles	3800	1000	1000	1000	ug/Kg
CA91708	$8100SMR	Benzo(a)pyrene	CT / RSR GB (mg/kg) / Semivolatiles	4700	1000	1000	1000	ug/Kg
CA91708	$8100SMR	Benz(a)anthracene	CT / RSR GB (mg/kg) / Semivolatiles	2700	1000	1000	1000	ug/Kg
CA91708	$8100SMR	Benzo(k)fluoranthene	CT / RSR GB (mg/kg) / Semivolatiles	2200	1000	1000	1000	ug/Kg
CA91708	$8260MAR	Benzene	CT / RSR GB (mg/kg) / Volatiles	220	200	200	200	ug/Kg
CA91708	$ETPH_SMR	Ext. Petroleum H.C. (C9-C36)	CT / RSR DEC RES (mg/kg) / Pest/PCB/TPH	1400	260	500	500	mg/Kg
CA91708	AS-SM	Arsenic	CT / RSR DEC I/C (mg/kg) / Inorganics	22.4	0.67	10	10	mg/Kg
CA91708	AS-SM	Arsenic	CT / RSR DEC RES (mg/kg) / Inorganics	22.4	0.67	10	10	mg/Kg
CA91709	$8100SMR	Indeno(1,2,3-cd)pyrene	CT / RSR DEC I/C (mg/kg) / APS Organics	22000	1300	7800	7800	ug/Kg
CA91709	$8100SMR	Dibenz(a,h)anthracene	CT / RSR DEC I/C (mg/kg) / APS Organics	4400	1200	1000	1000	ug/Kg
CA91709	$8100SMR	Benz(a)anthracene	CT / RSR DEC I/C (mg/kg) / Semivolatiles	28000	1300	7800	7800	ug/Kg
CA91709	$8100SMR	Benzo(a)pyrene	CT / RSR DEC I/C (mg/kg) / Semivolatiles	16000	1200	1000	1000	ug/Kg
CA91709	$8100SMR	Benzo(b)fluoranthene	CT / RSR DEC I/C (mg/kg) / Semivolatiles	23000	1300	7800	7800	ug/Kg
CA91709	$8100SMR	Benzo(ghi)perylene	CT / RSR DEC RES (mg/kg) / APS Organics	26000	1200	8400	8400	ug/Kg
CA91709	$8100SMR	Indeno(1,2,3-cd)pyrene	CT / RSR DEC RES (mg/kg) / APS Organics	22000	1300	1000	1000	ug/Kg
CA91709	$8100SMR	Dibenz(a,h)anthracene	CT / RSR DEC RES (mg/kg) / APS Organics	4400	1200	1000	1000	ug/Kg
CA91709	$8100SMR	Benzo(k)fluoranthene	CT / RSR DEC RES (mg/kg) / Semivolatiles	19000	1300	8400	8400	ug/Kg
CA91709	$8100SMR	Benzo(b)fluoranthene	CT / RSR DEC RES (mg/kg) / Semivolatiles	23000	1300	1000	1000	ug/Kg
CA91709	$8100SMR	Benzo(a)pyrene	CT / RSR DEC RES (mg/kg) / Semivolatiles	16000	1200	1000	1000	ug/Kg
CA91709	$8100SMR	Benz(a)anthracene	CT / RSR DEC RES (mg/kg) / Semivolatiles	28000	1300	1000	1000	ug/Kg
CA91709	$8100SMR	Chrysene	CT / RSR GB (mg/kg) / APS Organics	37000	1300	1000	1000	ug/Kg
CA91709	$8100SMR	Dibenz(a,h)anthracene	CT / RSR GB (mg/kg) / APS Organics	4400	1200	1000	1000	ug/Kg
CA91709	$8100SMR	Indeno(1,2,3-cd)pyrene	CT / RSR GB (mg/kg) / APS Organics	22000	1300	1000	1000	ug/Kg
CA91709	$8100SMR	Benzo(ghi)perylene	CT / RSR GB (mg/kg) / APS Organics	26000	1200	1000	1000	ug/Kg
CA91709	$8100SMR	Benzo(k)fluoranthene	CT / RSR GB (mg/kg) / Semivolatiles	19000	1300	1000	1000	ug/Kg
CA91709	$8100SMR	Pyrene	CT / RSR GB (mg/kg) / Semivolatiles	110000	13000	40000	40000	ug/Kg
CA91709	$8100SMR	Phenanthrene	CT / RSR GB (mg/kg) / Semivolatiles	45000	2700	40000	40000	ug/Kg
CA91709	$8100SMR	Benz(a)anthracene	CT / RSR GB (mg/kg) / Semivolatiles	28000	1300	1000	1000	ug/Kg

Tuesday, November 27, 2018

Criteria: CT: GBM, I/C, RC

State: CT

Sample Criteria Exceedances Report

GCA91708 - TIGHE-DAS

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CA91709	$8100SMR	Benzo(a)pyrene	CT / RSR GB (mg/kg) / Semivolatiles	16000	1200	1000	1000	ug/Kg
CA91709	$8100SMR	Benzo(b)fluoranthene	CT / RSR GB (mg/kg) / Semivolatiles	23000	1300	1000	1000	ug/Kg
CA91709	$8260MAR	Benzene	CT / RSR GB (mg/kg) / Volatiles	350	200	200	200	ug/Kg
CA91709	$ETPH_SMR	Ext. Petroleum H.C. (C9-C36)	CT / RSR DEC I/C (mg/kg) / Pest/PCB/TPH	4800	290	2500	2500	mg/Kg
CA91709	$ETPH_SMR	Ext. Petroleum H.C. (C9-C36)	CT / RSR DEC RES (mg/kg) / Pest/PCB/TPH	4800	290	500	500	mg/Kg
CA91709	$ETPH_SMR	Ext. Petroleum H.C. (C9-C36)	CT / RSR GB (mg/kg) / Pesticides/TPH	4800	290	2500	2500	mg/Kg
CA91709	AS-SM	Arsenic	CT / RSR DEC I/C (mg/kg) / Inorganics	15.4	0.79	10	10	mg/Kg
CA91709	AS-SM	Arsenic	CT / RSR DEC RES (mg/kg) / Inorganics	15.4	0.79	10	10	mg/Kg
CA91711	$8100SMR	Benzo(a)pyrene	CT / RSR DEC I/C (mg/kg) / Semivolatiles	2000	260	1000	1000	ug/Kg
CA91711	$8100SMR	Indeno(1,2,3-cd)pyrene	CT / RSR DEC RES (mg/kg) / APS Organics	2500	260	1000	1000	ug/Kg
CA91711	$8100SMR	Benzo(b)fluoranthene	CT / RSR DEC RES (mg/kg) / Semivolatiles	1400	260	1000	1000	ug/Kg
CA91711	$8100SMR	Benzo(a)pyrene	CT / RSR DEC RES (mg/kg) / Semivolatiles	2000	260	1000	1000	ug/Kg
CA91711	$8100SMR	Benzo(ghi)perylene	CT / RSR GB (mg/kg) / APS Organics	2900	260	1000	1000	ug/Kg
CA91711	$8100SMR	Indeno(1,2,3-cd)pyrene	CT / RSR GB (mg/kg) / APS Organics	2500	260	1000	1000	ug/Kg
CA91711	$8100SMR	Benzo(b)fluoranthene	CT / RSR GB (mg/kg) / Semivolatiles	1400	260	1000	1000	ug/Kg
CA91711	$8100SMR	Benzo(k)fluoranthene	CT / RSR GB (mg/kg) / Semivolatiles	1200	260	1000	1000	ug/Kg
CA91711	$8100SMR	Benzo(a)pyrene	CT / RSR GB (mg/kg) / Semivolatiles	2000	260	1000	1000	ug/Kg
CA91711	AS-SM	Arsenic	CT / RSR DEC I/C (mg/kg) / Inorganics	14.8	0.79	10	10	mg/Kg
CA91711	AS-SM	Arsenic	CT / RSR DEC RES (mg/kg) / Inorganics	14.8	0.79	10	10	mg/Kg
CA91714	$8270-SMR	Benzo(ghi)perylene	CT / RSR GB (mg/kg) / APS Organics	1100	260	1000	1000	ug/Kg
CA91714	AS-SM	Arsenic	CT / RSR DEC I/C (mg/kg) / Inorganics	28.5	0.72	10	10	mg/Kg
CA91714	AS-SM	Arsenic	CT / RSR DEC RES (mg/kg) / Inorganics	28.5	0.72	10	10	mg/Kg
CA91721	$8270-SMR	Dibenz(a,h)anthracene	CT / RSR DEC I/C (mg/kg) / APS Organics	1200	520	1000	1000	ug/Kg
CA91721	$8270-SMR	Benzidine	CT / RSR DEC I/C (mg/kg) / APS Organics	ND	300	200	200	ug/Kg
CA91721	$8270-SMR	Benzo(a)pyrene	CT / RSR DEC I/C (mg/kg) / Semivolatiles	2700	520	1000	1000	ug/Kg
CA91721	$8270-SMR	Indeno(1,2,3-cd)pyrene	CT / RSR DEC RES (mg/kg) / APS Organics	4100	520	1000	1000	ug/Kg
CA91721	$8270-SMR	Benzidine	CT / RSR DEC RES (mg/kg) / APS Organics	ND	300	200	200	ug/Kg
CA91721	$8270-SMR	Dibenz(a,h)anthracene	CT / RSR DEC RES (mg/kg) / APS Organics	1200	520	1000	1000	ug/Kg
CA91721	$8270-SMR	Benzo(a)pyrene	CT / RSR DEC RES (mg/kg) / Semivolatiles	2700	520	1000	1000	ug/Kg
CA91721	$8270-SMR	Benzo(b)fluoranthene	CT / RSR DEC RES (mg/kg) / Semivolatiles	2700	520	1000	1000	ug/Kg
CA91721	$8270-SMR	Dibenz(a,h)anthracene	CT / RSR GB (mg/kg) / APS Organics	1200	520	1000	1000	ug/Kg
CA91721	$8270-SMR	Benzo(ghi)perylene	CT / RSR GB (mg/kg) / APS Organics	4400	520	1000	1000	ug/Kg
CA91721	$8270-SMR	Chrysene	CT / RSR GB (mg/kg) / APS Organics	1300	520	1000	1000	ug/Kg
CA91721	$8270-SMR	Indeno(1,2,3-cd)pyrene	CT / RSR GB (mg/kg) / APS Organics	4100	520	1000	1000	ug/Kg
CA91721	$8270-SMR	Benzo(b)fluoranthene	CT / RSR GB (mg/kg) / Semivolatiles	2700	520	1000	1000	ug/Kg
CA91721	$8270-SMR	Benzo(a)pyrene	CT / RSR GB (mg/kg) / Semivolatiles	2700	520	1000	1000	ug/Kg
CA91721	$8270-SMR	Benzo(k)fluoranthene	CT / RSR GB (mg/kg) / Semivolatiles	1400	520	1000	1000	ug/Kg
CA91721	$ETPH_SMR	Ext. Petroleum H.C. (C9-C36)	CT / RSR DEC I/C (mg/kg) / Pest/PCB/TPH	2600	280	2500	2500	mg/Kg
CA91721	$ETPH_SMR	Ext. Petroleum H.C. (C9-C36)	CT / RSR DEC RES (mg/kg) / Pest/PCB/TPH	2600	280	500	500	mg/Kg
CA91721	$ETPH_SMR	Ext. Petroleum H.C. (C9-C36)	CT / RSR GB (mg/kg) / Pesticides/TPH	2600	280	2500	2500	mg/Kg

Tuesday, November 27, 2018

Criteria: CT: GBM, I/C, RC

State: CT

Sample Criteria Exceedances Report

GCA91708 - TIGHE-DAS

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

REASONABLE CONFIDENCE PROTOCOL
LABORATORY ANALYSIS QA/QC CERTIFICATION FORM

Laboratory Name: Phoenix Environmental Labs, Inc. ***Client:*** Tighe & Bond

Project Location: ROCKVILLE MGP ***Project Number:***

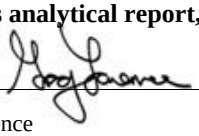
Laboratory Sample ID(s): CA91708, CA91709, CA91711, CA91712, CA91714, CA91715, CA91717, CA91719-CA91721 ***Sampling Date(s):*** 7/16/2018, 7/17/2018

List RCP Methods Used (e.g., 8260, 8270, et cetera) 1311/1312, 6010, 7470/7471, 8082, 8260, 8270, ETPH, 9010/9012

1	**For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP method-specific Reasonable Confidence Protocol documents?**	☑ Yes ☐ No
1A	**Were the method specified preservation and holding time requirements met?**	☑ Yes ☐ No
1B	***VPH and EPH methods only:*** **Was the VPH or EPH method conducted without significant modifications (see section 11.3 of respective RCP methods)**	☐ Yes ☐ No ☑ NA
2	**Were all samples received by the laboratory in a condition consistent with that described on the associated Chain-of-Custody document(s)?**	☑ Yes ☐ No
3	**Were samples received at an appropriate temperature (< 6 Degrees C)?**	☑ Yes ☐ No ☐ NA
4	**Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents acheived? See Sections: ETPH Narration, ICP Narration, Mercury Narration, SVOA Narration, VOA Narration.**	☐ Yes ☑ No
5	**a) Were reporting limits specified or referenced on the chain-of-custody?** **b) Were these reporting limits met?**	☑ Yes ☐ No ☑ Yes ☐ No
6	**For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?**	☐ Yes ☑ No
7	**Are project-specific matrix spikes and laboratory duplicates included in the data set?**	☑ Yes ☐ No

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or 1B is "No", the data package does not meet the requirements for "Reasonable Confidence". This form may not be altered and all questions must be answered.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized Signature:  **Position:** Assistant Lab Director

Printed Name: Greg Lawrence **Date:** Tuesday, November 27, 2018

Name of Laboratory Phoenix Environmental Labs, Inc.

This certification form is to be used for RCP methods only.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

November 27, 2018

SDG I.D.: GCA91708

SDG Comments

8270 Semi-volatile Organics: CA91708, CA91709, CA91711, CA91712
The client requested a short list for 8270 RCP Semivolatile. Only the PAH constituents are reported as requested on the chain-of-custody.

Cyanide Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument:

LACHAT 07/19/18-1 Eric Geyer, Chemist 07/19/18

CA91708

The samples were distilled in accordance with the method.
The initial calibration met criteria.

The calibration check standards (ICV,CCV) were within 15% of true value and were analyzed at a frequencey of one per ten samples.
The continuing calibration blanks (ICB,CCB) had concentrations less than the reporting level.

The method blank, laboratory control sample (LCS), and matrix spike were distilled with the samples.

LACHAT 07/23/18-1 Dustin Harrison, Greg Danielewski, Chemist 07/23/18

CA91709, CA91714, CA91715, CA91717, CA91719, CA91720, CA91721

The samples were distilled in accordance with the method.
The initial calibration met criteria.

The calibration check standards (ICV,CCV) were within 15% of true value and were analyzed at a frequencey of one per ten samples.
The continuing calibration blanks (ICB,CCB) had concentrations less than the reporting level.

The method blank, laboratory control sample (LCS), and matrix spike were distilled with the samples.

LACHAT 07/30/18-1 Dustin Harrison, Greg Danielewski, Chemist 07/30/18

CA91711, CA91712

The samples were distilled in accordance with the method.
The initial calibration met criteria.

The calibration check standards (ICV,CCV) were within 15% of true value and were analyzed at a frequencey of one per ten samples.
The continuing calibration blanks (ICB,CCB) had concentrations less than the reporting level.

The method blank, laboratory control sample (LCS), and matrix spike were distilled with the samples.

QC (Batch Specific):

Batch 439437 (CA91086)

CA91708

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RCP Certification Report

November 27, 2018

SDG I.D.: GCA91708

Cyanide Narration

All LCS recoveries were within 80 - 120 with the following exceptions: None.
Additional: LCS acceptance range is 80-120% for soils MS acceptance range 75-125% for soils

Batch 439830 (CA93881)

CA91709, CA91714, CA91715, CA91717, CA91719, CA91720, CA91721

All LCS recoveries were within 80 - 120 with the following exceptions: None.
Additional: LCS acceptance range is 80-120% for soils MS acceptance range 75-125% for soils

Batch 440745 (CA99405)

CA91711, CA91712

All LCS recoveries were within 80 - 120 with the following exceptions: None.
Additional: LCS acceptance range is 80-120% for soils MS acceptance range 75-125% for soils

ETPH Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 439334 (Samples: CA91708): -----

The surrogate recovery in the blank is below acceptance criteria, all other samples and QC are within criteria. No bias is suspected.

Instrument:

AU-FID1 07/20/18-1 Jeff Bucko, Chemist 07/20/18

CA91709

The initial calibration (ETPH717I) RSD for the compound list was less than 30% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 30% except for the following compounds:
Samples: CA91709
Preceding CC 720A003 - None.
Succeeding CC 720A016 - Pentacosane 39%H (30%)

AU-FID21 07/20/18-1 Jeff Bucko, Chemist 07/20/18

CA91720

The initial calibration (ETPH620I) RSD for the compound list was less than 30% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 30% except for the following compounds:None.

AU-FID21 07/23/18-1 Jeff Bucko, Chemist 07/23/18

CA91721

The initial calibration (ETPH620I) RSD for the compound list was less than 30% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 30% except for the following compounds:None.

AU-FID22 07/20/18-1 Jeff Bucko, Chemist 07/20/18

CA91715, CA91717, CA91719

The initial calibration (ETPH621I) RSD for the compound list was less than 30% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 30% except for the following compounds:None.

AU-FID22 07/27/18-1 Jeff Bucko, Chemist 07/27/18

CA91712

The initial calibration (ETPH621I) RSD for the compound list was less than 30% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 30% except for the following compounds:None.

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ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

November 27, 2018

SDG I.D.: GCA91708

ETPH Narration

AU-FID22 07/30/18-1 Jeff Bucko, Chemist 07/30/18

CA91711

The initial calibration (ETPH621I) RSD for the compound list was less than 30% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 30% except for the following compounds:None.

AU-FID84 07/19/18-1 Jeff Bucko, Chemist 07/19/18

CA91708

The initial calibration (ETPH705I) RSD for the compound list was less than 30% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 30% except for the following compounds:
Samples: CA91708
Preceding CC 719A003 - None.
Succeeding CC 719A015 - Pentacosane 47%H (30%)

AU-XL1 07/19/18-1 Jeff Bucko, Chemist 07/19/18

CA91714

The initial calibration (ETPH605I) RSD for the compound list was less than 30% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 30% except for the following compounds:None.

QC (Batch Specific):

Batch 439334 (CA91307)

CA91708

All LCS recoveries were within 60 - 120 with the following exceptions: None.
The surrogate recovery in the blank is below acceptance criteria, all other samples and QC are within criteria. No bias is suspected.
Additional surrogate criteria: LCS acceptance range is 60-120% MS acceptance range 50-150%. The ETPH/DRO LCS has been normalized based on the alkane calibration.

Batch 439591 (CA93630)

CA91709

All LCS recoveries were within 60 - 120 with the following exceptions: None.
All LCSD recoveries were within 60 - 120 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
Additional surrogate criteria: LCS acceptance range is 60-120% MS acceptance range 50-150%. The ETPH/DRO LCS has been normalized based on the alkane calibration.

Batch 439592 (CA93879)

CA91714

All LCS recoveries were within 60 - 120 with the following exceptions: None.
All LCSD recoveries were within 60 - 120 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
Additional surrogate criteria: LCS acceptance range is 60-120% MS acceptance range 50-150%. The ETPH/DRO LCS has been normalized based on the alkane calibration.

Batch 439728 (CA94567)

CA91715, CA91717, CA91719, CA91720, CA91721

All LCS recoveries were within 60 - 120 with the following exceptions: None.
All LCSD recoveries were within 60 - 120 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

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ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

November 27, 2018

SDG I.D.: GCA91708

ETPH Narration

Additional surrogate criteria: LCS acceptance range is 60-120% MS acceptance range 50-150%. The ETPH/DRO LCS has been normalized based on the alkane calibration.

Batch 440643 (CA99145)

CA91711, CA91712

All LCS recoveries were within 60 - 120 with the following exceptions: None.
All LCSD recoveries were within 60 - 120 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
Additional surrogate criteria: LCS acceptance range is 60-120% MS acceptance range 50-150%. The ETPH/DRO LCS has been normalized based on the alkane calibration.

Mercury Narration

Were all QA/QC performance criteria specified in the analytical method achieved? No.

QC Batch 439699 (Samples: CA91709, CA91714, CA91715, CA91717, CA91719, CA91720, CA91721): -----

The Sample/Duplicate RPD exceeds the method criteria, therefore there may be variability in the reported result.

Instrument:

MERLIN 07/19/18 08:13 Rick Schweitzer, Chemist 07/19/18

CA91708

The method preparation blank contains all of the acids and reagents as the samples; the instrument blanks do not.
The initial calibration met all criteria including a standard run at or below the reporting level.
All calibration verification standards (ICV, CCV) met criteria.
All calibration blank verification standards (ICB, CCB) met criteria.
The matrix spike sample is used to identify spectral interference for each batch of samples, if within 85-115%, no interference is observed and no further action is taken.
The following Initial Calibration Verification (ICV) compounds did not meet criteria: None.
The following Continuing Calibration Verification (CCV) compounds did not meet criteria: None.

MERLIN 07/20/18 08:11 Rick Schweitzer, Chemist 07/20/18

CA91709, CA91714, CA91715, CA91717, CA91719, CA91720, CA91721

The method preparation blank contains all of the acids and reagents as the samples; the instrument blanks do not.
The initial calibration met all criteria including a standard run at or below the reporting level.
All calibration verification standards (ICV, CCV) met criteria.
All calibration blank verification standards (ICB, CCB) met criteria.
The matrix spike sample is used to identify spectral interference for each batch of samples, if within 85-115%, no interference is observed and no further action is taken.
The following Initial Calibration Verification (ICV) compounds did not meet criteria: None.
The following Continuing Calibration Verification (CCV) compounds did not meet criteria: None.

MERLIN 07/23/18 08:10 Rick Schweitzer, Chemist 07/23/18

CA91709, CA91714, CA91715, CA91717, CA91719, CA91720, CA91721

The method preparation blank contains all of the acids and reagents as the samples; the instrument blanks do not.
The initial calibration met all criteria including a standard run at or below the reporting level.
All calibration verification standards (ICV, CCV) met criteria.
All calibration blank verification standards (ICB, CCB) met criteria.
The matrix spike sample is used to identify spectral interference for each batch of samples, if within 85-115%, no interference is observed and no further action is taken.

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Certification Report

November 27, 2018

SDG I.D.: GCA91708

Mercury Narration

The following Initial Calibration Verification (ICV) compounds did not meet criteria: None.
The following Continuing Calibration Verification (CCV) compounds did not meet criteria: None.

MERLIN 07/30/18 08:25 Rick Schweitzer, Chemist 07/30/18

CA91711, CA91712

The method preparation blank contains all of the acids and reagents as the samples; the instrument blanks do not.
The initial calibration met all criteria including a standard run at or below the reporting level.
All calibration verification standards (ICV, CCV) met criteria.
All calibration blank verification standards (ICB, CCB) met criteria.
The matrix spike sample is used to identify spectral interference for each batch of samples, if within 85-115%, no interference is observed and no further action is taken.
The following Initial Calibration Verification (ICV) compounds did not meet criteria: None.
The following Continuing Calibration Verification (CCV) compounds did not meet criteria: None.

QC (Batch Specific):

Batch 439509 (CA91307)

CA91708

All LCS recoveries were within 70 - 130 with the following exceptions: None.
All LCSD recoveries were within 70 - 130 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.

Batch 439515 (CA92953)

CA91708

All LCS recoveries were within 80 - 120 with the following exceptions: None.
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.

Batch 439704 (CA93877)

CA91709, CA91714, CA91715, CA91717, CA91719, CA91720, CA91721

All LCS recoveries were within 80 - 120 with the following exceptions: None.
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.

Batch 440835 (CA99405)

CA91711, CA91712

All LCS recoveries were within 70 - 130 with the following exceptions: None.
All LCSD recoveries were within 70 - 130 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.

Batch 440839 (CA99730)

CA91711, CA91712

All LCS recoveries were within 80 - 120 with the following exceptions: None.
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.

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SDG I.D.: GCA91708

Mercury Narration

QC (Site Specific):

Batch 439699 (CA91709)

CA91709, CA91714, CA91715, CA91717, CA91719, CA91720, CA91721

All LCS recoveries were within 70 - 130 with the following exceptions: None.
All LCSD recoveries were within 70 - 130 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
All MS recoveries were within 75 - 125 with the following exceptions: None.
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.

ICP Metals Narration

Were all QA/QC performance criteria specified in the analytical method achieved? No.

QC Batch 439411 (Samples: CA91708): -----

A trace amount of an analyte was found in blank. Due to the concentration in the blank relative to the samples, no bias is suspected. (Soil- Copper(CA91708))

Instrument:

ARCOS 07/18/18 09:30 Emily Kolominskaya, Tina Hall, Chemist 07/18/18

CA91708

Additional criteria for CCV and ICSAB:
Sodium and Potassium are poor performing elements, the laboratory's in-house limits are 85-115% (CCV) and 70-130% (ICSAB).The linear range is defined daily by the calibration range.
The following Initial Calibration Verification (ICV) compounds did not meet criteria: None.
The following Continuing Calibration Verification (CCV) compounds did not meet criteria: None.
The following ICP Interference Check (ICSAB) compounds did not meet criteria: None.

ARCOS 07/19/18 10:14 Emily Kolominskaya, Tina Hall, Chemist 07/19/18

CA91708

Additional criteria for CCV and ICSAB:
Sodium and Potassium are poor performing elements, the laboratory's in-house limits are 85-115% (CCV) and 70-130% (ICSAB).The linear range is defined daily by the calibration range.
The following Initial Calibration Verification (ICV) compounds did not meet criteria: None.
The following Continuing Calibration Verification (CCV) compounds did not meet criteria: None.
The following ICP Interference Check (ICSAB) compounds did not meet criteria: None.

ARCOS 07/20/18 11:09 Emily Kolominskaya, Phyllis Shiller, Chemist 07/20/18

CA91709, CA91714, CA91715, CA91717, CA91719, CA91720, CA91721

Additional criteria for CCV and ICSAB:
Sodium and Potassium are poor performing elements, the laboratory's in-house limits are 85-115% (CCV) and 70-130% (ICSAB).The linear range is defined daily by the calibration range.
The following Initial Calibration Verification (ICV) compounds did not meet criteria: None.
The following Continuing Calibration Verification (CCV) compounds did not meet criteria: None.
The following ICP Interference Check (ICSAB) compounds did not meet criteria: None.

ARCOS 07/28/18 07:01 Emily Kolominskaya, Chemist 07/28/18

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SDG I.D.: GCA91708

ICP Metals Narration

CA91711, CA91712

Additional criteria for CCV and ICSAB:
Sodium and Potassium are poor performing elements, the laboratory's in-house limits are 85-115% (CCV) and 70-130% (ICSAB).The linear range is defined daily by the calibration range.
The following Initial Calibration Verification (ICV) compounds did not meet criteria: None.
The following Continuing Calibration Verification (CCV) compounds did not meet criteria: None.
The following ICP Interference Check (ICSAB) compounds did not meet criteria: None.

BLUE 07/30/18 09:50 Emily Kolominskaya, Chemist 07/30/18

CA91711, CA91712

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.The linear range is defined daily by the calibration range.
The following Initial Calibration Verification (ICV) compounds did not meet criteria: None.
The following Continuing Calibration Verification (CCV) compounds did not meet criteria: None.
The following ICP Interference Check (ICSAB) compounds did not meet criteria: None.

QC (Batch Specific):

Batch 439411 (CA91307)

CA91708

All LCS recoveries were within 75 - 125 with the following exceptions: None.

Batch 439518 (CA92748)

CA91708

All LCS recoveries were within 75 - 125 with the following exceptions: None.

Batch 439754 (CA91132)

CA91709, CA91714, CA91715, CA91717, CA91719, CA91720, CA91721

All LCS recoveries were within 75 - 125 with the following exceptions: None.

Batch 440844 (CA99450)

CA91711, CA91712

All LCS recoveries were within 75 - 125 with the following exceptions: None.

QC (Site Specific):

Batch 439804 (CA91717)

CA91709, CA91714, CA91715, CA91717, CA91719, CA91720, CA91721

All LCS recoveries were within 75 - 125 with the following exceptions: None.
All MS recoveries were within 75 - 125 with the following exceptions: None.

Batch 440729 (CA91712)

CA91711, CA91712

All LCS recoveries were within 75 - 125 with the following exceptions: None.

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SDG I.D.: GCA91708

ICP Metals Narration

All MS recoveries were within 75 - 125 with the following exceptions: None.

PCB Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument:

AU-ECD24 07/23/18-1 Adam Werner, Chemist 07/23/18

CA91714, CA91715, CA91717, CA91719, CA91720, CA91721

The initial calibration (PC705AI) RSD for the compound list was less than 20% except for the following compounds: None.
The initial calibration (PC705BI) RSD for the compound list was less than 20% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 15% except for the following compounds:None.

AU-ECD24 07/30/18-1 Adam Werner, Chemist 07/30/18

CA91709, CA91711

The initial calibration (PC705AI) RSD for the compound list was less than 20% except for the following compounds: None.
The initial calibration (PC705BI) RSD for the compound list was less than 20% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 15% except for the following compounds:None.

AU-ECD3 07/19/18-1 Adam Werner, Chemist 07/19/18

CA91708

The initial calibration (PC605AI) RSD for the compound list was less than 20% except for the following compounds: None.
The initial calibration (PC605BI) RSD for the compound list was less than 20% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 15% except for the following compounds:None.

QC (Batch Specific):

Batch 439654 (CA94225)

CA91708

All LCS recoveries were within 40 - 140 with the following exceptions: None.
All LCSD recoveries were within 40 - 140 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

Batch 439789 (CA95173)

CA91714, CA91715, CA91717, CA91719, CA91720, CA91721

All LCS recoveries were within 40 - 140 with the following exceptions: None.
All LCSD recoveries were within 40 - 140 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

Batch 440644 (CA99736)

CA91709, CA91711

All LCS recoveries were within 40 - 140 with the following exceptions: None.
All LCSD recoveries were within 40 - 140 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

SVOA Narration

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RCP Certification Report

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SDG I.D.: GCA91708

SVOA Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 439785 (Samples: CA91714, CA91715, CA91717, CA91719, CA91720, CA91721): -----

The LCS/LCSD is below the method criteria. The Batch MS/MSD is acceptable. A slight low bias for this analyte is possible. (2,4-Dinitrophenol)

The LCS/LCSD is below the lower range but within the method criteria. The Batch MS/MSD is acceptable. A slight low bias for this analyte is possible.(4,6-Dinitro-2-methylphenol)

The LCS/LCSD RPD exceeds the method criteria for one or more analytes, but these analytes were not reported in the sample(s) so no variability is suspected. (4,6-Dinitro-2-methylphenol)

The QC recoveries for one analyte are below the method criteria. A low bias is likely. (Benzoic Acid)

The QC recoveries for one analyte are below the lower range but within the method criteria. A low bias is possible.(Pyridine)

QC Batch 440641 (Samples: CA91711, CA91712): -----

The LCS/LCSD RPD exceeds the method criteria for one or more analytes and the surrogates. Therefore there may be variability in the reported result. (Anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Chrysene, Indeno(1,2,3-cd)pyrene, % 2-Fluorobiphenyl, % Nitrobenzene-d5, % Terphenyl-d14)

Instrument:

CHEM06 07/27/18-1

CA91711, CA91712

The DDT breakdown and pentachlorophenol & benzidine peak tailing were evaluated in the DFTPP tune and were found to be in control.

Initial Calibration Verification (CHEM06/BN_0627):
100% of target compounds met criteria.
The following compounds had %RSDs >20%: None.
The following compounds did not meet recommended response factors: None.
The following compounds did not meet a minimum response factors: None.

Continuing Calibration Verification (CHEM06/0727_04-BN_0627):
Internal standard areas were within 50 to 200% of the initial calibration with the following exceptions: None.
100% of target compounds met criteria.
The following compounds did not meet % deviation criteria: None.
The following compounds did not meet maximum % deviations: None.
The following compounds did not meet recommended response factors: None.
The following compounds did not meet minimum response factors: None.

CHEM19 07/19/18-2 Keith Aloisa, Chemist 07/19/18

CA91708

The DDT breakdown and pentachlorophenol & benzidine peak tailing were evaluated in the DFTPP tune and were found to be in control.

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SDG I.D.: GCA91708

SVOA Narration

Initial Calibration Verification (CHEM19/SPLIT_0717):
95% of target compounds met criteria.
The following compounds had %RSDs >20%: None.
The following compounds did not meet recommended response factors: None.
The following compounds did not meet a minimum response factors: None.

Continuing Calibration Verification (CHEM19/0719_02-SPLIT_0717):
Internal standard areas were within 50 to 200% of the initial calibration with the following exceptions: None.
98% of target compounds met criteria.
The following compounds did not meet % deviation criteria: None.
The following compounds did not meet maximum % deviations: None.
The following compounds did not meet recommended response factors: None.
The following compounds did not meet minimum response factors: None.

CHEM19 07/21/18-1

CA91714, CA91715, CA91717, CA91719, CA91720

The DDT breakdown and pentachlorophenol & benzidine peak tailing were evaluated in the DFTPP tune and were found to be in control.

Initial Calibration Verification (CHEM19/SPLIT_0717):
95% of target compounds met criteria.
The following compounds had %RSDs >20%: 2,4-Dinitrophenol 43% (20%), Benzidine 24% (20%), Pentachlorophenol 22% (20%)
The following compounds did not meet recommended response factors: None.
The following compounds did not meet a minimum response factors: None.

Continuing Calibration Verification (CHEM19/0721_02-SPLIT_0717):
Internal standard areas were within 50 to 200% of the initial calibration with the following exceptions: None.
99% of target compounds met criteria.
The following compounds did not meet % deviation criteria: None.
The following compounds did not meet maximum % deviations: None.
The following compounds did not meet recommended response factors: Bis(2-chloroethyl)ether 0.683 (0.7), Hexachlorobenzene 0.094 (0.1)
The following compounds did not meet minimum response factors: None.

CHEM27 07/23/18-1 Harry Mullin, Chemist 07/23/18

CA91709

Initial Calibration Verification (CHEM27/SPLIT_0722):
98% of target compounds met criteria.
The following compounds had %RSDs >20%: None.
The following compounds did not meet recommended response factors: None.
The following compounds did not meet a minimum response factors: None.

Continuing Calibration Verification (CHEM27/0723_02-SPLIT_0722):
Internal standard areas were within 50 to 200% of the initial calibration with the following exceptions: None.
100% of target compounds met criteria.
The following compounds did not meet % deviation criteria: None.
The following compounds did not meet maximum % deviations: None.
The following compounds did not meet recommended response factors: None.
The following compounds did not meet minimum response factors: None.

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SDG I.D.: GCA91708

SVOA Narration

CHEM28 07/23/18-1 Keith Aloisa, Chemist 07/23/18

CA91721

Initial Calibration Verification (CHEM28/SPLIT_0717):
92% of target compounds met criteria.
The following compounds had %RSDs >20%: 2,4-Dinitrophenol 37% (20%), 4,6-Dinitro-2-methylphenol 36% (20%), Benzidine 24% (20%), Benzoic acid 26% (20%), Hexachlorocyclopentadiene 24% (20%), Pentachlorophenol 31% (20%)
The following compounds did not meet recommended response factors: None.
The following compounds did not meet a minimum response factors: None.

Continuing Calibration Verification (CHEM28/0723_06-SPLIT_0717):
Internal standard areas were within 50 to 200% of the initial calibration with the following exceptions: None.
98% of target compounds met criteria.
The following compounds did not meet % deviation criteria: 4-Nitrophenol 32%H (30%), Benzoic acid 73%H (30%)
The following compounds did not meet maximum % deviations: Benzoic acid 73%H (40%)
The following compounds did not meet recommended response factors: None.
The following compounds did not meet minimum response factors: None.

CHEM29 07/21/18-1

CA91709

Initial Calibration Verification (CHEM29/BN_0614):
100% of target compounds met criteria.
The following compounds had %RSDs >20%: None.
The following compounds did not meet recommended response factors: None.
The following compounds did not meet a minimum response factors: None.

Continuing Calibration Verification (CHEM29/0721_08-BN_0614):
Internal standard areas were within 50 to 200% of the initial calibration with the following exceptions: None.
100% of target compounds met criteria.
The following compounds did not meet % deviation criteria: None.
The following compounds did not meet maximum % deviations: None.
The following compounds did not meet recommended response factors: None.
The following compounds did not meet minimum response factors: None.

QC (Batch Specific):

Batch 439329 (CA91994)

CA91708

All LCS recoveries were within 30 - 130 with the following exceptions: None.
All LCSD recoveries were within 30 - 130 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

Batch 439785 (CA95183)

CA91714, CA91715, CA91717, CA91719, CA91720, CA91721

All LCS recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(10%), 4,6-Dinitro-2-methylphenol(28%), Benzoic Acid(<10%), Pyridine(27%)
All LCSD recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(<10%), 4,6-Dinitro-2-methylphenol(15%), Benzoic Acid(<10%), Pyridine(29%)

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SVOA Narration

All LCS/LCSD RPDs were less than 30% with the following exceptions: 4,6-Dinitro-2-methylphenol(60.5%)
Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

Batch 439787 (CA94567)

CA91709

All LCS recoveries were within 30 - 130 with the following exceptions: None.
All LCSD recoveries were within 30 - 130 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

Batch 440641 (CA99009)

CA91711, CA91712

All LCS recoveries were within 30 - 130 with the following exceptions: None.
All LCSD recoveries were within 30 - 130 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: % 2-Fluorobiphenyl(37.9%), % Terphenyl-d14(40.7%)
This batch consists of a Blank, LCS, LCSD and MS.
Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

VOA Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 439719 (Samples: CA91714, CA91715, CA91719, CA91720, CA91721): -----

The LCSD recovery is below the method criteria. All of the other QC is acceptable, therefore no significant bias is suspected. (2-Hexanone, Methyl ethyl ketone, Methylene chloride)

The QC recoveries for one analyte are below the lower range but within the method criteria. A slight low bias is likely. (Acetone)

QC Batch 439968 (Samples: CA91708, CA91709, CA91714, CA91719, CA91720, CA91721): -----

The LCS and Batch MS/MSD recoveries are below the lower range but within the method criteria. A slight low bias is possible. (Acetone)

Instrument:

CHEM03 07/19/18-1 Jane Li, Chemist 07/19/18

CA91708

Initial Calibration Verification (CHEM03/VT-L0714):
95% of target compounds met criteria.
The following compounds had %RSDs >20%: trans-1,4-dichloro-2-butene 23% (20%)
The following compounds did not meet recommended response factors: None.
The following compounds did not meet a minimum response factors: None.

Continuing Calibration Verification (CHEM03/0719L02-VT-L0714):
Internal standard areas were within 50 to 200% of the initial calibration with the following exceptions: None.

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SDG I.D.: GCA91708

VOA Narration

100% of target compounds met criteria.
The following compounds did not meet % deviation criteria: None.
The following compounds did not meet maximum % deviations: None.
The following compounds did not meet recommended response factors: None.
The following compounds did not meet minimum response factors: None.

CHEM03 07/19/18-2 Jane Li, Chemist 07/19/18

CA91714, CA91715, CA91719, CA91720, CA91721

Initial Calibration Verification (CHEM03/VT-L0714):
95% of target compounds met criteria.
The following compounds had %RSDs >20%: Bromoform 26% (20%), Chloroethane 30% (20%), trans-1,4-dichloro-2-butene 23% (20%), Trichlorofluoromethane 22% (20%)
The following compounds did not meet recommended response factors: Tetrachloroethene 0.186 (0.2)
The following compounds did not meet a minimum response factors: None.

Continuing Calibration Verification (CHEM03/0719L35-VT-L0714):
Internal standard areas were within 50 to 200% of the initial calibration with the following exceptions: None.
99% of target compounds met criteria.
The following compounds did not meet % deviation criteria: Acetone 31%L (30%)
The following compounds did not meet maximum % deviations: None.
The following compounds did not meet recommended response factors: None.
The following compounds did not meet minimum response factors: None.

CHEM03 07/20/18-1 Jane Li, Chemist 07/20/18

CA91708, CA91709, CA91714, CA91719, CA91720, CA91721

Initial Calibration Verification (CHEM03/VT-L0714):
95% of target compounds met criteria.
The following compounds had %RSDs >20%: Bromoform 26% (20%), Chloroethane 30% (20%), trans-1,4-dichloro-2-butene 23% (20%), Trichlorofluoromethane 22% (20%)
The following compounds did not meet recommended response factors: Tetrachloroethene 0.186 (0.2)
The following compounds did not meet a minimum response factors: None.

Continuing Calibration Verification (CHEM03/0720L02-VT-L0714):
Internal standard areas were within 50 to 200% of the initial calibration with the following exceptions: None.
100% of target compounds met criteria.
The following compounds did not meet % deviation criteria: None.
The following compounds did not meet maximum % deviations: None.
The following compounds did not meet recommended response factors: None.
The following compounds did not meet minimum response factors: None.

CHEM14 07/27/18-2 Jane Li, Chemist 07/27/18

CA91711, CA91712

Initial Calibration Verification (CHEM14/VT-0725):
99% of target compounds met criteria.
The following compounds had %RSDs >20%: Acetone 23% (20%)
The following compounds did not meet recommended response factors: Acetone 0.070 (0.1)
The following compounds did not meet a minimum response factors: None.

Continuing Calibration Verification (CHEM14/0727_37-VT-0725):
Internal standard areas were within 50 to 200% of the initial calibration with the following exceptions: None.

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SDG I.D.: GCA91708

VOA Narration

100% of target compounds met criteria.
The following compounds did not meet % deviation criteria: None.
The following compounds did not meet maximum % deviations: None.
The following compounds did not meet recommended response factors: None.
The following compounds did not meet minimum response factors: None.

CHEM14 07/28/18-1 Jane Li, Chemist 07/28/18

CA91711

Initial Calibration Verification (CHEM14/VT-0725):
99% of target compounds met criteria.
The following compounds had %RSDs >20%: None.
The following compounds did not meet recommended response factors: None.
The following compounds did not meet a minimum response factors: None.

Continuing Calibration Verification (CHEM14/0728_02-VT-0725):
Internal standard areas were within 50 to 200% of the initial calibration with the following exceptions: None.
100% of target compounds met criteria.
The following compounds did not meet % deviation criteria: None.
The following compounds did not meet maximum % deviations: None.
The following compounds did not meet recommended response factors: None.
The following compounds did not meet minimum response factors: None.

CHEM26 07/21/18-1 Jane Li, Chemist 07/21/18

CA91709

Initial Calibration Verification (CHEM26/VT-0718):
99% of target compounds met criteria.
The following compounds had %RSDs >20%: Methylene chloride 28% (20%)
The following compounds did not meet recommended response factors: None.
The following compounds did not meet a minimum response factors: None.

Continuing Calibration Verification (CHEM26/0721_02-VT-0718):
Internal standard areas were within 50 to 200% of the initial calibration with the following exceptions: None.
100% of target compounds met criteria.
The following compounds did not meet % deviation criteria: None.
The following compounds did not meet maximum % deviations: None.
The following compounds did not meet recommended response factors: None.
The following compounds did not meet minimum response factors: None.

QC (Batch Specific):

Batch 439719 (CA93486)

CA91714, CA91715, CA91719, CA91720, CA91721

All LCS recoveries were within 70 - 130 with the following exceptions: Acetone(61%)
All LCSD recoveries were within 70 - 130 with the following exceptions: 2-Hexanone(66%), Acetone(54%), Methyl ethyl ketone(61%), Methylene chloride(68%)
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%.

Batch 439723 (CA90365)

CA91708

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

November 27, 2018

SDG I.D.: GCA91708

VOA Narration

All LCS recoveries were within 70 - 130 with the following exceptions: None.
All LCSD recoveries were within 70 - 130 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%.

Batch 439961 (CA94870)

CA91709

All LCS recoveries were within 70 - 130 with the following exceptions: None.
All LCSD recoveries were within 70 - 130 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%.

Batch 439968 (CA94060)

CA91708, CA91709, CA91714, CA91719, CA91720, CA91721

All LCS recoveries were within 70 - 130 with the following exceptions: Acetone(68%)
All LCSD recoveries were within 70 - 130 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%.

Batch 440852 (CA99223)

CA91711, CA91712

All LCS recoveries were within 70 - 130 with the following exceptions: None.
All LCSD recoveries were within 70 - 130 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%.

Batch 440867 (CA99219)

CA91711

All LCS recoveries were within 70 - 130 with the following exceptions: None.
All LCSD recoveries were within 70 - 130 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%.

Temperature Narration

The samples in this delivery group were received at 5.4°C.
(Note acceptance criteria for relevant matrices is above freezing up to 6°C)

Cooler: Yes ☒ No ☐
Coolant: IPK ☐ ICE ☒ No ☐

PHOENIX
Environmental Laboratories, Inc.

CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Temp 5.4 °C Pg 1 of 2

Contact Options:
☐ Fax:
☐ Phone:
☒ Email: LEwing@Tighebond.com

Customer: Tighe + Bond
Address: 213 Court St
Middletown CT

Project: Rexhame MGP
Report to: Lynn Wiley
Invoice to: Tighe + Bond

Project P.O: 150755-4413

This section MUST be completed with Bottle Quantities.

Client Sample - Information - Identification

Sampler's Signature: [signature] Date: 7/17/19

Matrix Code:
DW=Drinking Water **GW**=Ground Water **SW**=Surface Water **WW**=Waste Water
RW=Raw Water **SE**=Sediment **SL**=Sludge **S**=Soil **SD**=Solid **W**=Wipe
OIL=Oil **B**=Bulk **L**=Liquid

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	VOC	PAHs	TCLP	RCRA metals	SPLP RCRA metals	Total Cyanide	Soil VOA Vials ☒ methanol ☒ H2O	GL Soil container ( ) 1oz	GL Soil container ( ) 1oz	40 ml VOA Vial [ ] As is [ ] HCl	GL Amber 1000ml [ ] As is [ ] H2SO4	PL As is [ ] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml [ ] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
	~~SB-33 (1-3 ft)~~	~~S~~	~~7/16/19~~	~~15:00~~																
91708	SB-33 (5-7 ft)	S	7/17/19	13:40	X	X	X	X	X	X	3	1								
91709	SB-34 (2-4 ft)		7/16/19	11:10							3	1								
91710	SB-35 (2-4 ft)			11:30							3	1								
91711	SB-36 (2-4 ft)			13:40							3	1								
91712	SB-37 (2-4 ft)			14:00							3	1								
91713	SB-38 (2-4 ft)			14:25							3	1								
91714	SB-42 (2-4 ft)			14:45							3	1								
91715	SB-41 (1-3 ft)			15:35							3	1								
91716	SB-40 (0-2 ft)		7/17/19	7:10							3	1								
91717	SB-47 (2-4 ft)			7:35							3	1								
91718	SB-43 (1-3 ft)			9:30							3	1								

Relinquished by:	Accepted by:	Date:	Time:
[signature]	TRUCK	7/17/19	1307
			1503

Comments, Special Requirements or Regulations:
DAS Pricing
Quote: TIO185178A
Please hold samples pending add'l Manual investigation

Turnaround:
☐ 1 Day*
☐ 2 Days*
☐ 3 Days*
☒ Standard
☐ Other
* SURCHARGE APPLIES

RI
☐ Direct Exposure (Residential)
☐ GW
☐ Other

CT
☒ RCP Cert
☐ GW Protection
☐ SW Protection
☐ GA Mobility
☐ GB Mobility
☒ Residential DEC
☒ I/C DEC
☐ Other

MA
☐ MCP Certification
☐ GW-1
☐ GW-2
☐ GW-3
☐ S-1
☐ S-2
☐ S-3
☐ MWRA eSMART
☐ Other

State where samples were collected: CT

Data Format
☒ Excel
☒ PDF
☐ GIS/Key
☐ EQuIS
☒ Other Geotech

Data Package
☐ Tier II Checklist
☐ Full Data Package*
☒ Phoenix Std Report
☐ Other

* SURCHARGE APPLIES

Cooler: Yes [X] No [ ]
Coolant: IPK [ ] ICE [X] No [ ]

CHAIN OF CUSTODY RECORD

Temp 4 °C Pg 1 of 2

PHOENIX Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Contact Options:
[ ] Fax:
[ ] Phone:
[X] Email: LEwiley@tighebond.com

Customer: Tighe + Bond
Address: 213 Court St
Middletown CT

Project: Revere MGP
Report to: Lynn Wiley
Invoice to: Tighe + Bond

Project P.O: 15-0758-4413

This section MUST be completed with Bottle Quantities.

Client Sample - Information - Identification

Sampler's Signature: [signature] Date: 7/17/18

Matrix Code:
DW=Drinking Water **GW**=Ground Water **SW**=Surface Water **WW**=Waste Water
RW=Raw Water **SE**=Sediment **SL**=Sludge **S**=Soil **SD**=Solid **W**=Wipe
OIL=Oil **B**=Bulk **L**=Liquid

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	Soil VOA Vials [X] methanol [X] H2O	GL Soil container ( ) oz	GL Soil container ( ) oz	40 ml VOA Vial [ ] As is [ ] HCl	GL Amber 1000ml [ ] As is [ ] H2SO4	PL As is [ ] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
91719	SB-44 (1-3 ft)	S	7/17/18	9:45	X	X								
91720	SB-45 (0-2 ft)	"	"	11:00	X	X								
91721	SB-65 (1-3 ft)	"	"	11:50	X	X								

Relinquished by:	Accepted by:	Date:	Time:
[signature]	TTOWMM	7/17/18	15:03

Comments, Special Requirements or Regulations:

Turnaround:
[ ] 1 Day*
[ ] 2 Days*
[ ] 3 Days*
[X] Standard
[ ] Other
* SURCHARGE APPLIES

RI
[ ] Direct Exposure (Residential)
[ ] GW
[ ] Other

CT
[X] RCP Cert
[ ] GW Protection
[ ] SW Protection
[ ] GA Mobility
[ ] GB Mobility
[X] Residential DEC
[X] I/C DEC
[ ] Other

MA
[ ] MCP Certification
[ ] GW-1
[ ] GW-2
[ ] GW-3
[ ] S-1
[ ] S-2
[ ] S-3
[ ] MWRA eSMART
[ ] Other

State where samples were collected: CT

Data Format
[X] Excel
[X] PDF
[ ] GIS/Key
[ ] EQuIS
[ ] Other G-check

Data Package
[ ] Tier II Checklist
[ ] Full Data Package*
[X] Phoenix Std Report
[ ] Other
* SURCHARGE APPLIES

Client Services

From: Lynn E. Willey <LEWilley@tighebond.com>
Sent: Wednesday, July 18, 2018 10:12 AM
To: Client Services
Cc: Benjamin P. Caswell
Subject: RE: Phoenix Labs - GCA91708, ROCKVILLE MGP - COC Acknowledgement
Attachments: Sample Acknowledgement.pdf

Sarah:

Analyze SB-33 (5-7) (91708) for the requested analysis. HOLD the remaining soil samples with unchecked analysis.

Thank you.
Lynn E. Willey, P.G., LEP | Senior Environmental Scientist
Tighe & Bond | 213 Court Street Suite 1100 | Middletown, CT 06457
| 860.852.5214 | 860-729-7502 (cell)
www.tighebond.com | Follow us on: Twitter Facebook LinkedIn

From: Client Services [mailto:clientservices@phoenixlabs.com]
Sent: Wednesday, July 18, 2018 10:04 AM
To: Lynn E. Willey <LEWilley@tighebond.com>
Cc: Benjamin P. Caswell <BCaswell@tighebond.com>
Subject: RE: Phoenix Labs - GCA91708, ROCKVILLE MGP - COC Acknowledgement

SO these I am leaving on hold. I did add criteria for when you do release.

Sarah Bell
Client Services - Project Manager
Accounts Receivable
Phoenix Environmental Laboratories
587 East Middle Turnpike
Manchester, CT 06040
Ph: 1-860-645-1102

From: Lynn E. Willey [mailto:LEWilley@tighebond.com]
Sent: Wednesday, July 18, 2018 9:54 AM
To: Client Services
Cc: Benjamin P. Caswell
Subject: RE: Phoenix Labs - GCA91708, ROCKVILLE MGP - COC Acknowledgement

Sarah:

Good morning.

We submitted soil samples for a number of boring locations on the attached COCs. The majority of them are on hold at the moment. We had to pre-clear boreholes and will be completing additional samples this week. I need to see if there are deeper impacts before activating the samples that do not have analysis checked.

Also, we will need the GB PMC criteria.

Lynn E. Willey, P.G., LEP | Senior Environmental Scientist
Tighe & Bond | 213 Court Street Suite 1100 | Middletown, CT 06457
| 860.852.5214 | 860-729-7502 (cell)
www.tighebond.com | Follow us on: Twitter Facebook LinkedIn

From: clientservices@phoenixlabs.com [mailto:clientservices@phoenixlabs.com]
Sent: Tuesday, July 17, 2018 8:17 PM
To: Lynn E. Willey <LEWilley@tighebond.com>
Subject: Phoenix Labs - GCA91708, ROCKVILLE MGP - COC Acknowledgement

Lynn,

Price Quote#: TI012517BA

Purchase Order#:15-0755-44B

GCA91708 Criteria:
SOIL(14): CT I/C (I/C Dec), CT RC (Res. Criteria)

Please email client services only if you require criteria different than what is listed.

Delivery group GCA91708 (ROCKVILLE MGP) has been logged in for the following samples:

Phoenix Id	Client Id
CA91708	SB-33 5-7 FT
CA91709	SB-34 2-4 FT
CA91710	SB-35 2-4 FT
CA91711	SB-36 2-4 FT
CA91712	SB-37 2-4 FT
CA91713	SB-38 2-4 FT
CA91714	SB-42 2-4 FT
CA91715	SB- 41 1-3 FT
CA91716	SB-46 0-2 FT
CA91717	SB-47 2-4 FT
CA91718	SB-43 1-3 FT
CA91719	SB-44 1-3 FT
CA91720	SB-45 0-2 FT
CA91721	SB-65 1-3 FT

The samples in this delivery group were received at 5.4°C. (Note acceptance criteria for relevant matrices is above freezing up to 6°C)

If there are any questions regarding this submittal, please call Phoenix Client Services at extension 200.

Phoenix Environmental Laboratories, Inc.

587 East Middle Turnpike
P.O. Box 370
Manchester, CT 06374
Tel. (860) 645-1102
Fax. (860) 645-0823
www.phoenixlabs.com

Please do not reply to this email.

Lynn E. Willey

From: clientservices@phoenixlabs.com
Sent: Tuesday, July 17, 2018 8:17 PM
To: Lynn E. Willey
Subject: Phoenix Labs - GCA91708, ROCKVILLE MGP - COC Acknowledgement
Attachments: Sample Acknowledgement.pdf

Lynn,

Price Quote#: TI012517BA

Purchase Order#:15-0755-44B

GCA91708 Criteria:
SOIL(14): CT I/C (I/C Dec), CT RC (Res. Criteria)

Please email client services only if you require criteria different than what is listed.

Delivery group GCA91708 (ROCKVILLE MGP) has been logged in for the following samples:

Phoenix Id	Client Id
CA91708	SB-33 5-7 FT Add PCB
CA91709	SB-34 2-4 FT - Activate 7/19/18
CA91710	SB-35 2-4 FT HOLD
CA91711	SB-36 2-4 FT
CA91712	SB-37 2-4 FT
CA91713	SB-38 2-4 FT HOLD
CA91714	SB-42 2-4 FT - Activate 7/19/18
CA91715	SB- 41 1-3 FT - Activate 7/19/18
CA91716	SB-46 0-2 FT HOLD
CA91717	SB-47 2-4 FT - Activate 7/19/18
CA91718	SB-43 1-3 FT
CA91719	SB-44 1-3 FT - Activate 7/19/18
CA91720	SB-45 0-2 FT - Activate 7/19/18
CA91721	SB-65 1-3 FT - Activate 7/19/18

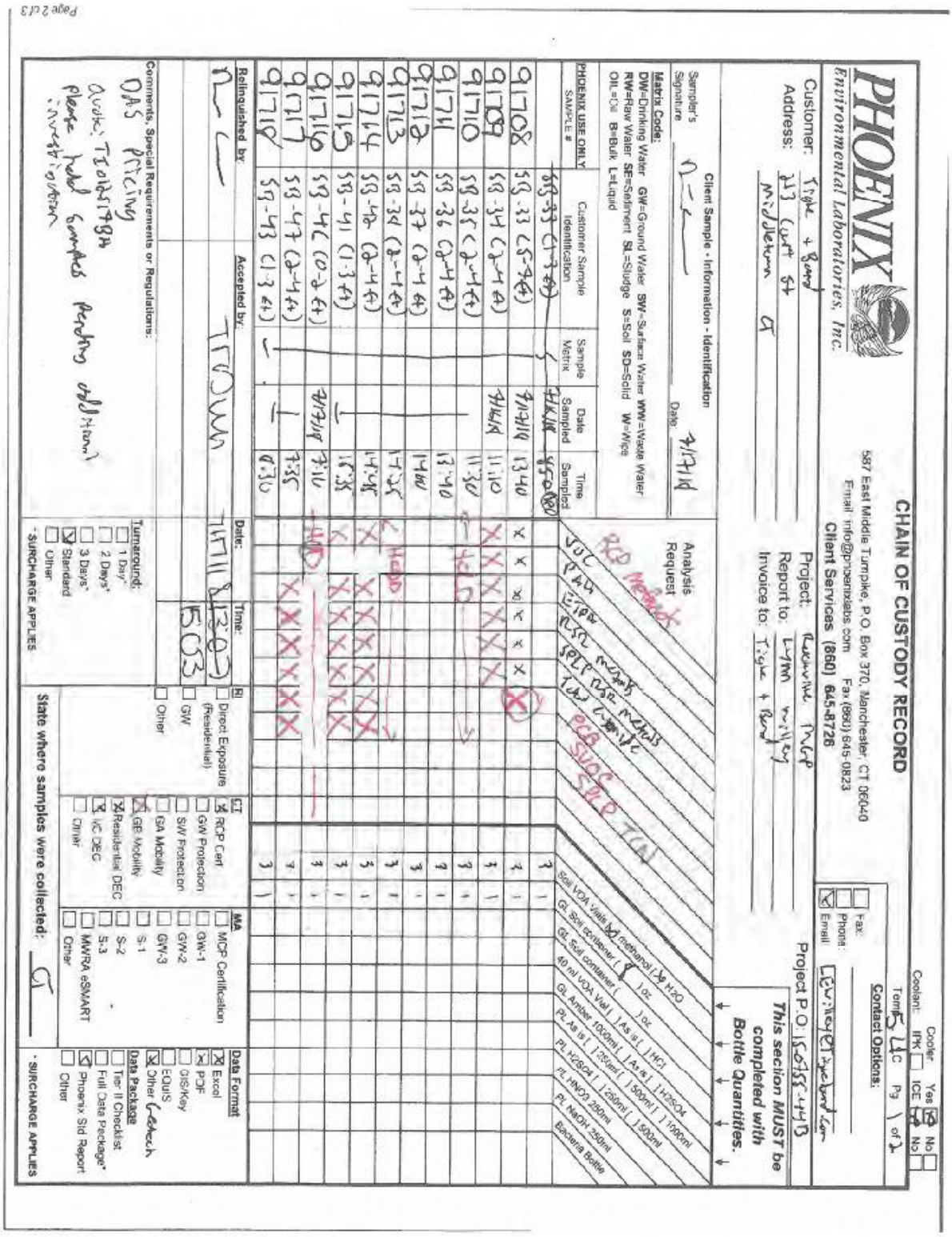


The samples in this delivery group were received at 5.4°C. (Note acceptance criteria for relevant matrices is above freezing up to 6°C)

If there are any questions regarding this submittal, please call Phoenix Client Services at extension 200.

Phoenix Environmental Laboratories, Inc.
587 East Middle Turnpike
P.O. Box 370

1



PHOENIX

CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax: (860) 645-0823

Environmental Laboratories, Inc.

Client Services (860) 645-8726

Cooler: Yes / No — Coolant: IPK / ICE — Temp 5.4C — Pg 1 of 2

Contact Options: Fax: Phone: Email

Customer: Triple + Road
Address: 213 Court St Middletown CT

Project: Revenue Mgmt
Report to: Lynn Mullen
Invoice to: Triple + Road

Project P.O. 4507552479

This section MUST be completed with Bottle Quantities.

Client Sample - Information - Identification

Sampler's Signature: [signature] Date: 9/17/19

Matrix Code: DW=Drinking Water GW=Ground Water SW=Surface Water WW=Waste Water RW=Raw Water SE=Settlement SL=Sludge S=Soil SD=Solid W=Wipe OIL=Oil B=Bulk L=Liquid

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	Analysis Request: VOC (624) EDB (Method 504.1) RCP VPH (MADEP) EPH (MADEP) SPLP RCP Metals TAL Lead (6010D) ECB SVOC SIM TCLP	Soil VOA Vials (4) methanol (4) H2O	GL Soil container ( ) 8oz	GL Soil container ( ) 1oz	40 ml VOA Vial ( ) As is ( ) HCl	GL Amber 100ml ( ) As is ( ) H2SO4	PL As is ( ) 250ml ( ) 500ml ( ) 1000ml	PL HCl/SO4 ( ) 250ml ( ) 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
91708	SG-33 (25-45')	S	9/17/19	13:40	X	X	X	X	X	X	X	3	1		
91709	SG-34 (2-4')			11:10	X	X	X	X	X	X	X	3	1		
91710	SG-35 (2-4')			11:30	X	X	X	X	X	X	X	3	1		
91711	SG-36 (2-4')			13:40	X	X	X	X	X	X	X	3	1		
91712	SG-37 (2-4')			14:00	X	X	X	X	X	X	X	3	1		
91713	SG-38 (2-4')			14:25	X	X	X	X	X	X	X	3	1		
91714	SG-42 (2-4')			14:45	X	X	X	X	X	X	X	3	1		
91715	SG-41 (1-3')			15:35	X	X	X	X	X	X	X	3	1		
91716	SG-40 (0-2')			7:10	X	X	X	X	X	X	X	3	1		
91717	SG-47 (2-4')			7:35	X	X	X	X	X	X	X	3	1		
91718	SG-43 (1-3')			8:30	X	X	X	X	X	X	X	3	1		

Relinquished by: [signature] Date: 9/17/19 Time: 15:30

Accepted by: [signature] Date: 9/17/19 Time: 15:03

Comments, Special Requirements or Regulations:
DAS Pricing
Quote: T20191904
Please hold samples pending additional instruction

Turnaround: ☐ 1 Day* ☐ 2 Days* ☐ 3 Days* ☒ Standard ☐ Other
*SURCHARGE APPLIES

EI: ☐ Direct Exposure (Residential) ☐ GW ☐ Other

CT: ☒ RCP Cert ☐ GW Protection ☐ SW Protection ☐ GA Mobility ☒ GB Mobility ☒ Residential DEC ☐ I/C DEC ☐ Other

MA: ☐ MCP Certification ☐ GW-1 ☐ GW-2 ☐ GW-3 ☐ S-1 ☐ S-2 ☐ S-3 ☐ MWRA eSMART ☐ Other

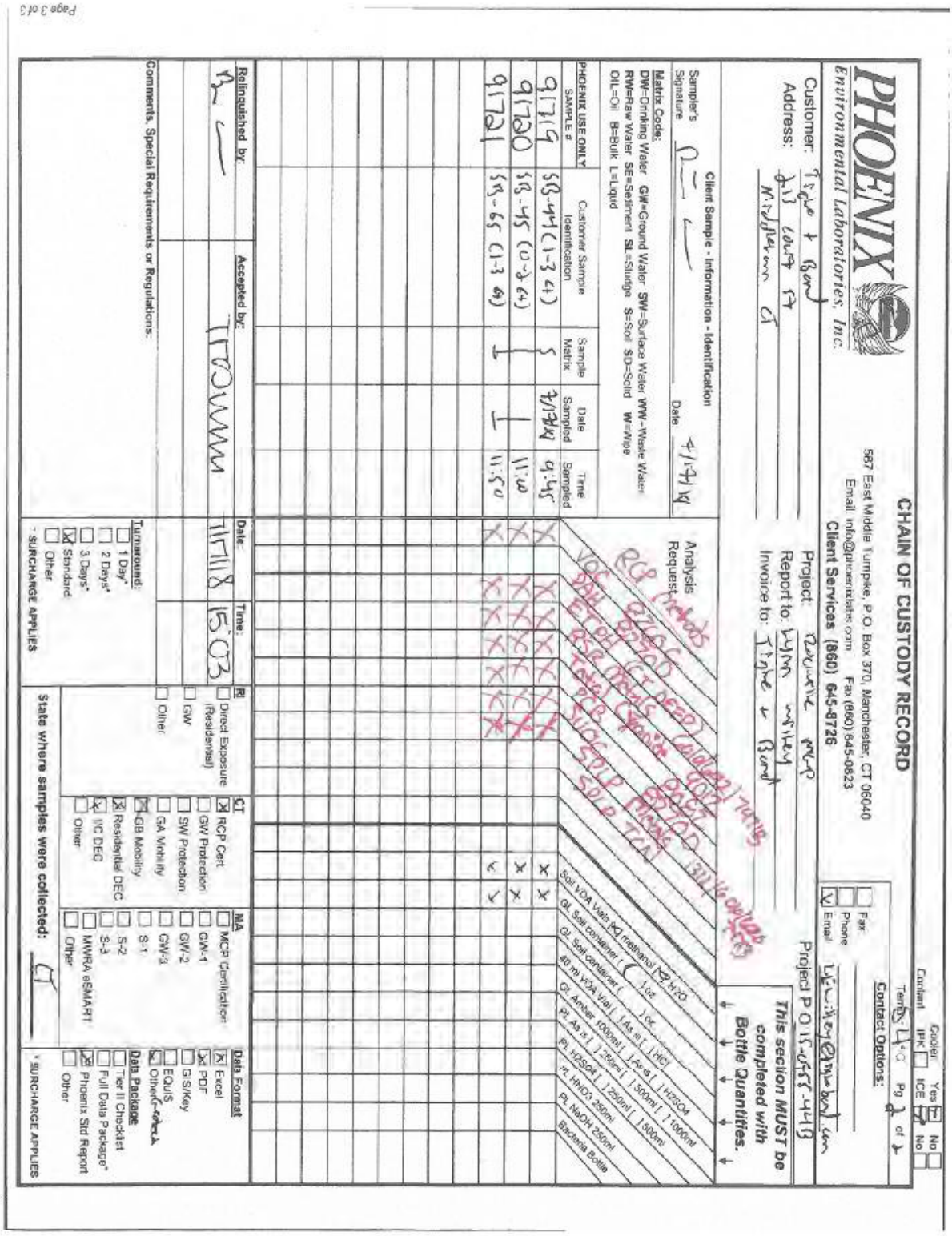
State where samples were collected: CT

Data Format: ☒ Excel ☐ PDF ☐ GIS/Key ☐ EQUIS ☒ Other Gsheet

Data Package: ☐ Tier II Checklist ☐ Full Data Package* ☒ Phoenix Std Report ☐ Other

*SURCHARGE APPLIES

Page 2 of 3



PHOENIX

Environmental Laboratories, Inc.

CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Cooler: Yes / No
Cooler IPK / ICE
Temp: 4°C Pg 1 of 2

Contact Options:
Fax
Phone
Email

Customer: Tighe & Bond
Address: 53 Eames St
Windsor, CT

Project: Rocky Hill MGP
Report to: Mary Wahlen
Invoice to: Tighe & Bond

Project P.O.: 0155-0557-4413

This section MUST be completed with Bottle Quantities.

Client Sample - Information - Identification

Sample's Signature: [signature] Date: 4/14/26

Matrix Code: DW=Drinking Water GW=Ground Water SW=Surface Water WW=Waste Water RW=Raw Water SE=Sediment SL=Sludge S=Soil SD=Solid W=Wipe OIL=Oil B=Bulk L=Liquid

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled
91719	SB-44(3-4)	S	4/13/26	9:45
91720	SB-45 (0-2 ft)			11:00
91721	SB-45 (3-4 ft)			11:50

Analysis Request

Soil VOA Vials [X] methanol [X] H2O
GL Soil container [ ] 1oz
GL Soil container [ ] 1oz [ ] 4oz [ ] HCl
40 ml VOA Vial [ ] As III [ ] As-5 [ ] H2SO4
GL Amber 100ml [ ] 250ml [ ] 500ml [ ] 1000ml
Pt. As III [ ] 250ml [ ] 500ml [ ] 1000ml
PL H2SO4 [ ] 250ml [ ] 500ml [ ] 1000ml
Pt. HNO3 250ml
PL NaOH 250ml
Bacteria Bottle

Relinquished by: [signature] Date: 4/15/26 Time: 15:03

Accepted by: [signature]

Turnaround: ☐ 1 Day* ☐ 2 Days* ☐ 3 Days* ☒ Standard ☐ Other *SURCHARGE APPLIES

Comments, Special Requirements or Regulations:

RI: ☐ Direct Exposure (Residential) ☐ GW ☐ Other

CT: ☒ RCP Cert ☐ GW Protection ☐ SW Protection ☐ GA Mobility ☒ GB Mobility ☒ Residential DEC ☐ I/C DEC ☐ Other

MA: ☐ MCP Classification ☐ GW-1 ☐ GW-2 ☐ GW-3 ☐ S-1 ☐ S-2 ☐ S-3 ☐ MWRA eSMART ☐ Other

Data Format: ☒ Excel ☒ PDF ☐ GIS/Key ☐ EQuIS ☒ Other Excel

Data Package: ☐ Tier II Checklist ☐ Full Data Package* ☒ Phoenix Std Report ☐ Other

State where samples were collected: CT

* SURCHARGE APPLIES

Page 3 of 3

Client Services

From: Lynn E. Willey <LEWilley@tighebond.com>
Sent: Thursday, July 19, 2018 4:41 PM
To: Client Services
Cc: Benjamin P. Caswell
Subject: RE: Phoenix Labs - GCA91708, ROCKVILLE MGP - COC Acknowledgement
Attachments: 2018-7-17-Tighe-Bond Rockville MGP COC -Additional analyses.pdf

Sarah:

Here is the first batch of the samples to active for Rockville that were collected on Monday 7/16 Tuesday 7/17. I have highlighted them in red. Also see the activation for PCB for SB-33 (5-7) (91708).

Let us know if there are any questions.

Thanks.

Lynn E. Willey, P.G., LEP | Senior Environmental Scientist
Tighe & Bond | 213 Court Street Suite 1100 | Middletown, CT 06457
| 860.852.5214 | 860-729-7502 (cell)
www.tighebond.com | Follow us on: Twitter Facebook LinkedIn

From: Client Services [mailto:clientservices@phoenixlabs.com]
Sent: Wednesday, July 18, 2018 10:04 AM
To: Lynn E. Willey <LEWilley@tighebond.com>
Cc: Benjamin P. Caswell <BCaswell@tighebond.com>
Subject: RE: Phoenix Labs - GCA91708, ROCKVILLE MGP - COC Acknowledgement

SO these I am leaving on hold. I did add criteria for when you do release.

Sarah Bell
Client Services - Project Manager
Accounts Receivable
Phoenix Environmental Laboratories
587 East Middle Turnpike
Manchester, CT 06040
Ph: 1-860-645-1102

From: Lynn E. Willey [mailto:LEWilley@tighebond.com]
Sent: Wednesday, July 18, 2018 9:54 AM
To: Client Services
Cc: Benjamin P. Caswell
Subject: RE: Phoenix Labs - GCA91708, ROCKVILLE MGP - COC Acknowledgement

Sarah:

Good morning.

We submitted soil samples for a number of boring locations on the attached COCs. The majority of them are on hold at the moment. We had to pre-clear boreholes and will be completing additional samples this week. I need to see if there are deeper impacts before activating the samples that do not have analysis checked.

Also, we will need the GB PMC criteria.

Lynn E. Willey, P.G., LEP | Senior Environmental Scientist
Tighe & Bond | 213 Court Street Suite 1100 | Middletown, CT 06457
| 860.852.5214 | 860-729-7502 (cell)
www.tighebond.com | Follow us on: Twitter Facebook LinkedIn

From: clientservices@phoenixlabs.com [mailto:clientservices@phoenixlabs.com]
Sent: Tuesday, July 17, 2018 8:17 PM
To: Lynn E. Willey <LEWilley@tighebond.com>
Subject: Phoenix Labs - GCA91708, ROCKVILLE MGP - COC Acknowledgement

Lynn,

Price Quote#: TI012517BA

Purchase Order#:15-0755-44B

GCA91708 Criteria:
SOIL(14): CT I/C (I/C Dec), CT RC (Res. Criteria)

Please email client services only if you require criteria different than what is listed.

Delivery group GCA91708 (ROCKVILLE MGP) has been logged in for the following samples:

Phoenix Id	Client Id
CA91708	SB-33 5-7 FT
CA91709	SB-34 2-4 FT
CA91710	SB-35 2-4 FT
CA91711	SB-36 2-4 FT
CA91712	SB-37 2-4 FT
CA91713	SB-38 2-4 FT
CA91714	SB-42 2-4 FT
CA91715	SB- 41 1-3 FT
CA91716	SB-46 0-2 FT
CA91717	SB-47 2-4 FT
CA91718	SB-43 1-3 FT
CA91719	SB-44 1-3 FT
CA91720	SB-45 0-2 FT
CA91721	SB-65 1-3 FT

The samples in this delivery group were received at 5.4°C. (Note acceptance criteria for relevant matrices is above

freezing up to 6°C)

If there are any questions regarding this submittal, please call Phoenix Client Services at extension 200.

Phoenix Environmental Laboratories, Inc.
587 East Middle Turnpike
P.O. Box 370
Manchester, CT 06374
Tel. (860) 645-1102
Fax. (860) 645-0823
www.phoenixlabs.com

Please do not reply to this email.

Client Services

From: Lynn E. Willey <LEWilley@tighebond.com>
Sent: Friday, July 27, 2018 10:16 AM
To: Client Services
Cc: Benjamin P. Caswell
Subject: Additional Analyses
Attachments: Rockville MGP -Additional Analysis 7-27-18.pdf

Sarah:

Please see the additional analyses for the attached COCs. They are still in hold time as long as they get analyzed before Tuesday.

Thanks.

Lynn E. Willey, P.G., LEP | Senior Environmental Scientist
Tighe & Bond | 213 Court Street Suite 1100 | Middletown, CT 06457
| 860.852.5214 | 860-729-7502 (cell)
www.tighebond.com | Follow us on: Twitter Facebook LinkedIn



PHOENIX
Environmental Laboratories, Inc.

CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Cooler: Yes No
IFK ICE
Temp 4.1c Pg 1 of 2
Contact Options:
Fax
Phone
Email

Customer: Tighe & Bond
Address: 213 Court St
Middletown CT

Project: Eversource Energy
Report to: Lynn Mulvey
Invoice to: Tighe & Bond

Project P.O.: [illegible]

This section MUST be completed with Bottle Quantities.

Client Sample - Information - Identification
Sampler's Signature
Date: 4/17/24

Matrix Codes: DW=Drinking Water GW=Ground Water SW=Surface Water WW=Waste Water RW=Raw Water SE=Sediment SL=Sludge S=Soil SD=Solid W=Wipe OIL=Oil B=Bulk L=Liquid

Analysis Request

PHOENIX USE ONLY SAMPLE #

Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled
SB-33 (2-4)	GW	4/17/24	13:40
SB-34 (2-4)	GW	4/16/24	11:10
SB-35 (2-4)			11:30
SB-36 (2-4)			13:40
SB-37 (2-4)			14:00
SB-38 (2-4)			14:25
SB-42 (2-4)			14:45
SB-41 (2-4)			15:35
SB-40 (2-4)			7:15
SB-47 (2-4)			7:35
SB-43 (2-4)			8:30

Relinquished by:
Accepted by:
Date:
Time:

Comments, Special Requirements or Regulations:
DAS Pricing
Quote: T2018179A
Please hold samples pending additional investigation

Turnaround:
☐ 1 Day*
☐ 2 Days*
☐ 3 Days*
☒ Standard
☐ Other
*SURCHARGE APPLIES

RI
☐ Direct Exposure (Residential)
☐ GW
☐ Other

CT
☒ RCP Certi
☐ GW Protection
☐ SW Protection
☐ GA Mobility
☒ GB Mobility
☒ Residential DEC
☐ I/C DEC
☐ Other

MA
☐ MCP Certification
☐ GW-1
☐ GW-2
☐ GW-3
☐ S-1
☐ S-2
☐ S-3
☐ MWRA eSMART
☐ Other

Data Format
☒ Excel
☒ PDF
☐ EQuIS Key
☐ EQuIS
☒ Other Geotech

Data Package
☐ Tier II Checklist
☐ Full Data Package*
☒ Pricenix Std Report
☐ Other

State where samples were collected: CT

*SURCHARGE APPLIES

PHOENIX
Environmental Laboratories, Inc.

Monday, August 13, 2018

Attn: Ms. Lynn Willey
Tighe & Bond
213 Court St, Suite 1100
Middletown, CT 06457

Project ID: ROCKVILLE MGP
Sample ID#s: CA94064 - CA94065, CA94067, CA94069

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

Enclosed are revised Analysis Report pages. Please replace and discard the original pages. If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
UT Lab Registration #CT00007
VT Lab Registration #VT11301

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

August 13, 2018

FOR: Attn: Ms. Lynn Willey
Tighe & Bond
213 Court St, Suite 1100
Middletown, CT 06457

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		07/19/18	7:45
Location Code:	TIGHE-DAS	Received by:	LB	07/19/18	16:17
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	14-0755-443				

Laboratory Data

SDG ID: GCA94064
Phoenix ID: CA94064

Project ID: ROCKVILLE MGP
Client ID: SB-46 (5-7 FT)

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 3.7	3.7	mg/Kg	1	07/20/18	EK	SW6010C
Arsenic	18.5	0.75	mg/Kg	1	07/20/18	EK	SW6010C
Barium	59.3	0.37	mg/Kg	1	07/20/18	EK	SW6010C
Beryllium	0.37	0.30	mg/Kg	1	07/20/18	EK	SW6010C
Cadmium	0.72	0.37	mg/Kg	1	07/20/18	EK	SW6010C
Chromium	13.7	0.37	mg/Kg	1	07/20/18	EK	SW6010C
Copper	24.0	0.37	mg/kg	1	07/20/18	PS	SW6010C
Mercury	0.21	0.13	mg/Kg	1	07/23/18	RS	SW7471B
Nickel	11.4	0.37	mg/Kg	1	07/20/18	EK	SW6010C
Lead	45.5	0.37	mg/Kg	1	07/20/18	EK	SW6010C
Antimony	< 3.7	3.7	mg/Kg	1	07/20/18	EK	SW6010C
Selenium	< 1.5	1.5	mg/Kg	1	07/20/18	EK	SW6010C
SPLP Silver	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Arsenic	0.009	0.004	mg/L	1	07/20/18	EK	SW6010C
SPLP Barium	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Beryllium	< 0.001	0.001	mg/L	1	07/20/18	EK	SW6010C
SPLP Cadmium	< 0.005	0.005	mg/L	1	07/20/18	EK	SW6010C
SPLP Chromium	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Copper	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Mercury	< 0.0005	0.0005	mg/L	1	07/23/18	RS	SW7470A
SPLP Nickel	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Lead	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Antimony	< 0.005	0.005	mg/L	1	07/20/18	EK	SW6010C
SPLP Selenium	< 0.020	0.020	mg/L	1	07/20/18	EK	SW6010C
SPLP Thallium	< 0.005	0.005	mg/L	1	07/20/18	EK	SW6010C
SPLP Vanadium	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Zinc	0.017	0.010	mg/L	1	07/20/18	EK	SW6010C
Thallium	< 3.4	3.4	mg/Kg	1	07/20/18	EK	SW6010C

Ver 2

Project ID: ROCKVILLE MGP
Client ID: SB-46 (5-7 FT)

Phoenix I.D.: CA94064

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
SPLP Metals Digestion	Completed				07/20/18	I/I	SW3010A
Vanadium	22.7	0.37	mg/Kg	1	07/20/18	EK	SW6010C
Zinc	125	3.7	mg/Kg	10	07/20/18	EK	SW6010C
Percent Solid	88		%		07/19/18	Q	SW846-%Solid
Total Cyanide (SW9010C Distill.)	2.38	0.52	mg/Kg	1	07/23/18	O/GD	SW9012B
Soil Extraction for PCB	Completed				07/19/18	BB/V	SW3545A
Soil Extraction for SVOA	Completed				07/19/18	JJ/V	SW3545A
Extraction of CT ETPH	Completed				07/20/18	JA/V	SW3545A
Mercury Digestion	Completed				07/23/18	I/I	SW7471B
SPLP Digestion Mercury	Completed				07/23/18	I/I	SW1312/SW7470A
SPLP Extraction for Metals	Completed				07/19/18	I	SW1312
Total Metals Digest	Completed				07/19/18	L/AG	SW3050B
TPH by GC (Extractable Products)							
Ext. Petroleum H.C. (C9-C36)	1600	280	mg/Kg	5	07/23/18	JRB	CTETPH 8015D
Identification	**		mg/Kg	5	07/23/18	JRB	CTETPH 8015D
QA/QC Surrogates							
% n-Pentacosane	Diluted Out		%	5	07/23/18	JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	370	ug/Kg	10	07/21/18	AW	SW8082A
PCB-1221	ND	370	ug/Kg	10	07/21/18	AW	SW8082A
PCB-1232	ND	370	ug/Kg	10	07/21/18	AW	SW8082A
PCB-1242	ND	370	ug/Kg	10	07/21/18	AW	SW8082A
PCB-1248	ND	370	ug/Kg	10	07/21/18	AW	SW8082A
PCB-1254	ND	370	ug/Kg	10	07/21/18	AW	SW8082A
PCB-1260	ND	370	ug/Kg	10	07/21/18	AW	SW8082A
PCB-1262	ND	370	ug/Kg	10	07/21/18	AW	SW8082A
PCB-1268	ND	370	ug/Kg	10	07/21/18	AW	SW8082A
QA/QC Surrogates							
% DCBP	78		%	10	07/21/18	AW	30 - 150 %
% TCMX	83		%	10	07/21/18	AW	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C
1,1,1-Trichloroethane	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	2.7	ug/Kg	1	07/23/18	JLI	SW8260C
1,1,2-Trichloroethane	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C
1,1-Dichloroethane	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C
1,1-Dichloroethene	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C
1,1-Dichloropropene	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C
1,2,3-Trichloropropane	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C
1,2-Dibromoethane	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C
1,2-Dichlorobenzene	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C
1,2-Dichloroethane	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C
1,2-Dichloropropane	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C

Ver 2

Project ID: ROCKVILLE MGP
Client ID: SB-46 (5-7 FT)

Phoenix I.D.: CA94064

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,3,5-Trimethylbenzene	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C
1,3-Dichlorobenzene	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C
1,3-Dichloropropane	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C
1,4-Dichlorobenzene	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C
2,2-Dichloropropane	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C
2-Chlorotoluene	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C
2-Hexanone	ND	22	ug/Kg	1	07/23/18	JLI	SW8260C
2-Isopropyltoluene	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C
4-Chlorotoluene	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C
4-Methyl-2-pentanone	ND	22	ug/Kg	1	07/23/18	JLI	SW8260C
Acetone	ND	220	ug/Kg	1	07/23/18	JLI	SW8260C
Acrylonitrile	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C
Benzene	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C
Bromobenzene	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C
Bromochloromethane	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C
Bromodichloromethane	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C
Bromoform	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C
Bromomethane	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C
Carbon Disulfide	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C
Carbon tetrachloride	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C
Chlorobenzene	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C
Chloroethane	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C
Chloroform	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C
Chloromethane	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C
cis-1,2-Dichloroethene	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C
cis-1,3-Dichloropropene	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C
Dibromochloromethane	ND	2.7	ug/Kg	1	07/23/18	JLI	SW8260C
Dibromomethane	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C
Dichlorodifluoromethane	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C
Ethylbenzene	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C
Hexachlorobutadiene	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C
Isopropylbenzene	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C
m&p-Xylene	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C
Methyl Ethyl Ketone	ND	27	ug/Kg	1	07/23/18	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	8.9	ug/Kg	1	07/23/18	JLI	SW8260C
Methylene chloride	ND	8.9	ug/Kg	1	07/23/18	JLI	SW8260C
Naphthalene	490	360	ug/Kg	50	07/21/18	JLI	SW8260C
n-Butylbenzene	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C
n-Propylbenzene	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C
o-Xylene	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C
p-Isopropyltoluene	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C
sec-Butylbenzene	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C
Styrene	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C
tert-Butylbenzene	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C
Tetrachloroethene	170	140	ug/Kg	50	07/21/18	JLI	SW8260C
Tetrahydrofuran (THF)	ND	8.9	ug/Kg	1	07/23/18	JLI	SW8260C
Toluene	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C
Total Xylenes	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C
trans-1,2-Dichloroethene	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C

Project ID: ROCKVILLE MGP
Client ID: SB-46 (5-7 FT)

Phoenix I.D.: CA94064

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
trans-1,3-Dichloropropene	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	8.9	ug/Kg	1	07/23/18	JLI	SW8260C
Trichloroethene	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C
Trichlorofluoromethane	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C
Trichlorotrifluoroethane	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C
Vinyl chloride	ND	4.4	ug/Kg	1	07/23/18	JLI	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	96		%	1	07/23/18	JLI	70 - 130 %
% Bromofluorobenzene	89		%	1	07/23/18	JLI	70 - 130 %
% Dibromofluoromethane	97		%	1	07/23/18	JLI	70 - 130 %
% Toluene-d8	85		%	1	07/23/18	JLI	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	260	ug/Kg	1	07/24/18	KCA	SW8270D
1,2,4-Trichlorobenzene	ND	260	ug/Kg	1	07/24/18	KCA	SW8270D
1,2-Dichlorobenzene	ND	260	ug/Kg	1	07/24/18	KCA	SW8270D
1,2-Diphenylhydrazine	ND	370	ug/Kg	1	07/24/18	KCA	SW8270D
1,3-Dichlorobenzene	ND	260	ug/Kg	1	07/24/18	KCA	SW8270D
1,4-Dichlorobenzene	ND	260	ug/Kg	1	07/24/18	KCA	SW8270D
2,4,5-Trichlorophenol	ND	260	ug/Kg	1	07/24/18	KCA	SW8270D
2,4,6-Trichlorophenol	ND	260	ug/Kg	1	07/24/18	KCA	SW8270D
2,4-Dichlorophenol	ND	260	ug/Kg	1	07/24/18	KCA	SW8270D
2,4-Dimethylphenol	ND	260	ug/Kg	1	07/24/18	KCA	SW8270D
2,4-Dinitrophenol	ND	370	ug/Kg	1	07/24/18	KCA	SW8270D
2,4-Dinitrotoluene	ND	260	ug/Kg	1	07/24/18	KCA	SW8270D
2,6-Dinitrotoluene	ND	260	ug/Kg	1	07/24/18	KCA	SW8270D
2-Chloronaphthalene	ND	260	ug/Kg	1	07/24/18	KCA	SW8270D
2-Chlorophenol	ND	260	ug/Kg	1	07/24/18	KCA	SW8270D
2-Methylnaphthalene	6800	260	ug/Kg	1	07/24/18	KCA	SW8270D
2-Methylphenol (o-cresol)	ND	260	ug/Kg	1	07/24/18	KCA	SW8270D
2-Nitroaniline	ND	370	ug/Kg	1	07/24/18	KCA	SW8270D
2-Nitrophenol	ND	260	ug/Kg	1	07/24/18	KCA	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	370	ug/Kg	1	07/24/18	KCA	SW8270D
3,3'-Dichlorobenzidine	ND	260	ug/Kg	1	07/24/18	KCA	SW8270D
3-Nitroaniline	ND	370	ug/Kg	1	07/24/18	KCA	SW8270D
4,6-Dinitro-2-methylphenol	ND	370	ug/Kg	1	07/24/18	KCA	SW8270D
4-Bromophenyl phenyl ether	ND	370	ug/Kg	1	07/24/18	KCA	SW8270D
4-Chloro-3-methylphenol	ND	260	ug/Kg	1	07/24/18	KCA	SW8270D
4-Chloroaniline	ND	260	ug/Kg	1	07/24/18	KCA	SW8270D
4-Chlorophenyl phenyl ether	ND	260	ug/Kg	1	07/24/18	KCA	SW8270D
4-Nitroaniline	ND	590	ug/Kg	1	07/24/18	KCA	SW8270D
4-Nitrophenol	ND	260	ug/Kg	1	07/24/18	KCA	SW8270D
Acenaphthene	880	260	ug/Kg	1	07/24/18	KCA	SW8270D
Acenaphthylene	7000	260	ug/Kg	1	07/24/18	KCA	SW8270D
Acetophenone	ND	260	ug/Kg	1	07/24/18	KCA	SW8270D
Aniline	ND	370	ug/Kg	1	07/24/18	KCA	SW8270D
Anthracene	6200	260	ug/Kg	1	07/24/18	KCA	SW8270D
Benz(a)anthracene	16000	1000	ug/Kg	10	07/25/18	KCA	SW8270D
Benzidine	ND	200	ug/Kg	1	07/24/18	KCA	SW8270D
Benzo(a)pyrene	13000	1200	ug/Kg	10	07/25/18	KCA	SW8270D

Project ID: ROCKVILLE MGP
Client ID: SB-46 (5-7 FT)

Phoenix I.D.: CA94064

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Benzo(b)fluoranthene	9000	1000	ug/Kg	10	07/25/18	KCA	SW8270D
Benzo(ghi)perylene	7100	260	ug/Kg	1	07/24/18	KCA	SW8270D
Benzo(k)fluoranthene	12000	1000	ug/Kg	10	07/25/18	KCA	SW8270D
Benzoic acid	ND	740	ug/Kg	1	07/24/18	KCA	SW8270D
Benzyl butyl phthalate	ND	260	ug/Kg	1	07/24/18	KCA	SW8270D
Bis(2-chloroethoxy)methane	ND	260	ug/Kg	1	07/24/18	KCA	SW8270D
Bis(2-chloroethyl)ether	ND	370	ug/Kg	1	07/24/18	KCA	SW8270D
Bis(2-chloroisopropyl)ether	ND	260	ug/Kg	1	07/24/18	KCA	SW8270D
Bis(2-ethylhexyl)phthalate	ND	260	ug/Kg	1	07/24/18	KCA	SW8270D
Carbazole	520	370	ug/Kg	1	07/24/18	KCA	SW8270D
Chrysene	17000	1000	ug/Kg	10	07/25/18	KCA	SW8270D
Dibenz(a,h)anthracene	1900	260	ug/Kg	1	07/24/18	KCA	SW8270D
Dibenzofuran	1300	260	ug/Kg	1	07/24/18	KCA	SW8270D
Diethyl phthalate	ND	260	ug/Kg	1	07/24/18	KCA	SW8270D
Dimethylphthalate	ND	260	ug/Kg	1	07/24/18	KCA	SW8270D
Di-n-butylphthalate	ND	370	ug/Kg	1	07/24/18	KCA	SW8270D
Di-n-octylphthalate	ND	260	ug/Kg	1	07/24/18	KCA	SW8270D
Fluoranthene	22000	2600	ug/Kg	10	07/25/18	KCA	SW8270D
Fluorene	5900	260	ug/Kg	1	07/24/18	KCA	SW8270D
Hexachlorobenzene	ND	260	ug/Kg	1	07/24/18	KCA	SW8270D
Hexachlorobutadiene	ND	260	ug/Kg	1	07/24/18	KCA	SW8270D
Hexachlorocyclopentadiene	ND	260	ug/Kg	1	07/24/18	KCA	SW8270D
Hexachloroethane	ND	260	ug/Kg	1	07/24/18	KCA	SW8270D
Indeno(1,2,3-cd)pyrene	6900	260	ug/Kg	1	07/24/18	KCA	SW8270D
Isophorone	ND	260	ug/Kg	1	07/24/18	KCA	SW8270D
Naphthalene	6700	260	ug/Kg	1	07/24/18	KCA	SW8270D
Nitrobenzene	ND	260	ug/Kg	1	07/24/18	KCA	SW8270D
N-Nitrosodimethylamine	ND	200	ug/Kg	1	07/24/18	KCA	SW8270D
N-Nitrosodi-n-propylamine	ND	200	ug/Kg	1	07/24/18	KCA	SW8270D
N-Nitrosodiphenylamine	ND	370	ug/Kg	1	07/24/18	KCA	SW8270D
Pentachloronitrobenzene	ND	370	ug/Kg	1	07/24/18	KCA	SW8270D
Pentachlorophenol	ND	370	ug/Kg	1	07/24/18	KCA	SW8270D
Phenanthrene	25000	2600	ug/Kg	10	07/25/18	KCA	SW8270D
Phenol	ND	260	ug/Kg	1	07/24/18	KCA	SW8270D
Pyrene	28000	2600	ug/Kg	10	07/25/18	KCA	SW8270D
Pyridine	ND	370	ug/Kg	1	07/24/18	KCA	SW8270D
QA/QC Surrogates							
% 2,4,6-Tribromophenol	77		%	1	07/24/18	KCA	30 - 130 %
% 2-Fluorobiphenyl	59		%	1	07/24/18	KCA	30 - 130 %
% 2-Fluorophenol	48		%	1	07/24/18	KCA	30 - 130 %
% Nitrobenzene-d5	56		%	1	07/24/18	KCA	30 - 130 %
% Phenol-d5	54		%	1	07/24/18	KCA	30 - 130 %
% Terphenyl-d14	56		%	1	07/24/18	KCA	30 - 130 %
Field Extraction	Completed				07/19/18		SW5035A

Project ID: ROCKVILLE MGP
Client ID: SB-46 (5-7 FT)
Phoenix I.D.: CA94064

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

TPH Comment:
**Petroleum hydrocarbon chromatogram contains a multicomponent hydrocarbon distribution in the range of C9 to C36. The sample was quantitated against a C9-C36 alkane hydrocarbon standard.

Semi-Volatile Comment:
Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services.
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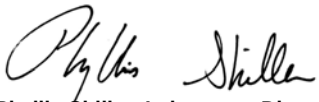

Phyllis Shiller, Laboratory Director
August 13, 2018
Reviewed and Released by: Sarah Bell, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

August 13, 2018

FOR: Attn: Ms. Lynn Willey
Tighe & Bond
213 Court St, Suite 1100
Middletown, CT 06457

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		07/19/18	10:00
Location Code:	TIGHE-DAS	Received by:	LB	07/19/18	16:17
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	14-0755-443				

Laboratory Data

SDG ID: GCA94064
Phoenix ID: CA94065

Project ID: ROCKVILLE MGP
Client ID: SB-47 (11-13 FT)

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	92		%		07/19/18	Q	SW846-%Solid
Soil Extraction SVOA PAH	Completed				07/19/18	JJ/V	SW3545A
Extraction of CT ETPH	Completed				07/20/18	JA/V	SW3545A
TPH by GC (Extractable Products)							
Ext. Petroleum H.C. (C9-C36)	6400	260	mg/Kg	5	07/23/18	JRB	CTETPH 8015D
Identification	**		mg/Kg	5	07/23/18	JRB	CTETPH 8015D
QA/QC Surrogates							
% n-Pentacosane	Diluted Out		%	5	07/23/18	JRB	50 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	200	ug/Kg	50	07/21/18	JLI	SW8260C
1,1,1-Trichloroethane	ND	330	ug/Kg	50	07/21/18	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	100	ug/Kg	50	07/21/18	JLI	SW8260C
1,1,2-Trichloroethane	ND	330	ug/Kg	50	07/21/18	JLI	SW8260C
1,1-Dichloroethane	ND	330	ug/Kg	50	07/21/18	JLI	SW8260C
1,1-Dichloroethene	ND	330	ug/Kg	50	07/21/18	JLI	SW8260C
1,1-Dichloropropene	ND	330	ug/Kg	50	07/21/18	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	330	ug/Kg	50	07/21/18	JLI	SW8260C
1,2,3-Trichloropropane	ND	330	ug/Kg	50	07/21/18	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	330	ug/Kg	50	07/21/18	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	330	ug/Kg	50	07/21/18	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	65	ug/Kg	50	07/21/18	JLI	SW8260C
1,2-Dibromoethane	ND	33	ug/Kg	50	07/21/18	JLI	SW8260C
1,2-Dichlorobenzene	ND	330	ug/Kg	50	07/21/18	JLI	SW8260C
1,2-Dichloroethane	ND	200	ug/Kg	50	07/21/18	JLI	SW8260C
1,2-Dichloropropane	ND	330	ug/Kg	50	07/21/18	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	330	ug/Kg	50	07/21/18	JLI	SW8260C

Project ID: ROCKVILLE MGP
Client ID: SB-47 (11-13 FT)

Phoenix I.D.: CA94065

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,3-Dichlorobenzene	ND	330	ug/Kg	50	07/21/18	JLI	SW8260C
1,3-Dichloropropane	ND	330	ug/Kg	50	07/21/18	JLI	SW8260C
1,4-Dichlorobenzene	ND	330	ug/Kg	50	07/21/18	JLI	SW8260C
2,2-Dichloropropane	ND	330	ug/Kg	50	07/21/18	JLI	SW8260C
2-Chlorotoluene	ND	330	ug/Kg	50	07/21/18	JLI	SW8260C
2-Hexanone	ND	1600	ug/Kg	50	07/21/18	JLI	SW8260C
2-Isopropyltoluene	ND	330	ug/Kg	50	07/21/18	JLI	SW8260C
4-Chlorotoluene	ND	330	ug/Kg	50	07/21/18	JLI	SW8260C
4-Methyl-2-pentanone	ND	1600	ug/Kg	50	07/21/18	JLI	SW8260C
Acetone	ND	16000	ug/Kg	50	07/21/18	JLI	SW8260C
Acrylonitrile	ND	100	ug/Kg	50	07/21/18	JLI	SW8260C
Benzene	ND	200	ug/Kg	50	07/21/18	JLI	SW8260C
Bromobenzene	ND	330	ug/Kg	50	07/21/18	JLI	SW8260C
Bromochloromethane	ND	330	ug/Kg	50	07/21/18	JLI	SW8260C
Bromodichloromethane	ND	210	ug/Kg	50	07/21/18	JLI	SW8260C
Bromoform	ND	330	ug/Kg	50	07/21/18	JLI	SW8260C
Bromomethane	ND	330	ug/Kg	50	07/21/18	JLI	SW8260C
Carbon Disulfide	ND	330	ug/Kg	50	07/21/18	JLI	SW8260C
Carbon tetrachloride	ND	330	ug/Kg	50	07/21/18	JLI	SW8260C
Chlorobenzene	ND	330	ug/Kg	50	07/21/18	JLI	SW8260C
Chloroethane	ND	330	ug/Kg	50	07/21/18	JLI	SW8260C
Chloroform	ND	330	ug/Kg	50	07/21/18	JLI	SW8260C
Chloromethane	ND	330	ug/Kg	50	07/21/18	JLI	SW8260C
cis-1,2-Dichloroethene	ND	330	ug/Kg	50	07/21/18	JLI	SW8260C
cis-1,3-Dichloropropene	ND	100	ug/Kg	50	07/21/18	JLI	SW8260C
Dibromochloromethane	ND	100	ug/Kg	50	07/21/18	JLI	SW8260C
Dibromomethane	ND	330	ug/Kg	50	07/21/18	JLI	SW8260C
Dichlorodifluoromethane	ND	330	ug/Kg	50	07/21/18	JLI	SW8260C
Ethylbenzene	190	130	ug/Kg	50	07/21/18	JLI	SW8260C
Hexachlorobutadiene	ND	330	ug/Kg	50	07/21/18	JLI	SW8260C
Isopropylbenzene	190	130	ug/Kg	50	07/21/18	JLI	SW8260C
m&p-Xylene	ND	330	ug/Kg	50	07/21/18	JLI	SW8260C
Methyl Ethyl Ketone	ND	2000	ug/Kg	50	07/21/18	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	650	ug/Kg	50	07/21/18	JLI	SW8260C
Methylene chloride	ND	650	ug/Kg	50	07/21/18	JLI	SW8260C
Naphthalene	840	330	ug/Kg	50	07/21/18	JLI	SW8260C
n-Butylbenzene	220	200	ug/Kg	50	07/21/18	JLI	SW8260C
n-Propylbenzene	170	130	ug/Kg	50	07/21/18	JLI	SW8260C
o-Xylene	ND	330	ug/Kg	50	07/21/18	JLI	SW8260C
p-Isopropyltoluene	ND	330	ug/Kg	50	07/21/18	JLI	SW8260C
sec-Butylbenzene	ND	330	ug/Kg	50	07/21/18	JLI	SW8260C
Styrene	ND	330	ug/Kg	50	07/21/18	JLI	SW8260C
tert-Butylbenzene	ND	330	ug/Kg	50	07/21/18	JLI	SW8260C
Tetrachloroethene	ND	330	ug/Kg	50	07/21/18	JLI	SW8260C
Tetrahydrofuran (THF)	ND	650	ug/Kg	50	07/21/18	JLI	SW8260C
Toluene	ND	330	ug/Kg	50	07/21/18	JLI	SW8260C
Total Xylenes	ND	330	ug/Kg	50	07/21/18	JLI	SW8260C
trans-1,2-Dichloroethene	ND	330	ug/Kg	50	07/21/18	JLI	SW8260C
trans-1,3-Dichloropropene	ND	100	ug/Kg	50	07/21/18	JLI	SW8260C

Project ID: ROCKVILLE MGP
Client ID: SB-47 (11-13 FT)

Phoenix I.D.: CA94065

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
trans-1,4-dichloro-2-butene	ND	650	ug/Kg	50	07/21/18	JLI	SW8260C
Trichloroethene	ND	330	ug/Kg	50	07/21/18	JLI	SW8260C
Trichlorofluoromethane	ND	330	ug/Kg	50	07/21/18	JLI	SW8260C
Trichlorotrifluoroethane	ND	330	ug/Kg	50	07/21/18	JLI	SW8260C
Vinyl chloride	ND	320	ug/Kg	50	07/21/18	JLI	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	99		%	50	07/21/18	JLI	70 - 130 %
% Bromofluorobenzene	100		%	50	07/21/18	JLI	70 - 130 %
% Dibromofluoromethane	95		%	50	07/21/18	JLI	70 - 130 %
% Toluene-d8	102		%	50	07/21/18	JLI	70 - 130 %
Polynuclear Aromatic HC							
2-Methylnaphthalene	ND	1300	ug/Kg	5	07/20/18	KCA	SW8270D
Acenaphthene	14000	1300	ug/Kg	5	07/20/18	KCA	SW8270D
Acenaphthylene	5400	1300	ug/Kg	5	07/20/18	KCA	SW8270D
Anthracene	18000	1300	ug/Kg	5	07/20/18	KCA	SW8270D
Benz(a)anthracene	14000	1000	ug/Kg	5	07/20/18	KCA	SW8270D
Benzo(a)pyrene	12000	1000	ug/Kg	5	07/20/18	KCA	SW8270D
Benzo(b)fluoranthene	7300	1000	ug/Kg	5	07/20/18	KCA	SW8270D
Benzo(ghi)perylene	6300	1000	ug/Kg	5	07/20/18	KCA	SW8270D
Benzo(k)fluoranthene	9600	1000	ug/Kg	5	07/20/18	KCA	SW8270D
Chrysene	15000	1000	ug/Kg	5	07/20/18	KCA	SW8270D
Dibenz(a,h)anthracene	1400	1000	ug/Kg	5	07/20/18	KCA	SW8270D
Fluoranthene	24000	1300	ug/Kg	5	07/20/18	KCA	SW8270D
Fluorene	16000	1300	ug/Kg	5	07/20/18	KCA	SW8270D
Indeno(1,2,3-cd)pyrene	6400	1000	ug/Kg	5	07/20/18	KCA	SW8270D
Naphthalene	2400	1300	ug/Kg	5	07/20/18	KCA	SW8270D
Phenanthrene	24000	1300	ug/Kg	5	07/20/18	KCA	SW8270D
Pyrene	32000	1300	ug/Kg	5	07/20/18	KCA	SW8270D
QA/QC Surrogates							
% 2-Fluorobiphenyl	72		%	5	07/20/18	KCA	30 - 130 %
% Nitrobenzene-d5	74		%	5	07/20/18	KCA	30 - 130 %
% Terphenyl-d14	70		%	5	07/20/18	KCA	30 - 130 %
Field Extraction	Completed				07/19/18		SW5035A

Project ID: ROCKVILLE MGP
Client ID: SB-47 (11-13 FT)

Phoenix I.D.: CA94065

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Semi-Volatile Comment:
Due to a matrix interference and/or the presence of a large amount of non-target material in the sample, a dilution was required resulting in an elevated RL for the semivolatile analysis.

Semi-Volatile Comment:
Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

Volatile Comment:
Elevated reporting limits for volatiles due to the presence of non-target compounds.

TPH Comment:
**Petroleum hydrocarbon chromatogram contains a multicomponent hydrocarbon distribution in the range of C9 to C36. The sample was quantitated against a C9-C36 alkane hydrocarbon standard.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services.
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Phyllis Shiller, Laboratory Director
August 13, 2018
Reviewed and Released by: Sarah Bell, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

August 13, 2018

FOR: Attn: Ms. Lynn Willey
Tighe & Bond
213 Court St, Suite 1100
Middletown, CT 06457

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		07/19/18	12:30
Location Code:	TIGHE-DAS	Received by:	LB	07/19/18	16:17
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	14-0755-443				

Laboratory Data

SDG ID: GCA94064
Phoenix ID: CA94067

Project ID: ROCKVILLE MGP
Client ID: SB-35 (5-7 FT)

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.38	0.38	mg/Kg	1	07/20/18	EK	SW6010C
Arsenic	91.6	0.76	mg/Kg	1	07/20/18	EK	SW6010C
Barium	79.7	0.38	mg/Kg	1	07/20/18	EK	SW6010C
Beryllium	< 0.31	0.31	mg/Kg	1	07/20/18	EK	SW6010C
Cadmium	0.85	0.38	mg/Kg	1	07/20/18	EK	SW6010C
Chromium	9.39	0.38	mg/Kg	1	07/20/18	EK	SW6010C
Copper	24.3	0.38	mg/kg	1	07/20/18	PS	SW6010C
Mercury	0.33	0.16	mg/Kg	1	07/23/18	RS	SW7471B
Nickel	6.22	0.38	mg/Kg	1	07/20/18	EK	SW6010C
Lead	55.2	0.38	mg/Kg	1	07/20/18	EK	SW6010C
Antimony	< 3.8	3.8	mg/Kg	1	07/20/18	EK	SW6010C
Selenium	< 15	15	mg/Kg	1	07/20/18	EK	SW6010C
SPLP Silver	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Arsenic	0.022	0.004	mg/L	1	07/20/18	EK	SW6010C
SPLP Barium	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Beryllium	< 0.001	0.001	mg/L	1	07/20/18	EK	SW6010C
SPLP Cadmium	< 0.005	0.005	mg/L	1	07/20/18	EK	SW6010C
SPLP Chromium	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Copper	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Mercury	< 0.0005	0.0005	mg/L	1	07/23/18	RS	SW7470A
SPLP Nickel	0.016	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Lead	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Antimony	< 0.005	0.005	mg/L	1	07/20/18	EK	SW6010C
SPLP Selenium	< 0.020	0.020	mg/L	1	07/20/18	EK	SW6010C
SPLP Thallium	< 0.005	0.005	mg/L	1	07/20/18	EK	SW6010C
SPLP Vanadium	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Zinc	0.018	0.010	mg/L	1	07/20/18	EK	SW6010C
Thallium	< 3.4	3.4	mg/Kg	1	07/20/18	EK	SW6010C

Ver 2

Project ID: ROCKVILLE MGP
Client ID: SB-35 (5-7 FT)

Phoenix I.D.: CA94067

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
SPLP Metals Digestion	Completed				07/20/18	I/I	SW3010A
Vanadium	36.0	0.38	mg/Kg	1	07/20/18	EK	SW6010C
Zinc	58.2	0.38	mg/Kg	1	07/20/18	EK	SW6010C
Percent Solid	85		%		07/19/18	Q	SW846-%Solid
Total Cyanide (SW9010C Distill.)	3.23	0.59	mg/Kg	1	07/23/18	O/GD	SW9012B
Soil Extraction for PCB	Completed				07/19/18	BB/V	SW3545A
Soil Extraction SVOA PAH	Completed				07/19/18	JJ/V	SW3545A
Extraction of CT ETPH	Completed				07/20/18	JA/V	SW3545A
Mercury Digestion	Completed				07/23/18	I/I	SW7471B
SPLP Digestion Mercury	Completed				07/23/18	I/I	SW1312/SW7470A
SPLP Extraction for Metals	Completed				07/19/18	I	SW1312
Total Metals Digest	Completed				07/19/18	L/AG	SW3050B
TPH by GC (Extractable Products)							
Ext. Petroleum H.C. (C9-C36)	8600	580	mg/Kg	10	07/23/18	JRB	CTETPH 8015D
Identification	**		mg/Kg	10	07/23/18	JRB	CTETPH 8015D
QA/QC Surrogates							
% n-Pentacosane	Diluted Out		%	10	07/23/18	JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	380	ug/Kg	10	07/21/18	AW	SW8082A
PCB-1221	ND	380	ug/Kg	10	07/21/18	AW	SW8082A
PCB-1232	ND	380	ug/Kg	10	07/21/18	AW	SW8082A
PCB-1242	ND	380	ug/Kg	10	07/21/18	AW	SW8082A
PCB-1248	ND	380	ug/Kg	10	07/21/18	AW	SW8082A
PCB-1254	ND	380	ug/Kg	10	07/21/18	AW	SW8082A
PCB-1260	ND	380	ug/Kg	10	07/21/18	AW	SW8082A
PCB-1262	ND	380	ug/Kg	10	07/21/18	AW	SW8082A
PCB-1268	ND	380	ug/Kg	10	07/21/18	AW	SW8082A
QA/QC Surrogates							
% DCBP	100		%	10	07/21/18	AW	30 - 150 %
% TCMX	74		%	10	07/21/18	AW	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	9.4	ug/Kg	1	07/23/18	JLI	SW8260C
1,1,1-Trichloroethane	ND	9.4	ug/Kg	1	07/23/18	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	5.6	ug/Kg	1	07/23/18	JLI	SW8260C
1,1,2-Trichloroethane	ND	9.4	ug/Kg	1	07/23/18	JLI	SW8260C
1,1-Dichloroethane	ND	9.4	ug/Kg	1	07/23/18	JLI	SW8260C
1,1-Dichloroethene	ND	9.4	ug/Kg	1	07/23/18	JLI	SW8260C
1,1-Dichloropropene	ND	9.4	ug/Kg	1	07/23/18	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	9.4	ug/Kg	1	07/23/18	JLI	SW8260C
1,2,3-Trichloropropane	ND	9.4	ug/Kg	1	07/23/18	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	9.4	ug/Kg	1	07/23/18	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	9.4	ug/Kg	1	07/23/18	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	9.4	ug/Kg	1	07/23/18	JLI	SW8260C
1,2-Dibromoethane	ND	7.0	ug/Kg	1	07/23/18	JLI	SW8260C
1,2-Dichlorobenzene	ND	9.4	ug/Kg	1	07/23/18	JLI	SW8260C
1,2-Dichloroethane	ND	9.4	ug/Kg	1	07/23/18	JLI	SW8260C
1,2-Dichloropropane	ND	9.4	ug/Kg	1	07/23/18	JLI	SW8260C

Ver 2

Project ID: ROCKVILLE MGP
Client ID: SB-35 (5-7 FT)

Phoenix I.D.: CA94067

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,3,5-Trimethylbenzene	ND	9.4	ug/Kg	1	07/23/18	JLI	SW8260C
1,3-Dichlorobenzene	ND	9.4	ug/Kg	1	07/23/18	JLI	SW8260C
1,3-Dichloropropane	ND	9.4	ug/Kg	1	07/23/18	JLI	SW8260C
1,4-Dichlorobenzene	ND	9.4	ug/Kg	1	07/23/18	JLI	SW8260C
2,2-Dichloropropane	ND	9.4	ug/Kg	1	07/23/18	JLI	SW8260C
2-Chlorotoluene	ND	9.4	ug/Kg	1	07/23/18	JLI	SW8260C
2-Hexanone	ND	47	ug/Kg	1	07/23/18	JLI	SW8260C
2-Isopropyltoluene	ND	9.4	ug/Kg	1	07/23/18	JLI	SW8260C
4-Chlorotoluene	ND	9.4	ug/Kg	1	07/23/18	JLI	SW8260C
4-Methyl-2-pentanone	ND	47	ug/Kg	1	07/23/18	JLI	SW8260C
Acetone	ND	470	ug/Kg	1	07/23/18	JLI	SW8260C
Acrylonitrile	ND	9.4	ug/Kg	1	07/23/18	JLI	SW8260C
Benzene	ND	9.4	ug/Kg	1	07/23/18	JLI	SW8260C
Bromobenzene	ND	9.4	ug/Kg	1	07/23/18	JLI	SW8260C
Bromochloromethane	ND	9.4	ug/Kg	1	07/23/18	JLI	SW8260C
Bromodichloromethane	ND	9.4	ug/Kg	1	07/23/18	JLI	SW8260C
Bromoform	ND	9.4	ug/Kg	1	07/23/18	JLI	SW8260C
Bromomethane	ND	9.4	ug/Kg	1	07/23/18	JLI	SW8260C
Carbon Disulfide	ND	9.4	ug/Kg	1	07/23/18	JLI	SW8260C
Carbon tetrachloride	ND	9.4	ug/Kg	1	07/23/18	JLI	SW8260C
Chlorobenzene	ND	9.4	ug/Kg	1	07/23/18	JLI	SW8260C
Chloroethane	ND	9.4	ug/Kg	1	07/23/18	JLI	SW8260C
Chloroform	ND	9.4	ug/Kg	1	07/23/18	JLI	SW8260C
Chloromethane	ND	9.4	ug/Kg	1	07/23/18	JLI	SW8260C
cis-1,2-Dichloroethene	ND	9.4	ug/Kg	1	07/23/18	JLI	SW8260C
cis-1,3-Dichloropropene	ND	9.4	ug/Kg	1	07/23/18	JLI	SW8260C
Dibromochloromethane	ND	5.6	ug/Kg	1	07/23/18	JLI	SW8260C
Dibromomethane	ND	9.4	ug/Kg	1	07/23/18	JLI	SW8260C
Dichlorodifluoromethane	ND	9.4	ug/Kg	1	07/23/18	JLI	SW8260C
Ethylbenzene	ND	9.4	ug/Kg	1	07/23/18	JLI	SW8260C
Hexachlorobutadiene	ND	9.4	ug/Kg	1	07/23/18	JLI	SW8260C
Isopropylbenzene	ND	9.4	ug/Kg	1	07/23/18	JLI	SW8260C
m&p-Xylene	ND	9.4	ug/Kg	1	07/23/18	JLI	SW8260C
Methyl Ethyl Ketone	ND	56	ug/Kg	1	07/23/18	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	19	ug/Kg	1	07/23/18	JLI	SW8260C
Methylene chloride	ND	19	ug/Kg	1	07/23/18	JLI	SW8260C
Naphthalene	350	320	ug/Kg	50	07/21/18	JLI	SW8260C
n-Butylbenzene	ND	9.4	ug/Kg	1	07/23/18	JLI	SW8260C
n-Propylbenzene	ND	9.4	ug/Kg	1	07/23/18	JLI	SW8260C
o-Xylene	ND	9.4	ug/Kg	1	07/23/18	JLI	SW8260C
p-Isopropyltoluene	ND	9.4	ug/Kg	1	07/23/18	JLI	SW8260C
sec-Butylbenzene	ND	9.4	ug/Kg	1	07/23/18	JLI	SW8260C
Styrene	ND	9.4	ug/Kg	1	07/23/18	JLI	SW8260C
tert-Butylbenzene	ND	9.4	ug/Kg	1	07/23/18	JLI	SW8260C
Tetrachloroethene	320	320	ug/Kg	50	07/21/18	JLI	SW8260C
Tetrahydrofuran (THF)	ND	19	ug/Kg	1	07/23/18	JLI	SW8260C
Toluene	ND	9.4	ug/Kg	1	07/23/18	JLI	SW8260C
Total Xylenes	ND	9.4	ug/Kg	1	07/23/18	JLI	SW8260C
trans-1,2-Dichloroethene	ND	9.4	ug/Kg	1	07/23/18	JLI	SW8260C

Project ID: ROCKVILLE MGP
Client ID: SB-35 (5-7 FT)
Phoenix I.D.: CA94067

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
trans-1,3-Dichloropropene	ND	9.4	ug/Kg	1	07/23/18	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	19	ug/Kg	1	07/23/18	JLI	SW8260C
Trichloroethene	ND	9.4	ug/Kg	1	07/23/18	JLI	SW8260C
Trichlorofluoromethane	ND	9.4	ug/Kg	1	07/23/18	JLI	SW8260C
Trichlorotrifluoroethane	ND	9.4	ug/Kg	1	07/23/18	JLI	SW8260C
Vinyl chloride	ND	9.4	ug/Kg	1	07/23/18	JLI	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	95		%	1	07/23/18	JLI	70 - 130 %
% Bromofluorobenzene	80		%	1	07/23/18	JLI	70 - 130 %
% Dibromofluoromethane	101		%	1	07/23/18	JLI	70 - 130 %
% Toluene-d8	82		%	1	07/23/18	JLI	70 - 130 %
Polynuclear Aromatic HC							
2-Methylnaphthalene	ND	5600	ug/Kg	50	07/23/18	KCA	SW8270D
Acenaphthene	ND	13000	ug/Kg	50	07/23/18	KCA	SW8270D
Acenaphthylene	56000	13000	ug/Kg	50	07/23/18	KCA	SW8270D
Anthracene	22000	13000	ug/Kg	50	07/23/18	KCA	SW8270D
Benz(a)anthracene	150000	3800	ug/Kg	50	07/23/18	KCA	SW8270D
Benzo(a)pyrene	150000	6200	ug/Kg	50	07/23/18	KCA	SW8270D
Benzo(b)fluoranthene	120000	3800	ug/Kg	50	07/23/18	KCA	SW8270D
Benzo(ghi)perylene	140000	3800	ug/Kg	50	07/23/18	KCA	SW8270D
Benzo(k)fluoranthene	130000	3800	ug/Kg	50	07/23/18	KCA	SW8270D
Chrysene	160000	3800	ug/Kg	50	07/23/18	KCA	SW8270D
Dibenz(a,h)anthracene	21000	6200	ug/Kg	50	07/23/18	KCA	SW8270D
Fluoranthene	170000	13000	ug/Kg	50	07/23/18	KCA	SW8270D
Fluorene	ND	13000	ug/Kg	50	07/23/18	KCA	SW8270D
Indeno(1,2,3-cd)pyrene	120000	6400	ug/Kg	50	07/23/18	KCA	SW8270D
Naphthalene	ND	13000	ug/Kg	50	07/23/18	KCA	SW8270D
Phenanthrene	38000	13000	ug/Kg	50	07/23/18	KCA	SW8270D
Pyrene	450000	40000	ug/Kg	250	07/23/18	KCA	SW8270D
QA/QC Surrogates							
% 2-Fluorobiphenyl	56		%	50	07/23/18	KCA	30 - 130 %
% Nitrobenzene-d5	59		%	50	07/23/18	KCA	30 - 130 %
% Terphenyl-d14	69		%	50	07/23/18	KCA	30 - 130 %
Field Extraction	Completed				07/19/18		SW5035A

Project ID: ROCKVILLE MGP
Client ID: SB-35 (5-7 FT)
Phoenix I.D.: CA94067

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Semi-Volatile Comment:
Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

TPH Comment:
**Petroleum hydrocarbon chromatogram contains a multicomponent hydrocarbon distribution in the range of C9 to C36. The sample was quantitated against a C9-C36 alkane hydrocarbon standard.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services.
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Phyllis Shiller, Laboratory Director
August 13, 2018
Reviewed and Released by: Sarah Bell, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

August 13, 2018

FOR: Attn: Ms. Lynn Willey
Tighe & Bond
213 Court St, Suite 1100
Middletown, CT 06457

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		07/19/18	14:30
Location Code:	TIGHE-DAS	Received by:	LB	07/19/18	16:17
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	14-0755-443				

Laboratory Data

SDG ID: GCA94064
Phoenix ID: CA94069

Project ID: ROCKVILLE MGP
Client ID: SB-38 (5-7 FT)

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.33	0.33	mg/Kg	1	07/20/18	EK	SW6010C
Arsenic	3.86	0.66	mg/Kg	1	07/20/18	EK	SW6010C
Barium	63.6	0.33	mg/Kg	1	07/20/18	EK	SW6010C
Beryllium	0.45	0.27	mg/Kg	1	07/20/18	EK	SW6010C
Cadmium	0.52	0.33	mg/Kg	1	07/20/18	EK	SW6010C
Chromium	17.7	0.33	mg/Kg	1	07/20/18	EK	SW6010C
Copper	28.5	0.33	mg/kg	1	07/20/18	PS	SW6010C
Mercury	0.18	0.13	mg/Kg	1	07/23/18	RS	SW7471B
Nickel	11.8	0.33	mg/Kg	1	07/20/18	EK	SW6010C
Lead	49.1	0.33	mg/Kg	1	07/20/18	EK	SW6010C
Antimony	< 3.3	3.3	mg/Kg	1	07/20/18	EK	SW6010C
Selenium	< 1.3	1.3	mg/Kg	1	07/20/18	EK	SW6010C
SPLP Silver	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Arsenic	0.007	0.004	mg/L	1	07/20/18	EK	SW6010C
SPLP Barium	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Beryllium	< 0.001	0.001	mg/L	1	07/20/18	EK	SW6010C
SPLP Cadmium	< 0.005	0.005	mg/L	1	07/20/18	EK	SW6010C
SPLP Chromium	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Copper	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Mercury	< 0.0005	0.0005	mg/L	1	07/23/18	RS	SW7470A
SPLP Nickel	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Lead	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Antimony	< 0.005	0.005	mg/L	1	07/20/18	EK	SW6010C
SPLP Selenium	< 0.020	0.020	mg/L	1	07/20/18	EK	SW6010C
SPLP Thallium	< 0.005	0.005	mg/L	1	07/20/18	EK	SW6010C
SPLP Vanadium	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
SPLP Zinc	< 0.010	0.010	mg/L	1	07/20/18	EK	SW6010C
Thallium	< 3.0	3.0	mg/Kg	1	07/20/18	EK	SW6010C

Ver 2

Project ID: ROCKVILLE MGP
Client ID: SB-38 (5-7 FT)

Phoenix I.D.: CA94069

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
SPLP Metals Digestion	Completed				07/20/18	I/I	SW3010A
Vanadium	38.5	0.33	mg/Kg	1	07/20/18	EK	SW6010C
Zinc	57.0	0.33	mg/Kg	1	07/20/18	EK	SW6010C
Percent Solid	94		%		07/19/18	Q	SW846-%Solid
Total Cyanide (SW9010C Distill.)	3.55	0.53	mg/Kg	1	07/23/18	O/GD	SW9012B
Soil Extraction SVOA PAH	Completed				07/23/18	JJ/CKV	SW3545A
Extraction of CT ETPH	Completed				07/20/18	JA/V	SW3545A
Mercury Digestion	Completed				07/23/18	I/I	SW7471B
SPLP Digestion Mercury	Completed				07/23/18	I/I	SW1312/SW7470A
SPLP Extraction for Metals	Completed				07/19/18	I	SW1312
Total Metals Digest	Completed				07/19/18	L/AG	SW3050B
TPH by GC (Extractable Products)							
Ext. Petroleum H.C. (C9-C36)	ND	52	mg/Kg	1	07/21/18	JRB	CTETPH 8015D
Identification	ND		mg/Kg	1	07/21/18	JRB	CTETPH 8015D
QA/QC Surrogates							
% n-Pentacosane	82		%	1	07/21/18	JRB	50 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
1,1,1-Trichloroethane	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	3.3	ug/Kg	1	07/21/18	JLI	SW8260C
1,1,2-Trichloroethane	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
1,1-Dichloroethane	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
1,1-Dichloroethene	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
1,1-Dichloropropene	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
1,2,3-Trichloropropane	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
1,2-Dibromoethane	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
1,2-Dichlorobenzene	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
1,2-Dichloroethane	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
1,2-Dichloropropane	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
1,3-Dichlorobenzene	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
1,3-Dichloropropane	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
1,4-Dichlorobenzene	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
2,2-Dichloropropane	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
2-Chlorotoluene	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
2-Hexanone	ND	27	ug/Kg	1	07/21/18	JLI	SW8260C
2-Isopropyltoluene	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
4-Chlorotoluene	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
4-Methyl-2-pentanone	ND	27	ug/Kg	1	07/21/18	JLI	SW8260C
Acetone	ND	270	ug/Kg	1	07/21/18	JLI	SW8260C
Acrylonitrile	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
Benzene	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
Bromobenzene	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
Bromochloromethane	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C

Ver 2

Project ID: ROCKVILLE MGP
Client ID: SB-38 (5-7 FT)

Phoenix I.D.: CA94069

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Bromodichloromethane	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
Bromoform	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
Bromomethane	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
Carbon Disulfide	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
Carbon tetrachloride	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
Chlorobenzene	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
Chloroethane	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
Chloroform	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
Chloromethane	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
cis-1,2-Dichloroethene	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
cis-1,3-Dichloropropene	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
Dibromochloromethane	ND	3.3	ug/Kg	1	07/21/18	JLI	SW8260C
Dibromomethane	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
Dichlorodifluoromethane	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
Ethylbenzene	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
Hexachlorobutadiene	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
Isopropylbenzene	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
m&p-Xylene	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
Methyl Ethyl Ketone	ND	33	ug/Kg	1	07/21/18	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	11	ug/Kg	1	07/21/18	JLI	SW8260C
Methylene chloride	ND	11	ug/Kg	1	07/21/18	JLI	SW8260C
Naphthalene	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
n-Butylbenzene	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
n-Propylbenzene	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
o-Xylene	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
p-Isopropyltoluene	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
sec-Butylbenzene	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
Styrene	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
tert-Butylbenzene	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
Tetrachloroethene	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
Tetrahydrofuran (THF)	ND	11	ug/Kg	1	07/21/18	JLI	SW8260C
Toluene	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
Total Xylenes	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
trans-1,2-Dichloroethene	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
trans-1,3-Dichloropropene	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	11	ug/Kg	1	07/21/18	JLI	SW8260C
Trichloroethene	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
Trichlorofluoromethane	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
Trichlorotrifluoroethane	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
Vinyl chloride	ND	5.4	ug/Kg	1	07/21/18	JLI	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	101		%	1	07/21/18	JLI	70 - 130 %
% Bromofluorobenzene	96		%	1	07/21/18	JLI	70 - 130 %
% Dibromofluoromethane	93		%	1	07/21/18	JLI	70 - 130 %
% Toluene-d8	102		%	1	07/21/18	JLI	70 - 130 %
Polynuclear Aromatic HC							
2-Methylnaphthalene	ND	240	ug/Kg	1	07/24/18	HM	SW8270D
Acenaphthene	ND	240	ug/Kg	1	07/24/18	HM	SW8270D
Acenaphthylene	300	240	ug/Kg	1	07/24/18	HM	SW8270D

Ver 2

Project ID: ROCKVILLE MGP
Client ID: SB-38 (5-7 FT)

Phoenix I.D.: CA94069

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Anthracene	ND	240	ug/Kg	1	07/24/18	HM	SW8270D
Benz(a)anthracene	790	240	ug/Kg	1	07/24/18	HM	SW8270D
Benzo(a)pyrene	550	240	ug/Kg	1	07/24/18	HM	SW8270D
Benzo(b)fluoranthene	850	240	ug/Kg	1	07/24/18	HM	SW8270D
Benzo(ghi)perylene	830	240	ug/Kg	1	07/24/18	HM	SW8270D
Benzo(k)fluoranthene	800	240	ug/Kg	1	07/24/18	HM	SW8270D
Chrysene	1100	240	ug/Kg	1	07/24/18	HM	SW8270D
Dibenz(a,h)anthracene	ND	240	ug/Kg	1	07/24/18	HM	SW8270D
Fluoranthene	810	240	ug/Kg	1	07/24/18	HM	SW8270D
Fluorene	ND	240	ug/Kg	1	07/24/18	HM	SW8270D
Indeno(1,2,3-cd)pyrene	790	240	ug/Kg	1	07/24/18	HM	SW8270D
Naphthalene	ND	240	ug/Kg	1	07/24/18	HM	SW8270D
Phenanthrene	310	240	ug/Kg	1	07/24/18	HM	SW8270D
Pyrene	1400	240	ug/Kg	1	07/24/18	HM	SW8270D
QA/QC Surrogates							
% 2-Fluorobiphenyl	71		%	1	07/24/18	HM	30 - 130 %
% Nitrobenzene-d5	71		%	1	07/24/18	HM	30 - 130 %
% Terphenyl-d14	66		%	1	07/24/18	HM	30 - 130 %
Field Extraction	Completed				07/19/18		SW5035A

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services.
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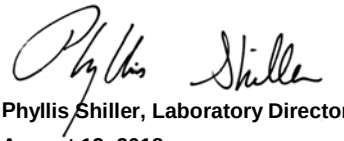

Phyllis Shiller, Laboratory Director
August 13, 2018
Reviewed and Released by: Sarah Bell, Project Manager

Environmental Laboratories, Inc.
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QA/QC Report

August 13, 2018

QA/QC Data

SDG I.D.: GCA94064

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 439754 (mg/L), QC Sample No: CA91132 (CA94064, CA94067, CA94069)														
ICP Metals - SPLP Extraction														
Antimony	BRL	0.005	0.006	<0.005	NC	103			102			75 - 125	20	
Arsenic	BRL	0.004	0.009	<0.004	NC	101			99.4			75 - 125	20	
Barium	BRL	0.010	0.008	0.009	NC	98.6			98.0			75 - 125	20	
Beryllium	BRL	0.001	<0.001	<0.001	NC	99.7			99.7			75 - 125	20	
Cadmium	BRL	0.005	<0.005	<0.005	NC	103			103			75 - 125	20	
Chromium	BRL	0.010	0.002	0.001	NC	99.7			99.0			75 - 125	20	
Copper	BRL	0.010	0.004	0.004	NC	99.5			99.2			75 - 125	20	
Lead	BRL	0.010	0.003	<0.010	NC	100			100			75 - 125	20	
Nickel	BRL	0.010	0.006	0.003	NC	101			99.7			75 - 125	20	
Selenium	BRL	0.020	<0.020	<0.020	NC	100			98.6			75 - 125	20	
Silver	BRL	0.010	<0.010	<0.010	NC	100			99.9			75 - 125	20	
Thallium	BRL	0.005	<0.005	<0.005	NC	97.2			96.3			75 - 125	20	
Vanadium	BRL	0.010	0.032	0.032	NC	97.1			96.7			75 - 125	20	
Zinc	BRL	0.010	0.005	0.004	NC	102			101			75 - 125	20	
QA/QC Batch 439700 (mg/kg), QC Sample No: CA93881 (CA94064, CA94067, CA94069)														
Mercury - Soil	BRL	0.02	0.71	0.76	6.80	110	83.2	27.7	NC			70 - 130	30	
Comment:														
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.														
QA/QC Batch 439657 (mg/kg), QC Sample No: CA94190 (CA94064, CA94067, CA94069)														
ICP Metals - Soil														
Antimony	BRL	3.3	3.9	4.1	NC	96.3			90.7			75 - 125	30	
Arsenic	BRL	0.67	4.24	6.8	46.4	105			93.6			75 - 125	30	r
Barium	BRL	0.33	85.1	78.0	8.70	95.8			90.0			75 - 125	30	
Beryllium	BRL	0.27	0.47	0.51	NC	94.6			91.8			75 - 125	30	
Cadmium	BRL	0.33	0.40	0.43	NC	91.9			91.1			75 - 125	30	
Chromium	BRL	0.33	16.1	19.2	17.6	103			92.2			75 - 125	30	
Copper	BRL	0.32	38.5	35.4	8.40	112			107			75 - 125	30	
Lead	BRL	0.33	915	909	0.70	98.9			58.3			75 - 125	30	m
Nickel	BRL	0.51	21.7	33.8	43.6	94.1			84.5			75 - 125	30	r
Selenium	BRL	1.3	<1.3	<1.3	NC	120			92.4			75 - 125	30	
Silver	BRL	0.33	<0.32	<0.32	NC	98.0			92.2			75 - 125	30	
Thallium	BRL	3.0	<1.3	<2.9	NC	95.7			90.9			75 - 125	30	
Vanadium	BRL	0.33	22.1	22.2	0.50	108			90.7			75 - 125	30	
Zinc	BRL	1.3	47.7	43.5	9.20	97.5			92.2			75 - 125	30	
QA/QC Batch 439705 (mg/L), QC Sample No: CA94371 (CA94064, CA94067, CA94069)														
Mercury - Water	BRL	0.0002	<0.0002	<0.0002	NC	92.8			89.3			80 - 120	20	
Comment:														
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.														

m = This parameter is outside laboratory MS/MSD specified recovery limits.
r = This parameter is outside laboratory RPD specified recovery limits.

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QA/QC Report

August 13, 2018

QA/QC Data

SDG I.D.: GCA94064

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 439830 (mg/Kg), QC Sample No: CA93881 50X (CA94064, CA94067, CA94069)													
Total Cyanide (SW9010C Distill.)	BRL	0.50	0.65	<0.57	NC	99.0			102			80 - 120	30
Comment:													
Additional: LCS acceptance range is 80-120% for soils MS acceptance range 75-125% for soils													

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QA/QC Report

August 13, 2018

QA/QC Data

SDG I.D.: GCA94064

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 439589 (ug/kg), QC Sample No: CA93433 (CA94065, CA94067)											
Polynuclear Aromatic HC - Soil											
2-Methylnaphthalene	ND	230	72	69	4.3	74	64	14.5	30 - 130	30	
Acenaphthene	ND	230	71	70	1.4	74	63	16.1	30 - 130	30	
Acenaphthylene	ND	230	66	66	0.0	44	40	9.5	30 - 130	30	
Anthracene	ND	230	74	73	1.4	67	55	19.7	30 - 130	30	
Benz(a)anthracene	ND	230	73	72	1.4	NC	NC	NC	30 - 130	30	
Benzo(a)pyrene	ND	230	70	70	0.0	NC	NC	NC	30 - 130	30	
Benzo(b)fluoranthene	ND	230	78	77	1.3	NC	NC	NC	30 - 130	30	
Benzo(ghi)perylene	ND	230	68	69	1.5	NC	NC	NC	30 - 130	30	
Benzo(k)fluoranthene	ND	230	68	67	1.5	NC	NC	NC	30 - 130	30	
Chrysene	ND	230	72	72	0.0	NC	NC	NC	30 - 130	30	
Dibenz(a,h)anthracene	ND	230	71	71	0.0	64	60	6.5	30 - 130	30	
Fluoranthene	ND	230	73	72	1.4	NC	NC	NC	30 - 130	30	
Fluorene	ND	230	71	70	1.4	72	64	11.8	30 - 130	30	
Indeno(1,2,3-cd)pyrene	ND	230	69	71	2.9	NC	NC	NC	30 - 130	30	
Naphthalene	ND	230	78	74	5.3	81	71	13.2	30 - 130	30	
Phenanthrene	ND	230	74	72	2.7	61	69	12.3	30 - 130	30	
Pyrene	ND	230	74	73	1.4	NC	NC	NC	30 - 130	30	
% 2-Fluorobiphenyl	63	%	70	69	1.4	71	60	16.8	30 - 130	30	
% Nitrobenzene-d5	58	%	70	70	0.0	79	67	16.4	30 - 130	30	
% Terphenyl-d14	61	%	76	73	4.0	66	59	11.2	30 - 130	30	
Comment:											
Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)											
QA/QC Batch 439590 (ug/Kg), QC Sample No: CA93883 2X (CA94064, CA94067)											
Polychlorinated Biphenyls - Soil											
PCB-1016	ND	33	89	91	2.2	80	71	11.9	40 - 140	30	
PCB-1221	ND	33							40 - 140	30	
PCB-1232	ND	33							40 - 140	30	
PCB-1242	ND	33							40 - 140	30	
PCB-1248	ND	33							40 - 140	30	
PCB-1254	ND	33							40 - 140	30	
PCB-1260	ND	33	95	81	15.9	71	65	8.8	40 - 140	30	
PCB-1262	ND	33							40 - 140	30	
PCB-1268	ND	33							40 - 140	30	
% DCBP (Surrogate Rec)	92	%	109	75	37.0	66	61	7.9	30 - 150	30	r
% TCMX (Surrogate Rec)	87	%	97	94	3.1	83	76	8.8	30 - 150	30	
QA/QC Batch 439640 (ug/kg), QC Sample No: CA94051 (CA94064)											
Semivolatiles - Soil											
1,2,4,5-Tetrachlorobenzene	ND	230	56	68	19.4	62	62	0.0	30 - 130	30	
1,2,4-Trichlorobenzene	ND	230	57	68	17.6	60	61	1.7	30 - 130	30	

QA/QC Data

SDG I.D.: GCA94064

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
1,2-Dichlorobenzene	ND	180	51	59	14.5	54	55	1.8	30 - 130	30	
1,2-Diphenylhydrazine	ND	230	53	64	18.8	59	58	1.7	30 - 130	30	
1,3-Dichlorobenzene	ND	230	47	56	17.5	49	48	2.1	30 - 130	30	
1,4-Dichlorobenzene	ND	230	49	56	13.3	50	49	2.0	30 - 130	30	
2,4,5-Trichlorophenol	ND	230	60	75	22.2	66	64	3.1	30 - 130	30	
2,4,6-Trichlorophenol	ND	130	61	73	17.9	64	63	1.6	30 - 130	30	
2,4-Dichlorophenol	ND	130	60	73	19.5	65	65	0.0	30 - 130	30	
2,4-Dimethylphenol	ND	230	58	72	21.5	64	62	3.2	30 - 130	30	
2,4-Dinitrophenol	ND	230	<10	<10	NC	55	41	29.2	30 - 130	30	l
2,4-Dinitrotoluene	ND	130	60	73	19.5	64	64	0.0	30 - 130	30	
2,6-Dinitrotoluene	ND	130	60	71	16.8	64	62	3.2	30 - 130	30	
2-Chloronaphthalene	ND	230	56	67	17.9	64	62	3.2	30 - 130	30	
2-Chlorophenol	ND	230	57	66	14.6	62	62	0.0	30 - 130	30	
2-Methylnaphthalene	ND	230	57	68	17.6	61	61	0.0	30 - 130	30	
2-Methylphenol (o-cresol)	ND	230	59	69	15.6	68	67	1.5	30 - 130	30	
2-Nitroaniline	ND	330	80	100	22.2	88	85	3.5	30 - 130	30	
2-Nitrophenol	ND	230	64	75	15.8	69	69	0.0	30 - 130	30	
3&4-Methylphenol (m&p-cresol)	ND	230	59	72	19.8	65	64	1.6	30 - 130	30	
3,3'-Dichlorobenzidine	ND	130	59	68	14.2	83	80	3.7	30 - 130	30	
3-Nitroaniline	ND	330	71	85	17.9	77	74	4.0	30 - 130	30	
4,6-Dinitro-2-methylphenol	ND	230	19	25	27.3	62	51	19.5	30 - 130	30	l
4-Bromophenyl phenyl ether	ND	230	59	73	21.2	67	66	1.5	30 - 130	30	
4-Chloro-3-methylphenol	ND	230	65	75	14.3	67	68	1.5	30 - 130	30	
4-Chloroaniline	ND	230	64	75	15.8	67	69	2.9	30 - 130	30	
4-Chlorophenyl phenyl ether	ND	230	55	69	22.6	61	61	0.0	30 - 130	30	
4-Nitroaniline	ND	230	62	74	17.6	65	62	4.7	30 - 130	30	
4-Nitrophenol	ND	230	64	78	19.7	64	60	6.5	30 - 130	30	
Acenaphthene	ND	230	57	69	19.0	63	62	1.6	30 - 130	30	
Acenaphthylene	ND	130	53	64	18.8	57	58	1.7	30 - 130	30	
Acetophenone	ND	230	52	63	19.1	60	60	0.0	30 - 130	30	
Aniline	ND	330	47	53	12.0	52	48	8.0	30 - 130	30	
Anthracene	ND	230	57	70	20.5	63	62	1.6	30 - 130	30	
Benz(a)anthracene	ND	230	58	70	18.8	62	61	1.6	30 - 130	30	
Benzidine	ND	330	40	44	9.5	42	34	21.1	30 - 130	30	
Benzo(a)pyrene	ND	130	55	67	19.7	59	58	1.7	30 - 130	30	
Benzo(b)fluoranthene	ND	160	61	75	20.6	66	62	6.3	30 - 130	30	
Benzo(ghi)perylene	ND	230	58	72	21.5	63	65	3.1	30 - 130	30	
Benzo(k)fluoranthene	ND	230	57	70	20.5	60	63	4.9	30 - 130	30	
Benzoic Acid	ND	330	<10	<10	NC	13	<10	NC	30 - 130	30	l,m
Benzyl butyl phthalate	ND	230	61	72	16.5	63	64	1.6	30 - 130	30	
Bis(2-chloroethoxy)methane	ND	230	58	68	15.9	61	61	0.0	30 - 130	30	
Bis(2-chloroethyl)ether	ND	130	48	56	15.4	53	54	1.9	30 - 130	30	
Bis(2-chloroisopropyl)ether	ND	230	45	53	16.3	52	51	1.9	30 - 130	30	
Bis(2-ethylhexyl)phthalate	ND	230	63	76	18.7	66	65	1.5	30 - 130	30	
Carbazole	ND	230	60	73	19.5	65	63	3.1	30 - 130	30	
Chrysene	ND	230	56	68	19.4	60	61	1.7	30 - 130	30	
Dibenz(a,h)anthracene	ND	130	62	79	24.1	70	68	2.9	30 - 130	30	
Dibenzofuran	ND	230	56	68	19.4	61	60	1.7	30 - 130	30	
Diethyl phthalate	ND	230	59	73	21.2	63	63	0.0	30 - 130	30	
Dimethylphthalate	ND	230	56	70	22.2	59	59	0.0	30 - 130	30	
Di-n-butylphthalate	ND	670	62	76	20.3	66	65	1.5	30 - 130	30	
Di-n-octylphthalate	ND	230	70	83	17.0	72	73	1.4	30 - 130	30	
Fluoranthene	ND	230	59	73	21.2	63	62	1.6	30 - 130	30	

QA/QC Data

SDG I.D.: GCA94064

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
Fluorene	ND	230	56	68	19.4	61	61	0.0	30 - 130	30
Hexachlorobenzene	ND	130	61	74	19.3	65	64	1.6	30 - 130	30
Hexachlorobutadiene	ND	230	58	69	17.3	59	58	1.7	30 - 130	30
Hexachlorocyclopentadiene	ND	230	51	62	19.5	36	33	8.7	30 - 130	30
Hexachloroethane	ND	130	53	61	14.0	51	51	0.0	30 - 130	30
Indeno(1,2,3-cd)pyrene	ND	230	61	77	23.2	67	67	0.0	30 - 130	30
Isophorone	ND	130	54	65	18.5	58	58	0.0	30 - 130	30
Naphthalene	ND	230	55	65	16.7	60	61	1.7	30 - 130	30
Nitrobenzene	ND	130	57	68	17.6	66	65	1.5	30 - 130	30
N-Nitrosodimethylamine	ND	230	38	45	16.9	44	43	2.3	30 - 130	30
N-Nitrosodi-n-propylamine	ND	130	61	72	16.5	69	69	0.0	30 - 130	30
N-Nitrosodiphenylamine	ND	130	56	67	17.9	61	60	1.7	30 - 130	30
Pentachloronitrobenzene	ND	230	59	71	18.5	63	62	1.6	30 - 130	30
Pentachlorophenol	ND	230	47	59	22.6	63	55	13.6	30 - 130	30
Phenanthrene	ND	130	56	68	19.4	62	61	1.6	30 - 130	30
Phenol	ND	230	55	67	19.7	63	61	3.2	30 - 130	30
Pyrene	ND	230	61	75	20.6	64	63	1.6	30 - 130	30
Pyridine	ND	230	29	35	18.8	35	36	2.8	30 - 130	30
% 2,4,6-Tribromophenol	70	%	65	82	23.1	72	72	0.0	30 - 130	30
% 2-Fluorobiphenyl	69	%	55	65	16.7	59	62	5.0	30 - 130	30
% 2-Fluorophenol	61	%	53	61	14.0	60	57	5.1	30 - 130	30
% Nitrobenzene-d5	68	%	58	67	14.4	65	66	1.5	30 - 130	30
% Phenol-d5	65	%	58	69	17.3	62	61	1.6	30 - 130	30
% Terphenyl-d14	72	%	61	75	20.6	65	64	1.6	30 - 130	30

Comment:

Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

QA/QC Batch 439728 (mg/Kg), QC Sample No: CA94567 (CA94064, CA94065, CA94067, CA94069)

TPH by GC (Extractable Products) - Soil

Ext. Petroleum H.C. (C9-C36)	ND	50	67	60	11.0	71	64	10.4	60 - 120	30
% n-Pentacosane	70	%	63	64	1.6	70	66	5.9	50 - 150	30

Comment:

Additional surrogate criteria: LCS acceptance range is 60-120% MS acceptance range 50-150%. The ETPH/DRO LCS has been normalized based on the alkane calibration.

QA/QC Batch 439979 (ug/kg), QC Sample No: CA94628 (CA94064 (50X) , CA94065 (50X) , CA94067 (50X))

Volatiles - Soil

1,1,1,2-Tetrachloroethane	ND	5.0	101	105	3.9	109	108	0.9	70 - 130	30
1,1,1-Trichloroethane	ND	5.0	94	97	3.1	99	100	1.0	70 - 130	30
1,1,2,2-Tetrachloroethane	ND	3.0	94	99	5.2	98	102	4.0	70 - 130	30
1,1,2-Trichloroethane	ND	5.0	91	96	5.3	97	99	2.0	70 - 130	30
1,1-Dichloroethane	ND	5.0	82	86	4.8	87	88	1.1	70 - 130	30
1,1-Dichloroethene	ND	5.0	95	96	1.0	91	93	2.2	70 - 130	30
1,1-Dichloropropene	ND	5.0	95	98	3.1	101	99	2.0	70 - 130	30
1,2,3-Trichlorobenzene	ND	5.0	93	96	3.2	77	71	8.1	70 - 130	30
1,2,3-Trichloropropane	ND	5.0	87	90	3.4	90	93	3.3	70 - 130	30
1,2,4-Trichlorobenzene	ND	5.0	94	95	1.1	78	74	5.3	70 - 130	30
1,2,4-Trimethylbenzene	ND	1.0	95	96	1.0	96	94	2.1	70 - 130	30
1,2-Dibromo-3-chloropropane	ND	5.0	104	105	1.0	101	109	7.6	70 - 130	30
1,2-Dibromoethane	ND	5.0	95	99	4.1	99	103	4.0	70 - 130	30
1,2-Dichlorobenzene	ND	5.0	92	96	4.3	92	89	3.3	70 - 130	30
1,2-Dichloroethane	ND	5.0	89	93	4.4	95	97	2.1	70 - 130	30
1,2-Dichloropropane	ND	5.0	90	94	4.3	95	97	2.1	70 - 130	30

QA/QC Data

SDG I.D.: GCA94064

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
1,3,5-Trimethylbenzene	ND	1.0	95	98	3.1	99	94	5.2	70 - 130	30	
1,3-Dichlorobenzene	ND	5.0	95	97	2.1	95	92	3.2	70 - 130	30	
1,3-Dichloropropane	ND	5.0	90	94	4.3	96	99	3.1	70 - 130	30	
1,4-Dichlorobenzene	ND	5.0	92	94	2.2	92	88	4.4	70 - 130	30	
2,2-Dichloropropane	ND	5.0	93	97	4.2	98	98	0.0	70 - 130	30	
2-Chlorotoluene	ND	5.0	95	97	2.1	99	96	3.1	70 - 130	30	
2-Hexanone	ND	25	75	76	1.3	74	79	6.5	70 - 130	30	
2-Isopropyltoluene	ND	5.0	104	106	1.9	107	101	5.8	70 - 130	30	
4-Chlorotoluene	ND	5.0	93	96	3.2	96	93	3.2	70 - 130	30	
4-Methyl-2-pentanone	ND	25	79	82	3.7	81	86	6.0	70 - 130	30	
Acetone	ND	10	68	68	0.0	43	40	7.2	70 - 130	30	l,m
Acrylonitrile	ND	5.0	83	87	4.7	80	87	8.4	70 - 130	30	
Benzene	ND	1.0	92	96	4.3	99	99	0.0	70 - 130	30	
Bromobenzene	ND	5.0	97	100	3.0	103	101	2.0	70 - 130	30	
Bromochloromethane	ND	5.0	94	98	4.2	99	101	2.0	70 - 130	30	
Bromodichloromethane	ND	5.0	98	102	4.0	102	104	1.9	70 - 130	30	
Bromoform	ND	5.0	108	114	5.4	108	113	4.5	70 - 130	30	
Bromomethane	ND	5.0	117	117	0.0	120	115	4.3	70 - 130	30	
Carbon Disulfide	ND	5.0	110	113	2.7	104	105	1.0	70 - 130	30	
Carbon tetrachloride	ND	5.0	97	85	13.2	101	85	17.2	70 - 130	30	
Chlorobenzene	ND	5.0	94	97	3.1	99	97	2.0	70 - 130	30	
Chloroethane	ND	5.0	103	105	1.9	106	103	2.9	70 - 130	30	
Chloroform	ND	5.0	92	95	3.2	96	97	1.0	70 - 130	30	
Chloromethane	ND	5.0	90	94	4.3	90	93	3.3	70 - 130	30	
cis-1,2-Dichloroethene	ND	5.0	95	94	1.1	99	101	2.0	70 - 130	30	
cis-1,3-Dichloropropene	ND	5.0	94	98	4.2	99	100	1.0	70 - 130	30	
Dibromochloromethane	ND	3.0	108	113	4.5	114	117	2.6	70 - 130	30	
Dibromomethane	ND	5.0	92	96	4.3	96	100	4.1	70 - 130	30	
Dichlorodifluoromethane	ND	5.0	112	113	0.9	117	114	2.6	70 - 130	30	
Ethylbenzene	ND	1.0	96	99	3.1	101	99	2.0	70 - 130	30	
Hexachlorobutadiene	ND	5.0	97	95	2.1	79	67	16.4	70 - 130	30	m
Isopropylbenzene	ND	1.0	95	98	3.1	102	98	4.0	70 - 130	30	
m&p-Xylene	ND	2.0	97	100	3.0	102	99	3.0	70 - 130	30	
Methyl ethyl ketone	ND	5.0	71	72	1.4	67	72	7.2	70 - 130	30	m
Methyl t-butyl ether (MTBE)	ND	1.0	98	102	4.0	97	103	6.0	70 - 130	30	
Methylene chloride	ND	5.0	80	82	2.5	97	97	0.0	70 - 130	30	
Naphthalene	ND	5.0	94	98	4.2	83	81	2.4	70 - 130	30	
n-Butylbenzene	ND	1.0	95	93	2.1	91	83	9.2	70 - 130	30	
n-Propylbenzene	ND	1.0	94	96	2.1	100	94	6.2	70 - 130	30	
o-Xylene	ND	2.0	96	100	4.1	102	100	2.0	70 - 130	30	
p-Isopropyltoluene	ND	1.0	97	98	1.0	98	91	7.4	70 - 130	30	
sec-Butylbenzene	ND	1.0	100	101	1.0	100	93	7.3	70 - 130	30	
Styrene	ND	5.0	95	100	5.1	100	97	3.0	70 - 130	30	
tert-Butylbenzene	ND	1.0	95	98	3.1	101	95	6.1	70 - 130	30	
Tetrachloroethene	ND	5.0	96	98	2.1	104	100	3.9	70 - 130	30	
Tetrahydrofuran (THF)	ND	5.0	82	85	3.6	68	75	9.8	70 - 130	30	m
Toluene	ND	1.0	93	98	5.2	99	99	0.0	70 - 130	30	
trans-1,2-Dichloroethene	ND	5.0	95	98	3.1	93	96	3.2	70 - 130	30	
trans-1,3-Dichloropropene	ND	5.0	91	96	5.3	96	97	1.0	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	5.0	104	110	5.6	106	111	4.6	70 - 130	30	
Trichloroethene	ND	5.0	97	100	3.0	104	102	1.9	70 - 130	30	
Trichlorofluoromethane	ND	5.0	114	115	0.9	110	109	0.9	70 - 130	30	
Trichlorotrifluoroethane	ND	5.0	104	103	1.0	103	101	2.0	70 - 130	30	

QA/QC Data

SDG I.D.: GCA94064

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Vinyl chloride	ND	5.0	105	108	2.8	107	106	0.9	70 - 130	30	
% 1,2-dichlorobenzene-d4	99	%	99	99	0.0	98	98	0.0	70 - 130	30	
% Bromofluorobenzene	100	%	99	98	1.0	98	98	0.0	70 - 130	30	
% Dibromofluoromethane	95	%	101	101	0.0	101	102	1.0	70 - 130	30	
% Toluene-d8	102	%	99	99	0.0	98	98	0.0	70 - 130	30	

Comment:

Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 439971 (ug/kg), QC Sample No: CA95025 (CA94069)

Volatiles - Soil

1,1,1,2-Tetrachloroethane	ND	5.0	100	100	0.0	94	97	3.1	70 - 130	30	
1,1,1-Trichloroethane	ND	5.0	94	94	0.0	90	91	1.1	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	3.0	92	91	1.1	89	88	1.1	70 - 130	30	
1,1,2-Trichloroethane	ND	5.0	89	89	0.0	82	84	2.4	70 - 130	30	
1,1-Dichloroethane	ND	5.0	82	82	0.0	80	81	1.2	70 - 130	30	
1,1-Dichloroethene	ND	5.0	86	87	1.2	90	91	1.1	70 - 130	30	
1,1-Dichloropropene	ND	5.0	94	95	1.1	91	92	1.1	70 - 130	30	
1,2,3-Trichlorobenzene	ND	5.0	86	89	3.4	90	95	5.4	70 - 130	30	
1,2,3-Trichloropropane	ND	5.0	84	85	1.2	82	80	2.5	70 - 130	30	
1,2,4-Trichlorobenzene	ND	5.0	85	88	3.5	89	95	6.5	70 - 130	30	
1,2,4-Trimethylbenzene	ND	1.0	91	93	2.2	93	95	2.1	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	5.0	95	98	3.1	88	90	2.2	70 - 130	30	
1,2-Dibromoethane	ND	5.0	93	93	0.0	89	90	1.1	70 - 130	30	
1,2-Dichlorobenzene	ND	5.0	88	90	2.2	91	92	1.1	70 - 130	30	
1,2-Dichloroethane	ND	5.0	90	88	2.2	84	85	1.2	70 - 130	30	
1,2-Dichloropropane	ND	5.0	89	88	1.1	86	87	1.2	70 - 130	30	
1,3,5-Trimethylbenzene	ND	1.0	93	95	2.1	93	95	2.1	70 - 130	30	
1,3-Dichlorobenzene	ND	5.0	90	92	2.2	93	95	2.1	70 - 130	30	
1,3-Dichloropropane	ND	5.0	89	89	0.0	87	89	2.3	70 - 130	30	
1,4-Dichlorobenzene	ND	5.0	87	89	2.3	90	92	2.2	70 - 130	30	
2,2-Dichloropropane	ND	5.0	93	95	2.1	85	85	0.0	70 - 130	30	
2-Chlorotoluene	ND	5.0	92	94	2.2	92	94	2.2	70 - 130	30	
2-Hexanone	ND	25	72	73	1.4	65	68	4.5	70 - 130	30	m
2-Isopropyltoluene	ND	5.0	102	104	1.9	103	105	1.9	70 - 130	30	
4-Chlorotoluene	ND	5.0	90	91	1.1	91	93	2.2	70 - 130	30	
4-Methyl-2-pentanone	ND	25	76	76	0.0	70	73	4.2	70 - 130	30	
Acetone	ND	10	55	57	3.6	50	50	0.0	70 - 130	30	l,m
Acrylonitrile	ND	5.0	78	79	1.3	70	73	4.2	70 - 130	30	
Benzene	ND	1.0	91	91	0.0	87	88	1.1	70 - 130	30	
Bromobenzene	ND	5.0	94	96	2.1	93	96	3.2	70 - 130	30	
Bromochloromethane	ND	5.0	93	94	1.1	85	88	3.5	70 - 130	30	
Bromodichloromethane	ND	5.0	96	96	0.0	90	91	1.1	70 - 130	30	
Bromoform	ND	5.0	104	106	1.9	87	90	3.4	70 - 130	30	
Bromomethane	ND	5.0	108	104	3.8	106	102	3.8	70 - 130	30	
Carbon Disulfide	ND	5.0	101	103	2.0	80	84	4.9	70 - 130	30	
Carbon tetrachloride	ND	5.0	82	83	1.2	77	78	1.3	70 - 130	30	
Chlorobenzene	ND	5.0	92	93	1.1	85	86	1.2	70 - 130	30	
Chloroethane	ND	5.0	96	97	1.0	106	103	2.9	70 - 130	30	
Chloroform	ND	5.0	91	92	1.1	88	88	0.0	70 - 130	30	
Chloromethane	ND	5.0	90	89	1.1	78	81	3.8	70 - 130	30	
cis-1,2-Dichloroethene	ND	5.0	93	93	0.0	90	91	1.1	70 - 130	30	
cis-1,3-Dichloropropene	ND	5.0	93	93	0.0	84	85	1.2	70 - 130	30	
Dibromochloromethane	ND	3.0	106	107	0.9	99	100	1.0	70 - 130	30	

QA/QC Data

SDG I.D.: GCA94064

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Dibromomethane	ND	5.0	90	90	0.0	83	85	2.4	70 - 130	30	
Dichlorodifluoromethane	ND	5.0	119	120	0.8	116	115	0.9	70 - 130	30	
Ethylbenzene	ND	1.0	95	96	1.0	92	91	1.1	70 - 130	30	
Hexachlorobutadiene	ND	5.0	92	98	6.3	98	103	5.0	70 - 130	30	
Isopropylbenzene	ND	1.0	94	96	2.1	93	94	1.1	70 - 130	30	
m&p-Xylene	ND	2.0	94	96	2.1	89	89	0.0	70 - 130	30	
Methyl ethyl ketone	ND	5.0	67	65	3.0	67	65	3.0	70 - 130	30	l,m
Methyl t-butyl ether (MTBE)	ND	1.0	89	91	2.2	91	93	2.2	70 - 130	30	
Methylene chloride	ND	5.0	73	74	1.4	74	75	1.3	70 - 130	30	
Naphthalene	ND	5.0	89	91	2.2	86	90	4.5	70 - 130	30	
n-Butylbenzene	ND	1.0	90	94	4.3	94	97	3.1	70 - 130	30	
n-Propylbenzene	ND	1.0	93	95	2.1	93	94	1.1	70 - 130	30	
o-Xylene	ND	2.0	95	96	1.0	89	90	1.1	70 - 130	30	
p-Isopropyltoluene	ND	1.0	94	97	3.1	97	98	1.0	70 - 130	30	
sec-Butylbenzene	ND	1.0	97	100	3.0	99	100	1.0	70 - 130	30	
Styrene	ND	5.0	93	95	2.1	80	80	0.0	70 - 130	30	
tert-Butylbenzene	ND	1.0	94	96	2.1	94	95	1.1	70 - 130	30	
Tetrachloroethene	ND	5.0	95	97	2.1	88	90	2.2	70 - 130	30	
Tetrahydrofuran (THF)	ND	5.0	78	77	1.3	72	75	4.1	70 - 130	30	
Toluene	ND	1.0	92	93	1.1	86	87	1.2	70 - 130	30	
trans-1,2-Dichloroethene	ND	5.0	87	90	3.4	90	90	0.0	70 - 130	30	
trans-1,3-Dichloropropene	ND	5.0	89	91	2.2	79	80	1.3	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	5.0	100	100	0.0	90	92	2.2	70 - 130	30	
Trichloroethene	ND	5.0	96	97	1.0	92	93	1.1	70 - 130	30	
Trichlorofluoromethane	ND	5.0	104	108	3.8	111	111	0.0	70 - 130	30	
Trichlorotrifluoroethane	ND	5.0	97	100	3.0	100	101	1.0	70 - 130	30	
Vinyl chloride	ND	5.0	103	102	1.0	98	99	1.0	70 - 130	30	
% 1,2-dichlorobenzene-d4	98	%	98	98	0.0	96	97	1.0	70 - 130	30	
% Bromofluorobenzene	99	%	99	100	1.0	92	93	1.1	70 - 130	30	
% Dibromofluoromethane	94	%	102	101	1.0	99	101	2.0	70 - 130	30	
% Toluene-d8	103	%	99	98	1.0	98	98	0.0	70 - 130	30	

Comment:

Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 440000 (ug/kg), QC Sample No: CA95115 (CA94069)

Polynuclear Aromatic HC - Soil

2-Methylnaphthalene	ND	230	61	64	4.8	53	50	5.8	30 - 130	30	
Acenaphthene	ND	230	65	69	6.0	54	53	1.9	30 - 130	30	
Acenaphthylene	ND	230	62	66	6.3	52	50	3.9	30 - 130	30	
Anthracene	ND	230	67	71	5.8	55	53	3.7	30 - 130	30	
Benz(a)anthracene	ND	230	69	73	5.6	56	54	3.6	30 - 130	30	
Benzo(a)pyrene	ND	230	65	70	7.4	51	52	1.9	30 - 130	30	
Benzo(b)fluoranthene	ND	230	67	73	8.6	56	55	1.8	30 - 130	30	
Benzo(ghi)perylene	ND	230	62	60	3.3	48	48	0.0	30 - 130	30	
Benzo(k)fluoranthene	ND	230	69	74	7.0	53	53	0.0	30 - 130	30	
Chrysene	ND	230	67	72	7.2	55	52	5.6	30 - 130	30	
Dibenz(a,h)anthracene	ND	230	64	70	9.0	51	51	0.0	30 - 130	30	
Fluoranthene	ND	230	68	72	5.7	55	53	3.7	30 - 130	30	
Fluorene	ND	230	65	70	7.4	55	54	1.8	30 - 130	30	
Indeno(1,2,3-cd)pyrene	ND	230	67	75	11.3	53	53	0.0	30 - 130	30	
Naphthalene	ND	230	62	65	4.7	54	52	3.8	30 - 130	30	
Phenanthrene	ND	230	65	68	4.5	54	52	3.8	30 - 130	30	
Pyrene	ND	230	67	73	8.6	56	56	0.0	30 - 130	30	

QA/QC Data

SDG I.D.: GCA94064

Parameter	Blank	Blk RL		LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
% 2-Fluorobiphenyl	69	%		64	68	6.1	53	51	3.8	30 - 130	30
% Nitrobenzene-d5	67	%		67	70	4.4	58	53	9.0	30 - 130	30
% Terphenyl-d14	65	%		65	72	10.2	54	52	3.8	30 - 130	30

Comment:

Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

QA/QC Batch 440153 (ug/kg), QC Sample No: CA95159 (CA94064, CA94067)

Volatiles - Soil

1,1,1,2-Tetrachloroethane	ND	5.0		97	90	7.5	94	95	1.1	70 - 130	30
1,1,1-Trichloroethane	ND	5.0		92	81	12.7	88	88	0.0	70 - 130	30
1,1,2,2-Tetrachloroethane	ND	3.0		109	102	6.6	103	99	4.0	70 - 130	30
1,1,2-Trichloroethane	ND	5.0		93	85	9.0	91	90	1.1	70 - 130	30
1,1-Dichloroethane	ND	5.0		94	85	10.1	89	90	1.1	70 - 130	30
1,1-Dichloroethene	ND	5.0		102	91	11.4	92	91	1.1	70 - 130	30
1,1-Dichloropropene	ND	5.0		95	86	9.9	92	92	0.0	70 - 130	30
1,2,3-Trichlorobenzene	ND	5.0		113	101	11.2	105	111	5.6	70 - 130	30
1,2,3-Trichloropropane	ND	5.0		93	93	0.0	93	91	2.2	70 - 130	30
1,2,4-Trichlorobenzene	ND	5.0		111	96	14.5	101	107	5.8	70 - 130	30
1,2,4-Trimethylbenzene	ND	1.0		104	96	8.0	101	101	0.0	70 - 130	30
1,2-Dibromo-3-chloropropane	ND	5.0		118	107	9.8	107	101	5.8	70 - 130	30
1,2-Dibromoethane	ND	5.0		97	91	6.4	97	95	2.1	70 - 130	30
1,2-Dichlorobenzene	ND	5.0		106	99	6.8	102	103	1.0	70 - 130	30
1,2-Dichloroethane	ND	5.0		89	82	8.2	86	84	2.4	70 - 130	30
1,2-Dichloropropane	ND	5.0		94	87	7.7	92	91	1.1	70 - 130	30
1,3,5-Trimethylbenzene	ND	1.0		103	95	8.1	99	100	1.0	70 - 130	30
1,3-Dichlorobenzene	ND	5.0		104	95	9.0	100	100	0.0	70 - 130	30
1,3-Dichloropropane	ND	5.0		93	87	6.7	92	91	1.1	70 - 130	30
1,4-Dichlorobenzene	ND	5.0		106	96	9.9	102	102	0.0	70 - 130	30
2,2-Dichloropropane	ND	5.0		102	89	13.6	92	94	2.2	70 - 130	30
2-Chlorotoluene	ND	5.0		105	97	7.9	99	102	3.0	70 - 130	30
2-Hexanone	ND	25		86	80	7.2	83	79	4.9	70 - 130	30
2-Isopropyltoluene	ND	5.0		114	106	7.3	112	111	0.9	70 - 130	30
4-Chlorotoluene	ND	5.0		101	93	8.2	96	97	1.0	70 - 130	30
4-Methyl-2-pentanone	ND	25		91	81	11.6	84	79	6.1	70 - 130	30
Acetone	ND	10		78	71	9.4	125	108	14.6	70 - 130	30
Acrylonitrile	ND	5.0		101	93	8.2	100	98	2.0	70 - 130	30
Benzene	ND	1.0		92	84	9.1	91	90	1.1	70 - 130	30
Bromobenzene	ND	5.0		108	100	7.7	104	103	1.0	70 - 130	30
Bromochloromethane	ND	5.0		88	81	8.3	86	89	3.4	70 - 130	30
Bromodichloromethane	ND	5.0		99	90	9.5	90	88	2.2	70 - 130	30
Bromoform	ND	5.0		100	93	7.3	90	86	4.5	70 - 130	30
Bromomethane	ND	5.0		106	91	15.2	97	86	12.0	70 - 130	30
Carbon Disulfide	ND	5.0		115	100	14.0	89	92	3.3	70 - 130	30
Carbon tetrachloride	ND	5.0		95	84	12.3	86	87	1.2	70 - 130	30
Chlorobenzene	ND	5.0		96	88	8.7	95	94	1.1	70 - 130	30
Chloroethane	ND	5.0		126	111	12.7	117	92	23.9	70 - 130	30
Chloroform	ND	5.0		88	81	8.3	81	81	0.0	70 - 130	30
Chloromethane	ND	5.0		103	89	14.6	97	99	2.0	70 - 130	30
cis-1,2-Dichloroethene	ND	5.0		94	84	11.2	95	96	1.0	70 - 130	30
cis-1,3-Dichloropropene	ND	5.0		101	91	10.4	93	92	1.1	70 - 130	30
Dibromochloromethane	ND	3.0		108	100	7.7	99	98	1.0	70 - 130	30
Dibromomethane	ND	5.0		97	88	9.7	92	92	0.0	70 - 130	30

QA/QC Data

SDG I.D.: GCA94064

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Dichlorodifluoromethane	ND	5.0	118	101	15.5	105	107	1.9	70 - 130	30	
Ethylbenzene	ND	1.0	99	91	8.4	98	97	1.0	70 - 130	30	
Hexachlorobutadiene	ND	5.0	113	101	11.2	110	111	0.9	70 - 130	30	
Isopropylbenzene	ND	1.0	106	97	8.9	101	101	0.0	70 - 130	30	
m&p-Xylene	ND	2.0	94	87	7.7	95	94	1.1	70 - 130	30	
Methyl ethyl ketone	ND	5.0	85	73	15.2	80	75	6.5	70 - 130	30	
Methyl t-butyl ether (MTBE)	ND	1.0	103	93	10.2	101	101	0.0	70 - 130	30	
Methylene chloride	ND	5.0	87	78	10.9	86	85	1.2	70 - 130	30	
n-Butylbenzene	ND	1.0	114	103	10.1	109	109	0.0	70 - 130	30	
n-Propylbenzene	ND	1.0	107	98	8.8	103	102	1.0	70 - 130	30	
o-Xylene	ND	2.0	98	92	6.3	96	97	1.0	70 - 130	30	
p-Isopropyltoluene	ND	1.0	109	100	8.6	106	106	0.0	70 - 130	30	
sec-Butylbenzene	ND	1.0	109	101	7.6	105	105	0.0	70 - 130	30	
Styrene	ND	5.0	95	88	7.7	94	95	1.1	70 - 130	30	
tert-Butylbenzene	ND	1.0	105	97	7.9	102	101	1.0	70 - 130	30	
Tetrahydrofuran (THF)	ND	5.0	91	84	8.0	89	85	4.6	70 - 130	30	
Toluene	ND	1.0	97	88	9.7	95	94	1.1	70 - 130	30	
trans-1,2-Dichloroethene	ND	5.0	102	92	10.3	98	101	3.0	70 - 130	30	
trans-1,3-Dichloropropene	ND	5.0	95	86	9.9	88	85	3.5	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	5.0	130	118	9.7	114	112	1.8	70 - 130	30	
Trichloroethene	ND	5.0	93	84	10.2	93	91	2.2	70 - 130	30	
Trichlorofluoromethane	ND	5.0	108	97	10.7	92	62	39.0	70 - 130	30	m,r
Trichlorotrifluoroethane	ND	5.0	108	96	11.8	99	99	0.0	70 - 130	30	
Vinyl chloride	ND	5.0	116	102	12.8	117	119	1.7	70 - 130	30	
% 1,2-dichlorobenzene-d4	92	%	99	102	3.0	102	101	1.0	70 - 130	30	
% Bromofluorobenzene	96	%	92	92	0.0	92	94	2.2	70 - 130	30	
% Dibromofluoromethane	101	%	98	97	1.0	99	105	5.9	70 - 130	30	
% Toluene-d8	87	%	101	99	2.0	100	100	0.0	70 - 130	30	

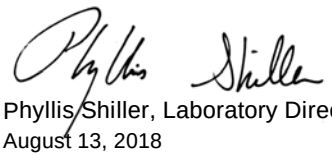
Comment:

Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%.

l = This parameter is outside laboratory LCS/LCSD specified recovery limits.
m = This parameter is outside laboratory MS/MSD specified recovery limits.
r = This parameter is outside laboratory RPD specified recovery limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference



Phyllis Shiller, Laboratory Director
August 13, 2018

Monday, August 13, 2018

Criteria: CT: GBM, I/C, RC

State: CT

Sample Criteria Exceedances Report

GCA94064 - TIGHE-DAS

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CA94064	$8270-SMR	Dibenz(a,h)anthracene	CT / RSR DEC I/C (mg/kg) / APS Organics	1900	260	1000	1000	ug/Kg
CA94064	$8270-SMR	Benz(a)anthracene	CT / RSR DEC I/C (mg/kg) / Semivolatiles	16000	1000	7800	7800	ug/Kg
CA94064	$8270-SMR	Benzo(a)pyrene	CT / RSR DEC I/C (mg/kg) / Semivolatiles	13000	1200	1000	1000	ug/Kg
CA94064	$8270-SMR	Benzo(b)fluoranthene	CT / RSR DEC I/C (mg/kg) / Semivolatiles	9000	1000	7800	7800	ug/Kg
CA94064	$8270-SMR	Indeno(1,2,3-cd)pyrene	CT / RSR DEC RES (mg/kg) / APS Organics	6900	260	1000	1000	ug/Kg
CA94064	$8270-SMR	Dibenz(a,h)anthracene	CT / RSR DEC RES (mg/kg) / APS Organics	1900	260	1000	1000	ug/Kg
CA94064	$8270-SMR	Dibenzofuran	CT / RSR DEC RES (mg/kg) / Semivolatiles	1300	260	1000	1000	ug/Kg
CA94064	$8270-SMR	Benzo(a)pyrene	CT / RSR DEC RES (mg/kg) / Semivolatiles	13000	1200	1000	1000	ug/Kg
CA94064	$8270-SMR	Benzo(b)fluoranthene	CT / RSR DEC RES (mg/kg) / Semivolatiles	9000	1000	1000	1000	ug/Kg
CA94064	$8270-SMR	Benzo(k)fluoranthene	CT / RSR DEC RES (mg/kg) / Semivolatiles	12000	1000	8400	8400	ug/Kg
CA94064	$8270-SMR	Benz(a)anthracene	CT / RSR DEC RES (mg/kg) / Semivolatiles	16000	1000	1000	1000	ug/Kg
CA94064	$8270-SMR	2-Methylnaphthalene	CT / RSR GB (mg/kg) / APS Organics	6800	260	5600	5600	ug/Kg
CA94064	$8270-SMR	Indeno(1,2,3-cd)pyrene	CT / RSR GB (mg/kg) / APS Organics	6900	260	1000	1000	ug/Kg
CA94064	$8270-SMR	Chrysene	CT / RSR GB (mg/kg) / APS Organics	17000	1000	1000	1000	ug/Kg
CA94064	$8270-SMR	Dibenz(a,h)anthracene	CT / RSR GB (mg/kg) / APS Organics	1900	260	1000	1000	ug/Kg
CA94064	$8270-SMR	Benzo(ghi)perylene	CT / RSR GB (mg/kg) / APS Organics	7100	260	1000	1000	ug/Kg
CA94064	$8270-SMR	Benzo(a)pyrene	CT / RSR GB (mg/kg) / Semivolatiles	13000	1200	1000	1000	ug/Kg
CA94064	$8270-SMR	Benz(a)anthracene	CT / RSR GB (mg/kg) / Semivolatiles	16000	1000	1000	1000	ug/Kg
CA94064	$8270-SMR	Benzo(k)fluoranthene	CT / RSR GB (mg/kg) / Semivolatiles	12000	1000	1000	1000	ug/Kg
CA94064	$8270-SMR	Benzo(b)fluoranthene	CT / RSR GB (mg/kg) / Semivolatiles	9000	1000	1000	1000	ug/Kg
CA94064	$8270-SMR	Dibenzofuran	CT / RSR GB (mg/kg) / Semivolatiles	1300	260	1000	1000	ug/Kg
CA94064	$ETPH_SMR	Ext. Petroleum H.C. (C9-C36)	CT / RSR DEC RES (mg/kg) / Pest/PCB/TPH	1600	280	500	500	mg/Kg
CA94064	AS-SM	Arsenic	CT / RSR DEC I/C (mg/kg) / Inorganics	18.5	0.75	10	10	mg/Kg
CA94064	AS-SM	Arsenic	CT / RSR DEC RES (mg/kg) / Inorganics	18.5	0.75	10	10	mg/Kg
CA94065	$8100SMR	Dibenz(a,h)anthracene	CT / RSR DEC I/C (mg/kg) / APS Organics	1400	1000	1000	1000	ug/Kg
CA94065	$8100SMR	Benz(a)anthracene	CT / RSR DEC I/C (mg/kg) / Semivolatiles	14000	1000	7800	7800	ug/Kg
CA94065	$8100SMR	Benzo(a)pyrene	CT / RSR DEC I/C (mg/kg) / Semivolatiles	12000	1000	1000	1000	ug/Kg
CA94065	$8100SMR	Dibenz(a,h)anthracene	CT / RSR DEC RES (mg/kg) / APS Organics	1400	1000	1000	1000	ug/Kg
CA94065	$8100SMR	Indeno(1,2,3-cd)pyrene	CT / RSR DEC RES (mg/kg) / APS Organics	6400	1000	1000	1000	ug/Kg
CA94065	$8100SMR	Benzo(k)fluoranthene	CT / RSR DEC RES (mg/kg) / Semivolatiles	9600	1000	8400	8400	ug/Kg
CA94065	$8100SMR	Benz(a)anthracene	CT / RSR DEC RES (mg/kg) / Semivolatiles	14000	1000	1000	1000	ug/Kg
CA94065	$8100SMR	Benzo(a)pyrene	CT / RSR DEC RES (mg/kg) / Semivolatiles	12000	1000	1000	1000	ug/Kg
CA94065	$8100SMR	Benzo(b)fluoranthene	CT / RSR DEC RES (mg/kg) / Semivolatiles	7300	1000	1000	1000	ug/Kg
CA94065	$8100SMR	Dibenz(a,h)anthracene	CT / RSR GB (mg/kg) / APS Organics	1400	1000	1000	1000	ug/Kg
CA94065	$8100SMR	Benzo(ghi)perylene	CT / RSR GB (mg/kg) / APS Organics	6300	1000	1000	1000	ug/Kg
CA94065	$8100SMR	Chrysene	CT / RSR GB (mg/kg) / APS Organics	15000	1000	1000	1000	ug/Kg
CA94065	$8100SMR	Indeno(1,2,3-cd)pyrene	CT / RSR GB (mg/kg) / APS Organics	6400	1000	1000	1000	ug/Kg
CA94065	$8100SMR	Benzo(a)pyrene	CT / RSR GB (mg/kg) / Semivolatiles	12000	1000	1000	1000	ug/Kg
CA94065	$8100SMR	Benz(a)anthracene	CT / RSR GB (mg/kg) / Semivolatiles	14000	1000	1000	1000	ug/Kg
CA94065	$8100SMR	Benzo(k)fluoranthene	CT / RSR GB (mg/kg) / Semivolatiles	9600	1000	1000	1000	ug/Kg
CA94065	$8100SMR	Benzo(b)fluoranthene	CT / RSR GB (mg/kg) / Semivolatiles	7300	1000	1000	1000	ug/Kg

Monday, August 13, 2018

Criteria: CT: GBM, I/C, RC

State: CT

Sample Criteria Exceedances Report

GCA94064 - TIGHE-DAS

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CA94065	$8260MAR	1,2-Dibromoethane	CT / RSR DEC RES (mg/kg) / Volatiles	ND	33	7	7	ug/Kg
CA94065	$8260MAR	1,2-Dibromo-3-chloropropane	CT / RSR GB (mg/kg) / APS Organics	ND	65	40	40	ug/Kg
CA94065	$ETPH_SMR	Ext. Petroleum H.C. (C9-C36)	CT / RSR DEC I/C (mg/kg) / Pest/PCB/TPH	6400	260	2500	2500	mg/Kg
CA94065	$ETPH_SMR	Ext. Petroleum H.C. (C9-C36)	CT / RSR DEC RES (mg/kg) / Pest/PCB/TPH	6400	260	500	500	mg/Kg
CA94065	$ETPH_SMR	Ext. Petroleum H.C. (C9-C36)	CT / RSR GB (mg/kg) / Pesticides/TPH	6400	260	2500	2500	mg/Kg
CA94067	$8100SMR	Indeno(1,2,3-cd)pyrene	CT / RSR DEC I/C (mg/kg) / APS Organics	120000	6400	7800	7800	ug/Kg
CA94067	$8100SMR	Dibenz(a,h)anthracene	CT / RSR DEC I/C (mg/kg) / APS Organics	21000	6200	1000	1000	ug/Kg
CA94067	$8100SMR	Benzo(ghi)perylene	CT / RSR DEC I/C (mg/kg) / APS Organics	140000	3800	78000	78000	ug/Kg
CA94067	$8100SMR	Benzo(k)fluoranthene	CT / RSR DEC I/C (mg/kg) / Semivolatiles	130000	3800	78000	78000	ug/Kg
CA94067	$8100SMR	Benzo(b)fluoranthene	CT / RSR DEC I/C (mg/kg) / Semivolatiles	120000	3800	7800	7800	ug/Kg
CA94067	$8100SMR	Benzo(a)pyrene	CT / RSR DEC I/C (mg/kg) / Semivolatiles	150000	6200	1000	1000	ug/Kg
CA94067	$8100SMR	Benz(a)anthracene	CT / RSR DEC I/C (mg/kg) / Semivolatiles	150000	3800	7800	7800	ug/Kg
CA94067	$8100SMR	Dibenz(a,h)anthracene	CT / RSR DEC RES (mg/kg) / APS Organics	21000	6200	1000	1000	ug/Kg
CA94067	$8100SMR	Indeno(1,2,3-cd)pyrene	CT / RSR DEC RES (mg/kg) / APS Organics	120000	6400	1000	1000	ug/Kg
CA94067	$8100SMR	Chrysene	CT / RSR DEC RES (mg/kg) / APS Organics	160000	3800	84000	84000	ug/Kg
CA94067	$8100SMR	Benzo(ghi)perylene	CT / RSR DEC RES (mg/kg) / APS Organics	140000	3800	8400	8400	ug/Kg
CA94067	$8100SMR	Benzo(k)fluoranthene	CT / RSR DEC RES (mg/kg) / Semivolatiles	130000	3800	8400	8400	ug/Kg
CA94067	$8100SMR	Benzo(b)fluoranthene	CT / RSR DEC RES (mg/kg) / Semivolatiles	120000	3800	1000	1000	ug/Kg
CA94067	$8100SMR	Benz(a)anthracene	CT / RSR DEC RES (mg/kg) / Semivolatiles	150000	3800	1000	1000	ug/Kg
CA94067	$8100SMR	Benzo(a)pyrene	CT / RSR DEC RES (mg/kg) / Semivolatiles	150000	6200	1000	1000	ug/Kg
CA94067	$8100SMR	Chrysene	CT / RSR GB (mg/kg) / APS Organics	160000	3800	1000	1000	ug/Kg
CA94067	$8100SMR	Indeno(1,2,3-cd)pyrene	CT / RSR GB (mg/kg) / APS Organics	120000	6400	1000	1000	ug/Kg
CA94067	$8100SMR	Dibenz(a,h)anthracene	CT / RSR GB (mg/kg) / APS Organics	21000	6200	1000	1000	ug/Kg
CA94067	$8100SMR	Benzo(ghi)perylene	CT / RSR GB (mg/kg) / APS Organics	140000	3800	1000	1000	ug/Kg
CA94067	$8100SMR	Fluoranthene	CT / RSR GB (mg/kg) / Semivolatiles	170000	13000	56000	56000	ug/Kg
CA94067	$8100SMR	Pyrene	CT / RSR GB (mg/kg) / Semivolatiles	450000	40000	40000	40000	ug/Kg
CA94067	$8100SMR	Benzo(b)fluoranthene	CT / RSR GB (mg/kg) / Semivolatiles	120000	3800	1000	1000	ug/Kg
CA94067	$8100SMR	Benz(a)anthracene	CT / RSR GB (mg/kg) / Semivolatiles	150000	3800	1000	1000	ug/Kg
CA94067	$8100SMR	Benzo(a)pyrene	CT / RSR GB (mg/kg) / Semivolatiles	150000	6200	1000	1000	ug/Kg
CA94067	$8100SMR	Benzo(k)fluoranthene	CT / RSR GB (mg/kg) / Semivolatiles	130000	3800	1000	1000	ug/Kg
CA94067	$ETPH_SMR	Ext. Petroleum H.C. (C9-C36)	CT / RSR DEC I/C (mg/kg) / Pest/PCB/TPH	8600	580	2500	2500	mg/Kg
CA94067	$ETPH_SMR	Ext. Petroleum H.C. (C9-C36)	CT / RSR DEC RES (mg/kg) / Pest/PCB/TPH	8600	580	500	500	mg/Kg
CA94067	$ETPH_SMR	Ext. Petroleum H.C. (C9-C36)	CT / RSR GB (mg/kg) / Pesticides/TPH	8600	580	2500	2500	mg/Kg
CA94067	AS-SM	Arsenic	CT / RSR DEC I/C (mg/kg) / Inorganics	91.6	0.76	10	10	mg/Kg
CA94067	AS-SM	Arsenic	CT / RSR DEC RES (mg/kg) / Inorganics	91.6	0.76	10	10	mg/Kg
CA94069	$8100SMR	Chrysene	CT / RSR GB (mg/kg) / APS Organics	1100	240	1000	1000	ug/Kg

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

REASONABLE CONFIDENCE PROTOCOL
LABORATORY ANALYSIS QA/QC CERTIFICATION FORM

Laboratory Name: Phoenix Environmental Labs, Inc. ***Client:*** Tighe & Bond

Project Location: ROCKVILLE MGP ***Project Number:***

Laboratory Sample ID(s): CA94064, CA94065, CA94067, CA94069 ***Sampling Date(s):*** 7/19/2018

List RCP Methods Used (e.g., 8260, 8270, et cetera) 1311/1312, 6010, 7470/7471, 8082, 8260, 8270, ETPH, 9010/9012

1	**For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP method-specific Reasonable Confidence Protocol documents?**	☑ Yes ☐ No
1A	**Were the method specified preservation and holding time requirements met?**	☑ Yes ☐ No
1B	***VPH and EPH methods only:*** **Was the VPH or EPH method conducted without significant modifications (see section 11.3 of respective RCP methods)**	☐ Yes ☐ No ☑ NA
2	**Were all samples received by the laboratory in a condition consistent with that described on the associated Chain-of-Custody document(s)?**	☑ Yes ☐ No
3	**Were samples received at an appropriate temperature (< 6 Degrees C)?**	☑ Yes ☐ No ☐ NA
4	**Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents acheived? See Sections: ICP Narration, PCB Narration, SVOA Narration, VOA Narration.**	☐ Yes ☑ No
5	**a) Were reporting limits specified or referenced on the chain-of-custody?** **b) Were these reporting limits met?**	☑ Yes ☐ No ☐ Yes ☑ No
6	**For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?**	☐ Yes ☑ No
7	**Are project-specific matrix spikes and laboratory duplicates included in the data set?**	☐ Yes ☑ No

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or 1B is "No", the data package does not meet the requirements for "Reasonable Confidence". This form may not be altered and all questions must be answered.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized Signature: Rashmi Makol **Position:** Project Manager

Printed Name: Rashmi Makol **Date:** Monday, August 13, 2018

Name of Laboratory Phoenix Environmental Labs, Inc.

This certification form is to be used for RCP methods only.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

August 13, 2018

SDG I.D.: GCA94064

SDG Comments

8270 Semi-volatile Organics: (C94065, CA94067, CA94069)
The client requested a short list for 8270 RCP Semivolatile. Only the PAH constituents are reported as requested on the chain-of-custody.

Sample(CA94065) required a dilution for Volatiles due to the presence of target and/or non-target compounds. This resulted in elevated reporting limits that exceed the requested criteria for one or more analytes.

Sample(CA94065) required a dilution for Semivolatiles due to a matrix interference and/or the presence of a large amount of non-target material in the sample. This resulted in elevated reporting limits that exceed the requested criteria for one or more analytes.

Cyanide Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument:

LACHAT 07/23/18-1 Dustin Harrison, Greg Danielewski, Chemist 07/23/18

CA94064, CA94067, CA94069

The samples were distilled in accordance with the method.
The initial calibration met criteria.

The calibration check standards (ICV,CCV) were within 15% of true value and were analyzed at a frequencey of one per ten samples.
The continuing calibration blanks (ICB,CCB) had concentrations less than the reporting level.

The method blank, laboratory control sample (LCS), and matrix spike were distilled with the samples.

QC (Batch Specific):

Batch 439830 (CA93881)

CA94064, CA94067, CA94069

All LCS recoveries were within 80 - 120 with the following exceptions: None.
Additional: LCS acceptance range is 80-120% for soils MS acceptance range 75-125% for soils

ETPH Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument:

AU-FID1 07/23/18-1 Jeff Bucko, Chemist 07/23/18

CA94067

The initial calibration (ETPH723I) RSD for the compound list was less than 30% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 30% except for the following compounds:None.

AU-FID21 07/23/18-1 Jeff Bucko, Chemist 07/23/18

CA94064, CA94065

The initial calibration (ETPH620I) RSD for the compound list was less than 30% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 30% except for the following compounds:None.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

August 13, 2018

SDG I.D.: GCA94064

ETPH Narration

AU-FID22 07/20/18-1 Jeff Bucko, Chemist 07/20/18

CA94069

The initial calibration (ETPH621I) RSD for the compound list was less than 30% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 30% except for the following compounds:None.

QC (Batch Specific):

Batch 439728 (CA94567)

CA94064, CA94065, CA94067, CA94069

All LCS recoveries were within 60 - 120 with the following exceptions: None.
All LCSD recoveries were within 60 - 120 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
Additional surrogate criteria: LCS acceptance range is 60-120% MS acceptance range 50-150%. The ETPH/DRO LCS has been normalized based on the alkane calibration.

Mercury Narration

Were all QA/QC performance criteria specified in the analytical method achieved? Yes.

Instrument:

MERLIN 07/23/18 08:10 Rick Schweitzer, Chemist 07/23/18

CA94064, CA94067, CA94069

The method preparation blank contains all of the acids and reagents as the samples; the instrument blanks do not.
The initial calibration met all criteria including a standard run at or below the reporting level.
All calibration verification standards (ICV, CCV) met criteria.
All calibration blank verification standards (ICB, CCB) met criteria.
The matrix spike sample is used to identify spectral interference for each batch of samples, if within 85-115%, no interference is observed and no further action is taken.
The following Initial Calibration Verification (ICV) compounds did not meet criteria: None.
The following Continuing Calibration Verification (CCV) compounds did not meet criteria: None.

QC (Batch Specific):

Batch 439700 (CA93881)

CA94064, CA94067, CA94069

All LCS recoveries were within 70 - 130 with the following exceptions: None.
All LCSD recoveries were within 70 - 130 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.

Batch 439705 (CA94371)

CA94064, CA94067, CA94069

All LCS recoveries were within 80 - 120 with the following exceptions: None.
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

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Certification Report

August 13, 2018

SDG I.D.: GCA94064

ICP Metals Narration

Were all QA/QC performance criteria specified in the analytical method achieved? No.

QC Batch 439657 (Samples: CA94064, CA94067, CA94069): -----

The Sample/Duplicate RPD exceeds the method criteria for one or more analytes, therefore there may be variability in the reported result. (Arsenic, Nickel)

Instrument:

ARCOS 07/20/18 11:09 Emily Kolominskaya, Phyllis Shiller, Chemist 07/20/18

CA94064, CA94067, CA94069

Additional criteria for CCV and ICSAB:
Sodium and Potassium are poor performing elements, the laboratory's in-house limits are 85-115% (CCV) and 70-130% (ICSAB).The linear range is defined daily by the calibration range.
The following Initial Calibration Verification (ICV) compounds did not meet criteria: None.
The following Continuing Calibration Verification (CCV) compounds did not meet criteria: None.
The following ICP Interference Check (ICSAB) compounds did not meet criteria: None.

QC (Batch Specific):

Batch 439657 (CA94190)

CA94064, CA94067, CA94069

All LCS recoveries were within 75 - 125 with the following exceptions: None.

Batch 439754 (CA91132)

CA94064, CA94067, CA94069

All LCS recoveries were within 75 - 125 with the following exceptions: None.

PCB Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 439590 (Samples: CA94064, CA94067): -----

The LCS/LCSD RPD exceeds the method criteria for one or more surrogates, therefore there may be variability in the reported result. (% DCBP (Surrogate Rec))

Instrument:

AU-ECD3 07/19/18-1 Adam Werner, Chemist 07/19/18

CA94064, CA94067

The initial calibration (PC605AI) RSD for the compound list was less than 20% except for the following compounds: None.
The initial calibration (PC605BI) RSD for the compound list was less than 20% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 15% except for the following compounds:None.

QC (Batch Specific):

Batch 439590 (CA93883)

CA94064, CA94067

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RCP Certification Report

August 13, 2018

SDG I.D.: GCA94064

PCB Narration

All LCS recoveries were within 40 - 140 with the following exceptions: None.
All LCSD recoveries were within 40 - 140 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: % DCBP (Surrogate Rec)(37.0%)

SVOA Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 439640 (Samples: CA94064): -----

One or more analytes is below the method criteria. A low bias for these analytes is possible. (2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol)

The LCS and/or the LCSD recovery is below the method criteria. All of the other QC is acceptable, therefore no significant bias is suspected. (Pyridine)

The QC recoveries for one or more analytes is below the method criteria. A slight low bias is likely. (Benzoic Acid)

Instrument:

CHEM06 07/20/18-1 Keith Aloisa, Chemist 07/20/18

CA94065

The DDT breakdown and pentachlorophenol & benzidine peak tailing were evaluated in the DFTPP tune and were found to be in control.

Initial Calibration Verification (CHEM06/BN_0627):
100% of target compounds met criteria.
The following compounds had %RSDs >20%: None.
The following compounds did not meet recommended response factors: None.
The following compounds did not meet a minimum response factors: None.

Continuing Calibration Verification (CHEM06/0720_02A-BN_0627):
Internal standard areas were within 50 to 200% of the initial calibration with the following exceptions: None.
100% of target compounds met criteria.
The following compounds did not meet % deviation criteria: None.
The following compounds did not meet maximum % deviations: None.
The following compounds did not meet recommended response factors: None.
The following compounds did not meet minimum response factors: None.

CHEM06 07/23/18-1 Harry Mullin, Chemist 07/23/18

CA94069

The DDT breakdown and pentachlorophenol & benzidine peak tailing were evaluated in the DFTPP tune and were found to be in control.

Initial Calibration Verification (CHEM06/BN_0627):
100% of target compounds met criteria.
The following compounds had %RSDs >20%: None.
The following compounds did not meet recommended response factors: None.
The following compounds did not meet a minimum response factors: None.

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RCP Certification Report

August 13, 2018

SDG I.D.: GCA94064

SVOA Narration

Continuing Calibration Verification (CHEM06/0723_02-BN_0627):
Internal standard areas were within 50 to 200% of the initial calibration with the following exceptions: None.
100% of target compounds met criteria.
The following compounds did not meet % deviation criteria: None.
The following compounds did not meet maximum % deviations: None.
The following compounds did not meet recommended response factors: None.
The following compounds did not meet minimum response factors: None.

CHEM27 07/20/18-1 Keith Aloisa, Chemist 07/20/18

CA94065

Initial Calibration Verification (CHEM27/bn_0718):
100% of target compounds met criteria.
The following compounds had %RSDs >20%: None.
The following compounds did not meet recommended response factors: None.
The following compounds did not meet a minimum response factors: None.

Continuing Calibration Verification (CHEM27/0720_02-bn_0718):
Internal standard areas were within 50 to 200% of the initial calibration with the following exceptions: None.
100% of target compounds met criteria.
The following compounds did not meet % deviation criteria: None.
The following compounds did not meet maximum % deviations: None.
The following compounds did not meet recommended response factors: None.
The following compounds did not meet minimum response factors: None.

CHEM27 07/23/18-1 Harry Mullin, Chemist 07/23/18

CA94067

Initial Calibration Verification (CHEM27/SPLIT_0722):
98% of target compounds met criteria.
The following compounds had %RSDs >20%: None.
The following compounds did not meet recommended response factors: None.
The following compounds did not meet a minimum response factors: None.

Continuing Calibration Verification (CHEM27/0723_02-SPLIT_0722):
Internal standard areas were within 50 to 200% of the initial calibration with the following exceptions: None.
100% of target compounds met criteria.
The following compounds did not meet % deviation criteria: None.
The following compounds did not meet maximum % deviations: None.
The following compounds did not meet recommended response factors: None.
The following compounds did not meet minimum response factors: None.

CHEM28 07/23/18-1 Keith Aloisa, Chemist 07/23/18

CA94064

Initial Calibration Verification (CHEM28/SPLIT_0717):
92% of target compounds met criteria.
The following compounds had %RSDs >20%: 2,4-Dinitrophenol 37% (20%), 4,6-Dinitro-2-methylphenol 36% (20%), Benzidine 24% (20%), Benzoic acid 26% (20%), Hexachlorocyclopentadiene 24% (20%), Pentachlorophenol 31% (20%)
The following compounds did not meet recommended response factors: None.
The following compounds did not meet a minimum response factors: None.

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RCP Certification Report

August 13, 2018

SDG I.D.: GCA94064

SVOA Narration

Continuing Calibration Verification (CHEM28/0723_06-SPLIT_0717):
Internal standard areas were within 50 to 200% of the initial calibration with the following exceptions: None.
98% of target compounds met criteria.
The following compounds did not meet % deviation criteria: 4-Nitrophenol 32%H (30%), Benzoic acid 73%H (30%)
The following compounds did not meet maximum % deviations: Benzoic acid 73%H (40%)
The following compounds did not meet recommended response factors: None.
The following compounds did not meet minimum response factors: None.

CHEM28 07/25/18-1 Matt Richard, Chemist 07/25/18

CA94064

Initial Calibration Verification (CHEM28/SPLIT_0717):
92% of target compounds met criteria.
The following compounds had %RSDs >20%: None.
The following compounds did not meet recommended response factors: None.
The following compounds did not meet a minimum response factors: None.

Continuing Calibration Verification (CHEM28/0725_02-SPLIT_0717):
Internal standard areas were within 50 to 200% of the initial calibration with the following exceptions: None.
98% of target compounds met criteria.
The following compounds did not meet % deviation criteria: None.
The following compounds did not meet maximum % deviations: None.
The following compounds did not meet recommended response factors: None.
The following compounds did not meet minimum response factors: None.

QC (Batch Specific):

Batch 439589 (CA93433)

CA94065, CA94067

All LCS recoveries were within 30 - 130 with the following exceptions: None.
All LCSD recoveries were within 30 - 130 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

Batch 439640 (CA94051)

CA94064

All LCS recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(<10%), 4,6-Dinitro-2-methylphenol(19%), Benzoic Acid(<10%), Pyridine(29%)
All LCSD recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(<10%), 4,6-Dinitro-2-methylphenol(25%), Benzoic Acid(<10%)
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

Batch 440000 (CA95115)

CA94069

All LCS recoveries were within 30 - 130 with the following exceptions: None.
All LCSD recoveries were within 30 - 130 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

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RCP Certification Report

August 13, 2018

SDG I.D.: GCA94064

SVOA Narration

Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

VOA Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 439971 (Samples: CA94069): -----

The QC recoveries for one or more analytes is below the method criteria. A slight low bias is likely. (Acetone, Methyl ethyl ketone)

QC Batch 439979 (Samples: CA94064, CA94065, CA94067): -----

The QC recoveries for one or more analytes is below the method criteria. A slight low bias is likely. (Acetone)

QC Batch 440153 (Samples: CA94064, CA94067): -----

The MS/MSD RPD exceeds the method criteria for one or more analytes, therefore there may be variability in the reported result. (Trichlorofluoromethane)

Instrument:

CHEM03 07/20/18-2 Jane Li, Chemist 07/20/18

CA94069

Initial Calibration Verification (CHEM03/VT-L0714):
95% of target compounds met criteria.
The following compounds had %RSDs >20%: Bromoform 26% (20%), Chloroethane 30% (20%), trans-1,4-dichloro-2-butene 23% (20%), Trichlorofluoromethane 22% (20%)
The following compounds did not meet recommended response factors: Tetrachloroethene 0.186 (0.2)
The following compounds did not meet a minimum response factors: None.

Continuing Calibration Verification (CHEM03/0720L37-VT-L0714):
Internal standard areas were within 50 to 200% of the initial calibration with the following exceptions: None.
98% of target compounds met criteria.
The following compounds did not meet % deviation criteria: Acetone 37%L (30%), Methyl Ethyl Ketone 32%L (30%)
The following compounds did not meet maximum % deviations: None.
The following compounds did not meet recommended response factors: None.
The following compounds did not meet minimum response factors: None.

CHEM03 07/21/18-1 Jane Li, Chemist 07/21/18

CA94064, CA94065, CA94067

Initial Calibration Verification (CHEM03/VT-L0714):
95% of target compounds met criteria.
The following compounds had %RSDs >20%: Bromoform 26% (20%), Chloroethane 30% (20%), trans-1,4-dichloro-2-butene 23% (20%), Trichlorofluoromethane 22% (20%)
The following compounds did not meet recommended response factors: Tetrachloroethene 0.186 (0.2)
The following compounds did not meet a minimum response factors: None.

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RCP Certification Report

August 13, 2018

SDG I.D.: GCA94064

VOA Narration

Continuing Calibration Verification (CHEM03/0721L02-VT-L0714):
Internal standard areas were within 50 to 200% of the initial calibration with the following exceptions: None.
100% of target compounds met criteria.
The following compounds did not meet % deviation criteria: None.
The following compounds did not meet maximum % deviations: None.
The following compounds did not meet recommended response factors: None.
The following compounds did not meet minimum response factors: None.

CHEM18 07/23/18-1 Jane Li, Chemist 07/23/18

CA94064, CA94067

Initial Calibration Verification (CHEM18/VT-M0714):
98% of target compounds met criteria.
The following compounds had %RSDs >20%: 1,2-Dibromo-3-chloropropane 21% (20%), Chloroethane 22% (20%)
The following compounds did not meet recommended response factors: None.
The following compounds did not meet a minimum response factors: None.

Continuing Calibration Verification (CHEM18/0723M04-VT-M0714):
Internal standard areas were within 50 to 200% of the initial calibration with the following exceptions: None.
100% of target compounds met criteria.
The following compounds did not meet % deviation criteria: None.
The following compounds did not meet maximum % deviations: None.
The following compounds did not meet recommended response factors: None.
The following compounds did not meet minimum response factors: None.

QC (Batch Specific):

Batch 439971 (CA95025)

CA94069

All LCS recoveries were within 70 - 130 with the following exceptions: Acetone(55%), Methyl ethyl ketone(67%)
All LCSD recoveries were within 70 - 130 with the following exceptions: Acetone(57%), Methyl ethyl ketone(65%)
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%.

Batch 439979 (CA94628)

CA94064, CA94065, CA94067

All LCS recoveries were within 70 - 130 with the following exceptions: Acetone(68%)
All LCSD recoveries were within 70 - 130 with the following exceptions: Acetone(68%)
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%.

Batch 440153 (CA95159)

CA94064, CA94067

All LCS recoveries were within 70 - 130 with the following exceptions: None.
All LCSD recoveries were within 70 - 130 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%.

Temperature Narration

Environmental Laboratories, Inc.
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NY # 11301

RCP Certification Report

August 13, 2018

SDG I.D.: GCA94064

The samples were received at 2.1C with cooling initiated.
(Note acceptance criteria for relevant matrices is above freezing up to 6°C)

Cooler: Yes ☒ No ☐
Coolant: IPK ☐ ICE ☒ No ☐
Temp 2.1 °C Pg 1 of 1

PHOENIX
Environmental Laboratories, Inc.

CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Contact Options:
☐ Fax:
☐ Phone:
☒ Email: LBerglund@tighebond.com

Customer: Tighe + Bond
Address: 213 Court St Suite 1102
Middletown CT

Project: Rocky Hill MGP
Report to: Lynn Wiley
Invoice to: Tighe + Bond

Project P.O: 14-0755-4473

This section MUST be completed with Bottle Quantities.

Client Sample - Information - Identification

Sampler's Signature: [signature] Date: 7/14/18

Matrix Code:
DW=Drinking Water **GW**=Ground Water **SW**=Surface Water **WW**=Waste Water
RW=Raw Water **SE**=Sediment **SL**=Sludge **S**=Soil **SD**=Solid **W**=Wipe
OIL=Oil **B**=Bulk **L**=Liquid

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	ETPH	RAH	VOC	SVOC	RSR metals	SPLP RSR metals	Total Cyanide	PCBs			Soil VOA Vials [x] methanol [x] H2O	GL Soil container (4) oz	GL Soil container ( ) oz	40 ml VOA Vial [ ] As is [ ] HCl	GL Amber 1000ml [ ] As is [ ] H2SO4	PL As is [ ] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 1500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
940661	SB-46 (5-7 ft)	S	7/14/18	7:45	X		X	X	X	X	X	X			3	1								
940665	SB-47 (11-13 ft)			10:00	X	X	X								3	1								
* 940666	SB-34 (5-7 ft)			10:30	X	X	X		X	X	[illegible]				3	1								
940667	SB-35 (5-7 ft)			12:30	X	X	X		X	X	X	X			3	1								
* 940668	SB-42 (7-9 ft)			13:30											3	1								
940669	SB-39 (5-7 ft)	↓	↓	14:30	X	X	X		X	X	X				3	1								

Relinquished by:	Accepted by:	Date:	Time:
[signature]	[signature]	7/14/18	14:17

Comments, Special Requirements or Regulations:
DAS Pricing
Quote: TIG0517BA
Sent Email for Analysis LB

Turnaround:
☐ 1 Day*
☐ 2 Days*
☐ 3 Days*
☒ Standard
☐ Other
* SURCHARGE APPLIES

RI
☐ Direct Exposure (Residential)
☐ GW
☐ Other

CT
☒ RCP Cert
☐ GW Protection
☐ SW Protection
☐ GA Mobility
☒ GB Mobility
☒ Residential DEC
☒ I/C DEC
☐ Other

MA
☐ MCP Certification
☐ GW-1
☐ GW-2
☐ GW-3
☐ S-1
☐ S-2
☐ S-3
☐ MWRA eSMART
☐ Other

State where samples were collected: CT

Data Format
☒ Excel
☒ PDF
☐ GIS/Key
☐ EQuIS
☒ Other Geotech

Data Package
☐ Tier II Checklist
☐ Full Data Package*
☒ Phoenix Std Report
☐ Other
* SURCHARGE APPLIES

Lori Bailey

From: Lori Bailey
Sent: Thursday, July 19, 2018 05:01 PM
To: 'lewilley@tighebond.com'
Subject: Rockville MGP Samples

Hi Lynn,

On the samples received today for the above mentioned project, SB-42 (7-9 ft) has no analysis listed. Also, SB-34 (5-7 ft) the analysis is crossed out. I am placing these on hold for now. Please let me know how you would like for us to proceed.

Thanks,

Lori Bailey
Client Services Representative
Phoenix Environmental Laboratories
587 East Middle Turnpike
Manchester, CT 06040
Ph: 1-860-645-1102
Fx: 1-860-645-0823
THIS MESSAGE IS INTENDED ONLY FOR THE USE OF THE INDIVIDUAL OR ENTITY TO WHICH IT IS ADDRESSED AND MAY CONTAIN INFORMATION THAT IS PRIVILEGED, CONFIDENTIAL, AND EXEMPT FROM DISCLOSURE UNDER APPLICABLE LAW. If the reader of this message is not the intended recipient, or the employee or agent responsible for delivering the message to the intended recipient, you are hereby notified that any dissemination, distribution, forwarding, or copying of this communication is strictly prohibited. If you have received this communication in error, please notify the sender immediately by e-mail or telephone, and delete the original message immediately. Thank you.

GCA 94064

Lori Bailey

From: Benjamin P. Caswell <BCaswell@tighebond.com>
Sent: Thursday, July 19, 2018 05:08 PM
To: Lynn E. Willey
Cc: Lori Bailey
Subject: Re: Rockville MGP Samples

Hi Lori,

Both of those samples should be placed on hold. Sorry, I forgot got to put a note at the bottom.

Thank you

Ben Caswell

On Jul 19, 2018, at 17:03, Lynn E. Willey <LEWilley@tighebond.com> wrote:

> Hi Lori:
>
> Thank you for the update. Please keep the SB 34 (5-7) on hold.
>
> I will check with Ben on SB-42 (7-9'). This one should be on hold but not sure if he has it in the cooler.
>
> Thank U.
>
> **Lynn E. Willey, P.G., LEP** | Senior Environmental Scientist
> **Tighe & Bond** | 213 Court Street Suite 1100 | Middletown, CT 06457
> | 860.852.5214 | 860-729-7502 (cell)
> **www.tighebond.com** | Follow us on: Twitter Facebook LinkedIn
> <image001.png>
>
> **From:** Lori Bailey [mailto:lori@phoenixlabs.com]
> **Sent:** Thursday, July 19, 2018 5:01 PM
> **To:** Lynn E. Willey <LEWilley@tighebond.com>
> **Subject:** Rockville MGP Samples
>
> Hi Lynn,
>
> On the samples received today for the above mentioned project, SB-42 (7-9 ft) has no analysis listed. Also, SB-34 (5-7 ft) the analysis is crossed out. I am placing these on hold for now. Please let me know how you would like for us to proceed.
>
> Thanks,
>
> Lori Bailey
> Client Services Representative
> Phoenix Environmental Laboratories
> 587 East Middle Turnpike
> Manchester, CT 06040

PHOENIX
Environmental Laboratories, Inc.

Tuesday, August 07, 2018

Attn: Lynn Willey
Tighe & Bond
213 Court St, Suite 1100
Middletown, CT 06457

Project ID: ROCKVILLE MGP
Sample ID#s: CA95004 - CA95008

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

Enclosed are revised Analysis Report pages. Please replace and discard the original pages. If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
UT Lab Registration #CT00007
VT Lab Registration #VT11301

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

August 07, 2018

FOR: Attn: Lynn Willey
Tighe & Bond
213 Court St, Suite 1100
Middletown, CT 06457

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		07/20/18	8:15
Location Code:	TIGHE-DAS	Received by:	CP	07/20/18	15:14
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	14-0755-44				

Laboratory Data

SDG ID: GCA95004
Phoenix ID: CA95004

Project ID: ROCKVILLE MGP
Client ID: SB-44 (10-12`)

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.33	0.33	mg/Kg	1	07/21/18	EK	SW6010C
Arsenic	2.54	0.66	mg/Kg	1	07/21/18	EK	SW6010C
Barium	41.9	0.33	mg/Kg	1	07/21/18	EK	SW6010C
Beryllium	0.40	0.27	mg/Kg	1	07/21/18	EK	SW6010C
Cadmium	0.41	0.33	mg/Kg	1	07/21/18	EK	SW6010C
Chromium	17.2	0.33	mg/Kg	1	07/21/18	EK	SW6010C
Copper	15.5	0.9	mg/kg	1	07/21/18	EK	SW6010C
Mercury	< 0.03	0.03	mg/Kg	1	07/24/18	RS	SW7471B
Nickel	10.4	0.33	mg/Kg	1	07/21/18	EK	SW6010C
Lead	8.29	0.33	mg/Kg	1	07/21/18	EK	SW6010C
Antimony	< 3.3	3.3	mg/Kg	1	07/21/18	EK	SW6010C
Selenium	< 1.3	1.3	mg/Kg	1	07/21/18	EK	SW6010C
SPLP Silver	< 0.010	0.010	mg/L	1	07/23/18	EK	SW6010C
SPLP Arsenic	< 0.004	0.004	mg/L	1	07/23/18	EK	SW6010C
SPLP Barium	< 0.010	0.010	mg/L	1	07/23/18	EK	SW6010C
SPLP Beryllium	< 0.001	0.001	mg/L	1	07/23/18	EK	SW6010C
SPLP Cadmium	< 0.005	0.005	mg/L	1	07/23/18	EK	SW6010C
SPLP Chromium	< 0.010	0.010	mg/L	1	07/23/18	EK	SW6010C
SPLP Copper	< 0.010	0.010	mg/L	1	07/23/18	EK	SW6010C
SPLP Mercury	< 0.0005	0.0005	mg/L	1	07/23/18	RS	SW7470A
SPLP Nickel	< 0.010	0.010	mg/L	1	07/23/18	EK	SW6010C
SPLP Lead	< 0.010	0.010	mg/L	1	07/23/18	EK	SW6010C
SPLP Antimony	< 0.005	0.005	mg/L	1	07/23/18	EK	SW6010C
SPLP Selenium	< 0.020	0.020	mg/L	1	07/23/18	EK	SW6010C
SPLP Thallium	< 0.005	0.005	mg/L	1	07/23/18	EK	SW6010C
SPLP Vanadium	< 0.010	0.010	mg/L	1	07/23/18	EK	SW6010C
SPLP Zinc	< 0.010	0.010	mg/L	1	07/23/18	EK	SW6010C
Thallium	< 3.0	3.0	mg/Kg	1	07/21/18	EK	SW6010C

Ver 3

Project ID: ROCKVILLE MGP
Client ID: SB-44 (10-12`)

Phoenix I.D.: CA95004

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
SPLP Metals Digestion	Completed				07/23/18	I/I	SW3010A
Vanadium	33.2	0.33	mg/Kg	1	07/21/18	EK	SW6010C
Zinc	24.7	0.9	mg/Kg	1	07/21/18	EK	SW6010C
Percent Solid	92		%		07/20/18	Q	SW846-%Solid
Total Cyanide (SW9010C Distill.)	0.89	0.54	mg/Kg	1	07/24/18	O/GD	SW9012B
Soil Extraction for PCB	Completed				07/23/18	AA/V	SW3545A
Soil Extraction for SVOA	Completed				07/23/18	JJ/CKV	SW3545A
Extraction of CT ETPH	Completed				07/20/18	NT/V	SW3545A
Mercury Digestion	Completed				07/24/18	I/I	SW7471B
SPLP Digestion Mercury	Completed				07/23/18	I/I	SW1312/SW7470A
SPLP Extraction for Metals	Completed				07/20/18	I	SW1312
Total Metals Digest	Completed				07/20/18	T/AG/BF	SW3050B
TPH by GC (Extractable Products)							
Ext. Petroleum H.C. (C9-C36)	ND	54	mg/Kg	1	07/23/18	JRB	CTETPH 8015D
Identification	ND		mg/Kg	1	07/23/18	JRB	CTETPH 8015D
QA/QC Surrogates							
% n-Pentacosane	69		%	1	07/23/18	JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	360	ug/Kg	10	07/24/18	AW	SW8082A
PCB-1221	ND	360	ug/Kg	10	07/24/18	AW	SW8082A
PCB-1232	ND	360	ug/Kg	10	07/24/18	AW	SW8082A
PCB-1242	ND	360	ug/Kg	10	07/24/18	AW	SW8082A
PCB-1248	ND	360	ug/Kg	10	07/24/18	AW	SW8082A
PCB-1254	ND	360	ug/Kg	10	07/24/18	AW	SW8082A
PCB-1260	ND	360	ug/Kg	10	07/24/18	AW	SW8082A
PCB-1262	ND	360	ug/Kg	10	07/24/18	AW	SW8082A
PCB-1268	ND	360	ug/Kg	10	07/24/18	AW	SW8082A
QA/QC Surrogates							
% DCBP	97		%	10	07/24/18	AW	30 - 150 %
% TCMX	90		%	10	07/24/18	AW	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
1,1,1-Trichloroethane	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	3.8	ug/Kg	1	07/21/18	JLI	SW8260C
1,1,2-Trichloroethane	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
1,1-Dichloroethane	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
1,1-Dichloroethene	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
1,1-Dichloropropene	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
1,2,3-Trichloropropane	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
1,2-Dibromoethane	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
1,2-Dichlorobenzene	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
1,2-Dichloroethane	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
1,2-Dichloropropane	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C

Ver 3

Project ID: ROCKVILLE MGP
Client ID: SB-44 (10-12`)

Phoenix I.D.: CA95004

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,3,5-Trimethylbenzene	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
1,3-Dichlorobenzene	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
1,3-Dichloropropane	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
1,4-Dichlorobenzene	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
2,2-Dichloropropane	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
2-Chlorotoluene	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
2-Hexanone	ND	32	ug/Kg	1	07/21/18	JLI	SW8260C
2-Isopropyltoluene	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
4-Chlorotoluene	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
4-Methyl-2-pentanone	ND	32	ug/Kg	1	07/21/18	JLI	SW8260C
Acetone	ND	320	ug/Kg	1	07/21/18	JLI	SW8260C
Acrylonitrile	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
Benzene	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
Bromobenzene	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
Bromochloromethane	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
Bromodichloromethane	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
Bromoform	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
Bromomethane	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
Carbon Disulfide	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
Carbon tetrachloride	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
Chlorobenzene	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
Chloroethane	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
Chloroform	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
Chloromethane	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
cis-1,2-Dichloroethene	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
cis-1,3-Dichloropropene	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
Dibromochloromethane	ND	3.8	ug/Kg	1	07/21/18	JLI	SW8260C
Dibromomethane	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
Dichlorodifluoromethane	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
Ethylbenzene	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
Hexachlorobutadiene	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
Isopropylbenzene	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
m&p-Xylene	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
Methyl Ethyl Ketone	ND	38	ug/Kg	1	07/21/18	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	13	ug/Kg	1	07/21/18	JLI	SW8260C
Methylene chloride	ND	13	ug/Kg	1	07/21/18	JLI	SW8260C
Naphthalene	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
n-Butylbenzene	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
n-Propylbenzene	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
o-Xylene	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
p-Isopropyltoluene	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
sec-Butylbenzene	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
Styrene	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
tert-Butylbenzene	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
Tetrachloroethene	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
Tetrahydrofuran (THF)	ND	13	ug/Kg	1	07/21/18	JLI	SW8260C
Toluene	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
Total Xylenes	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
trans-1,2-Dichloroethene	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C

Project ID: ROCKVILLE MGP
Client ID: SB-44 (10-12`)

Phoenix I.D.: CA95004

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
trans-1,3-Dichloropropene	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	13	ug/Kg	1	07/21/18	JLI	SW8260C
Trichloroethene	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
Trichlorofluoromethane	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
Trichlorotrifluoroethane	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
Vinyl chloride	ND	6.4	ug/Kg	1	07/21/18	JLI	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	104		%	1	07/21/18	JLI	70 - 130 %
% Bromofluorobenzene	91		%	1	07/21/18	JLI	70 - 130 %
% Dibromofluoromethane	106		%	1	07/21/18	JLI	70 - 130 %
% Toluene-d8	99		%	1	07/21/18	JLI	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	250	ug/Kg	1	07/24/18	KCA	SW8270D
1,2,4-Trichlorobenzene	ND	250	ug/Kg	1	07/24/18	KCA	SW8270D
1,2-Dichlorobenzene	ND	250	ug/Kg	1	07/24/18	KCA	SW8270D
1,2-Diphenylhydrazine	ND	360	ug/Kg	1	07/24/18	KCA	SW8270D
1,3-Dichlorobenzene	ND	250	ug/Kg	1	07/24/18	KCA	SW8270D
1,4-Dichlorobenzene	ND	250	ug/Kg	1	07/24/18	KCA	SW8270D
2,4,5-Trichlorophenol	ND	250	ug/Kg	1	07/24/18	KCA	SW8270D
2,4,6-Trichlorophenol	ND	250	ug/Kg	1	07/24/18	KCA	SW8270D
2,4-Dichlorophenol	ND	250	ug/Kg	1	07/24/18	KCA	SW8270D
2,4-Dimethylphenol	ND	250	ug/Kg	1	07/24/18	KCA	SW8270D
2,4-Dinitrophenol	ND	360	ug/Kg	1	07/24/18	KCA	SW8270D
2,4-Dinitrotoluene	ND	250	ug/Kg	1	07/24/18	KCA	SW8270D
2,6-Dinitrotoluene	ND	250	ug/Kg	1	07/24/18	KCA	SW8270D
2-Chloronaphthalene	ND	250	ug/Kg	1	07/24/18	KCA	SW8270D
2-Chlorophenol	ND	250	ug/Kg	1	07/24/18	KCA	SW8270D
2-Methylnaphthalene	ND	250	ug/Kg	1	07/24/18	KCA	SW8270D
2-Methylphenol (o-cresol)	ND	250	ug/Kg	1	07/24/18	KCA	SW8270D
2-Nitroaniline	ND	360	ug/Kg	1	07/24/18	KCA	SW8270D
2-Nitrophenol	ND	250	ug/Kg	1	07/24/18	KCA	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	360	ug/Kg	1	07/24/18	KCA	SW8270D
3,3'-Dichlorobenzidine	ND	250	ug/Kg	1	07/24/18	KCA	SW8270D
3-Nitroaniline	ND	360	ug/Kg	1	07/24/18	KCA	SW8270D
4,6-Dinitro-2-methylphenol	ND	360	ug/Kg	1	07/24/18	KCA	SW8270D
4-Bromophenyl phenyl ether	ND	360	ug/Kg	1	07/24/18	KCA	SW8270D
4-Chloro-3-methylphenol	ND	250	ug/Kg	1	07/24/18	KCA	SW8270D
4-Chloroaniline	ND	250	ug/Kg	1	07/24/18	KCA	SW8270D
4-Chlorophenyl phenyl ether	ND	250	ug/Kg	1	07/24/18	KCA	SW8270D
4-Nitroaniline	ND	580	ug/Kg	1	07/24/18	KCA	SW8270D
4-Nitrophenol	ND	250	ug/Kg	1	07/24/18	KCA	SW8270D
Acenaphthene	ND	250	ug/Kg	1	07/24/18	KCA	SW8270D
Acenaphthylene	ND	250	ug/Kg	1	07/24/18	KCA	SW8270D
Acetophenone	ND	250	ug/Kg	1	07/24/18	KCA	SW8270D
Aniline	ND	360	ug/Kg	1	07/24/18	KCA	SW8270D
Anthracene	ND	250	ug/Kg	1	07/24/18	KCA	SW8270D
Benz(a)anthracene	ND	250	ug/Kg	1	07/24/18	KCA	SW8270D
Benzidine	ND	200	ug/Kg	1	07/24/18	KCA	SW8270D
Benzo(a)pyrene	ND	250	ug/Kg	1	07/24/18	KCA	SW8270D

Project ID: ROCKVILLE MGP
Client ID: SB-44 (10-12`)

Phoenix I.D.: CA95004

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Benzo(b)fluoranthene	ND	250	ug/Kg	1	07/24/18	KCA	SW8270D
Benzo(ghi)perylene	310	250	ug/Kg	1	07/24/18	KCA	SW8270D
Benzo(k)fluoranthene	ND	250	ug/Kg	1	07/24/18	KCA	SW8270D
Benzoic acid	ND	720	ug/Kg	1	07/24/18	KCA	SW8270D
Benzyl butyl phthalate	ND	250	ug/Kg	1	07/24/18	KCA	SW8270D
Bis(2-chloroethoxy)methane	ND	250	ug/Kg	1	07/24/18	KCA	SW8270D
Bis(2-chloroethyl)ether	ND	360	ug/Kg	1	07/24/18	KCA	SW8270D
Bis(2-chloroisopropyl)ether	ND	250	ug/Kg	1	07/24/18	KCA	SW8270D
Bis(2-ethylhexyl)phthalate	ND	250	ug/Kg	1	07/24/18	KCA	SW8270D
Carbazole	ND	360	ug/Kg	1	07/24/18	KCA	SW8270D
Chrysene	ND	250	ug/Kg	1	07/24/18	KCA	SW8270D
Dibenz(a,h)anthracene	ND	250	ug/Kg	1	07/24/18	KCA	SW8270D
Dibenzofuran	ND	250	ug/Kg	1	07/24/18	KCA	SW8270D
Diethyl phthalate	ND	250	ug/Kg	1	07/24/18	KCA	SW8270D
Dimethylphthalate	ND	250	ug/Kg	1	07/24/18	KCA	SW8270D
Di-n-butylphthalate	ND	360	ug/Kg	1	07/24/18	KCA	SW8270D
Di-n-octylphthalate	ND	250	ug/Kg	1	07/24/18	KCA	SW8270D
Fluoranthene	ND	250	ug/Kg	1	07/24/18	KCA	SW8270D
Fluorene	ND	250	ug/Kg	1	07/24/18	KCA	SW8270D
Hexachlorobenzene	ND	250	ug/Kg	1	07/24/18	KCA	SW8270D
Hexachlorobutadiene	ND	250	ug/Kg	1	07/24/18	KCA	SW8270D
Hexachlorocyclopentadiene	ND	250	ug/Kg	1	07/24/18	KCA	SW8270D
Hexachloroethane	ND	250	ug/Kg	1	07/24/18	KCA	SW8270D
Indeno(1,2,3-cd)pyrene	ND	250	ug/Kg	1	07/24/18	KCA	SW8270D
Isophorone	ND	250	ug/Kg	1	07/24/18	KCA	SW8270D
Naphthalene	ND	250	ug/Kg	1	07/24/18	KCA	SW8270D
Nitrobenzene	ND	250	ug/Kg	1	07/24/18	KCA	SW8270D
N-Nitrosodimethylamine	ND	200	ug/Kg	1	07/24/18	KCA	SW8270D
N-Nitrosodi-n-propylamine	ND	200	ug/Kg	1	07/24/18	KCA	SW8270D
N-Nitrosodiphenylamine	ND	360	ug/Kg	1	07/24/18	KCA	SW8270D
Pentachloronitrobenzene	ND	360	ug/Kg	1	07/24/18	KCA	SW8270D
Pentachlorophenol	ND	360	ug/Kg	1	07/24/18	KCA	SW8270D
Phenanthrene	ND	250	ug/Kg	1	07/24/18	KCA	SW8270D
Phenol	ND	250	ug/Kg	1	07/24/18	KCA	SW8270D
Pyrene	ND	250	ug/Kg	1	07/24/18	KCA	SW8270D
Pyridine	ND	360	ug/Kg	1	07/24/18	KCA	SW8270D
QA/QC Surrogates							
% 2,4,6-Tribromophenol	76		%	1	07/24/18	KCA	30 - 130 %
% 2-Fluorobiphenyl	68		%	1	07/24/18	KCA	30 - 130 %
% 2-Fluorophenol	53		%	1	07/24/18	KCA	30 - 130 %
% Nitrobenzene-d5	60		%	1	07/24/18	KCA	30 - 130 %
% Phenol-d5	63		%	1	07/24/18	KCA	30 - 130 %
% Terphenyl-d14	67		%	1	07/24/18	KCA	30 - 130 %
Field Extraction	Completed				07/20/18		SW5035A

Project ID: ROCKVILLE MGP
Client ID: SB-44 (10-12`)

Phoenix I.D.: CA95004

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Semi-Volatile Comment:
Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services.
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Phyllis Shiller, Laboratory Director
August 07, 2018
Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

August 07, 2018

FOR: Attn: Lynn Willey
Tighe & Bond
213 Court St, Suite 1100
Middletown, CT 06457

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		07/20/18	13:15
Location Code:	TIGHE-DAS	Received by:	CP	07/20/18	15:14
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	14-0755-44				

Laboratory Data

SDG ID: GCA95004
Phoenix ID: CA95005

Project ID: ROCKVILLE MGP
Client ID: HA-7 (0-1`)

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.37	0.37	mg/Kg	1	07/21/18	EK	SW6010C
Arsenic	8.84	0.74	mg/Kg	1	07/21/18	EK	SW6010C
Barium	64.6	0.37	mg/Kg	1	07/21/18	EK	SW6010C
Beryllium	0.54	0.30	mg/Kg	1	07/21/18	EK	SW6010C
Cadmium	0.65	0.37	mg/Kg	1	07/21/18	EK	SW6010C
Chromium	15.1	0.37	mg/Kg	1	07/21/18	EK	SW6010C
Copper	30.6	0.9	mg/kg	1	07/21/18	EK	SW6010C
Mercury	0.38	0.03	mg/Kg	1	07/24/18	RS	SW7471B
Nickel	14.7	0.37	mg/Kg	1	07/21/18	EK	SW6010C
Lead	73.4	0.37	mg/Kg	1	07/21/18	EK	SW6010C
Antimony	< 3.7	3.7	mg/Kg	1	07/21/18	EK	SW6010C
Selenium	< 1.5	1.5	mg/Kg	1	07/21/18	EK	SW6010C
Thallium	< 3.3	3.3	mg/Kg	1	07/21/18	EK	SW6010C
Vanadium	24.9	0.37	mg/Kg	1	07/21/18	EK	SW6010C
Zinc	87.8	0.9	mg/Kg	1	07/21/18	EK	SW6010C
Percent Solid	90		%		07/20/18	Q	SW846-%Solid
Total Cyanide (SW9010C Distill.)	5.94	0.56	mg/Kg	1	07/24/18	O/GD	SW9012B
Soil Extraction for PCB	Completed				07/23/18	AA/V	SW3545A
Soil Extraction SVOA PAH	Completed				07/20/18	JJ/V	SW3545A
Extraction of CT ETPH	Completed				07/20/18	NT/V	SW3545A
Mercury Digestion	Completed				07/24/18	I/I	SW7471B
Total Metals Digest	Completed				07/20/18	T/AG/BF	SW3050B
TPH by GC (Extractable Products)							
Ext. Petroleum H.C. (C9-C36)	780	270	mg/Kg	5	07/23/18	JRB	CTETPH 8015D
Identification	**		mg/Kg	5	07/23/18	JRB	CTETPH 8015D
QA/QC Surrogates							
% n-Pentacosane	90		%	5	07/23/18	JRB	50 - 150 %

Ver 3

Project ID: ROCKVILLE MGP
Client ID: HA-7 (0-1`)

Phoenix I.D.: CA95005

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Polychlorinated Biphenyls							
PCB-1016	ND	360	ug/Kg	10	07/24/18	AW	SW8082A
PCB-1221	ND	360	ug/Kg	10	07/24/18	AW	SW8082A
PCB-1232	ND	360	ug/Kg	10	07/24/18	AW	SW8082A
PCB-1242	ND	360	ug/Kg	10	07/24/18	AW	SW8082A
PCB-1248	ND	360	ug/Kg	10	07/24/18	AW	SW8082A
PCB-1254	ND	360	ug/Kg	10	07/24/18	AW	SW8082A
PCB-1260	ND	360	ug/Kg	10	07/24/18	AW	SW8082A
PCB-1262	ND	360	ug/Kg	10	07/24/18	AW	SW8082A
PCB-1268	ND	360	ug/Kg	10	07/24/18	AW	SW8082A
QA/QC Surrogates							
% DCBP	100		%	10	07/24/18	AW	30 - 150 %
% TCMX	90		%	10	07/24/18	AW	30 - 150 %
Polynuclear Aromatic HC							
2-Methylnaphthalene	ND	500	ug/Kg	2	07/25/18	HM	SW8270D
Acenaphthene	ND	500	ug/Kg	2	07/25/18	HM	SW8270D
Acenaphthylene	1400	500	ug/Kg	2	07/25/18	HM	SW8270D
Anthracene	560	500	ug/Kg	2	07/25/18	HM	SW8270D
Benz(a)anthracene	1500	500	ug/Kg	2	07/25/18	HM	SW8270D
Benzo(a)pyrene	1900	500	ug/Kg	2	07/25/18	HM	SW8270D
Benzo(b)fluoranthene	2100	500	ug/Kg	2	07/25/18	HM	SW8270D
Benzo(ghi)perylene	2200	500	ug/Kg	2	07/25/18	HM	SW8270D
Benzo(k)fluoranthene	1800	500	ug/Kg	2	07/25/18	HM	SW8270D
Chrysene	2000	500	ug/Kg	2	07/25/18	HM	SW8270D
Dibenz(a,h)anthracene	ND	500	ug/Kg	2	07/25/18	HM	SW8270D
Fluoranthene	1600	500	ug/Kg	2	07/25/18	HM	SW8270D
Fluorene	ND	500	ug/Kg	2	07/25/18	HM	SW8270D
Indeno(1,2,3-cd)pyrene	2000	500	ug/Kg	2	07/25/18	HM	SW8270D
Naphthalene	ND	500	ug/Kg	2	07/25/18	HM	SW8270D
Phenanthrene	880	500	ug/Kg	2	07/25/18	HM	SW8270D
Pyrene	2400	500	ug/Kg	2	07/25/18	HM	SW8270D
QA/QC Surrogates							
% 2-Fluorobiphenyl	68		%	2	07/25/18	HM	30 - 130 %
% Nitrobenzene-d5	63		%	2	07/25/18	HM	30 - 130 %
% Terphenyl-d14	64		%	2	07/25/18	HM	30 - 130 %

Project ID: ROCKVILLE MGP
Client ID: HA-7 (0-1`)

Phoenix I.D.: CA95005

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

TPH Comment:
**Petroleum hydrocarbon chromatogram contains a multicomponent hydrocarbon distribution in the range of C9 to C36. The sample was quantitated against a C9-C36 alkane hydrocarbon standard.

Semi-Volatile Comment:
Due to a matrix interference and/or the presence of a large amount of non-target material in the sample, a dilution was required resulting in an elevated RL for the semivolatile analysis.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services.
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Phyllis Shiller, Laboratory Director
August 07, 2018
Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

August 07, 2018

FOR: Attn: Lynn Willey
Tighe & Bond
213 Court St, Suite 1100
Middletown, CT 06457

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		07/20/18	14:00
Location Code:	TIGHE-DAS	Received by:	CP	07/20/18	15:14
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	14-0755-44				

Laboratory Data

SDG ID: GCA95004
Phoenix ID: CA95006

Project ID: ROCKVILLE MGP
Client ID: HA-9 (2-2.5`)

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.41	0.41	mg/Kg	1	07/21/18	EK	SW6010C
Arsenic	11.8	0.82	mg/Kg	1	07/21/18	EK	SW6010C
Barium	70.1	0.41	mg/Kg	1	07/21/18	EK	SW6010C
Beryllium	0.41	0.33	mg/Kg	1	07/21/18	EK	SW6010C
Cadmium	0.83	0.41	mg/Kg	1	07/21/18	EK	SW6010C
Chromium	15.7	0.41	mg/Kg	1	07/21/18	EK	SW6010C
Copper	103	0.9	mg/kg	1	07/21/18	EK	SW6010C
Mercury	0.13	0.03	mg/Kg	1	07/24/18	RS	SW7471B
Nickel	8.58	0.41	mg/Kg	1	07/21/18	EK	SW6010C
Lead	80.9	0.41	mg/Kg	1	07/21/18	EK	SW6010C
Antimony	< 4.1	4.1	mg/Kg	1	07/21/18	EK	SW6010C
Selenium	< 1.6	1.6	mg/Kg	1	07/21/18	EK	SW6010C
Thallium	< 3.7	3.7	mg/Kg	1	07/21/18	EK	SW6010C
Vanadium	29.2	0.41	mg/Kg	1	07/21/18	EK	SW6010C
Zinc	60.5	0.9	mg/Kg	1	07/21/18	EK	SW6010C
Percent Solid	87		%		07/20/18	Q	SW846-%Solid
Total Cyanide (SW9010C Distill.)	7.36	0.57	mg/Kg	1	07/24/18	O/GD	SW9012B
Soil Extraction for PCB	Completed				07/23/18	AA/V	SW3545A
Soil Extraction SVOA PAH	Completed				07/20/18	JJ/V	SW3545A
Extraction of CT ETPH	Completed				07/20/18	NT/V	SW3545A
Mercury Digestion	Completed				07/24/18	I/I	SW7471B
Total Metals Digest	Completed				07/20/18	T/AG/BF	SW3050B
TPH by GC (Extractable Products)							
Ext. Petroleum H.C. (C9-C36)	2500	570	mg/Kg	10	07/23/18	JRB	CTETPH 8015D
Identification	**		mg/Kg	10	07/23/18	JRB	CTETPH 8015D
QA/QC Surrogates							
% n-Pentacosane	Diluted Out		%	10	07/23/18	JRB	50 - 150 %

Ver 3

Project ID: ROCKVILLE MGP
Client ID: HA-9 (2-2.5`)

Phoenix I.D.: CA95006

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Polychlorinated Biphenyls							
PCB-1016	ND	380	ug/Kg	10	07/24/18	AW	SW8082A
PCB-1221	ND	380	ug/Kg	10	07/24/18	AW	SW8082A
PCB-1232	ND	380	ug/Kg	10	07/24/18	AW	SW8082A
PCB-1242	ND	380	ug/Kg	10	07/24/18	AW	SW8082A
PCB-1248	ND	380	ug/Kg	10	07/24/18	AW	SW8082A
PCB-1254	ND	380	ug/Kg	10	07/24/18	AW	SW8082A
PCB-1260	ND	380	ug/Kg	10	07/24/18	AW	SW8082A
PCB-1262	ND	380	ug/Kg	10	07/24/18	AW	SW8082A
PCB-1268	ND	380	ug/Kg	10	07/24/18	AW	SW8082A
QA/QC Surrogates							
% DCBP	96		%	10	07/24/18	AW	30 - 150 %
% TCMX	75		%	10	07/24/18	AW	30 - 150 %
Polynuclear Aromatic HC							
2-Methylnaphthalene	1900	1300	ug/Kg	5	07/24/18	HM	SW8270D
Acenaphthene	ND	1300	ug/Kg	5	07/24/18	HM	SW8270D
Acenaphthylene	12000	1300	ug/Kg	5	07/24/18	HM	SW8270D
Anthracene	3700	1300	ug/Kg	5	07/24/18	HM	SW8270D
Benz(a)anthracene	3300	1000	ug/Kg	5	07/24/18	HM	SW8270D
Benzo(a)pyrene	7200	1000	ug/Kg	5	07/24/18	HM	SW8270D
Benzo(b)fluoranthene	6600	1000	ug/Kg	5	07/24/18	HM	SW8270D
Benzo(ghi)perylene	12000	1000	ug/Kg	5	07/24/18	HM	SW8270D
Benzo(k)fluoranthene	6000	1000	ug/Kg	5	07/24/18	HM	SW8270D
Chrysene	5100	1000	ug/Kg	5	07/24/18	HM	SW8270D
Dibenz(a,h)anthracene	2600	1000	ug/Kg	5	07/24/18	HM	SW8270D
Fluoranthene	3400	1300	ug/Kg	5	07/24/18	HM	SW8270D
Fluorene	ND	1300	ug/Kg	5	07/24/18	HM	SW8270D
Indeno(1,2,3-cd)pyrene	11000	1000	ug/Kg	5	07/24/18	HM	SW8270D
Naphthalene	1600	1300	ug/Kg	5	07/24/18	HM	SW8270D
Phenanthrene	1900	1300	ug/Kg	5	07/24/18	HM	SW8270D
Pyrene	6000	1300	ug/Kg	5	07/24/18	HM	SW8270D
QA/QC Surrogates							
% 2-Fluorobiphenyl	55		%	5	07/24/18	HM	30 - 130 %
% Nitrobenzene-d5	47		%	5	07/24/18	HM	30 - 130 %
% Terphenyl-d14	57		%	5	07/24/18	HM	30 - 130 %

Project ID: ROCKVILLE MGP
Client ID: HA-9 (2-2.5`)

Phoenix I.D.: CA95006

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

TPH Comment:
**Petroleum hydrocarbon chromatogram contains a multicomponent hydrocarbon distribution in the range of C9 to C36. The sample was quantitated against a C9-C36 alkane hydrocarbon standard.

Semi-Volatile Comment:
Due to a matrix interference and/or the presence of a large amount of non-target material in the sample, a dilution was required resulting in an elevated RL for the semivolatile analysis.

Semi-Volatile Comment:
Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services.
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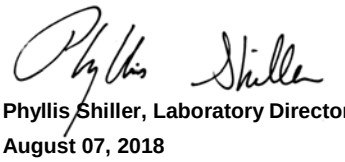

Phyllis Shiller, Laboratory Director
August 07, 2018
Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

August 07, 2018

FOR: Attn: Lynn Willey
Tighe & Bond
213 Court St, Suite 1100
Middletown, CT 06457

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		07/20/18	14:30
Location Code:	TIGHE-DAS	Received by:	CP	07/20/18	15:14
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	14-0755-44				

Laboratory Data

SDG ID: GCA95004
Phoenix ID: CA95007

Project ID: ROCKVILLE MGP
Client ID: HA-10 (2-2.5`)

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.38	0.38	mg/Kg	1	07/21/18	EK	SW6010C
Arsenic	15.1	0.76	mg/Kg	1	07/21/18	EK	SW6010C
Barium	64.9	0.38	mg/Kg	1	07/21/18	EK	SW6010C
Beryllium	0.40	0.30	mg/Kg	1	07/21/18	EK	SW6010C
Cadmium	0.67	0.38	mg/Kg	1	07/21/18	EK	SW6010C
Chromium	20.6	0.38	mg/Kg	1	07/21/18	EK	SW6010C
Copper	104	0.9	mg/kg	1	07/21/18	EK	SW6010C
Mercury	0.46	0.03	mg/Kg	1	07/24/18	RS	SW7471B
Nickel	9.61	0.38	mg/Kg	1	07/21/18	EK	SW6010C
Lead	106	0.38	mg/Kg	1	07/21/18	EK	SW6010C
Antimony	< 3.8	3.8	mg/Kg	1	07/21/18	EK	SW6010C
Selenium	< 1.5	1.5	mg/Kg	1	07/21/18	EK	SW6010C
SPLP Silver	< 0.010	0.010	mg/L	1	08/03/18	CPP	SW6010C
SPLP Arsenic	< 0.004	0.004	mg/L	1	08/03/18	CPP	SW6010C
SPLP Barium	0.075	0.010	mg/L	1	08/03/18	CPP	SW6010C
SPLP Beryllium	< 0.001	0.001	mg/L	1	08/03/18	CPP	SW6010C
SPLP Cadmium	< 0.005	0.005	mg/L	1	08/03/18	CPP	SW6010C
SPLP Chromium	< 0.010	0.010	mg/L	1	08/03/18	CPP	SW6010C
SPLP Copper	< 0.010	0.010	mg/L	1	08/03/18	CPP	SW6010C
SPLP Mercury	< 0.0005	0.0005	mg/L	1	08/03/18	RS	SW7470A
SPLP Nickel	< 0.010	0.010	mg/L	1	08/03/18	CPP	SW6010C
SPLP Lead	< 0.010	0.010	mg/L	1	08/03/18	CPP	SW6010C
SPLP Antimony	< 0.005	0.005	mg/L	1	08/03/18	CPP	SW6010C
SPLP Selenium	< 0.020	0.020	mg/L	1	08/03/18	CPP	SW6010C
SPLP Thallium	< 0.005	0.005	mg/L	1	08/03/18	CPP	SW6010C
SPLP Vanadium	< 0.010	0.010	mg/L	1	08/03/18	CPP	SW6010C
SPLP Zinc	0.021	0.010	mg/L	1	08/03/18	CPP	SW6010C
Thallium	< 3.4	3.4	mg/Kg	1	07/21/18	EK	SW6010C

Ver 3

Project ID: ROCKVILLE MGP
Client ID: HA-10 (2-2.5`)

Phoenix I.D.: CA95007

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
SPLP Metals Digestion	Completed				08/03/18	Q/I/I	SW3010A
Vanadium	29.1	0.38	mg/Kg	1	07/21/18	EK	SW6010C
Zinc	52.7	0.9	mg/Kg	1	07/21/18	EK	SW6010C
Percent Solid	80		%		07/20/18	Q	SW846-%Solid
SPLP Cyanide	0.02	0.01	mg/L	1	08/06/18	O/GD	SW1312/SW9012B
Total Cyanide (SW9010C Distill.)	32.8	0.57	mg/Kg	1	07/24/18	O/GD	SW9012B
Soil Extraction for PCB	Completed				07/23/18	AA/V	SW3545A
Soil Extraction SVOA PAH	Completed				07/20/18	JJ/V	SW3545A
Extraction of CT ETPH	Completed				07/20/18	NT/V	SW3545A
Mercury Digestion	Completed				07/24/18	I/I	SW7471B
SPLP Extraction Cyanide (Total)	Completed				08/02/18	I	SW1312
SPLP Digestion Mercury	Completed				08/03/18	Q/I/Q	SW1312/SW7470A
SPLP Extraction for Metals	Completed				08/02/18	I	SW1312
SPLP Extraction, Wet Chemistry	Completed				08/02/18	I	SW1312
Total Metals Digest	Completed				07/20/18	T/AG/BF	SW3050B
TPH by GC (Extractable Products)							
Ext. Petroleum H.C. (C9-C36)	5800	620	mg/Kg	10	07/23/18	JRB	CTETPH 8015D
Identification	**		mg/Kg	10	07/23/18	JRB	CTETPH 8015D
QA/QC Surrogates							
% n-Pentacosane	Diluted Out		%	10	07/23/18	JRB	50 - 150 %
Polychlorinated Biphenyls							
PCB-1016	ND	410	ug/Kg	10	07/24/18	AW	SW8082A
PCB-1221	ND	410	ug/Kg	10	07/24/18	AW	SW8082A
PCB-1232	ND	410	ug/Kg	10	07/24/18	AW	SW8082A
PCB-1242	ND	410	ug/Kg	10	07/24/18	AW	SW8082A
PCB-1248	ND	410	ug/Kg	10	07/24/18	AW	SW8082A
PCB-1254	ND	410	ug/Kg	10	07/24/18	AW	SW8082A
PCB-1260	ND	410	ug/Kg	10	07/24/18	AW	SW8082A
PCB-1262	ND	410	ug/Kg	10	07/24/18	AW	SW8082A
PCB-1268	ND	410	ug/Kg	10	07/24/18	AW	SW8082A
QA/QC Surrogates							
% DCBP	76		%	10	07/24/18	AW	30 - 150 %
% TCMX	56		%	10	07/24/18	AW	30 - 150 %
Polynuclear Aromatic HC							
2-Methylnaphthalene	2400	1400	ug/Kg	5	07/24/18	HM	SW8270D
Acenaphthene	ND	1400	ug/Kg	5	07/24/18	HM	SW8270D
Acenaphthylene	21000	1400	ug/Kg	5	07/24/18	HM	SW8270D
Anthracene	7800	1400	ug/Kg	5	07/24/18	HM	SW8270D
Benz(a)anthracene	11000	1000	ug/Kg	5	07/24/18	HM	SW8270D
Benzo(a)pyrene	14000	1000	ug/Kg	5	07/24/18	HM	SW8270D
Benzo(b)fluoranthene	17000	1000	ug/Kg	5	07/24/18	HM	SW8270D
Benzo(ghi)perylene	24000	1000	ug/Kg	5	07/24/18	HM	SW8270D
Benzo(k)fluoranthene	17000	1000	ug/Kg	5	07/24/18	HM	SW8270D
Chrysene	18000	1000	ug/Kg	5	07/24/18	HM	SW8270D
Dibenz(a,h)anthracene	4400	1000	ug/Kg	5	07/24/18	HM	SW8270D
Fluoranthene	8900	1400	ug/Kg	5	07/24/18	HM	SW8270D
Fluorene	1600	1400	ug/Kg	5	07/24/18	HM	SW8270D

Ver 3

Project ID: ROCKVILLE MGP
Client ID: HA-10 (2-2.5`)

Phoenix I.D.: CA95007

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Indeno(1,2,3-cd)pyrene	23000	1000	ug/Kg	5	07/24/18	HM	SW8270D
Naphthalene	2700	1400	ug/Kg	5	07/24/18	HM	SW8270D
Phenanthrene	3100	1400	ug/Kg	5	07/24/18	HM	SW8270D
Pyrene	19000	1400	ug/Kg	5	07/24/18	HM	SW8270D
QA/QC Surrogates							
% 2-Fluorobiphenyl	61		%	5	07/24/18	HM	30 - 130 %
% Nitrobenzene-d5	55		%	5	07/24/18	HM	30 - 130 %
% Terphenyl-d14	58		%	5	07/24/18	HM	30 - 130 %

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

TPH Comment:
**Petroleum hydrocarbon chromatogram contains a multicomponent hydrocarbon distribution in the range of C9 to C36. The sample was quantitated against a C9-C36 alkane hydrocarbon standard.

Semi-Volatile Comment:
Due to a matrix interference and/or the presence of a large amount of non-target material in the sample, a dilution was required resulting in an elevated RL for the semivolatile analysis.

Semi-Volatile Comment:
Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

Total Cyanide:
This sample was received with a pH<12; pH was adjusted to >12 (EPA requires preservation at time of sampling to a pH of >12.)
A sample bias can not be ruled out.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services.
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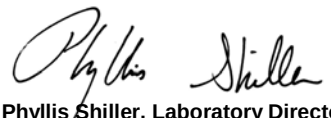

Phyllis Shiller, Laboratory Director
August 07, 2018
Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
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Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

August 07, 2018

FOR: Attn: Lynn Willey
Tighe & Bond
213 Court St, Suite 1100
Middletown, CT 06457

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		07/20/18	14:45
Location Code:	TIGHE-DAS	Received by:	CP	07/20/18	15:14
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	14-0755-44				

Laboratory Data

SDG ID: GCA95004
Phoenix ID: CA95008

Project ID: ROCKVILLE MGP
Client ID: HA-11 (1-2`)

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.33	0.33	mg/Kg	1	07/21/18	EK	SW6010C
Arsenic	13.8	0.66	mg/Kg	1	07/21/18	EK	SW6010C
Barium	45.1	0.33	mg/Kg	1	07/21/18	EK	SW6010C
Beryllium	0.39	0.26	mg/Kg	1	07/21/18	EK	SW6010C
Cadmium	0.39	0.33	mg/Kg	1	07/21/18	EK	SW6010C
Chromium	12.4	0.33	mg/Kg	1	07/21/18	EK	SW6010C
Copper	20.6	0.33	mg/kg	1	07/21/18	EK	SW6010C
Mercury	0.03	0.03	mg/Kg	1	07/24/18	RS	SW7471B
Nickel	9.92	0.33	mg/Kg	1	07/21/18	EK	SW6010C
Lead	10.2	0.33	mg/Kg	1	07/21/18	EK	SW6010C
Antimony	< 3.3	3.3	mg/Kg	1	07/21/18	EK	SW6010C
Selenium	< 1.3	1.3	mg/Kg	1	07/21/18	EK	SW6010C
Thallium	< 3.0	3.0	mg/Kg	1	07/21/18	EK	SW6010C
Vanadium	29.5	0.33	mg/Kg	1	07/21/18	EK	SW6010C
Zinc	41.0	0.33	mg/Kg	1	07/21/18	EK	SW6010C
Percent Solid	91		%		07/20/18	Q	SW846-%Solid
Total Cyanide (SW9010C Distill.)	< 0.50	0.50	mg/Kg	1	07/24/18	O/GD	SW9012B
Soil Extraction for PCB	Completed				07/23/18	AA/V	SW3545A
Soil Extraction SVOA PAH	Completed				07/20/18	JJ/V	SW3545A
Extraction of CT ETPH	Completed				07/20/18	NT/V	SW3545A
Mercury Digestion	Completed				07/24/18	I/I	SW7471B
Total Metals Digest	Completed				07/20/18	B/AG/BF	SW3050B
TPH by GC (Extractable Products)							
Ext. Petroleum H.C. (C9-C36)	78	55	mg/Kg	1	07/21/18	JRB	CTETPH 8015D
Identification	**		mg/Kg	1	07/21/18	JRB	CTETPH 8015D
QA/QC Surrogates							
% n-Pentacosane	74		%	1	07/21/18	JRB	50 - 150 %

Ver 3

Project ID: ROCKVILLE MGP
Client ID: HA-11 (1-2`)

Phoenix I.D.: CA95008

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Polychlorinated Biphenyls							
PCB-1016	ND	360	ug/Kg	10	07/24/18	AW	SW8082A
PCB-1221	ND	360	ug/Kg	10	07/24/18	AW	SW8082A
PCB-1232	ND	360	ug/Kg	10	07/24/18	AW	SW8082A
PCB-1242	ND	360	ug/Kg	10	07/24/18	AW	SW8082A
PCB-1248	ND	360	ug/Kg	10	07/24/18	AW	SW8082A
PCB-1254	ND	360	ug/Kg	10	07/24/18	AW	SW8082A
PCB-1260	ND	360	ug/Kg	10	07/24/18	AW	SW8082A
PCB-1262	ND	360	ug/Kg	10	07/24/18	AW	SW8082A
PCB-1268	ND	360	ug/Kg	10	07/24/18	AW	SW8082A
QA/QC Surrogates							
% DCBP	99		%	10	07/24/18	AW	30 - 150 %
% TCMX	73		%	10	07/24/18	AW	30 - 150 %
Polynuclear Aromatic HC							
2-Methylnaphthalene	ND	250	ug/Kg	1	07/25/18	HM	SW8270D
Acenaphthene	ND	250	ug/Kg	1	07/25/18	HM	SW8270D
Acenaphthylene	ND	250	ug/Kg	1	07/25/18	HM	SW8270D
Anthracene	ND	250	ug/Kg	1	07/25/18	HM	SW8270D
Benz(a)anthracene	ND	250	ug/Kg	1	07/25/18	HM	SW8270D
Benzo(a)pyrene	ND	250	ug/Kg	1	07/25/18	HM	SW8270D
Benzo(b)fluoranthene	ND	250	ug/Kg	1	07/25/18	HM	SW8270D
Benzo(ghi)perylene	ND	250	ug/Kg	1	07/25/18	HM	SW8270D
Benzo(k)fluoranthene	ND	250	ug/Kg	1	07/25/18	HM	SW8270D
Chrysene	ND	250	ug/Kg	1	07/25/18	HM	SW8270D
Dibenz(a,h)anthracene	ND	250	ug/Kg	1	07/25/18	HM	SW8270D
Fluoranthene	ND	250	ug/Kg	1	07/25/18	HM	SW8270D
Fluorene	ND	250	ug/Kg	1	07/25/18	HM	SW8270D
Indeno(1,2,3-cd)pyrene	ND	250	ug/Kg	1	07/25/18	HM	SW8270D
Naphthalene	ND	250	ug/Kg	1	07/25/18	HM	SW8270D
Phenanthrene	ND	250	ug/Kg	1	07/25/18	HM	SW8270D
Pyrene	ND	250	ug/Kg	1	07/25/18	HM	SW8270D
QA/QC Surrogates							
% 2-Fluorobiphenyl	69		%	1	07/25/18	HM	30 - 130 %
% Nitrobenzene-d5	65		%	1	07/25/18	HM	30 - 130 %
% Terphenyl-d14	69		%	1	07/25/18	HM	30 - 130 %

Project ID: ROCKVILLE MGP
Client ID: HA-11 (1-2`)

Phoenix I.D.: CA95008

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

TPH Comment:
**Petroleum hydrocarbon chromatogram contains a multicomponent hydrocarbon distribution in the range of C9 to C36. The sample was quantitated against a C9-C36 alkane hydrocarbon standard.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services.
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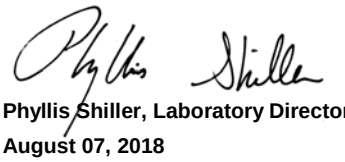

Phyllis Shiller, Laboratory Director
August 07, 2018
Reviewed and Released by: Greg Lawrence, Assistant Lab Director

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QA/QC Report

August 07, 2018

QA/QC Data

SDG I.D.: GCA95004

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 439944 (mg/L), QC Sample No: CA89051 (CA95004)														
Mercury - Water	BRL	0.0002	<0.0002	<0.0002	NC	79.4			82.2			80 - 120	20	l
Comment:														
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.														
QA/QC Batch 439805 (mg/kg), QC Sample No: CA94472 (CA95004, CA95005, CA95006, CA95007)														
ICP Metals - Soil														
Antimony	BRL	3.3	<42	<39	NC	103			95.8			75 - 125	30	
Arsenic	BRL	0.67	5.57	4.87	13.4	97.7			94.8			75 - 125	30	
Barium	BRL	0.33	45.9	63.1	31.6	103			104			75 - 125	30	r
Beryllium	BRL	0.27	<0.34	<0.31	NC	99.2			95.1			75 - 125	30	
Cadmium	BRL	0.33	2.69	2.32	14.8	101			87.9			75 - 125	30	
Chromium	BRL	0.33	42.5	34.9	19.6	103			95.5			75 - 125	30	
Copper	BRL	0.9	203	126	46.8	100			113			75 - 125	30	r
Lead	BRL	0.33	857	556	42.6	94.6			68.1			75 - 125	30	m,r
Nickel	BRL	0.33	26.6	24.3	9.00	101			89.6			75 - 125	30	
Selenium	BRL	1.3	<1.7	<1.5	NC	111			81.8			75 - 125	30	
Silver	BRL	0.33	<0.42	<0.39	NC	107			110			75 - 125	30	
Thallium	BRL	3.0	<3.8	<3.5	NC	100			89.4			75 - 125	30	
Vanadium	BRL	0.33	22.4	24.6	9.40	107			100			75 - 125	30	
Zinc	BRL	0.9	1370	1140	18.3	96.8			NC			75 - 125	30	
QA/QC Batch 439941 (mg/kg), QC Sample No: CA94566 (CA95004, CA95005, CA95006, CA95007, CA95008)														
Mercury - Soil	BRL	0.02	1.96	5.33	92.5	94.0	95.8	1.9	NC			70 - 130	30	r
Comment:														
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.														
QA/QC Batch 439947 (mg/L), QC Sample No: CA94624 (CA95004)														
ICP Metals - SPLP Extraction														
Antimony	BRL	0.005	0.007	<0.005	NC	107			103			75 - 125	20	
Arsenic	BRL	0.004	<0.004	<0.004	NC	104			100			75 - 125	20	
Barium	BRL	0.010	<0.010	<0.010	NC	99.8			95.9			75 - 125	20	
Beryllium	BRL	0.001	<0.001	<0.001	NC	101			97.0			75 - 125	20	
Cadmium	BRL	0.005	<0.005	<0.005	NC	104			101			75 - 125	20	
Chromium	BRL	0.010	<0.010	<0.010	NC	102			98.3			75 - 125	20	
Copper	BRL	0.010	<0.010	<0.010	NC	100			97.2			75 - 125	20	
Lead	BRL	0.010	<0.010	<0.010	NC	104			101			75 - 125	20	
Nickel	BRL	0.010	<0.010	<0.010	NC	103			98.7			75 - 125	20	
Selenium	BRL	0.020	<0.020	<0.020	NC	105			101			75 - 125	20	
Silver	BRL	0.010	<0.010	<0.010	NC	98.3			95.2			75 - 125	20	
Thallium	BRL	0.005	<0.005	<0.005	NC	101			97.9			75 - 125	20	
Vanadium	BRL	0.010	<0.010	<0.010	NC	98.6			96.0			75 - 125	20	
Zinc	BRL	0.010	<0.010	<0.010	NC	107			102			75 - 125	20	

QA/QC Data

SDG I.D.: GCA95004

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 439846 (mg/kg), QC Sample No: CA95169 (CA95008)													
ICP Metals - Soil													
Antimony	BRL	3.3	<3.2	<3.6	NC	99.4			90.8			75 - 125	30
Arsenic	BRL	0.66	3.06	2.47	NC	107			88.8			75 - 125	30
Barium	BRL	0.33	31.5	37.9	18.4	109			102			75 - 125	30
Beryllium	BRL	0.26	0.39	0.37	NC	105			93.8			75 - 125	30
Cadmium	BRL	0.33	0.34	<0.36	NC	98.4			90.1			75 - 125	30
Chromium	BRL	0.33	15.9	16.3	2.50	112			98.7			75 - 125	30
Copper	BRL	0.66	15.8	13.6	15.0	107			99.5			75 - 125	30
Lead	BRL	0.60	14.9	12.2	19.9	104			91.2			75 - 125	30
Nickel	BRL	0.33	34.3	33.8	1.50	101			94.9			75 - 125	30
Selenium	BRL	1.3	<1.3	<1.4	NC	118			78.0			75 - 125	30
Silver	BRL	0.33	<0.32	<0.36	NC	115			101			75 - 125	30
Thallium	BRL	3.0	<2.8	<3.2	NC	103			89.6			75 - 125	30
Vanadium	BRL	0.33	18.7	18.9	1.10	117			98.5			75 - 125	30
Zinc	BRL	0.33	26.3	25.3	3.90	104			91.4			75 - 125	30
QA/QC Batch 441597 (mg/L), QC Sample No: CB03032 (CA95007)													
ICP Metals - SPLP Extraction													
Antimony	BRL	0.005	<0.005	<0.005	NC	109			102			75 - 125	20
Arsenic	BRL	0.004	0.007	0.005	NC	105			97.5			75 - 125	20
Barium	BRL	0.010	0.012	0.011	NC	110			103			75 - 125	20
Beryllium	BRL	0.001	0.001	<0.001	NC	107			100			75 - 125	20
Cadmium	BRL	0.005	0.002	<0.005	NC	106			98.3			75 - 125	20
Chromium	BRL	0.010	0.002	<0.010	NC	105			97.2			75 - 125	20
Copper	BRL	0.010	0.002	<0.010	NC	109			102			75 - 125	20
Lead	BRL	0.010	<0.010	<0.010	NC	106			97.8			75 - 125	20
Nickel	BRL	0.010	0.002	<0.010	NC	108			99.8			75 - 125	20
Selenium	BRL	0.020	<0.020	<0.020	NC	108			101			75 - 125	20
Silver	BRL	0.010	<0.010	<0.010	NC	105			98.9			75 - 125	20
Thallium	BRL	0.005	0.007	<0.005	NC	107			99.2			75 - 125	20
Vanadium	BRL	0.010	0.047	0.044	NC	106			97.9			75 - 125	20
Zinc	BRL	0.010	0.005	0.003	NC	108			99.4			75 - 125	20
QA/QC Batch 441595 (mg/L), QC Sample No: CB03413 (CA95007)													
Mercury - Water	BRL	0.0002	<0.0002	<0.0002	NC	92.0			90.7			80 - 120	20

Comment:

Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.

l = This parameter is outside laboratory LCS/LCSD specified recovery limits.
m = This parameter is outside laboratory MS/MSD specified recovery limits.
r = This parameter is outside laboratory RPD specified recovery limits.

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QA/QC Report

August 07, 2018

QA/QC Data

SDG I.D.: GCA95004

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 440034 (mg/Kg), QC Sample No: CA95005 50X (CA95004, CA95005, CA95006, CA95007, CA95008)													
Total Cyanide (SW9010C Distill.)	BRL	0.50	5.94	5.26	12.1	104			96.5			80 - 120	30
Comment:													
Additional: LCS acceptance range is 80-120% for soils MS acceptance range 75-125% for soils													
QA/QC Batch 441747 (mg/L), QC Sample No: CB03622 (CA95007)													
Total Cyanide	BRL	0.010	0.072	0.066	8.70	94.9			102			90 - 110	20
Comment:													
Additional: LCS acceptance range is 80-120% for soils MS acceptance range 75-125% for soils													

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QA/QC Report

August 07, 2018

QA/QC Data

SDG I.D.: GCA95004

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 439862 (ug/kg), QC Sample No: CA94867 (CA95005, CA95006, CA95007, CA95008)										
Polynuclear Aromatic HC - Soil										
2-Methylnaphthalene	ND	230	59	60	1.7	57	49	15.1	30 - 130	30
Acenaphthene	ND	230	64	65	1.6	58	51	12.8	30 - 130	30
Acenaphthylene	ND	230	61	61	0.0	55	48	13.6	30 - 130	30
Anthracene	ND	230	67	67	0.0	61	52	15.9	30 - 130	30
Benz(a)anthracene	ND	230	67	68	1.5	61	51	17.9	30 - 130	30
Benzo(a)pyrene	ND	230	64	65	1.6	58	49	16.8	30 - 130	30
Benzo(b)fluoranthene	ND	230	67	71	5.8	62	51	19.5	30 - 130	30
Benzo(ghi)perylene	ND	230	63	62	1.6	56	53	5.5	30 - 130	30
Benzo(k)fluoranthene	ND	230	68	66	3.0	57	50	13.1	30 - 130	30
Chrysene	ND	230	66	66	0.0	59	51	14.5	30 - 130	30
Dibenz(a,h)anthracene	ND	230	65	64	1.6	58	54	7.1	30 - 130	30
Fluoranthene	ND	230	66	67	1.5	64	54	16.9	30 - 130	30
Fluorene	ND	230	65	66	1.5	60	53	12.4	30 - 130	30
Indeno(1,2,3-cd)pyrene	ND	230	68	67	1.5	60	55	8.7	30 - 130	30
Naphthalene	ND	230	60	61	1.7	58	49	16.8	30 - 130	30
Phenanthrene	ND	230	64	65	1.6	60	50	18.2	30 - 130	30
Pyrene	ND	230	67	69	2.9	65	56	14.9	30 - 130	30
% 2-Fluorobiphenyl	63	%	61	63	3.2	56	49	13.3	30 - 130	30
% Nitrobenzene-d5	60	%	65	65	0.0	66	58	12.9	30 - 130	30
% Terphenyl-d14	62	%	64	64	0.0	62	52	17.5	30 - 130	30
Comment:										
Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)										
QA/QC Batch 439961 (ug/kg), QC Sample No: CA94870 (CA95004)										
Volatiles - Soil										
1,1,1,2-Tetrachloroethane	ND	5.0	96	97	1.0	102	95	7.1	70 - 130	30
1,1,1-Trichloroethane	ND	5.0	97	95	2.1	102	95	7.1	70 - 130	30
1,1,2,2-Tetrachloroethane	ND	3.0	99	100	1.0	105	91	14.3	70 - 130	30
1,1,2-Trichloroethane	ND	5.0	97	95	2.1	100	95	5.1	70 - 130	30
1,1-Dichloroethane	ND	5.0	100	99	1.0	100	94	6.2	70 - 130	30
1,1-Dichloroethene	ND	5.0	98	99	1.0	107	96	10.8	70 - 130	30
1,1-Dichloropropene	ND	5.0	98	99	1.0	106	97	8.9	70 - 130	30
1,2,3-Trichlorobenzene	ND	5.0	93	96	3.2	102	91	11.4	70 - 130	30
1,2,3-Trichloropropane	ND	5.0	92	93	1.1	97	92	5.3	70 - 130	30
1,2,4-Trichlorobenzene	ND	5.0	91	95	4.3	104	90	14.4	70 - 130	30
1,2,4-Trimethylbenzene	ND	1.0	95	98	3.1	105	82	24.6	70 - 130	30
1,2-Dibromo-3-chloropropane	ND	5.0	97	98	1.0	104	103	1.0	70 - 130	30
1,2-Dibromoethane	ND	5.0	95	96	1.0	98	95	3.1	70 - 130	30
1,2-Dichlorobenzene	ND	5.0	92	93	1.1	102	90	12.5	70 - 130	30
1,2-Dichloroethane	ND	5.0	93	93	0.0	94	87	7.7	70 - 130	30
1,2-Dichloropropane	ND	5.0	100	99	1.0	102	95	7.1	70 - 130	30

QA/QC Data

SDG I.D.: GCA95004

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
1,3,5-Trimethylbenzene	ND	1.0	98	100	2.0	107	95	11.9	70 - 130	30
1,3-Dichlorobenzene	ND	5.0	92	94	2.2	102	90	12.5	70 - 130	30
1,3-Dichloropropane	ND	5.0	95	95	0.0	99	93	6.3	70 - 130	30
1,4-Dichlorobenzene	ND	5.0	89	91	2.2	100	87	13.9	70 - 130	30
2,2-Dichloropropane	ND	5.0	100	103	3.0	94	92	2.2	70 - 130	30
2-Chlorotoluene	ND	5.0	95	98	3.1	105	96	9.0	70 - 130	30
2-Hexanone	ND	25	95	95	0.0	87	84	3.5	70 - 130	30
2-Isopropyltoluene	ND	5.0	106	108	1.9	115	107	7.2	70 - 130	30
4-Chlorotoluene	ND	5.0	94	95	1.1	101	90	11.5	70 - 130	30
4-Methyl-2-pentanone	ND	25	99	102	3.0	92	90	2.2	70 - 130	30
Acetone	ND	10	86	88	2.3	79	91	14.1	70 - 130	30
Acrylonitrile	ND	5.0	101	99	2.0	92	88	4.4	70 - 130	30
Benzene	ND	1.0	97	95	2.1	100	92	8.3	70 - 130	30
Bromobenzene	ND	5.0	95	95	0.0	104	95	9.0	70 - 130	30
Bromochloromethane	ND	5.0	97	96	1.0	102	96	6.1	70 - 130	30
Bromodichloromethane	ND	5.0	97	96	1.0	98	93	5.2	70 - 130	30
Bromoform	ND	5.0	96	96	0.0	97	93	4.2	70 - 130	30
Bromomethane	ND	5.0	107	104	2.8	111	103	7.5	70 - 130	30
Carbon Disulfide	ND	5.0	107	109	1.9	110	103	6.6	70 - 130	30
Carbon tetrachloride	ND	5.0	97	99	2.0	101	95	6.1	70 - 130	30
Chlorobenzene	ND	5.0	94	94	0.0	101	93	8.2	70 - 130	30
Chloroethane	ND	5.0	111	110	0.9	115	106	8.1	70 - 130	30
Chloroform	ND	5.0	94	95	1.1	96	92	4.3	70 - 130	30
Chloromethane	ND	5.0	105	105	0.0	99	90	9.5	70 - 130	30
cis-1,2-Dichloroethene	ND	5.0	100	100	0.0	105	102	2.9	70 - 130	30
cis-1,3-Dichloropropene	ND	5.0	101	102	1.0	103	97	6.0	70 - 130	30
Dibromochloromethane	ND	3.0	100	100	0.0	102	98	4.0	70 - 130	30
Dibromomethane	ND	5.0	93	93	0.0	98	91	7.4	70 - 130	30
Dichlorodifluoromethane	ND	5.0	102	106	3.8	106	98	7.8	70 - 130	30
Ethylbenzene	ND	1.0	96	97	1.0	96	89	7.6	70 - 130	30
Hexachlorobutadiene	ND	5.0	92	98	6.3	105	92	13.2	70 - 130	30
Isopropylbenzene	ND	1.0	100	101	1.0	109	102	6.6	70 - 130	30
m&p-Xylene	ND	2.0	94	95	1.1	84	78	7.4	70 - 130	30
Methyl ethyl ketone	ND	5.0	92	91	1.1	77	80	3.8	70 - 130	30
Methyl t-butyl ether (MTBE)	ND	1.0	105	106	0.9	107	103	3.8	70 - 130	30
Methylene chloride	ND	5.0	82	81	1.2	105	101	3.9	70 - 130	30
Naphthalene	ND	5.0	101	104	2.9	107	106	0.9	70 - 130	30
n-Butylbenzene	ND	1.0	94	100	6.2	109	94	14.8	70 - 130	30
n-Propylbenzene	ND	1.0	96	99	3.1	107	94	12.9	70 - 130	30
o-Xylene	ND	2.0	98	101	3.0	95	87	8.8	70 - 130	30
p-Isopropyltoluene	ND	1.0	98	103	5.0	110	101	8.5	70 - 130	30
sec-Butylbenzene	ND	1.0	101	105	3.9	111	103	7.5	70 - 130	30
Styrene	ND	5.0	100	100	0.0	105	98	6.9	70 - 130	30
tert-Butylbenzene	ND	1.0	100	102	2.0	108	102	5.7	70 - 130	30
Tetrachloroethene	ND	5.0	91	94	3.2	102	94	8.2	70 - 130	30
Tetrahydrofuran (THF)	ND	5.0	104	106	1.9	88	86	2.3	70 - 130	30
Toluene	ND	1.0	95	95	0.0	82	73	11.6	70 - 130	30
trans-1,2-Dichloroethene	ND	5.0	98	100	2.0	105	99	5.9	70 - 130	30
trans-1,3-Dichloropropene	ND	5.0	96	96	0.0	94	88	6.6	70 - 130	30
trans-1,4-dichloro-2-butene	ND	5.0	109	110	0.9	104	96	8.0	70 - 130	30
Trichloroethene	ND	5.0	96	97	1.0	108	102	5.7	70 - 130	30
Trichlorofluoromethane	ND	5.0	101	102	1.0	101	95	6.1	70 - 130	30
Trichlorotrifluoroethane	ND	5.0	95	100	5.1	108	101	6.7	70 - 130	30

QA/QC Data

SDG I.D.: GCA95004

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Vinyl chloride	ND	5.0	113	113	0.0	115	106	8.1	70 - 130	30	
% 1,2-dichlorobenzene-d4	105	%	99	101	2.0	99	100	1.0	70 - 130	30	
% Bromofluorobenzene	92	%	100	99	1.0	96	99	3.1	70 - 130	30	
% Dibromofluoromethane	106	%	100	99	1.0	99	99	0.0	70 - 130	30	
% Toluene-d8	100	%	102	102	0.0	102	100	2.0	70 - 130	30	
Comment:											
Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%.											
QA/QC Batch 440003 (ug/Kg), QC Sample No: CA95006 2X (CA95004, CA95005, CA95006, CA95007, CA95008)											
Polychlorinated Biphenyls - Soil											
PCB-1016	ND	33	103	97	6.0	53	59	10.7	40 - 140	30	
PCB-1221	ND	33							40 - 140	30	
PCB-1232	ND	33							40 - 140	30	
PCB-1242	ND	33							40 - 140	30	
PCB-1248	ND	33							40 - 140	30	
PCB-1254	ND	33							40 - 140	30	
PCB-1260	ND	33	101	107	5.8	58	62	6.7	40 - 140	30	
PCB-1262	ND	33							40 - 140	30	
PCB-1268	ND	33							40 - 140	30	
% DCBP (Surrogate Rec)	88	%	129	116	10.6	70	87	21.7	30 - 150	30	
% TCMX (Surrogate Rec)	94	%	118	111	6.1	59	64	8.1	30 - 150	30	
QA/QC Batch 439841 (mg/Kg), QC Sample No: CA95008 (CA95004, CA95005, CA95006, CA95007, CA95008)											
TPH by GC (Extractable Products) - Soil											
Ext. Petroleum H.C. (C9-C36)	ND	50	86	102	17.0	86	83	3.6	60 - 120	30	
% n-Pentacosane	62	%	79	92	15.2	91	88	3.4	50 - 150	30	
Comment:											
Additional surrogate criteria: LCS acceptance range is 60-120% MS acceptance range 50-150%. The ETPH/DRO LCS has been normalized based on the alkane calibration.											
QA/QC Batch 439997 (ug/kg), QC Sample No: CA95804 (CA95004)											
Semivolatiles - Soil											
1,2,4,5-Tetrachlorobenzene	ND	230	61	58	5.0	58	54	7.1	30 - 130	30	
1,2,4-Trichlorobenzene	ND	230	59	56	5.2	56	55	1.8	30 - 130	30	
1,2-Dichlorobenzene	ND	180	52	53	1.9	52	55	5.6	30 - 130	30	
1,2-Diphenylhydrazine	ND	230	62	59	5.0	52	51	1.9	30 - 130	30	
1,3-Dichlorobenzene	ND	230	50	47	6.2	47	50	6.2	30 - 130	30	
1,4-Dichlorobenzene	ND	230	55	50	9.5	50	51	2.0	30 - 130	30	
2,4,5-Trichlorophenol	ND	230	68	70	2.9	60	60	0.0	30 - 130	30	
2,4,6-Trichlorophenol	ND	130	69	67	2.9	63	63	0.0	30 - 130	30	
2,4-Dichlorophenol	ND	130	70	65	7.4	62	59	5.0	30 - 130	30	
2,4-Dimethylphenol	ND	230	64	63	1.6	64	56	13.3	30 - 130	30	
2,4-Dinitrophenol	ND	230	<10	19	NC	59	50	16.5	30 - 130	30	l
2,4-Dinitrotoluene	ND	130	64	64	0.0	59	56	5.2	30 - 130	30	
2,6-Dinitrotoluene	ND	130	66	64	3.1	58	56	3.5	30 - 130	30	
2-Chloronaphthalene	ND	230	65	64	1.6	60	57	5.1	30 - 130	30	
2-Chlorophenol	ND	230	61	56	8.5	60	58	3.4	30 - 130	30	
2-Methylnaphthalene	ND	230	60	58	3.4	57	57	0.0	30 - 130	30	
2-Methylphenol (o-cresol)	ND	230	68	58	15.9	70	65	7.4	30 - 130	30	
2-Nitroaniline	ND	330	77	79	2.6	50	44	12.8	30 - 130	30	
2-Nitrophenol	ND	230	61	56	8.5	61	64	4.8	30 - 130	30	
3&4-Methylphenol (m&p-cresol)	ND	230	68	58	15.9	70	65	7.4	30 - 130	30	
3,3'-Dichlorobenzidine	ND	130	65	67	3.0	18	<10	NC	30 - 130	30	m
3-Nitroaniline	ND	330	71	70	1.4	51	40	24.2	30 - 130	30	

QA/QC Data

SDG I.D.: GCA95004

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
4,6-Dinitro-2-methylphenol	ND	230	17	30	55.3	61	51	17.9	30 - 130	30	l,r
4-Bromophenyl phenyl ether	ND	230	66	64	3.1	60	58	3.4	30 - 130	30	
4-Chloro-3-methylphenol	ND	230	66	64	3.1	64	54	16.9	30 - 130	30	
4-Chloroaniline	ND	230	61	69	12.3	<10	<10	NC	30 - 130	30	m
4-Chlorophenyl phenyl ether	ND	230	65	64	1.6	60	57	5.1	30 - 130	30	
4-Nitroaniline	ND	230	63	62	1.6	57	56	1.8	30 - 130	30	
4-Nitrophenol	ND	230	64	64	0.0	67	56	17.9	30 - 130	30	
Acenaphthene	ND	230	66	65	1.5	62	59	5.0	30 - 130	30	
Acenaphthylene	ND	130	59	58	1.7	57	56	1.8	30 - 130	30	
Acetophenone	ND	230	54	50	7.7	55	53	3.7	30 - 130	30	
Aniline	ND	330	29	36	21.5	<10	<10	NC	30 - 130	30	l,m
Anthracene	ND	230	66	64	3.1	57	55	3.6	30 - 130	30	
Benz(a)anthracene	ND	230	63	62	1.6	55	61	10.3	30 - 130	30	
Benzidine	ND	330	39	39	0.0	<10	<10	NC	30 - 130	30	m
Benzo(a)pyrene	ND	130	62	59	5.0	49	55	11.5	30 - 130	30	
Benzo(b)fluoranthene	ND	160	64	63	1.6	56	62	10.2	30 - 130	30	
Benzo(ghi)perylene	ND	230	62	60	3.3	46	39	16.5	30 - 130	30	
Benzo(k)fluoranthene	ND	230	68	65	4.5	53	58	9.0	30 - 130	30	
Benzoic Acid	ND	330	<10	<10	NC	72	63	13.3	30 - 130	30	l
Benzyl butyl phthalate	ND	230	63	61	3.2	53	48	9.9	30 - 130	30	
Bis(2-chloroethoxy)methane	ND	230	63	60	4.9	58	57	1.7	30 - 130	30	
Bis(2-chloroethyl)ether	ND	130	64	55	15.1	47	48	2.1	30 - 130	30	
Bis(2-chloroisopropyl)ether	ND	230	46	46	0.0	46	47	2.2	30 - 130	30	
Bis(2-ethylhexyl)phthalate	ND	230	65	62	4.7	56	48	15.4	30 - 130	30	
Carbazole	ND	230	66	67	1.5	58	58	0.0	30 - 130	30	
Chrysene	ND	230	65	65	0.0	53	60	12.4	30 - 130	30	
Dibenz(a,h)anthracene	ND	130	64	63	1.6	49	45	8.5	30 - 130	30	
Dibenzofuran	ND	230	64	64	0.0	59	57	3.4	30 - 130	30	
Diethyl phthalate	ND	230	65	64	1.6	61	55	10.3	30 - 130	30	
Dimethylphthalate	ND	230	67	66	1.5	60	55	8.7	30 - 130	30	
Di-n-butylphthalate	ND	670	66	65	1.5	56	51	9.3	30 - 130	30	
Di-n-octylphthalate	ND	230	66	66	0.0	54	51	5.7	30 - 130	30	
Fluoranthene	ND	230	66	65	1.5	59	71	18.5	30 - 130	30	
Fluorene	ND	230	66	65	1.5	63	59	6.6	30 - 130	30	
Hexachlorobenzene	ND	130	67	63	6.2	58	57	1.7	30 - 130	30	
Hexachlorobutadiene	ND	230	61	56	8.5	55	58	5.3	30 - 130	30	
Hexachlorocyclopentadiene	ND	230	55	50	9.5	22	<10	NC	30 - 130	30	m
Hexachloroethane	ND	130	53	50	5.8	53	42	23.2	30 - 130	30	
Indeno(1,2,3-cd)pyrene	ND	230	61	60	1.7	47	43	8.9	30 - 130	30	
Isophorone	ND	130	57	55	3.6	54	51	5.7	30 - 130	30	
Naphthalene	ND	230	59	57	3.4	57	58	1.7	30 - 130	30	
Nitrobenzene	ND	130	59	54	8.8	58	57	1.7	30 - 130	30	
N-Nitrosodimethylamine	ND	230	53	50	5.8	49	45	8.5	30 - 130	30	
N-Nitrosodi-n-propylamine	ND	130	65	57	13.1	63	60	4.9	30 - 130	30	
N-Nitrosodiphenylamine	ND	130	64	65	1.6	58	56	3.5	30 - 130	30	
Pentachloronitrobenzene	ND	230	64	60	6.5	54	52	3.8	30 - 130	30	
Pentachlorophenol	ND	230	58	64	9.8	66	65	1.5	30 - 130	30	
Phenanthrene	ND	130	62	62	0.0	63	71	11.9	30 - 130	30	
Phenol	ND	230	64	58	9.8	63	56	11.8	30 - 130	30	
Pyrene	ND	230	66	65	1.5	57	68	17.6	30 - 130	30	
Pyridine	ND	230	37	35	5.6	<10	<10	NC	30 - 130	30	m
% 2,4,6-Tribromophenol	62	%	64	63	1.6	61	60	1.7	30 - 130	30	
% 2-Fluorobiphenyl	63	%	62	62	0.0	57	57	0.0	30 - 130	30	

QA/QC Data

SDG I.D.: GCA95004

Parameter	Blank	Blk RL		LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
% 2-Fluorophenol	54	%		59	54	8.8	57	53	7.3	30 - 130	30
% Nitrobenzene-d5	56	%		58	55	5.3	58	57	1.7	30 - 130	30
% Phenol-d5	58	%		66	60	9.5	66	57	14.6	30 - 130	30
% Terphenyl-d14	64	%		69	66	4.4	57	52	9.2	30 - 130	30

Comment:

Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

l = This parameter is outside laboratory LCS/LCSD specified recovery limits.
m = This parameter is outside laboratory MS/MSD specified recovery limits.
r = This parameter is outside laboratory RPD specified recovery limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller, Laboratory Director
August 07, 2018

Tuesday, August 07, 2018

Criteria: CT: GBM, I/C, RC

State: CT

Sample Criteria Exceedances Report

GCA95004 - TIGHE-DAS

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CA95005	$8100SMR	Benzo(a)pyrene	CT / RSR DEC I/C (mg/kg) / Semivolatiles	1900	500	1000	1000	ug/Kg
CA95005	$8100SMR	Indeno(1,2,3-cd)pyrene	CT / RSR DEC RES (mg/kg) / APS Organics	2000	500	1000	1000	ug/Kg
CA95005	$8100SMR	Benzo(a)pyrene	CT / RSR DEC RES (mg/kg) / Semivolatiles	1900	500	1000	1000	ug/Kg
CA95005	$8100SMR	Benzo(b)fluoranthene	CT / RSR DEC RES (mg/kg) / Semivolatiles	2100	500	1000	1000	ug/Kg
CA95005	$8100SMR	Benz(a)anthracene	CT / RSR DEC RES (mg/kg) / Semivolatiles	1500	500	1000	1000	ug/Kg
CA95005	$8100SMR	Benzo(ghi)perylene	CT / RSR GB (mg/kg) / APS Organics	2200	500	1000	1000	ug/Kg
CA95005	$8100SMR	Chrysene	CT / RSR GB (mg/kg) / APS Organics	2000	500	1000	1000	ug/Kg
CA95005	$8100SMR	Indeno(1,2,3-cd)pyrene	CT / RSR GB (mg/kg) / APS Organics	2000	500	1000	1000	ug/Kg
CA95005	$8100SMR	Benz(a)anthracene	CT / RSR GB (mg/kg) / Semivolatiles	1500	500	1000	1000	ug/Kg
CA95005	$8100SMR	Benzo(a)pyrene	CT / RSR GB (mg/kg) / Semivolatiles	1900	500	1000	1000	ug/Kg
CA95005	$8100SMR	Benzo(b)fluoranthene	CT / RSR GB (mg/kg) / Semivolatiles	2100	500	1000	1000	ug/Kg
CA95005	$8100SMR	Benzo(k)fluoranthene	CT / RSR GB (mg/kg) / Semivolatiles	1800	500	1000	1000	ug/Kg
CA95005	$ETPH_SMR	Ext. Petroleum H.C. (C9-C36)	CT / RSR DEC RES (mg/kg) / Pest/PCB/TPH	780	270	500	500	mg/Kg
CA95006	$8100SMR	Indeno(1,2,3-cd)pyrene	CT / RSR DEC I/C (mg/kg) / APS Organics	11000	1000	7800	7800	ug/Kg
CA95006	$8100SMR	Dibenz(a,h)anthracene	CT / RSR DEC I/C (mg/kg) / APS Organics	2600	1000	1000	1000	ug/Kg
CA95006	$8100SMR	Benzo(a)pyrene	CT / RSR DEC I/C (mg/kg) / Semivolatiles	7200	1000	1000	1000	ug/Kg
CA95006	$8100SMR	Benzo(ghi)perylene	CT / RSR DEC RES (mg/kg) / APS Organics	12000	1000	8400	8400	ug/Kg
CA95006	$8100SMR	Dibenz(a,h)anthracene	CT / RSR DEC RES (mg/kg) / APS Organics	2600	1000	1000	1000	ug/Kg
CA95006	$8100SMR	Indeno(1,2,3-cd)pyrene	CT / RSR DEC RES (mg/kg) / APS Organics	11000	1000	1000	1000	ug/Kg
CA95006	$8100SMR	Benzo(a)pyrene	CT / RSR DEC RES (mg/kg) / Semivolatiles	7200	1000	1000	1000	ug/Kg
CA95006	$8100SMR	Benzo(b)fluoranthene	CT / RSR DEC RES (mg/kg) / Semivolatiles	6600	1000	1000	1000	ug/Kg
CA95006	$8100SMR	Benz(a)anthracene	CT / RSR DEC RES (mg/kg) / Semivolatiles	3300	1000	1000	1000	ug/Kg
CA95006	$8100SMR	Benzo(ghi)perylene	CT / RSR GB (mg/kg) / APS Organics	12000	1000	1000	1000	ug/Kg
CA95006	$8100SMR	Chrysene	CT / RSR GB (mg/kg) / APS Organics	5100	1000	1000	1000	ug/Kg
CA95006	$8100SMR	Indeno(1,2,3-cd)pyrene	CT / RSR GB (mg/kg) / APS Organics	11000	1000	1000	1000	ug/Kg
CA95006	$8100SMR	Dibenz(a,h)anthracene	CT / RSR GB (mg/kg) / APS Organics	2600	1000	1000	1000	ug/Kg
CA95006	$8100SMR	Benz(a)anthracene	CT / RSR GB (mg/kg) / Semivolatiles	3300	1000	1000	1000	ug/Kg
CA95006	$8100SMR	Benzo(b)fluoranthene	CT / RSR GB (mg/kg) / Semivolatiles	6600	1000	1000	1000	ug/Kg
CA95006	$8100SMR	Benzo(k)fluoranthene	CT / RSR GB (mg/kg) / Semivolatiles	6000	1000	1000	1000	ug/Kg
CA95006	$8100SMR	Benzo(a)pyrene	CT / RSR GB (mg/kg) / Semivolatiles	7200	1000	1000	1000	ug/Kg
CA95006	$ETPH_SMR	Ext. Petroleum H.C. (C9-C36)	CT / RSR DEC RES (mg/kg) / Pest/PCB/TPH	2500	570	500	500	mg/Kg
CA95006	AS-SM	Arsenic	CT / RSR DEC I/C (mg/kg) / Inorganics	11.8	0.82	10	10	mg/Kg
CA95006	AS-SM	Arsenic	CT / RSR DEC RES (mg/kg) / Inorganics	11.8	0.82	10	10	mg/Kg
CA95007	$8100SMR	Dibenz(a,h)anthracene	CT / RSR DEC I/C (mg/kg) / APS Organics	4400	1000	1000	1000	ug/Kg
CA95007	$8100SMR	Indeno(1,2,3-cd)pyrene	CT / RSR DEC I/C (mg/kg) / APS Organics	23000	1000	7800	7800	ug/Kg
CA95007	$8100SMR	Benzo(a)pyrene	CT / RSR DEC I/C (mg/kg) / Semivolatiles	14000	1000	1000	1000	ug/Kg
CA95007	$8100SMR	Benz(a)anthracene	CT / RSR DEC I/C (mg/kg) / Semivolatiles	11000	1000	7800	7800	ug/Kg
CA95007	$8100SMR	Benzo(b)fluoranthene	CT / RSR DEC I/C (mg/kg) / Semivolatiles	17000	1000	7800	7800	ug/Kg
CA95007	$8100SMR	Dibenz(a,h)anthracene	CT / RSR DEC RES (mg/kg) / APS Organics	4400	1000	1000	1000	ug/Kg
CA95007	$8100SMR	Benzo(ghi)perylene	CT / RSR DEC RES (mg/kg) / APS Organics	24000	1000	8400	8400	ug/Kg

Tuesday, August 07, 2018

Criteria: CT: GBM, I/C, RC

State: CT

Sample Criteria Exceedances Report

GCA95004 - TIGHE-DAS

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CA95007	$8100SMR	Indeno(1,2,3-cd)pyrene	CT / RSR DEC RES (mg/kg) / APS Organics	23000	1000	1000	1000	ug/Kg
CA95007	$8100SMR	Benzo(k)fluoranthene	CT / RSR DEC RES (mg/kg) / Semivolatiles	17000	1000	8400	8400	ug/Kg
CA95007	$8100SMR	Benz(a)anthracene	CT / RSR DEC RES (mg/kg) / Semivolatiles	11000	1000	1000	1000	ug/Kg
CA95007	$8100SMR	Benzo(b)fluoranthene	CT / RSR DEC RES (mg/kg) / Semivolatiles	17000	1000	1000	1000	ug/Kg
CA95007	$8100SMR	Benzo(a)pyrene	CT / RSR DEC RES (mg/kg) / Semivolatiles	14000	1000	1000	1000	ug/Kg
CA95007	$8100SMR	Indeno(1,2,3-cd)pyrene	CT / RSR GB (mg/kg) / APS Organics	23000	1000	1000	1000	ug/Kg
CA95007	$8100SMR	Benzo(ghi)perylene	CT / RSR GB (mg/kg) / APS Organics	24000	1000	1000	1000	ug/Kg
CA95007	$8100SMR	Dibenz(a,h)anthracene	CT / RSR GB (mg/kg) / APS Organics	4400	1000	1000	1000	ug/Kg
CA95007	$8100SMR	Chrysene	CT / RSR GB (mg/kg) / APS Organics	18000	1000	1000	1000	ug/Kg
CA95007	$8100SMR	Benz(a)anthracene	CT / RSR GB (mg/kg) / Semivolatiles	11000	1000	1000	1000	ug/Kg
CA95007	$8100SMR	Benzo(a)pyrene	CT / RSR GB (mg/kg) / Semivolatiles	14000	1000	1000	1000	ug/Kg
CA95007	$8100SMR	Benzo(b)fluoranthene	CT / RSR GB (mg/kg) / Semivolatiles	17000	1000	1000	1000	ug/Kg
CA95007	$8100SMR	Benzo(k)fluoranthene	CT / RSR GB (mg/kg) / Semivolatiles	17000	1000	1000	1000	ug/Kg
CA95007	$ETPH_SMR	Ext. Petroleum H.C. (C9-C36)	CT / RSR DEC I/C (mg/kg) / Pest/PCB/TPH	5800	620	2500	2500	mg/Kg
CA95007	$ETPH_SMR	Ext. Petroleum H.C. (C9-C36)	CT / RSR DEC RES (mg/kg) / Pest/PCB/TPH	5800	620	500	500	mg/Kg
CA95007	$ETPH_SMR	Ext. Petroleum H.C. (C9-C36)	CT / RSR GB (mg/kg) / Pesticides/TPH	5800	620	2500	2500	mg/Kg
CA95007	AS-SM	Arsenic	CT / RSR DEC I/C (mg/kg) / Inorganics	15.1	0.76	10	10	mg/Kg
CA95007	AS-SM	Arsenic	CT / RSR DEC RES (mg/kg) / Inorganics	15.1	0.76	10	10	mg/Kg
CA95008	AS-SM	Arsenic	CT / RSR DEC I/C (mg/kg) / Inorganics	13.8	0.66	10	10	mg/Kg
CA95008	AS-SM	Arsenic	CT / RSR DEC RES (mg/kg) / Inorganics	13.8	0.66	10	10	mg/Kg

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

REASONABLE CONFIDENCE PROTOCOL
LABORATORY ANALYSIS QA/QC CERTIFICATION FORM

Laboratory Name: Phoenix Environmental Labs, Inc. ***Client:*** Tighe & Bond

Project Location: ROCKVILLE MGP ***Project Number:***

Laboratory Sample ID(s): CA95004-CA95008 ***Sampling Date(s):*** 7/20/2018

List RCP Methods Used (e.g., 8260, 8270, et cetera) 1311/1312, 6010, 7470/7471, 8082, 8260, 8270, ETPH, 9010/9012

1	**For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP method-specific Reasonable Confidence Protocol documents?**	☑ Yes ☐ No
1A	**Were the method specified preservation and holding time requirements met?**	☑ Yes ☐ No
1B	***VPH and EPH methods only:*** **Was the VPH or EPH method conducted without significant modifications (see section 11.3 of respective RCP methods)**	☐ Yes ☐ No ☑ NA
2	**Were all samples received by the laboratory in a condition consistent with that described on the associated Chain-of-Custody document(s)?**	☑ Yes ☐ No
3	**Were samples received at an appropriate temperature (< 6 Degrees C)?**	☑ Yes ☐ No ☐ NA
4	**Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents acheived? See Sections: ICP Narration, Mercury Narration, SVOA Narration.**	☐ Yes ☑ No
5	**a) Were reporting limits specified or referenced on the chain-of-custody?** **b) Were these reporting limits met?**	☑ Yes ☐ No ☑ Yes ☐ No
6	**For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?**	☐ Yes ☑ No
7	**Are project-specific matrix spikes and laboratory duplicates included in the data set?**	☑ Yes ☐ No

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or 1B is "No", the data package does not meet the requirements for "Reasonable Confidence". This form may not be altered and all questions must be answered.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized Signature: Helen Geoghegan **Position:** Project Manager

Printed Name: Helen Geoghegan **Date:** Tuesday, August 07, 2018

Name of Laboratory Phoenix Environmental Labs, Inc.

This certification form is to be used for RCP methods only.

Environmental Laboratories, Inc.
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ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

August 07, 2018

SDG I.D.: GCA95004

SDG Comments

8270 Semi-volatile Organics CA95005 - CA95008:
The client requested a short list for 8270 RCP Semivolatile. Only the PAH constituents are reported as requested on the chain-of-custody.

Cyanide Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument:

LACHAT 07/24/18-1 Dustin Harrison, Greg Danielewski, Chemist 07/24/18

CA95004, CA95005, CA95006, CA95007, CA95008

The samples were distilled in accordance with the method.
The initial calibration met criteria.

The calibration check standards (ICV,CCV) were within 15% of true value and were analyzed at a frequencey of one per ten samples.
The continuing calibration blanks (ICB,CCB) had concentrations less than the reporting level.

The method blank, laboratory control sample (LCS), and matrix spike were distilled with the samples.

LACHAT 08/06/18-1 Dustin Harrison, Greg Danielewski, Chemist 08/06/18

CA95007

The samples were distilled in accordance with the method.
The initial calibration met criteria.

The calibration check standards (ICV,CCV) were within 15% of true value and were analyzed at a frequencey of one per ten samples.
The continuing calibration blanks (ICB,CCB) had concentrations less than the reporting level.

The method blank, laboratory control sample (LCS), and matrix spike were distilled with the samples.

QC (Batch Specific):

Batch 441747 (CB03622)

CA95007

All LCS recoveries were within 90 - 110 with the following exceptions: None.
Additional: LCS acceptance range is 80-120% for soils MS acceptance range 75-125% for soils

QC (Site Specific):

Batch 440034 (CA95005)

CA95004, CA95005, CA95006, CA95007, CA95008

All LCS recoveries were within 80 - 120 with the following exceptions: None.
All MS recoveries were within 75 - 125 with the following exceptions: None.
Additional: LCS acceptance range is 80-120% for soils MS acceptance range 75-125% for soils

ETPH Narration

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RCP Certification Report

August 07, 2018

SDG I.D.: GCA95004

ETPH Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument:

AU-FID1 07/23/18-1 Jeff Bucko, Chemist 07/23/18

CA95005, CA95006, CA95007

The initial calibration (ETPH723I) RSD for the compound list was less than 30% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 30% except for the following compounds:None.

AU-XL1 07/20/18-1 Jeff Bucko, Chemist 07/20/18

CA95008

The initial calibration (ETPH605I) RSD for the compound list was less than 30% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 30% except for the following compounds:None.

AU-XL2 07/23/18-1 Jeff Bucko, Chemist 07/23/18

CA95004

The initial calibration (ETPH705I) RSD for the compound list was less than 30% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 30% except for the following compounds:None.

QC (Site Specific):

Batch 439841 (CA95008)

CA95004, CA95005, CA95006, CA95007, CA95008

All LCS recoveries were within 60 - 120 with the following exceptions: None.
All LCSD recoveries were within 60 - 120 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
All MS recoveries were within 50 - 150 with the following exceptions: None.
All MSD recoveries were within 50 - 150 with the following exceptions: None.
All MS/MSD RPDs were less than 30% with the following exceptions: None.
Additional surrogate criteria: LCS acceptance range is 60-120% MS acceptance range 50-150%. The ETPH/DRO LCS has been normalized based on the alkane calibration.

Mercury Narration

Were all QA/QC performance criteria specified in the analytical method achieved? No.

QC Batch 439941 (Samples: CA95004, CA95005, CA95006, CA95007, CA95008): -----

The Sample/Duplicate RPD exceeds the method criteria for one or more analytes, therefore there may be variability in the reported result. (Mercury)

QC Batch 439944 (Samples: CA95004): -----

The LCS and/or the LCSD recovery is below the method criteria. All of the other QC is acceptable, therefore no significant bias is suspected. (Mercury)

Instrument:

MERLIN 07/23/18 08:10 Rick Schweitzer, Chemist 07/23/18

CA95004

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Certification Report

August 07, 2018

SDG I.D.: GCA95004

Mercury Narration

The method preparation blank contains all of the acids and reagents as the samples; the instrument blanks do not.
The initial calibration met all criteria including a standard run at or below the reporting level.
All calibration verification standards (ICV, CCV) met criteria.
All calibration blank verification standards (ICB, CCB) met criteria.
The matrix spike sample is used to identify spectral interference for each batch of samples, if within 85-115%, no interference is observed and no further action is taken.
The following Initial Calibration Verification (ICV) compounds did not meet criteria: None.
The following Continuing Calibration Verification (CCV) compounds did not meet criteria: None.

MERLIN 07/24/18 09:22 Rick Schweitzer, Chemist 07/24/18

CA95004, CA95005, CA95006, CA95007, CA95008

The method preparation blank contains all of the acids and reagents as the samples; the instrument blanks do not.
The initial calibration met all criteria including a standard run at or below the reporting level.
All calibration verification standards (ICV, CCV) met criteria.
All calibration blank verification standards (ICB, CCB) met criteria.
The matrix spike sample is used to identify spectral interference for each batch of samples, if within 85-115%, no interference is observed and no further action is taken.
The following Initial Calibration Verification (ICV) compounds did not meet criteria: None.
The following Continuing Calibration Verification (CCV) compounds did not meet criteria: None.

MERLIN 08/03/18 07:25 Rick Schweitzer, Chemist 08/03/18

CA95007

The method preparation blank contains all of the acids and reagents as the samples; the instrument blanks do not.
The initial calibration met all criteria including a standard run at or below the reporting level.
All calibration verification standards (ICV, CCV) met criteria.
All calibration blank verification standards (ICB, CCB) met criteria.
The matrix spike sample is used to identify spectral interference for each batch of samples, if within 85-115%, no interference is observed and no further action is taken.
The following Initial Calibration Verification (ICV) compounds did not meet criteria: None.
The following Continuing Calibration Verification (CCV) compounds did not meet criteria: None.

QC (Batch Specific):

Batch 439941 (CA94566)

CA95004, CA95005, CA95006, CA95007, CA95008

All LCS recoveries were within 70 - 130 with the following exceptions: None.
All LCSD recoveries were within 70 - 130 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.

Batch 439944 (CA89051)

CA95004

All LCS recoveries were within 80 - 120 with the following exceptions: Mercury(79.4%)
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.

Batch 441595 (CB03413)

CA95007

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Certification Report

August 07, 2018

SDG I.D.: GCA95004

Mercury Narration

All LCS recoveries were within 80 - 120 with the following exceptions: None.
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.

ICP Metals Narration

Were all QA/QC performance criteria specified in the analytical method achieved? No.

QC Batch 439805 (Samples: CA95004, CA95005, CA95006, CA95007): -----

The Sample/Duplicate RPD exceeds the method criteria for one or more analytes, therefore there may be variability in the reported result. (Barium, Copper, Lead)

Instrument:

ARCOS 07/20/18 11:09 Emily Kolominskaya, Chemist 07/20/18

CA95004, CA95005, CA95006, CA95007, CA95008

Additional criteria for CCV and ICSAB:
Sodium and Potassium are poor performing elements, the laboratory's in-house limits are 85-115% (CCV) and 70-130% (ICSAB).The linear range is defined daily by the calibration range.
The following Initial Calibration Verification (ICV) compounds did not meet criteria: None.
The following Continuing Calibration Verification (CCV) compounds did not meet criteria: None.
The following ICP Interference Check (ICSAB) compounds did not meet criteria: None.

ARCOS 07/23/18 09:31 Emily Kolominskaya, Chemist 07/23/18

CA95004

Additional criteria for CCV and ICSAB:
Sodium and Potassium are poor performing elements, the laboratory's in-house limits are 85-115% (CCV) and 70-130% (ICSAB).The linear range is defined daily by the calibration range.
The following Initial Calibration Verification (ICV) compounds did not meet criteria: None.
The following Continuing Calibration Verification (CCV) compounds did not meet criteria: None.
The following ICP Interference Check (ICSAB) compounds did not meet criteria: None.

BLUE 08/03/18 14:26 Cindy Pearce, Chemist 08/03/18

CA95007

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.The linear range is defined daily by the calibration range.
The following Initial Calibration Verification (ICV) compounds did not meet criteria: None.
The following Continuing Calibration Verification (CCV) compounds did not meet criteria: None.
The following ICP Interference Check (ICSAB) compounds did not meet criteria: None.

QC (Batch Specific):

Batch 439805 (CA94472)

CA95004, CA95005, CA95006, CA95007

All LCS recoveries were within 75 - 125 with the following exceptions: None.

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Certification Report

August 07, 2018

SDG I.D.: GCA95004

ICP Metals Narration

Batch 439846 (CA95169)

CA95008

All LCS recoveries were within 75 - 125 with the following exceptions: None.

Batch 439947 (CA94624)

CA95004

All LCS recoveries were within 75 - 125 with the following exceptions: None.

Batch 441597 (CB03032)

CA95007

All LCS recoveries were within 75 - 125 with the following exceptions: None.

PCB Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument:

AU-ECD8 07/24/18-1 Adam Werner, Chemist 07/24/18

CA95004, CA95005, CA95006, CA95007, CA95008

The initial calibration (PC720AI) RSD for the compound list was less than 20% except for the following compounds: None.
The initial calibration (PC720BI) RSD for the compound list was less than 20% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 15% except for the following compounds:None.

QC (Site Specific):

Batch 440003 (CA95006)

CA95004, CA95005, CA95006, CA95007, CA95008

All LCS recoveries were within 40 - 140 with the following exceptions: None.
All LCSD recoveries were within 40 - 140 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
All MS recoveries were within 40 - 140 with the following exceptions: None.
All MSD recoveries were within 40 - 140 with the following exceptions: None.
All MS/MSD RPDs were less than 30% with the following exceptions: None.

SVOA Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 439997 (Samples: CA95004): -----

One or more analytes is below the method criteria. A low bias for these analytes is possible. (2,4-Dinitrophenol, Aniline, Benzoic Acid)

The LCS and/or the LCSD recovery is below the method criteria. All of the other QC is acceptable, therefore no significant bias is suspected. (4,6-Dinitro-2-methylphenol)

The LCS/LCSD RPD exceeds the method criteria for one or more analytes, but these analytes were not reported in the sample(s) so no variability is suspected. (4,6-Dinitro-2-methylphenol)

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SDG I.D.: GCA95004

SVOA Narration

Instrument:

CHEM05 07/24/18-1 Harry Mullin, Chemist 07/24/18

CA95006, CA95007

Initial Calibration Verification (CHEM05/BN_0722):
95% of target compounds met criteria.
The following compounds had %RSDs >20%: None.
The following compounds did not meet recommended response factors: None.
The following compounds did not meet a minimum response factors: None.

Continuing Calibration Verification (CHEM05/0724_02-BN_0722):
Internal standard areas were within 50 to 200% of the initial calibration with the following exceptions: None.
100% of target compounds met criteria.
The following compounds did not meet % deviation criteria: None.
The following compounds did not meet maximum % deviations: None.
The following compounds did not meet recommended response factors: None.
The following compounds did not meet minimum response factors: None.

CHEM06 07/25/18-1 Harry Mullin, Chemist 07/25/18

CA95005, CA95008

The DDT breakdown and pentachlorophenol & benzidine peak tailing were evaluated in the DFTPP tune and were found to be in control.

Initial Calibration Verification (CHEM06/BN_0627):
100% of target compounds met criteria.
The following compounds had %RSDs >20%: None.
The following compounds did not meet recommended response factors: None.
The following compounds did not meet a minimum response factors: None.

Continuing Calibration Verification (CHEM06/0725_02-BN_0627):
Internal standard areas were within 50 to 200% of the initial calibration with the following exceptions: None.
100% of target compounds met criteria.
The following compounds did not meet % deviation criteria: None.
The following compounds did not meet maximum % deviations: None.
The following compounds did not meet recommended response factors: None.
The following compounds did not meet minimum response factors: None.

CHEM27 07/23/18-2 Matt Richard, Chemist 07/23/18

CA95004

Initial Calibration Verification (CHEM27/SPLIT_0722):
98% of target compounds met criteria.
The following compounds had %RSDs >20%: 4-Chloroaniline 29% (20%)
The following compounds did not meet recommended response factors: Hexachlorobenzene 0.087 (0.1)
The following compounds did not meet a minimum response factors: None.

Continuing Calibration Verification (CHEM27/0723_14A-SPLIT_0722):
Internal standard areas were within 50 to 200% of the initial calibration with the following exceptions: None.
98% of target compounds met criteria.
The following compounds did not meet % deviation criteria: 2-Nitroaniline 35%L (30%), Aniline 35%L (30%)
The following compounds did not meet maximum % deviations: None.

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RCP Certification Report

August 07, 2018

SDG I.D.: GCA95004

SVOA Narration

The following compounds did not meet recommended response factors: Hexachlorobenzene 0.072 (0.1)
The following compounds did not meet minimum response factors: None.

QC (Batch Specific):

Batch 439862 (CA94867)

CA95005, CA95006, CA95007, CA95008

All LCS recoveries were within 30 - 130 with the following exceptions: None.
All LCSD recoveries were within 30 - 130 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

Batch 439997 (CA95804)

CA95004

All LCS recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(<10%), 4,6-Dinitro-2-methylphenol(17%), Aniline(29%), Benzoic Acid(<10%)
All LCSD recoveries were within 30 - 130 with the following exceptions: 2,4-Dinitrophenol(19%), Benzoic Acid(<10%)
All LCS/LCSD RPDs were less than 30% with the following exceptions: 4,6-Dinitro-2-methylphenol(55.3%)
Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

VOA Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument:

CHEM26 07/21/18-1 Jane Li, Chemist 07/21/18

CA95004

Initial Calibration Verification (CHEM26/VT-0718):
99% of target compounds met criteria.
The following compounds had %RSDs >20%: Methylene chloride 28% (20%)
The following compounds did not meet recommended response factors: None.
The following compounds did not meet a minimum response factors: None.

Continuing Calibration Verification (CHEM26/0721_02-VT-0718):
Internal standard areas were within 50 to 200% of the initial calibration with the following exceptions: None.
100% of target compounds met criteria.
The following compounds did not meet % deviation criteria: None.
The following compounds did not meet maximum % deviations: None.
The following compounds did not meet recommended response factors: None.
The following compounds did not meet minimum response factors: None.

QC (Batch Specific):

Batch 439961 (CA94870)

CA95004

All LCS recoveries were within 70 - 130 with the following exceptions: None.
All LCSD recoveries were within 70 - 130 with the following exceptions: None.

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RCP Certification Report

August 07, 2018

SDG I.D.: GCA95004

VOA Narration

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%.

Temperature Narration

The samples were received at 1.3C with cooling initiated.
(Note acceptance criteria for relevant matrices is above freezing up to 6°C)

Cooler: Yes [x] No [ ]
Coolant: IPK [ ] ICE [x] No [ ]

PHOENIX
Environmental Laboratories, Inc.

CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
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Client Services (860) 645-8726

Temp 1.2°C Pg 1 of 1

Contact Options:
[ ] Fax:
[ ] Phone:
[x] Email: LWilley@tighebond.com

Customer: Tighe + Bond
Address: 213 Court ST Suite 1100
Middletown CT

Project: Rocque MGP
Report to: Lynn Willey
Invoice to: Tighe + Bond

Project P.O: 14-0755-44

This section MUST be completed with Bottle Quantities.

Client Sample - Information - Identification

Sampler's Signature: [signature] Date: 7/20/14

Matrix Code:
DW=Drinking Water **GW**=Ground Water **SW**=Surface Water **WW**=Waste Water
RW=Raw Water **SE**=Sediment **SL**=Sludge **S**=Soil **SD**=Solid **W**=Wipe
OIL=Oil **B**=Bulk **L**=Liquid

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	VOCs	SVOCs	ETPHs	Total RCRA metals	SPLP RCRA metals	Total Cyanide	PCBs	PAH	Soil VOA Vials [M] methanol [X] H2O	GL Soil container ( ) oz	GL Soil container ( ) oz	40 ml VOA Vial [ ] As is [ ] HCl	GL Amber 1000ml [ ] As is [ ] H2SO4	PL As is [ ] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
95004	SB-44 (10-12 ft)	S	7/20/14	0915	X	X	X	X	X	X	X			3	1							
95005	HA-7 (0-1 ft)			1315			X	X		X	X	X			1							
95006	HA-9 (2-2.5 ft)			1400			X	X		X	X	X			1							
95007	HA-10 (2-2.5 ft)			1430			X	X		X	X	X			1							
95008	HA-11 (1-2 ft)			1445			X	X		X	X	X			1							

Relinquished by:	Accepted by:	Date:	Time:
[signature]	[signature]	7/20/14	15:14

Comments, Special Requirements or Regulations:
DAS Pricing
Quote: TI012517BA

Turnaround:
[ ] 1 Day*
[ ] 2 Days*
[ ] 3 Days*
[x] Standard
[ ] Other
* SURCHARGE APPLIES

RI
[ ] Direct Exposure (Residential)
[ ] GW
[ ] Other

CT
[x] RCP Cert
[ ] GW Protection
[ ] SW Protection
[ ] GA Mobility
[x] GB Mobility
[x] Residential DEC
[x] I/C DEC
[ ] Other

MA
[ ] MCP Certification
[ ] GW-1
[ ] GW-2
[ ] GW-3
[ ] S-1
[ ] S-2
[ ] S-3
[ ] MWRA eSMART
[ ] Other

State where samples were collected: CT

Data Format
[x] Excel
[x] PDF
[ ] GIS/Key
[ ] EQuIS
[x] Other E-mail

Data Package
[ ] Tier II Checklist
[ ] Full Data Package*
[x] Phoenix Std Report
[ ] Other
* SURCHARGE APPLIES

The Connecticut Light and Power Company
d/b/a Eversource Energy
Docket No. 26-05-10
Date Issued September 29, 2026
RSR-032 Attachment 17
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Client Services

From: Lynn E. Willey <LEWilley@tighebond.com>
Sent: Thursday, August 02, 2018 4:14 PM
To: Client Services
Subject: Activation Rockville MGP HA-10
Attachments: HA-10 Activation SPLP TCN and metals.pdf

Hi there:

Please activate HA-10 (95007) for SPLP TCN (within hold time) and SPLP RSR metals.

Thanks

Lynn E. Willey, P.G., LEP | Senior Environmental Scientist
Tighe & Bond | 213 Court Street Suite 1100 | Middletown, CT 06457
| 860.852.5214 | 860-729-7502 (cell)
www.tighebond.com | Follow us on: Twitter Facebook LinkedIn

Cooler: Yes / No
Coolant: IPK / ICE
Temp
Pg 1 of 1

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CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Contact Options:
Fax:
Phone:
Email:

Customer: Tighe + Bond
Address: 213 Court St Suite 1100
Middletown CT

Project:
Report to:
Invoice to: Tighe + Bond

Project P.O.#:

This section MUST be completed with Bottle Quantities.

Client Sample - Information - Identification
Sampler's Signature
Date: 7/30/19

Matrix Code:
DW=Drinking Water GW=Ground Water SW=Surface Water WW=Waste Water
RW=Raw Water SE=Sediment SL=Sludge S=Soil SD=Solid W=Wipe
OIL=Oil B=Bulk L=Liquid

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled
95004	SB-104 (10-12 ft)	S	7/30/19	0915
95005	MW-7 (0-1 ft)			1315
95006	MW-9 (0-2.5 ft)			1400
95007	MW-10 (0-2.5 ft)			1430
95008	MW-11 (0-2 ft)			1445

Analysis Request

| | | |

PHOENIX
Environmental Laboratories, Inc.

Monday, August 13, 2018

Attn: Lynn Willey
Tighe & Bond
213 Court St, Suite 1100
Middletown, CT 06457

Project ID: ROCKVILLE MGP
Sample ID#s: CA96212 - CA96216

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

Enclosed are revised Analysis Report pages. Please replace and discard the original pages. If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
UT Lab Registration #CT00007
VT Lab Registration #VT11301

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
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Environmental Laboratories, Inc.
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Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

August 13, 2018

FOR: Attn: Lynn Willey
Tighe & Bond
213 Court St, Suite 1100
Middletown, CT 06457

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		07/23/18	9:15
Location Code:	TIGHE-DAS	Received by:	DL	07/23/18	17:18
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:	14-0755-44B				

Laboratory Data

SDG ID: GCA96212
Phoenix ID: CA96212

Project ID: ROCKVILLE MGP
Client ID: SB-51 (2-4 FT)

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.33	0.33	mg/Kg	1	07/25/18	EK	SW6010C
Arsenic	10.7	0.66	mg/Kg	1	07/25/18	EK	SW6010C
Barium	62.6	0.33	mg/Kg	1	07/25/18	EK	SW6010C
Beryllium	0.63	0.26	mg/Kg	1	07/25/18	EK	SW6010C
Cadmium	0.68	0.33	mg/Kg	1	07/25/18	EK	SW6010C
Chromium	12.3	0.33	mg/Kg	1	07/25/18	EK	SW6010C
Copper	69.7	0.33	mg/kg	1	07/25/18	EK	SW6010C
Mercury	0.19	0.13	mg/Kg	1	07/24/18	RS	SW7471B
Nickel	14.3	0.33	mg/Kg	1	07/25/18	EK	SW6010C
Lead	44.2	0.33	mg/Kg	1	07/25/18	EK	SW6010C
Antimony	< 3.3	3.3	mg/Kg	1	07/25/18	EK	SW6010C
Selenium	< 1.3	1.3	mg/Kg	1	07/25/18	EK	SW6010C
Thallium	< 3.0	3.0	mg/Kg	1	07/25/18	EK	SW6010C
Vanadium	21.5	0.33	mg/Kg	1	07/25/18	EK	SW6010C
Zinc	63.7	0.33	mg/Kg	1	07/25/18	EK	SW6010C
Percent Solid	91		%		07/23/18	Q	SW846-%Solid
Total Cyanide (SW9010C Distill.)	7.25	0.55	mg/Kg	1	07/26/18	O/GD	SW9012B
Soil Extraction SVOA PAH	Completed				07/24/18	IG/CKV	SW3545A
Extraction of CT ETPH	Completed				07/24/18	IG/VCK	SW3545A
Mercury Digestion	Completed				07/24/18	I/I	SW7471B
Total Metals Digest	Completed				07/24/18	B/AG	SW3050B
TPH by GC (Extractable Products)							
Ext. Petroleum H.C. (C9-C36)	480	270	mg/Kg	5	07/25/18	JRB	CTETPH 8015D
Identification	**		mg/Kg	5	07/25/18	JRB	CTETPH 8015D
QA/QC Surrogates							
% n-Pentacosane	94		%	5	07/25/18	JRB	50 - 150 %

Ver 3

Project ID: ROCKVILLE MGP
Client ID: SB-51 (2-4 FT)

Phoenix I.D.: CA96212

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Polynuclear Aromatic HC							
2-Methylnaphthalene	350	250	ug/Kg	1	07/25/18	HM	SW8270D
Acenaphthene	ND	250	ug/Kg	1	07/25/18	HM	SW8270D
Acenaphthylene	1600	250	ug/Kg	1	07/25/18	HM	SW8270D
Anthracene	1500	250	ug/Kg	1	07/25/18	HM	SW8270D
Benz(a)anthracene	5500	1000	ug/Kg	5	07/25/18	HM	SW8270D
Benzo(a)pyrene	5700	1000	ug/Kg	5	07/25/18	HM	SW8270D
Benzo(b)fluoranthene	6000	250	ug/Kg	1	07/25/18	HM	SW8270D
Benzo(ghi)perylene	5200	1000	ug/Kg	5	07/25/18	HM	SW8270D
Benzo(k)fluoranthene	4900	1000	ug/Kg	5	07/25/18	HM	SW8270D
Chrysene	6100	1000	ug/Kg	5	07/25/18	HM	SW8270D
Dibenz(a,h)anthracene	1200	250	ug/Kg	1	07/25/18	HM	SW8270D
Fluoranthene	7200	1300	ug/Kg	5	07/25/18	HM	SW8270D
Fluorene	770	250	ug/Kg	1	07/25/18	HM	SW8270D
Indeno(1,2,3-cd)pyrene	5300	1000	ug/Kg	5	07/25/18	HM	SW8270D
Naphthalene	560	250	ug/Kg	1	07/25/18	HM	SW8270D
Phenanthrene	6500	1300	ug/Kg	5	07/25/18	HM	SW8270D
Pyrene	9100	1300	ug/Kg	5	07/25/18	HM	SW8270D
QA/QC Surrogates							
% 2-Fluorobiphenyl	65		%	1	07/25/18	HM	30 - 130 %
% Nitrobenzene-d5	68		%	1	07/25/18	HM	30 - 130 %
% Terphenyl-d14	64		%	1	07/25/18	HM	30 - 130 %

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Semi-Volatile Comment:
Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

TPH Comment:
**Petroleum hydrocarbon chromatogram contains a multicomponent hydrocarbon distribution in the range of C9 to C36. The sample was quantitated against a C9-C36 alkane hydrocarbon standard.

Cyanide LCS value changed from average value to mean value of 63.9 mg/Kg per Phyllis and Kathy.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services.
This report must not be reproduced except in full as defined by the attached chain of custody.



Phyllis Shiller, Laboratory Director
August 13, 2018
Reviewed and Released by: Sarah Bell, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

August 13, 2018

FOR: Attn: Lynn Willey
Tighe & Bond
213 Court St, Suite 1100
Middletown, CT 06457

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		07/23/18	9:30
Location Code:	TIGHE-DAS	Received by:	DL	07/23/18	17:18
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:	14-0755-44B				

Laboratory Data

SDG ID: GCA96212
Phoenix ID: CA96213

Project ID: ROCKVILLE MGP
Client ID: SB-51 (10-11 FT)

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	91		%		07/23/18	Q	SW846-%Solid
Volatiles							
1,1,1,2-Tetrachloroethane	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
1,1,1-Trichloroethane	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	4.7	ug/Kg	1	07/24/18	JLI	SW8260C
1,1,2-Trichloroethane	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
1,1-Dichloroethane	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
1,1-Dichloroethene	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
1,1-Dichloropropene	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
1,2,3-Trichloropropane	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
1,2-Dibromoethane	ND	7.0	ug/Kg	1	07/24/18	JLI	SW8260C
1,2-Dichlorobenzene	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
1,2-Dichloroethane	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
1,2-Dichloropropane	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
1,3-Dichlorobenzene	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
1,3-Dichloropropane	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
1,4-Dichlorobenzene	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
2,2-Dichloropropane	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
2-Chlorotoluene	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
2-Hexanone	ND	40	ug/Kg	1	07/24/18	JLI	SW8260C
2-Isopropyltoluene	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
4-Chlorotoluene	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C

Project ID: ROCKVILLE MGP
Client ID: SB-51 (10-11 FT)

Phoenix I.D.: CA96213

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
4-Methyl-2-pentanone	ND	40	ug/Kg	1	07/24/18	JLI	SW8260C
Acetone	ND	400	ug/Kg	1	07/24/18	JLI	SW8260C
Acrylonitrile	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
Benzene	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
Bromobenzene	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
Bromochloromethane	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
Bromodichloromethane	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
Bromoform	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
Bromomethane	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
Carbon Disulfide	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
Carbon tetrachloride	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
Chlorobenzene	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
Chloroethane	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
Chloroform	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
Chloromethane	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
cis-1,2-Dichloroethene	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
cis-1,3-Dichloropropene	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
Dibromochloromethane	ND	4.7	ug/Kg	1	07/24/18	JLI	SW8260C
Dibromomethane	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
Dichlorodifluoromethane	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
Ethylbenzene	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
Hexachlorobutadiene	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
Isopropylbenzene	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
m&p-Xylene	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
Methyl Ethyl Ketone	ND	47	ug/Kg	1	07/24/18	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	16	ug/Kg	1	07/24/18	JLI	SW8260C
Methylene chloride	ND	16	ug/Kg	1	07/24/18	JLI	SW8260C
Naphthalene	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
n-Butylbenzene	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
n-Propylbenzene	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
o-Xylene	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
p-Isopropyltoluene	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
sec-Butylbenzene	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
Styrene	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
tert-Butylbenzene	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
Tetrachloroethene	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
Tetrahydrofuran (THF)	ND	16	ug/Kg	1	07/24/18	JLI	SW8260C
Toluene	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
Total Xylenes	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
trans-1,2-Dichloroethene	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
trans-1,3-Dichloropropene	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	16	ug/Kg	1	07/24/18	JLI	SW8260C
Trichloroethene	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
Trichlorofluoromethane	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
Trichlorotrifluoroethane	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
Vinyl chloride	ND	7.9	ug/Kg	1	07/24/18	JLI	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	105		%	1	07/24/18	JLI	70 - 130 %
% Bromofluorobenzene	87		%	1	07/24/18	JLI	70 - 130 %

Ver 3

Project ID: ROCKVILLE MGP
Client ID: SB-51 (10-11 FT)

Phoenix I.D.: CA96213

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% Dibromofluoromethane	102		%	1	07/24/18	JLI	70 - 130 %
% Toluene-d8	102		%	1	07/24/18	JLI	70 - 130 %
Field Extraction	Completed				07/23/18		SW5035A

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Volatile Comment:
Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services.
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Phyllis Shiller, Laboratory Director
August 13, 2018
Reviewed and Released by: Sarah Bell, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

August 13, 2018

FOR: Attn: Lynn Willey
Tighe & Bond
213 Court St, Suite 1100
Middletown, CT 06457

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		07/23/18	10:30
Location Code:	TIGHE-DAS	Received by:	DL	07/23/18	17:18
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:	14-0755-44B				

Laboratory Data

SDG ID: GCA96212
Phoenix ID: CA96214

Project ID: ROCKVILLE MGP
Client ID: SB-50 (2-4 FT)

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.43	0.43	mg/Kg	1	07/25/18	EK	SW6010C
Arsenic	15.9	0.86	mg/Kg	1	07/25/18	EK	SW6010C
Barium	32.4	0.43	mg/Kg	1	07/25/18	EK	SW6010C
Beryllium	1.04	0.34	mg/Kg	1	07/25/18	EK	SW6010C
Cadmium	0.46	0.43	mg/Kg	1	07/25/18	EK	SW6010C
Chromium	12.5	0.43	mg/Kg	1	07/25/18	EK	SW6010C
Copper	56.4	0.43	mg/kg	1	07/25/18	EK	SW6010C
Mercury	0.41	0.15	mg/Kg	1	07/24/18	RS	SW7471B
Nickel	12.4	0.43	mg/Kg	1	07/25/18	EK	SW6010C
Lead	273	4.3	mg/Kg	10	07/25/18	EK	SW6010C
Antimony	17.1	4.3	mg/Kg	1	07/25/18	EK	SW6010C
Selenium	< 1.7	1.7	mg/Kg	1	07/25/18	EK	SW6010C
Thallium	< 3.9	3.9	mg/Kg	1	07/25/18	EK	SW6010C
Vanadium	25.9	0.43	mg/Kg	1	07/25/18	EK	SW6010C
Zinc	39.1	0.43	mg/Kg	1	07/25/18	EK	SW6010C
Percent Solid	80		%		07/23/18	Q	SW846-%Solid
Total Cyanide (SW9010C Distill.)	2.63	0.63	mg/Kg	1	07/26/18	O/GD	SW9012B
Soil Extraction SVOA PAH	Completed				07/24/18	IG/CKV	SW3545A
Extraction of CT ETPH	Completed				07/24/18	IG/VCK	SW3545A
Mercury Digestion	Completed				07/24/18	I/I	SW7471B
Total Metals Digest	Completed				07/24/18	B/AG	SW3050B
TPH by GC (Extractable Products)							
Ext. Petroleum H.C. (C9-C36)	210	62	mg/Kg	1	07/25/18	JRB	CTETPH 8015D
Identification	**		mg/Kg	1	07/25/18	JRB	CTETPH 8015D
QA/QC Surrogates							
% n-Pentacosane	97		%	1	07/25/18	JRB	50 - 150 %

Ver 3

Project ID: ROCKVILLE MGP
Client ID: SB-50 (2-4 FT)

Phoenix I.D.: CA96214

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Volatiles							
1,1,1,2-Tetrachloroethane	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
1,1,1-Trichloroethane	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	7.1	ug/Kg	1	07/24/18	JLI	SW8260C
1,1,2-Trichloroethane	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
1,1-Dichloroethane	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
1,1-Dichloroethene	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
1,1-Dichloropropene	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
1,2,3-Trichloropropane	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
1,2-Dibromoethane	ND	7.0	ug/Kg	1	07/24/18	JLI	SW8260C
1,2-Dichlorobenzene	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
1,2-Dichloroethane	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
1,2-Dichloropropane	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
1,3-Dichlorobenzene	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
1,3-Dichloropropane	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
1,4-Dichlorobenzene	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
2,2-Dichloropropane	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
2-Chlorotoluene	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
2-Hexanone	ND	59	ug/Kg	1	07/24/18	JLI	SW8260C
2-Isopropyltoluene	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
4-Chlorotoluene	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
4-Methyl-2-pentanone	ND	59	ug/Kg	1	07/24/18	JLI	SW8260C
Acetone	ND	590	ug/Kg	1	07/24/18	JLI	SW8260C
Acrylonitrile	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
Benzene	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
Bromobenzene	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
Bromochloromethane	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
Bromodichloromethane	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
Bromoform	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
Bromomethane	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
Carbon Disulfide	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
Carbon tetrachloride	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
Chlorobenzene	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
Chloroethane	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
Chloroform	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
Chloromethane	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
cis-1,2-Dichloroethene	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
cis-1,3-Dichloropropene	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
Dibromochloromethane	ND	7.1	ug/Kg	1	07/24/18	JLI	SW8260C
Dibromomethane	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
Dichlorodifluoromethane	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
Ethylbenzene	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
Hexachlorobutadiene	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
Isopropylbenzene	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C

Project ID: ROCKVILLE MGP
Client ID: SB-50 (2-4 FT)

Phoenix I.D.: CA96214

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
m&p-Xylene	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
Methyl Ethyl Ketone	ND	71	ug/Kg	1	07/24/18	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	24	ug/Kg	1	07/24/18	JLI	SW8260C
Methylene chloride	ND	24	ug/Kg	1	07/24/18	JLI	SW8260C
Naphthalene	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
n-Butylbenzene	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
n-Propylbenzene	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
o-Xylene	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
p-Isopropyltoluene	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
sec-Butylbenzene	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
Styrene	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
tert-Butylbenzene	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
Tetrachloroethene	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
Tetrahydrofuran (THF)	ND	24	ug/Kg	1	07/24/18	JLI	SW8260C
Toluene	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
Total Xylenes	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
trans-1,2-Dichloroethene	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
trans-1,3-Dichloropropene	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	24	ug/Kg	1	07/24/18	JLI	SW8260C
Trichloroethene	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
Trichlorofluoromethane	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
Trichlorotrifluoroethane	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
Vinyl chloride	ND	12	ug/Kg	1	07/24/18	JLI	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	113		%	1	07/24/18	JLI	70 - 130 %
% Bromofluorobenzene	86		%	1	07/24/18	JLI	70 - 130 %
% Dibromofluoromethane	101		%	1	07/24/18	JLI	70 - 130 %
% Toluene-d8	100		%	1	07/24/18	JLI	70 - 130 %
Polynuclear Aromatic HC							
2-Methylnaphthalene	ND	290	ug/Kg	1	07/25/18	KCA	SW8270D
Acenaphthene	ND	290	ug/Kg	1	07/25/18	KCA	SW8270D
Acenaphthylene	290	290	ug/Kg	1	07/25/18	KCA	SW8270D
Anthracene	ND	290	ug/Kg	1	07/25/18	KCA	SW8270D
Benz(a)anthracene	360	290	ug/Kg	1	07/25/18	KCA	SW8270D
Benzo(a)pyrene	530	290	ug/Kg	1	07/25/18	KCA	SW8270D
Benzo(b)fluoranthene	410	290	ug/Kg	1	07/25/18	KCA	SW8270D
Benzo(ghi)perylene	490	290	ug/Kg	1	07/25/18	KCA	SW8270D
Benzo(k)fluoranthene	430	290	ug/Kg	1	07/25/18	KCA	SW8270D
Chrysene	570	290	ug/Kg	1	07/25/18	KCA	SW8270D
Dibenz(a,h)anthracene	ND	290	ug/Kg	1	07/25/18	KCA	SW8270D
Fluoranthene	480	290	ug/Kg	1	07/25/18	KCA	SW8270D
Fluorene	ND	290	ug/Kg	1	07/25/18	KCA	SW8270D
Indeno(1,2,3-cd)pyrene	500	290	ug/Kg	1	07/25/18	KCA	SW8270D
Naphthalene	ND	290	ug/Kg	1	07/25/18	KCA	SW8270D
Phenanthrene	610	290	ug/Kg	1	07/25/18	KCA	SW8270D
Pyrene	740	290	ug/Kg	1	07/25/18	KCA	SW8270D
QA/QC Surrogates							
% 2-Fluorobiphenyl	68		%	1	07/25/18	KCA	30 - 130 %
% Nitrobenzene-d5	70		%	1	07/25/18	KCA	30 - 130 %

Ver 3

Project ID: ROCKVILLE MGP
Client ID: SB-50 (2-4 FT)

Phoenix I.D.: CA96214

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% Terphenyl-d14	66		%	1	07/25/18	KCA	30 - 130 %
Field Extraction	Completed				07/23/18		SW5035A

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Volatile Comment:
Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

TPH Comment:
**Petroleum hydrocarbon chromatogram contains a multicomponent hydrocarbon distribution in the range of C9 to C36. The sample was quantitated against a C9-C36 alkane hydrocarbon standard.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services.
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Phyllis Shiller, Laboratory Director
August 13, 2018
Reviewed and Released by: Sarah Bell, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

August 13, 2018

FOR: Attn: Lynn Willey
Tighe & Bond
213 Court St, Suite 1100
Middletown, CT 06457

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		07/23/18	14:05
Location Code:	TIGHE-DAS	Received by:	DL	07/23/18	17:18
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:	14-0755-44B				

Laboratory Data

SDG ID: GCA96212
Phoenix ID: CA96215

Project ID: ROCKVILLE MGP
Client ID: SB-32 (2-4 FT)

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.36	0.36	mg/Kg	1	07/25/18	EK	SW6010C
Arsenic	10.2	0.71	mg/Kg	1	07/25/18	EK	SW6010C
Barium	40.9	0.36	mg/Kg	1	07/25/18	EK	SW6010C
Beryllium	< 0.29	0.29	mg/Kg	1	07/25/18	EK	SW6010C
Cadmium	0.47	0.36	mg/Kg	1	07/25/18	EK	SW6010C
Chromium	7.68	0.36	mg/Kg	1	07/25/18	EK	SW6010C
Copper	33.9	0.36	mg/kg	1	07/25/18	EK	SW6010C
Mercury	0.14	0.13	mg/Kg	1	07/24/18	RS	SW7471B
Nickel	11.8	0.36	mg/Kg	1	07/25/18	EK	SW6010C
Lead	61.3	0.36	mg/Kg	1	07/25/18	EK	SW6010C
Antimony	< 3.6	3.6	mg/Kg	1	07/25/18	EK	SW6010C
Selenium	< 1.4	1.4	mg/Kg	1	07/25/18	EK	SW6010C
SPLP Silver	< 0.010	0.010	mg/L	1	08/08/18	EK	SW6010C
SPLP Arsenic	< 0.004	0.004	mg/L	1	08/08/18	EK	SW6010C
SPLP Barium	0.035	0.010	mg/L	1	08/08/18	EK	SW6010C
SPLP Beryllium	< 0.001	0.001	mg/L	1	08/08/18	EK	SW6010C
SPLP Cadmium	< 0.005	0.005	mg/L	1	08/08/18	EK	SW6010C
SPLP Chromium	< 0.010	0.010	mg/L	1	08/08/18	EK	SW6010C
SPLP Copper	< 0.010	0.010	mg/L	1	08/08/18	EK	SW6010C
SPLP Mercury	< 0.0005	0.0005	mg/L	1	08/07/18	RS	SW7470A
SPLP Nickel	< 0.010	0.010	mg/L	1	08/08/18	EK	SW6010C
SPLP Lead	< 0.010	0.010	mg/L	1	08/08/18	EK	SW6010C
SPLP Antimony	< 0.005	0.005	mg/L	1	08/08/18	EK	SW6010C
SPLP Selenium	< 0.020	0.020	mg/L	1	08/08/18	EK	SW6010C
SPLP Thallium	< 0.005	0.005	mg/L	1	08/08/18	EK	SW6010C
SPLP Vanadium	< 0.010	0.010	mg/L	1	08/08/18	EK	SW6010C
SPLP Zinc	< 0.010	0.010	mg/L	1	08/08/18	EK	SW6010C
Thallium	< 3.2	3.2	mg/Kg	1	07/25/18	EK	SW6010C

Ver 3

Project ID: ROCKVILLE MGP
Client ID: SB-32 (2-4 FT)

Phoenix I.D.: CA96215

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
SPLP Metals Digestion	Completed				08/07/18	Q/I/Q	SW3010A
Vanadium	19.0	0.36	mg/Kg	1	07/25/18	EK	SW6010C
Zinc	13.0	0.36	mg/Kg	1	07/25/18	EK	SW6010C
Percent Solid	91		%		07/23/18	Q	SW846-%Solid
Total Cyanide (SW9010C Distill.)	25.3	0.50	mg/Kg	1	07/26/18	O/GD	SW9012B
Soil Extraction SVOA PAH	Completed				07/24/18	IG/CKV	SW3545A
Extraction of CT ETPH	Completed				07/24/18	IG/VCK	SW3545A
Mercury Digestion	Completed				07/24/18	I/I	SW7471B
SPLP Digestion Mercury	Completed				08/07/18	Q/Q	SW1312/SW7470A
SPLP Extraction for Metals	Completed				08/06/18	Q	SW1312
Total Metals Digest	Completed				07/24/18	B/AG	SW3050B
TPH by GC (Extractable Products)							
Ext. Petroleum H.C. (C9-C36)	2900	270	mg/Kg	5	07/25/18	JRB	CTETPH 8015D
Identification	**		mg/Kg	5	07/25/18	JRB	CTETPH 8015D
QA/QC Surrogates							
% n-Pentacosane	Diluted Out		%	5	07/25/18	JRB	50 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
1,1,1-Trichloroethane	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	3.4	ug/Kg	1	07/24/18	JLI	SW8260C
1,1,2-Trichloroethane	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
1,1-Dichloroethane	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
1,1-Dichloroethene	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
1,1-Dichloropropene	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
1,2,3-Trichloropropane	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
1,2-Dibromoethane	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
1,2-Dichlorobenzene	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
1,2-Dichloroethane	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
1,2-Dichloropropane	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
1,3-Dichlorobenzene	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
1,3-Dichloropropane	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
1,4-Dichlorobenzene	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
2,2-Dichloropropane	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
2-Chlorotoluene	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
2-Hexanone	ND	29	ug/Kg	1	07/24/18	JLI	SW8260C
2-Isopropyltoluene	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
4-Chlorotoluene	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
4-Methyl-2-pentanone	ND	29	ug/Kg	1	07/24/18	JLI	SW8260C
Acetone	ND	290	ug/Kg	1	07/24/18	JLI	SW8260C
Acrylonitrile	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
Benzene	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
Bromobenzene	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
Bromochloromethane	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C

Project ID: ROCKVILLE MGP
Client ID: SB-32 (2-4 FT)

Phoenix I.D.: CA96215

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Bromodichloromethane	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
Bromoform	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
Bromomethane	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
Carbon Disulfide	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
Carbon tetrachloride	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
Chlorobenzene	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
Chloroethane	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
Chloroform	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
Chloromethane	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
cis-1,2-Dichloroethene	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
cis-1,3-Dichloropropene	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
Dibromochloromethane	ND	3.4	ug/Kg	1	07/24/18	JLI	SW8260C
Dibromomethane	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
Dichlorodifluoromethane	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
Ethylbenzene	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
Hexachlorobutadiene	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
Isopropylbenzene	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
m&p-Xylene	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
Methyl Ethyl Ketone	ND	34	ug/Kg	1	07/24/18	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	11	ug/Kg	1	07/24/18	JLI	SW8260C
Methylene chloride	ND	11	ug/Kg	1	07/24/18	JLI	SW8260C
Naphthalene	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
n-Butylbenzene	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
n-Propylbenzene	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
o-Xylene	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
p-Isopropyltoluene	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
sec-Butylbenzene	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
Styrene	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
tert-Butylbenzene	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
Tetrachloroethene	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
Tetrahydrofuran (THF)	ND	11	ug/Kg	1	07/24/18	JLI	SW8260C
Toluene	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
Total Xylenes	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
trans-1,2-Dichloroethene	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
trans-1,3-Dichloropropene	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	11	ug/Kg	1	07/24/18	JLI	SW8260C
Trichloroethene	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
Trichlorofluoromethane	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
Trichlorotrifluoroethane	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
Vinyl chloride	ND	5.7	ug/Kg	1	07/24/18	JLI	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	110		%	1	07/24/18	JLI	70 - 130 %
% Bromofluorobenzene	88		%	1	07/24/18	JLI	70 - 130 %
% Dibromofluoromethane	100		%	1	07/24/18	JLI	70 - 130 %
% Toluene-d8	100		%	1	07/24/18	JLI	70 - 130 %
Polynuclear Aromatic HC							
2-Methylnaphthalene	ND	1300	ug/Kg	5	07/25/18	KCA	SW8270D
Acenaphthene	ND	1300	ug/Kg	5	07/25/18	KCA	SW8270D
Acenaphthylene	12000	1300	ug/Kg	5	07/25/18	KCA	SW8270D

Ver 3

Project ID: ROCKVILLE MGP
Client ID: SB-32 (2-4 FT)

Phoenix I.D.: CA96215

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Anthracene	2000	1300	ug/Kg	5	07/25/18	KCA	SW8270D
Benz(a)anthracene	14000	1000	ug/Kg	5	07/25/18	KCA	SW8270D
Benzo(a)pyrene	13000	1000	ug/Kg	5	07/25/18	KCA	SW8270D
Benzo(b)fluoranthene	20000	1000	ug/Kg	5	07/25/18	KCA	SW8270D
Benzo(ghi)perylene	21000	1000	ug/Kg	5	07/25/18	KCA	SW8270D
Benzo(k)fluoranthene	17000	1000	ug/Kg	5	07/25/18	KCA	SW8270D
Chrysene	19000	1000	ug/Kg	5	07/25/18	KCA	SW8270D
Dibenz(a,h)anthracene	4100	1000	ug/Kg	5	07/25/18	KCA	SW8270D
Fluoranthene	8600	1300	ug/Kg	5	07/25/18	KCA	SW8270D
Fluorene	ND	1300	ug/Kg	5	07/25/18	KCA	SW8270D
Indeno(1,2,3-cd)pyrene	21000	1000	ug/Kg	5	07/25/18	KCA	SW8270D
Naphthalene	1500	1300	ug/Kg	5	07/25/18	KCA	SW8270D
Phenanthrene	2000	1300	ug/Kg	5	07/25/18	KCA	SW8270D
Pyrene	19000	1300	ug/Kg	5	07/25/18	KCA	SW8270D
QA/QC Surrogates							
% 2-Fluorobiphenyl	82		%	5	07/25/18	KCA	30 - 130 %
% Nitrobenzene-d5	82		%	5	07/25/18	KCA	30 - 130 %
% Terphenyl-d14	73		%	5	07/25/18	KCA	30 - 130 %
Field Extraction	Completed				07/23/18		SW5035A

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Semi-Volatile Comment:
Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

TPH Comment:
**Petroleum hydrocarbon chromatogram contains a multicomponent hydrocarbon distribution in the range of C9 to C36. The sample was quantitated against a C9-C36 alkane hydrocarbon standard.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services.
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Phyllis Shiller, Laboratory Director
August 13, 2018
Reviewed and Released by: Sarah Bell, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

August 13, 2018

FOR: Attn: Lynn Willey
Tighe & Bond
213 Court St, Suite 1100
Middletown, CT 06457

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		07/23/18	15:25
Location Code:	TIGHE-DAS	Received by:	DL	07/23/18	17:18
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:	14-0755-44B				

Laboratory Data

SDG ID: GCA96212
Phoenix ID: CA96216

Project ID: ROCKVILLE MGP
Client ID: SB-48 (2-4 FT)

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.40	0.40	mg/Kg	1	07/25/18	EK	SW6010C
Arsenic	17.5	0.79	mg/Kg	1	07/25/18	EK	SW6010C
Barium	49.7	0.40	mg/Kg	1	07/25/18	EK	SW6010C
Beryllium	0.61	0.32	mg/Kg	1	07/25/18	EK	SW6010C
Cadmium	< 0.40	0.40	mg/Kg	1	07/25/18	EK	SW6010C
Chromium	10.6	0.40	mg/Kg	1	07/25/18	EK	SW6010C
Copper	50.1	0.40	mg/kg	1	07/25/18	EK	SW6010C
Mercury	0.17	0.13	mg/Kg	1	07/24/18	RS	SW7471B
Nickel	13.9	0.40	mg/Kg	1	07/25/18	EK	SW6010C
Lead	48.1	0.40	mg/Kg	1	07/25/18	EK	SW6010C
Antimony	< 4.0	4.0	mg/Kg	1	07/25/18	EK	SW6010C
Selenium	< 1.6	1.6	mg/Kg	1	07/25/18	EK	SW6010C
Thallium	< 3.6	3.6	mg/Kg	1	07/25/18	EK	SW6010C
Vanadium	28.8	0.40	mg/Kg	1	07/25/18	EK	SW6010C
Zinc	26.3	0.40	mg/Kg	1	07/25/18	EK	SW6010C
Percent Solid	89		%		07/23/18	Q	SW846-%Solid
Total Cyanide (SW9010C Distill.)	1.98	0.56	mg/Kg	1	07/26/18	O/GD	SW9012B
Soil Extraction SVOA PAH	Completed				07/24/18	IG/CKV	SW3545A
Extraction of CT ETPH	Completed				07/24/18	IG/VCK	SW3545A
Mercury Digestion	Completed				07/24/18	I/I	SW7471B
Total Metals Digest	Completed				07/24/18	B/AG	SW3050B
TPH by GC (Extractable Products)							
Ext. Petroleum H.C. (C9-C36)	ND	55	mg/Kg	1	07/25/18	JRB	CTETPH 8015D
Identification	ND		mg/Kg	1	07/25/18	JRB	CTETPH 8015D
QA/QC Surrogates							
% n-Pentacosane	55		%	1	07/25/18	JRB	50 - 150 %

Ver 3

Project ID: ROCKVILLE MGP
Client ID: SB-48 (2-4 FT)

Phoenix I.D.: CA96216

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Volatiles							
1,1,1,2-Tetrachloroethane	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
1,1,1-Trichloroethane	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	6.0	ug/Kg	1	07/24/18	JLI	SW8260C
1,1,2-Trichloroethane	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
1,1-Dichloroethane	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
1,1-Dichloroethene	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
1,1-Dichloropropene	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
1,2,3-Trichloropropane	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
1,2-Dibromoethane	ND	7.0	ug/Kg	1	07/24/18	JLI	SW8260C
1,2-Dichlorobenzene	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
1,2-Dichloroethane	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
1,2-Dichloropropane	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
1,3-Dichlorobenzene	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
1,3-Dichloropropane	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
1,4-Dichlorobenzene	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
2,2-Dichloropropane	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
2-Chlorotoluene	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
2-Hexanone	ND	50	ug/Kg	1	07/24/18	JLI	SW8260C
2-Isopropyltoluene	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
4-Chlorotoluene	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
4-Methyl-2-pentanone	ND	50	ug/Kg	1	07/24/18	JLI	SW8260C
Acetone	ND	500	ug/Kg	1	07/24/18	JLI	SW8260C
Acrylonitrile	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
Benzene	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
Bromobenzene	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
Bromochloromethane	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
Bromodichloromethane	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
Bromoform	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
Bromomethane	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
Carbon Disulfide	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
Carbon tetrachloride	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
Chlorobenzene	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
Chloroethane	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
Chloroform	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
Chloromethane	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
cis-1,2-Dichloroethene	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
cis-1,3-Dichloropropene	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
Dibromochloromethane	ND	6.0	ug/Kg	1	07/24/18	JLI	SW8260C
Dibromomethane	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
Dichlorodifluoromethane	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
Ethylbenzene	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
Hexachlorobutadiene	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
Isopropylbenzene	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C

Ver 3

Project ID: ROCKVILLE MGP
Client ID: SB-48 (2-4 FT)

Phoenix I.D.: CA96216

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
m&p-Xylene	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
Methyl Ethyl Ketone	ND	60	ug/Kg	1	07/24/18	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	20	ug/Kg	1	07/24/18	JLI	SW8260C
Methylene chloride	ND	20	ug/Kg	1	07/24/18	JLI	SW8260C
Naphthalene	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
n-Butylbenzene	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
n-Propylbenzene	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
o-Xylene	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
p-Isopropyltoluene	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
sec-Butylbenzene	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
Styrene	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
tert-Butylbenzene	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
Tetrachloroethene	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
Tetrahydrofuran (THF)	ND	20	ug/Kg	1	07/24/18	JLI	SW8260C
Toluene	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
Total Xylenes	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
trans-1,2-Dichloroethene	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
trans-1,3-Dichloropropene	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	20	ug/Kg	1	07/24/18	JLI	SW8260C
Trichloroethene	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
Trichlorofluoromethane	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
Trichlorotrifluoroethane	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
Vinyl chloride	ND	10	ug/Kg	1	07/24/18	JLI	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	111		%	1	07/24/18	JLI	70 - 130 %
% Bromofluorobenzene	87		%	1	07/24/18	JLI	70 - 130 %
% Dibromofluoromethane	101		%	1	07/24/18	JLI	70 - 130 %
% Toluene-d8	101		%	1	07/24/18	JLI	70 - 130 %
Polynuclear Aromatic HC							
2-Methylnaphthalene	ND	260	ug/Kg	1	07/25/18	KCA	SW8270D
Acenaphthene	ND	260	ug/Kg	1	07/25/18	KCA	SW8270D
Acenaphthylene	260	260	ug/Kg	1	07/25/18	KCA	SW8270D
Anthracene	ND	260	ug/Kg	1	07/25/18	KCA	SW8270D
Benz(a)anthracene	430	260	ug/Kg	1	07/25/18	KCA	SW8270D
Benzo(a)pyrene	640	260	ug/Kg	1	07/25/18	KCA	SW8270D
Benzo(b)fluoranthene	720	260	ug/Kg	1	07/25/18	KCA	SW8270D
Benzo(ghi)perylene	770	260	ug/Kg	1	07/25/18	KCA	SW8270D
Benzo(k)fluoranthene	670	260	ug/Kg	1	07/25/18	KCA	SW8270D
Chrysene	620	260	ug/Kg	1	07/25/18	KCA	SW8270D
Dibenz(a,h)anthracene	ND	260	ug/Kg	1	07/25/18	KCA	SW8270D
Fluoranthene	520	260	ug/Kg	1	07/25/18	KCA	SW8270D
Fluorene	ND	260	ug/Kg	1	07/25/18	KCA	SW8270D
Indeno(1,2,3-cd)pyrene	840	260	ug/Kg	1	07/25/18	KCA	SW8270D
Naphthalene	ND	260	ug/Kg	1	07/25/18	KCA	SW8270D
Phenanthrene	ND	260	ug/Kg	1	07/25/18	KCA	SW8270D
Pyrene	760	260	ug/Kg	1	07/25/18	KCA	SW8270D
QA/QC Surrogates							
% 2-Fluorobiphenyl	71		%	1	07/25/18	KCA	30 - 130 %
% Nitrobenzene-d5	67		%	1	07/25/18	KCA	30 - 130 %

Ver 3

Project ID: ROCKVILLE MGP
Client ID: SB-48 (2-4 FT)

Phoenix I.D.: CA96216

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% Terphenyl-d14	72		%	1	07/25/18	KCA	30 - 130 %
Field Extraction	Completed				07/23/18		SW5035A

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Volatile Comment:
Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services.
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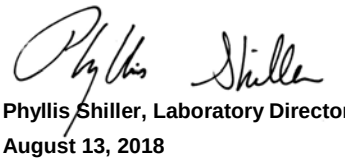

Phyllis Shiller, Laboratory Director
August 13, 2018
Reviewed and Released by: Sarah Bell, Project Manager

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QA/QC Report

August 13, 2018

QA/QC Data

SDG I.D.: GCA96212

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 440090 (mg/kg), QC Sample No: CA96173 (CA96212, CA96214, CA96215, CA96216)													
Mercury - Soil	BRL	0.02	0.10	0.12	NC	103	97.7	5.3	121			70 - 130	30
Comment:													
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.													
QA/QC Batch 442012 (mg/L), QC Sample No: CA96215 (CA96215)													
ICP Metals - SPLP Extraction													
Antimony	BRL	0.005	<0.005	<0.005	NC	104			105			75 - 125	20
Arsenic	BRL	0.004	<0.004	<0.004	NC	96.1			99.3			75 - 125	20
Barium	BRL	0.010	0.035	0.035	NC	104			104			75 - 125	20
Beryllium	BRL	0.001	<0.001	<0.001	NC	101			103			75 - 125	20
Cadmium	BRL	0.005	<0.005	<0.005	NC	99.9			102			75 - 125	20
Chromium	BRL	0.010	<0.010	<0.010	NC	99.3			99.1			75 - 125	20
Copper	BRL	0.010	<0.010	<0.010	NC	102			103			75 - 125	20
Lead	BRL	0.010	<0.010	<0.010	NC	99.3			99.4			75 - 125	20
Nickel	BRL	0.010	<0.010	<0.010	NC	98.7			99.2			75 - 125	20
Selenium	BRL	0.020	<0.020	<0.020	NC	99.1			100			75 - 125	20
Silver	BRL	0.010	<0.010	<0.010	NC	98.9			99.8			75 - 125	20
Thallium	BRL	0.005	<0.005	<0.005	NC	100			101			75 - 125	20
Vanadium	BRL	0.010	<0.010	<0.010	NC	99.7			101			75 - 125	20
Zinc	BRL	0.010	<0.010	<0.010	NC	101			102			75 - 125	20
QA/QC Batch 440165 (mg/kg), QC Sample No: CA96245 (CA96212, CA96214, CA96215, CA96216)													
ICP Metals - Soil													
Antimony	BRL	3.3	<3.7	<3.9	NC	77.1			94.3			75 - 125	30
Arsenic	BRL	0.67	5.29	5.17	2.30	99.7			92.6			75 - 125	30
Barium	BRL	0.33	42.4	43.4	2.30	97.0			107			75 - 125	30
Beryllium	BRL	0.27	0.34	0.35	NC	99.6			98.5			75 - 125	30
Cadmium	BRL	0.33	<0.37	<0.39	NC	107			97.1			75 - 125	30
Chromium	BRL	0.33	11.7	11.8	0.90	104			99.4			75 - 125	30
Copper	BRL	0.33	14.8	15.1	2.00	100			102			75 - 125	30
Lead	BRL	0.33	19.2	20.3	5.60	102			98.1			75 - 125	30
Nickel	BRL	0.33	9.69	10.8	10.8	104			97.4			75 - 125	30
Selenium	BRL	1.3	<1.5	<1.6	NC	90.6			85.5			75 - 125	30
Silver	BRL	0.33	<0.37	<0.39	NC	95.5			96.9			75 - 125	30
Thallium	BRL	3.0	<3.4	<3.5	NC	104			95.1			75 - 125	30
Vanadium	BRL	0.33	18.5	17.4	6.10	102			97.6			75 - 125	30
Zinc	BRL	0.9	35.3	37.6	6.30	96.5			94.9			75 - 125	30
QA/QC Batch 442008 (mg/L), QC Sample No: CB05482 (CA96215)													
Mercury - Water	BRL	0.0002	<0.0002	<0.0002	NC	86.9			84.5			80 - 120	20
Comment:													
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.													

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QA/QC Report

August 13, 2018

QA/QC Data

SDG I.D.: GCA96212

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 440381 (mg/Kg), QC Sample No: CA96212 50X (CA96212, CA96214, CA96215, CA96216)														
Total Cyanide (SW9010C Distill.)	BRL	0.50	7.25	5.19	33.1	98.6			103			80 - 120	30	r
Comment:														
Additional: LCS acceptance range is 80-120% for soils MS acceptance range 75-125% for soils														

r = This parameter is outside laboratory RPD specified recovery limits.

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QA/QC Report

August 13, 2018

QA/QC Data

SDG I.D.: GCA96212

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 440138 (ug/kg), QC Sample No: CA95893 (CA96213, CA96214, CA96215, CA96216)											
Volatiles - Soil											
1,1,1,2-Tetrachloroethane	ND	5.0	109	109	0.0	103	106	2.9	70 - 130	30	
1,1,1-Trichloroethane	ND	5.0	98	100	2.0	93	94	1.1	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	3.0	98	98	0.0	92	94	2.2	70 - 130	30	
1,1,2-Trichloroethane	ND	5.0	97	98	1.0	96	97	1.0	70 - 130	30	
1,1-Dichloroethane	ND	5.0	99	100	1.0	82	82	0.0	70 - 130	30	
1,1-Dichloroethene	ND	5.0	101	103	2.0	73	79	7.9	70 - 130	30	
1,1-Dichloropropene	ND	5.0	101	100	1.0	102	103	1.0	70 - 130	30	
1,2,3-Trichlorobenzene	ND	5.0	101	100	1.0	99	105	5.9	70 - 130	30	
1,2,3-Trichloropropane	ND	5.0	92	91	1.1	87	87	0.0	70 - 130	30	
1,2,4-Trichlorobenzene	ND	5.0	100	100	0.0	100	106	5.8	70 - 130	30	
1,2,4-Trimethylbenzene	ND	1.0	99	99	0.0	98	99	1.0	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	5.0	112	115	2.6	99	105	5.9	70 - 130	30	
1,2-Dibromoethane	ND	5.0	102	102	0.0	98	100	2.0	70 - 130	30	
1,2-Dichlorobenzene	ND	5.0	98	98	0.0	96	97	1.0	70 - 130	30	
1,2-Dichloroethane	ND	5.0	95	94	1.1	94	95	1.1	70 - 130	30	
1,2-Dichloropropane	ND	5.0	95	95	0.0	95	95	0.0	70 - 130	30	
1,3,5-Trimethylbenzene	ND	1.0	100	100	0.0	97	99	2.0	70 - 130	30	
1,3-Dichlorobenzene	ND	5.0	101	100	1.0	99	101	2.0	70 - 130	30	
1,3-Dichloropropane	ND	5.0	96	95	1.0	93	93	0.0	70 - 130	30	
1,4-Dichlorobenzene	ND	5.0	97	97	0.0	96	97	1.0	70 - 130	30	
2,2-Dichloropropane	ND	5.0	97	99	2.0	96	97	1.0	70 - 130	30	
2-Chlorotoluene	ND	5.0	100	100	0.0	97	99	2.0	70 - 130	30	
2-Hexanone	ND	25	72	74	2.7	70	70	0.0	70 - 130	30	
2-Isopropyltoluene	ND	5.0	104	103	1.0	102	104	1.9	70 - 130	30	
4-Chlorotoluene	ND	5.0	99	98	1.0	97	98	1.0	70 - 130	30	
4-Methyl-2-pentanone	ND	25	77	79	2.6	76	77	1.3	70 - 130	30	
Acetone	ND	10	71	74	4.1	58	55	5.3	70 - 130	30	m
Acrylonitrile	ND	5.0	88	91	3.4	78	77	1.3	70 - 130	30	
Benzene	ND	1.0	98	98	0.0	97	99	2.0	70 - 130	30	
Bromobenzene	ND	5.0	104	104	0.0	101	102	1.0	70 - 130	30	
Bromochloromethane	ND	5.0	101	103	2.0	96	96	0.0	70 - 130	30	
Bromodichloromethane	ND	5.0	104	103	1.0	98	99	1.0	70 - 130	30	
Bromoform	ND	5.0	122	123	0.8	105	108	2.8	70 - 130	30	
Bromomethane	ND	5.0	106	112	5.5	99	90	9.5	70 - 130	30	
Carbon Disulfide	ND	5.0	118	119	0.8	80	87	8.4	70 - 130	30	
Carbon tetrachloride	ND	5.0	88	89	1.1	80	82	2.5	70 - 130	30	
Chlorobenzene	ND	5.0	100	100	0.0	98	100	2.0	70 - 130	30	
Chloroethane	ND	5.0	102	101	1.0	94	92	2.2	70 - 130	30	
Chloroform	ND	5.0	96	97	1.0	91	91	0.0	70 - 130	30	
Chloromethane	ND	5.0	84	86	2.4	79	81	2.5	70 - 130	30	
cis-1,2-Dichloroethene	ND	5.0	100	102	2.0	93	97	4.2	70 - 130	30	

QA/QC Data

SDG I.D.: GCA96212

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
cis-1,3-Dichloropropene	ND	5.0	100	100	0.0	98	100	2.0	70 - 130	30	
Dibromochloromethane	ND	3.0	119	120	0.8	106	109	2.8	70 - 130	30	
Dibromomethane	ND	5.0	98	99	1.0	95	97	2.1	70 - 130	30	
Dichlorodifluoromethane	ND	5.0	114	116	1.7	107	110	2.8	70 - 130	30	
Ethylbenzene	ND	1.0	103	102	1.0	101	102	1.0	70 - 130	30	
Hexachlorobutadiene	ND	5.0	106	105	0.9	107	112	4.6	70 - 130	30	
Isopropylbenzene	ND	1.0	101	101	0.0	97	98	1.0	70 - 130	30	
m&p-Xylene	ND	2.0	103	103	0.0	101	103	2.0	70 - 130	30	
Methyl ethyl ketone	ND	5.0	66	70	5.9	66	65	1.5	70 - 130	30	l,m
Methyl t-butyl ether (MTBE)	ND	1.0	100	102	2.0	86	86	0.0	70 - 130	30	
Methylene chloride	ND	5.0	87	87	0.0	75	75	0.0	70 - 130	30	
Naphthalene	ND	5.0	99	100	1.0	95	100	5.1	70 - 130	30	
n-Butylbenzene	ND	1.0	99	99	0.0	98	100	2.0	70 - 130	30	
n-Propylbenzene	ND	1.0	100	100	0.0	97	99	2.0	70 - 130	30	
o-Xylene	ND	2.0	103	103	0.0	101	103	2.0	70 - 130	30	
p-Isopropyltoluene	ND	1.0	104	103	1.0	101	103	2.0	70 - 130	30	
sec-Butylbenzene	ND	1.0	105	104	1.0	102	103	1.0	70 - 130	30	
Styrene	ND	5.0	102	103	1.0	101	102	1.0	70 - 130	30	
tert-Butylbenzene	ND	1.0	102	100	2.0	98	99	1.0	70 - 130	30	
Tetrachloroethene	ND	5.0	107	107	0.0	109	111	1.8	70 - 130	30	
Tetrahydrofuran (THF)	ND	5.0	77	80	3.8	76	75	1.3	70 - 130	30	
Toluene	ND	1.0	99	100	1.0	99	102	3.0	70 - 130	30	
trans-1,2-Dichloroethene	ND	5.0	104	105	1.0	88	88	0.0	70 - 130	30	
trans-1,3-Dichloropropene	ND	5.0	98	98	0.0	95	97	2.1	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	5.0	101	103	2.0	92	93	1.1	70 - 130	30	
Trichloroethene	ND	5.0	105	105	0.0	103	106	2.9	70 - 130	30	
Trichlorofluoromethane	ND	5.0	110	112	1.8	99	97	2.0	70 - 130	30	
Trichlorotrifluoroethane	ND	5.0	108	109	0.9	85	89	4.6	70 - 130	30	
Vinyl chloride	ND	5.0	97	97	0.0	86	87	1.2	70 - 130	30	
% 1,2-dichlorobenzene-d4	100	%	99	99	0.0	99	98	1.0	70 - 130	30	
% Bromofluorobenzene	99	%	99	99	0.0	100	100	0.0	70 - 130	30	
% Dibromofluoromethane	101	%	104	104	0.0	101	101	0.0	70 - 130	30	
% Toluene-d8	102	%	99	98	1.0	99	99	0.0	70 - 130	30	

Comment:

Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 440118 (ug/kg), QC Sample No: CA96397 (CA96212, CA96214, CA96215, CA96216)

Polynuclear Aromatic HC - Soil

2-Methylnaphthalene	ND	230	61	68	10.9	70	55	24.0	30 - 130	30	
Acenaphthene	ND	230	66	74	11.4	74	61	19.3	30 - 130	30	
Acenaphthylene	ND	230	63	72	13.3	70	58	18.8	30 - 130	30	
Anthracene	ND	230	69	81	16.0	77	67	13.9	30 - 130	30	
Benz(a)anthracene	ND	230	68	79	15.0	78	70	10.8	30 - 130	30	
Benzo(a)pyrene	ND	230	67	77	13.9	72	61	16.5	30 - 130	30	
Benzo(b)fluoranthene	ND	230	70	80	13.3	78	60	26.1	30 - 130	30	
Benzo(ghi)perylene	ND	230	64	76	17.1	60	47	24.3	30 - 130	30	
Benzo(k)fluoranthene	ND	230	71	80	11.9	69	62	10.7	30 - 130	30	
Chrysene	ND	230	69	77	11.0	74	69	7.0	30 - 130	30	
Dibenz(a,h)anthracene	ND	230	65	78	18.2	72	57	23.3	30 - 130	30	
Fluoranthene	ND	230	69	83	18.4	78	84	7.4	30 - 130	30	
Fluorene	ND	230	64	73	13.1	72	61	16.5	30 - 130	30	
Indeno(1,2,3-cd)pyrene	ND	230	68	81	17.4	67	53	23.3	30 - 130	30	
Naphthalene	ND	230	63	70	10.5	73	58	22.9	30 - 130	30	

QA/QC Data

SDG I.D.: GCA96212

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
Phenanthrene	ND	230	67	77	13.9	75	80	6.5	30 - 130	30
Pyrene	ND	230	68	84	21.1	77	82	6.3	30 - 130	30
% 2-Fluorobiphenyl	72	%	67	73	8.6	70	58	18.8	30 - 130	30
% Nitrobenzene-d5	77	%	69	76	9.7	81	68	17.4	30 - 130	30
% Terphenyl-d14	69	%	67	78	15.2	74	60	20.9	30 - 130	30

Comment:

Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

QA/QC Batch 440120 (mg/Kg), QC Sample No: CA96848 (CA96212, CA96214, CA96215, CA96216)

TPH by GC (Extractable Products) - Soil

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
Ext. Petroleum H.C. (C9-C36)	ND	50	100	95	5.1	98	99	1.0	60 - 120	30
% n-Pentacosane	71	%	74	74	0.0	67	66	1.5	50 - 150	30

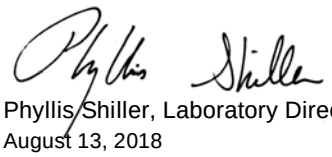
Comment:

Additional surrogate criteria: LCS acceptance range is 60-120% MS acceptance range 50-150%. The ETPH/DRO LCS has been normalized based on the alkane calibration.

l = This parameter is outside laboratory LCS/LCSD specified recovery limits.
m = This parameter is outside laboratory MS/MSD specified recovery limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference



Phyllis Shiller, Laboratory Director
August 13, 2018

Monday, August 13, 2018

Criteria: CT: GBM, I/C, RC

State: CT

Sample Criteria Exceedances Report

GCA96212 - TIGHE-DAS

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CA96212	$8100SMR	Dibenz(a,h)anthracene	CT / RSR DEC I/C (mg/kg) / APS Organics	1200	250	1000	1000	ug/Kg
CA96212	$8100SMR	Benzo(a)pyrene	CT / RSR DEC I/C (mg/kg) / Semivolatiles	5700	1000	1000	1000	ug/Kg
CA96212	$8100SMR	Indeno(1,2,3-cd)pyrene	CT / RSR DEC RES (mg/kg) / APS Organics	5300	1000	1000	1000	ug/Kg
CA96212	$8100SMR	Dibenz(a,h)anthracene	CT / RSR DEC RES (mg/kg) / APS Organics	1200	250	1000	1000	ug/Kg
CA96212	$8100SMR	Benz(a)anthracene	CT / RSR DEC RES (mg/kg) / Semivolatiles	5500	1000	1000	1000	ug/Kg
CA96212	$8100SMR	Benzo(a)pyrene	CT / RSR DEC RES (mg/kg) / Semivolatiles	5700	1000	1000	1000	ug/Kg
CA96212	$8100SMR	Benzo(b)fluoranthene	CT / RSR DEC RES (mg/kg) / Semivolatiles	6000	250	1000	1000	ug/Kg
CA96212	$8100SMR	Indeno(1,2,3-cd)pyrene	CT / RSR GB (mg/kg) / APS Organics	5300	1000	1000	1000	ug/Kg
CA96212	$8100SMR	Dibenz(a,h)anthracene	CT / RSR GB (mg/kg) / APS Organics	1200	250	1000	1000	ug/Kg
CA96212	$8100SMR	Chrysene	CT / RSR GB (mg/kg) / APS Organics	6100	1000	1000	1000	ug/Kg
CA96212	$8100SMR	Benzo(ghi)perylene	CT / RSR GB (mg/kg) / APS Organics	5200	1000	1000	1000	ug/Kg
CA96212	$8100SMR	Benzo(b)fluoranthene	CT / RSR GB (mg/kg) / Semivolatiles	6000	250	1000	1000	ug/Kg
CA96212	$8100SMR	Benz(a)anthracene	CT / RSR GB (mg/kg) / Semivolatiles	5500	1000	1000	1000	ug/Kg
CA96212	$8100SMR	Benzo(a)pyrene	CT / RSR GB (mg/kg) / Semivolatiles	5700	1000	1000	1000	ug/Kg
CA96212	$8100SMR	Benzo(k)fluoranthene	CT / RSR GB (mg/kg) / Semivolatiles	4900	1000	1000	1000	ug/Kg
CA96212	AS-SM	Arsenic	CT / RSR DEC I/C (mg/kg) / Inorganics	10.7	0.66	10	10	mg/Kg
CA96212	AS-SM	Arsenic	CT / RSR DEC RES (mg/kg) / Inorganics	10.7	0.66	10	10	mg/Kg
CA96214	AS-SM	Arsenic	CT / RSR DEC I/C (mg/kg) / Inorganics	15.9	0.86	10	10	mg/Kg
CA96214	AS-SM	Arsenic	CT / RSR DEC RES (mg/kg) / Inorganics	15.9	0.86	10	10	mg/Kg
CA96215	$8100SMR	Indeno(1,2,3-cd)pyrene	CT / RSR DEC I/C (mg/kg) / APS Organics	21000	1000	7800	7800	ug/Kg
CA96215	$8100SMR	Dibenz(a,h)anthracene	CT / RSR DEC I/C (mg/kg) / APS Organics	4100	1000	1000	1000	ug/Kg
CA96215	$8100SMR	Benz(a)anthracene	CT / RSR DEC I/C (mg/kg) / Semivolatiles	14000	1000	7800	7800	ug/Kg
CA96215	$8100SMR	Benzo(a)pyrene	CT / RSR DEC I/C (mg/kg) / Semivolatiles	13000	1000	1000	1000	ug/Kg
CA96215	$8100SMR	Benzo(b)fluoranthene	CT / RSR DEC I/C (mg/kg) / Semivolatiles	20000	1000	7800	7800	ug/Kg
CA96215	$8100SMR	Indeno(1,2,3-cd)pyrene	CT / RSR DEC RES (mg/kg) / APS Organics	21000	1000	1000	1000	ug/Kg
CA96215	$8100SMR	Dibenz(a,h)anthracene	CT / RSR DEC RES (mg/kg) / APS Organics	4100	1000	1000	1000	ug/Kg
CA96215	$8100SMR	Benzo(ghi)perylene	CT / RSR DEC RES (mg/kg) / APS Organics	21000	1000	8400	8400	ug/Kg
CA96215	$8100SMR	Benzo(a)pyrene	CT / RSR DEC RES (mg/kg) / Semivolatiles	13000	1000	1000	1000	ug/Kg
CA96215	$8100SMR	Benzo(b)fluoranthene	CT / RSR DEC RES (mg/kg) / Semivolatiles	20000	1000	1000	1000	ug/Kg
CA96215	$8100SMR	Benz(a)anthracene	CT / RSR DEC RES (mg/kg) / Semivolatiles	14000	1000	1000	1000	ug/Kg
CA96215	$8100SMR	Benzo(k)fluoranthene	CT / RSR DEC RES (mg/kg) / Semivolatiles	17000	1000	8400	8400	ug/Kg
CA96215	$8100SMR	Chrysene	CT / RSR GB (mg/kg) / APS Organics	19000	1000	1000	1000	ug/Kg
CA96215	$8100SMR	Indeno(1,2,3-cd)pyrene	CT / RSR GB (mg/kg) / APS Organics	21000	1000	1000	1000	ug/Kg
CA96215	$8100SMR	Dibenz(a,h)anthracene	CT / RSR GB (mg/kg) / APS Organics	4100	1000	1000	1000	ug/Kg
CA96215	$8100SMR	Benzo(ghi)perylene	CT / RSR GB (mg/kg) / APS Organics	21000	1000	1000	1000	ug/Kg
CA96215	$8100SMR	Benzo(b)fluoranthene	CT / RSR GB (mg/kg) / Semivolatiles	20000	1000	1000	1000	ug/Kg
CA96215	$8100SMR	Benzo(a)pyrene	CT / RSR GB (mg/kg) / Semivolatiles	13000	1000	1000	1000	ug/Kg
CA96215	$8100SMR	Benz(a)anthracene	CT / RSR GB (mg/kg) / Semivolatiles	14000	1000	1000	1000	ug/Kg
CA96215	$8100SMR	Benzo(k)fluoranthene	CT / RSR GB (mg/kg) / Semivolatiles	17000	1000	1000	1000	ug/Kg
CA96215	$ETPH_SMR	Ext. Petroleum H.C. (C9-C36)	CT / RSR DEC I/C (mg/kg) / Pest/PCB/TPH	2900	270	2500	2500	mg/Kg

Monday, August 13, 2018

Criteria: CT: GBM, I/C, RC

State: CT

Sample Criteria Exceedances Report

GCA96212 - TIGHE-DAS

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CA96215	$ETPH_SMR	Ext. Petroleum H.C. (C9-C36)	CT / RSR DEC RES (mg/kg) / Pest/PCB/TPH	2900	270	500	500	mg/Kg
CA96215	$ETPH_SMR	Ext. Petroleum H.C. (C9-C36)	CT / RSR GB (mg/kg) / Pesticides/TPH	2900	270	2500	2500	mg/Kg
CA96215	AS-SM	Arsenic	CT / RSR DEC I/C (mg/kg) / Inorganics	10.2	0.71	10	10	mg/Kg
CA96215	AS-SM	Arsenic	CT / RSR DEC RES (mg/kg) / Inorganics	10.2	0.71	10	10	mg/Kg
CA96216	AS-SM	Arsenic	CT / RSR DEC I/C (mg/kg) / Inorganics	17.5	0.79	10	10	mg/Kg
CA96216	AS-SM	Arsenic	CT / RSR DEC RES (mg/kg) / Inorganics	17.5	0.79	10	10	mg/Kg

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

REASONABLE CONFIDENCE PROTOCOL
LABORATORY ANALYSIS QA/QC CERTIFICATION FORM

Laboratory Name: Phoenix Environmental Labs, Inc. ***Client:*** Tighe & Bond

Project Location: ROCKVILLE MGP ***Project Number:***

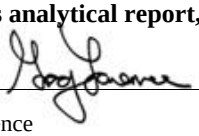
Laboratory Sample ID(s): CA96212-CA96216 ***Sampling Date(s):*** 7/23/2018

List RCP Methods Used (e.g., 8260, 8270, et cetera) 1311/1312, 6010, 7470/7471, 8260, 8270, ETPH, 9010/9012

1	**For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP method-specific Reasonable Confidence Protocol documents?**	☑ Yes ☐ No
1A	**Were the method specified preservation and holding time requirements met?**	☑ Yes ☐ No
1B	***VPH and EPH methods only:*** **Was the VPH or EPH method conducted without significant modifications (see section 11.3 of respective RCP methods)**	☐ Yes ☐ No ☑ NA
2	**Were all samples received by the laboratory in a condition consistent with that described on the associated Chain-of-Custody document(s)?**	☑ Yes ☐ No
3	**Were samples received at an appropriate temperature (< 6 Degrees C)?**	☑ Yes ☐ No ☐ NA
4	**Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents acheived? See Section: VOA Narration.**	☐ Yes ☑ No
5	**a) Were reporting limits specified or referenced on the chain-of-custody?** **b) Were these reporting limits met?**	☑ Yes ☐ No ☑ Yes ☐ No
6	**For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?**	☐ Yes ☑ No
7	**Are project-specific matrix spikes and laboratory duplicates included in the data set?**	☑ Yes ☐ No

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or 1B is "No", the data package does not meet the requirements for "Reasonable Confidence". This form may not be altered and all questions must be answered.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized Signature:  **Position:** Assistant Lab Director

Printed Name: Greg Lawrence **Date:** Monday, August 13, 2018

Name of Laboratory Phoenix Environmental Labs, Inc.

This certification form is to be used for RCP methods only.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

August 13, 2018

SDG I.D.: GCA96212

SDG Comments

8270 Semi-volatile Organics:
The client requested a short list for 8270 RCP Semivolatile. Only the PAH constituents are reported as requested on the chain-of-custody.

Cyanide Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument:

LACHAT 07/26/18-1 Dustin Harrison, Greg Danielewski, Chemist 07/26/18

CA96212, CA96214, CA96215, CA96216

The samples were distilled in accordance with the method.
The initial calibration met criteria.

The calibration check standards (ICV,CCV) were within 15% of true value and were analyzed at a frequencey of one per ten samples.
The continuing calibration blanks (ICB,CCB) had concentrations less than the reporting level.

The method blank, laboratory control sample (LCS), and matrix spike were distilled with the samples.

QC (Site Specific):

Batch 440381 (CA96212)

CA96212, CA96214, CA96215, CA96216

All LCS recoveries were within 80 - 120 with the following exceptions: None.
All MS recoveries were within 75 - 125 with the following exceptions: None.
Additional: LCS acceptance range is 80-120% for soils MS acceptance range 75-125% for soils

ETPH Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument:

AU-FID1 07/24/18-1 Jeff Bucko, Chemist 07/24/18

CA96212, CA96215

The initial calibration (ETPH723I) RSD for the compound list was less than 30% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 30% except for the following compounds:None.

AU-FID21 07/24/18-1 Jeff Bucko, Chemist 07/24/18

CA96214, CA96216

The initial calibration (ETPH620I) RSD for the compound list was less than 30% except for the following compounds: None.
The continuing calibration %D for the compound list was less than 30% except for the following compounds:None.

QC (Batch Specific):

Batch 440120 (CA96848)

CA96212, CA96214, CA96215, CA96216

All LCS recoveries were within 60 - 120 with the following exceptions: None.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

NY # 11301

RCP Certification Report

August 13, 2018

SDG I.D.: GCA96212

ETPH Narration

All LCSD recoveries were within 60 - 120 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
Additional surrogate criteria: LCS acceptance range is 60-120% MS acceptance range 50-150%. The ETPH/DRO LCS has been normalized based on the alkane calibration.

Mercury Narration

Were all QA/QC performance criteria specified in the analytical method achieved? Yes.

Instrument:

MERLIN 07/24/18 09:22 Rick Schweitzer, Chemist 07/24/18

CA96212, CA96214, CA96215, CA96216

The method preparation blank contains all of the acids and reagents as the samples; the instrument blanks do not.
The initial calibration met all criteria including a standard run at or below the reporting level.
All calibration verification standards (ICV, CCV) met criteria.
All calibration blank verification standards (ICB, CCB) met criteria.
The matrix spike sample is used to identify spectral interference for each batch of samples, if within 85-115%, no interference is observed and no further action is taken.
The following Initial Calibration Verification (ICV) compounds did not meet criteria: None.
The following Continuing Calibration Verification (CCV) compounds did not meet criteria: None.

MERLIN 08/07/18 08:24 Rick Schweitzer, Chemist 08/07/18

CA96215

The method preparation blank contains all of the acids and reagents as the samples; the instrument blanks do not.
The initial calibration met all criteria including a standard run at or below the reporting level.
All calibration verification standards (ICV, CCV) met criteria.
All calibration blank verification standards (ICB, CCB) met criteria.
The matrix spike sample is used to identify spectral interference for each batch of samples, if within 85-115%, no interference is observed and no further action is taken.
The following Initial Calibration Verification (ICV) compounds did not meet criteria: None.
The following Continuing Calibration Verification (CCV) compounds did not meet criteria: None.

QC (Batch Specific):

Batch 440090 (CA96173)

CA96212, CA96214, CA96215, CA96216

All LCS recoveries were within 70 - 130 with the following exceptions: None.
All LCSD recoveries were within 70 - 130 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.

Batch 442008 (CB05482)

CA96215

All LCS recoveries were within 80 - 120 with the following exceptions: None.
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Certification Report

August 13, 2018

SDG I.D.: GCA96212

ICP Metals Narration

Were all QA/QC performance criteria specified in the analytical method achieved? Yes.

Instrument:

ARCOS 07/24/18 08:32 Emily Kolominskaya, Chemist 07/24/18

CA96212, CA96214, CA96215, CA96216

Additional criteria for CCV and ICSAB:
Sodium and Potassium are poor performing elements, the laboratory's in-house limits are 85-115% (CCV) and 70-130% (ICSAB).The linear range is defined daily by the calibration range.
The following Initial Calibration Verification (ICV) compounds did not meet criteria: None.
The following Continuing Calibration Verification (CCV) compounds did not meet criteria: None.
The following ICP Interference Check (ICSAB) compounds did not meet criteria: None.

ARCOS 07/25/18 09:33 Emily Kolominskaya, Chemist 07/25/18

CA96212, CA96214, CA96215, CA96216

Additional criteria for CCV and ICSAB:
Sodium and Potassium are poor performing elements, the laboratory's in-house limits are 85-115% (CCV) and 70-130% (ICSAB).The linear range is defined daily by the calibration range.
The following Initial Calibration Verification (ICV) compounds did not meet criteria: None.
The following Continuing Calibration Verification (CCV) compounds did not meet criteria: None.
The following ICP Interference Check (ICSAB) compounds did not meet criteria: None.

BLUE 08/07/18 13:40 Emily Kolominskaya, Chemist 08/07/18

CA96215

The initial calibration met criteria.
The continuing calibration standards met criteria for all the elements reported. The linear range is defined daily by the calibration range.
The continuing calibration blanks were less than the reporting level for the elements reported.
The ICSA and ICSAB were analyzed at the beginning and end of the run and were within criteria.The linear range is defined daily by the calibration range.
The following Initial Calibration Verification (ICV) compounds did not meet criteria: None.
The following Continuing Calibration Verification (CCV) compounds did not meet criteria: None.
The following ICP Interference Check (ICSAB) compounds did not meet criteria: None.

QC (Batch Specific):

Batch 440165 (CA96245)

CA96212, CA96214, CA96215, CA96216

All LCS recoveries were within 75 - 125 with the following exceptions: None.

QC (Site Specific):

Batch 442012 (CA96215)

CA96215

All LCS recoveries were within 75 - 125 with the following exceptions: None.
All MS recoveries were within 75 - 125 with the following exceptions: None.

SVOA Narration

Environmental Laboratories, Inc.
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Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

August 13, 2018

SDG I.D.: GCA96212

SVOA Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument:

CHEM06 07/24/18-1 Matt Richard, Chemist 07/24/18

CA96212, CA96214, CA96215, CA96216

The DDT breakdown and pentachlorophenol & benzidine peak tailing were evaluated in the DFTPP tune and were found to be in control.

Initial Calibration Verification (CHEM06/BN_0627):
100% of target compounds met criteria.
The following compounds had %RSDs >20%: None.
The following compounds did not meet recommended response factors: None.
The following compounds did not meet a minimum response factors: None.

Continuing Calibration Verification (CHEM06/0724_02-BN_0627):
Internal standard areas were within 50 to 200% of the initial calibration with the following exceptions: None.
100% of target compounds met criteria.
The following compounds did not meet % deviation criteria: None.
The following compounds did not meet maximum % deviations: None.
The following compounds did not meet recommended response factors: Acenaphthene 0.896 (0.9)
The following compounds did not meet minimum response factors: None.

CHEM06 07/25/18-1 Harry Mullin, Chemist 07/25/18

CA96212

The DDT breakdown and pentachlorophenol & benzidine peak tailing were evaluated in the DFTPP tune and were found to be in control.

Initial Calibration Verification (CHEM06/BN_0627):
100% of target compounds met criteria.
The following compounds had %RSDs >20%: None.
The following compounds did not meet recommended response factors: None.
The following compounds did not meet a minimum response factors: None.

Continuing Calibration Verification (CHEM06/0725_02-BN_0627):
Internal standard areas were within 50 to 200% of the initial calibration with the following exceptions: None.
100% of target compounds met criteria.
The following compounds did not meet % deviation criteria: None.
The following compounds did not meet maximum % deviations: None.
The following compounds did not meet recommended response factors: None.
The following compounds did not meet minimum response factors: None.

QC (Batch Specific):

Batch 440118 (CA96397)

CA96212, CA96214, CA96215, CA96216

All LCS recoveries were within 30 - 130 with the following exceptions: None.
All LCSD recoveries were within 30 - 130 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid

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RCP Certification Report

August 13, 2018

SDG I.D.: GCA96212

SVOA Narration

surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

VOA Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? No.

QC Batch 440138 (Samples: CA96213, CA96214, CA96215, CA96216): -----

The LCS and Batch MS/MSD recovery is below the lower range but within the method criteria. The LCSD is acceptable. A slight low bias is possible. (Methyl ethyl ketone)

Instrument:

CHEM03 07/23/18-2 Jane Li, Chemist 07/23/18

CA96213, CA96214, CA96215, CA96216

Initial Calibration Verification (CHEM03/VT-L0714):
95% of target compounds met criteria.
The following compounds had %RSDs >20%: Bromoform 26% (20%), Chloroethane 30% (20%), trans-1,4-dichloro-2-butene 23% (20%), Trichlorofluoromethane 22% (20%)
The following compounds did not meet recommended response factors: Tetrachloroethene 0.186 (0.2)
The following compounds did not meet a minimum response factors: None.

Continuing Calibration Verification (CHEM03/0723L05-VT-L0714):
Internal standard areas were within 50 to 200% of the initial calibration with the following exceptions: None.
99% of target compounds met criteria.
The following compounds did not meet % deviation criteria: Methyl Ethyl Ketone 32%L (30%)
The following compounds did not meet maximum % deviations: None.
The following compounds did not meet recommended response factors: None.
The following compounds did not meet minimum response factors: None.

QC (Batch Specific):

Batch 440138 (CA95893)

CA96213, CA96214, CA96215, CA96216

All LCS recoveries were within 70 - 130 with the following exceptions: Methyl ethyl ketone(66%)
All LCSD recoveries were within 70 - 130 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%.

Temperature Narration

The samples in this delivery group were received at 3.3°C.
(Note acceptance criteria for relevant matrices is above freezing up to 6°C)

Cooler: Yes [x] No [ ]
Coolant: IPK [ ] ICE [x] No [ ]

CHAIN OF CUSTODY RECORD

Temp 3.8 Pg 1 of 1

PHOENIX *Environmental Laboratories, Inc.*

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Contact Options:
[ ] Fax:
[ ] Phone:
[x] Email: LBrinkley@tripbrand.com

Customer: Tighe + Bond
Address: 213 Court St Suite 1100
Middletown CT

Project: Redevelopment Map
Report to: Lynn Brinkley
Invoice to: Tighe + Bond

Project P.O: 14-0745-413

This section MUST be completed with Bottle Quantities.

Client Sample - Information - Identification

Sampler's Signature: [signature] Date: 7/23/14

Matrix Code:
DW=Drinking Water **GW**=Ground Water **SW**=Surface Water **WW**=Waste Water
RW=Raw Water **SE**=Sediment **SL**=Sludge **S**=Soil **SD**=Solid **W**=Wipe
OIL=Oil **B**=Bulk **L**=Liquid

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	VOC	PAH	ETPH	RCRA metals	Total Cyanide	Soil VOA Vials [x] methanol [x] H2O	GL Soil container (4) oz	GL Soil container ( ) oz	40 ml VOA Vial [ ] As is [ ] HCl	GL Amber 1000ml [ ] As is [ ] H2SO4	PL As is [ ] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml [ ] 1000ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
96212	SB-51 (2-4 ft)	S	7/23/14	9:15		x	x	x	x	3	1								
96213	SB-51 (10-11 ft)			9:30	x					3	1								
96214	SB-50 (2-4 ft)			10:30	x	x	x	x	x	3	1								
96215	SB-52 (2-4 ft)			14:05	x	x	x	x	x	3	1								
96216	SB-44 (2-4 ft)			15:25	x	x	x	x	x	3	1								

Relinquished by:	Accepted by:	Date:	Time:
[signature]	[signature]	7/23/14	17:18

Comments, Special Requirements or Regulations:
ORS Project
Quote: TIO25173*

Turnaround:
[ ] 1 Day*
[ ] 2 Days*
[x] 3 Days*
[ ] Standard
[ ] Other
* SURCHARGE APPLIES

RI
[ ] Direct Exposure (Residential)
[ ] GW
[ ] Other

CT
[x] RCP Cert
[ ] GW Protection
[ ] SW Protection
[ ] GA Mobility
[x] GB Mobility
[x] Residential DEC
[x] I/C DEC
[ ] Other

MA
[ ] MCP Certification
[ ] GW-1
[ ] GW-2
[ ] GW-3
[ ] S-1
[ ] S-2
[ ] S-3
[ ] MWRA eSMART
[ ] Other

State where samples were collected: CT

Data Format
[x] Excel
[x] PDF
[ ] GIS/Key
[ ] EQuIS
[x] Other Grade/A

Data Package
[ ] Tier II Checklist
[ ] Full Data Package*
[x] Phoenix Std Report
[ ] Other
* SURCHARGE APPLIES

PHOENIX
Environmental Laboratories, Inc.

Thursday, August 09, 2018

Attn: Lynn Willey
Tighe & Bond
213 Court St, Suite 1100
Middletown, CT 06457

Project ID: ROCKVILLE MGP
Sample ID#s: CA98174 - CA98183, CA98185

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
UT Lab Registration #CT00007
VT Lab Registration #VT11301

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

August 09, 2018

FOR: Attn: Lynn Willey
Tighe & Bond
213 Court St, Suite 1100
Middletown, CT 06457

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		07/24/18	9:40
Location Code:	TIGHE-DAS	Received by:	CP	07/25/18	16:22
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	14-0755-44B				

Laboratory Data

SDG ID: GCA98174
Phoenix ID: CA98174

Project ID: ROCKVILLE MGP
Client ID: SB-43 (0.5-2FT)

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 2.5	2.5	mg/Kg	1	07/27/18	CPP	SW6010C
Arsenic	48.5	0.89	mg/Kg	1	07/27/18	CPP	SW6010C
Barium	59.1	0.44	mg/Kg	1	07/27/18	CPP	SW6010C
Beryllium	0.55	0.36	mg/Kg	1	07/27/18	CPP	SW6010C
Cadmium	0.52	0.44	mg/Kg	1	07/27/18	CPP	SW6010C
Chromium	14.4	0.44	mg/Kg	1	07/27/18	CPP	SW6010C
Copper	34.9	0.9	mg/kg	1	07/27/18	CPP	SW6010C
Mercury	0.16	0.03	mg/Kg	1	07/26/18	RS	SW7471B
Nickel	11.5	0.44	mg/Kg	1	07/27/18	CPP	SW6010C
Lead	64.7	0.44	mg/Kg	1	07/27/18	CPP	SW6010C
Antimony	< 4.4	4.4	mg/Kg	1	07/27/18	CPP	SW6010C
Selenium	< 1.8	1.8	mg/Kg	1	07/27/18	CPP	SW6010C
SPLP Silver	< 0.010	0.010	mg/L	1	07/27/18	CPP	SW6010C
SPLP Arsenic	0.011	0.004	mg/L	1	07/27/18	CPP	SW6010C
SPLP Barium	< 0.010	0.010	mg/L	1	07/27/18	CPP	SW6010C
SPLP Beryllium	< 0.001	0.001	mg/L	1	07/27/18	CPP	SW6010C
SPLP Cadmium	< 0.005	0.005	mg/L	1	07/27/18	CPP	SW6010C
SPLP Chromium	< 0.010	0.010	mg/L	1	07/27/18	CPP	SW6010C
SPLP Copper	< 0.010	0.010	mg/L	1	07/27/18	CPP	SW6010C
SPLP Mercury	< 0.0005	0.0005	mg/L	1	07/26/18	RS	SW7470A
SPLP Nickel	< 0.010	0.010	mg/L	1	07/27/18	CPP	SW6010C
SPLP Lead	0.011	0.010	mg/L	1	07/27/18	CPP	SW6010C
SPLP Antimony	< 0.005	0.005	mg/L	1	07/27/18	CPP	SW6010C
SPLP Selenium	< 0.020	0.020	mg/L	1	07/27/18	CPP	SW6010C
SPLP Thallium	< 0.005	0.005	mg/L	1	07/27/18	CPP	SW6010C
SPLP Vanadium	< 0.010	0.010	mg/L	1	07/27/18	CPP	SW6010C
SPLP Zinc	0.018	0.010	mg/L	1	07/27/18	CPP	SW6010C
Thallium	< 4.0	4.0	mg/Kg	1	07/27/18	CPP	SW6010C

Ver 1

Project ID: ROCKVILLE MGP
Client ID: SB-43 (0.5-2FT)

Phoenix I.D.: CA98174

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
SPLP Metals Digestion	Completed				07/26/18	IQ/I	SW3010A
Vanadium	27.9	0.44	mg/Kg	1	07/27/18	CPP	SW6010C
Zinc	176	0.9	mg/Kg	1	07/27/18	CPP	SW6010C
Percent Solid	77		%		07/26/18	q	SW846-%Solid
Total Cyanide (SW9010C Distill.)	< 0.65	0.65	mg/Kg	1	07/27/18	O/GD	SW9012B
Soil Extraction for SVOA	Completed				07/26/18	JJ/CKV	SW3545A
Extraction of CT ETPH	Completed				07/26/18	VS/VCK	SW3545A
Mercury Digestion	Completed				07/26/18	I/I	SW7471B
SPLP Digestion Mercury	Completed				07/26/18	IQ/I	SW1312/SW7470A
SPLP Extraction for Metals	Completed				07/25/18	I	SW1312
Total Metals Digest	Completed				07/26/18	KD/AG	SW3050B
TPH by GC (Extractable Products)							
Ext. Petroleum H.C. (C9-C36)	ND	320	mg/Kg	5	07/27/18	JRB	CTETPH 8015D
Identification	ND		mg/Kg	5	07/27/18	JRB	CTETPH 8015D
QA/QC Surrogates							
% n-Pentacosane	119		%	5	07/27/18	JRB	50 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C
1,1,1-Trichloroethane	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	4.4	ug/Kg	1	07/27/18	JLI	SW8260C
1,1,2-Trichloroethane	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C
1,1-Dichloroethane	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C
1,1-Dichloroethene	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C
1,1-Dichloropropene	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C
1,2,3-Trichloropropane	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C
1,2-Dibromoethane	ND	7.0	ug/Kg	1	07/27/18	JLI	SW8260C
1,2-Dichlorobenzene	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C
1,2-Dichloroethane	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C
1,2-Dichloropropane	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C
1,3-Dichlorobenzene	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C
1,3-Dichloropropane	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C
1,4-Dichlorobenzene	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C
2,2-Dichloropropane	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C
2-Chlorotoluene	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C
2-Hexanone	ND	37	ug/Kg	1	07/27/18	JLI	SW8260C
2-Isopropyltoluene	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C
4-Chlorotoluene	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C
4-Methyl-2-pentanone	ND	37	ug/Kg	1	07/27/18	JLI	SW8260C
Acetone	ND	370	ug/Kg	1	07/27/18	JLI	SW8260C
Acrylonitrile	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C
Benzene	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C
Bromobenzene	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C
Bromochloromethane	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C

Ver 1

Project ID: ROCKVILLE MGP
Client ID: SB-43 (0.5-2FT)

Phoenix I.D.: CA98174

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Bromodichloromethane	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C
Bromoform	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C
Bromomethane	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C
Carbon Disulfide	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C
Carbon tetrachloride	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C
Chlorobenzene	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C
Chloroethane	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C
Chloroform	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C
Chloromethane	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C
cis-1,2-Dichloroethene	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C
cis-1,3-Dichloropropene	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C
Dibromochloromethane	ND	4.4	ug/Kg	1	07/27/18	JLI	SW8260C
Dibromomethane	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C
Dichlorodifluoromethane	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C
Ethylbenzene	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C
Hexachlorobutadiene	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C
Isopropylbenzene	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C
m&p-Xylene	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C
Methyl Ethyl Ketone	ND	44	ug/Kg	1	07/27/18	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	15	ug/Kg	1	07/27/18	JLI	SW8260C
Methylene chloride	ND	15	ug/Kg	1	07/27/18	JLI	SW8260C
Naphthalene	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C
n-Butylbenzene	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C
n-Propylbenzene	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C
o-Xylene	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C
p-Isopropyltoluene	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C
sec-Butylbenzene	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C
Styrene	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C
tert-Butylbenzene	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C
Tetrachloroethene	7.3	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
Tetrahydrofuran (THF)	ND	15	ug/Kg	1	07/27/18	JLI	SW8260C
Toluene	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C
Total Xylenes	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C
trans-1,2-Dichloroethene	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C
trans-1,3-Dichloropropene	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	15	ug/Kg	1	07/27/18	JLI	SW8260C
Trichloroethene	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C
Trichlorofluoromethane	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C
Trichlorotrifluoroethane	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C
Vinyl chloride	ND	7.4	ug/Kg	1	07/27/18	JLI	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	101		%	1	07/27/18	JLI	70 - 130 %
% Bromofluorobenzene	87		%	1	07/27/18	JLI	70 - 130 %
% Dibromofluoromethane	97		%	1	07/27/18	JLI	70 - 130 %
% Toluene-d8	98		%	1	07/27/18	JLI	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	300	ug/Kg	1	07/27/18	KCA	SW8270D
1,2,4-Trichlorobenzene	ND	300	ug/Kg	1	07/27/18	KCA	SW8270D
1,2-Dichlorobenzene	ND	300	ug/Kg	1	07/27/18	KCA	SW8270D

Ver 1

Project ID: ROCKVILLE MGP
Client ID: SB-43 (0.5-2FT)

Phoenix I.D.: CA98174

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,2-Diphenylhydrazine	ND	430	ug/Kg	1	07/27/18	KCA	SW8270D
1,3-Dichlorobenzene	ND	300	ug/Kg	1	07/27/18	KCA	SW8270D
1,4-Dichlorobenzene	ND	300	ug/Kg	1	07/27/18	KCA	SW8270D
2,4,5-Trichlorophenol	ND	300	ug/Kg	1	07/27/18	KCA	SW8270D
2,4,6-Trichlorophenol	ND	300	ug/Kg	1	07/27/18	KCA	SW8270D
2,4-Dichlorophenol	ND	300	ug/Kg	1	07/27/18	KCA	SW8270D
2,4-Dimethylphenol	ND	300	ug/Kg	1	07/27/18	KCA	SW8270D
2,4-Dinitrophenol	ND	430	ug/Kg	1	07/27/18	KCA	SW8270D
2,4-Dinitrotoluene	ND	300	ug/Kg	1	07/27/18	KCA	SW8270D
2,6-Dinitrotoluene	ND	300	ug/Kg	1	07/27/18	KCA	SW8270D
2-Chloronaphthalene	ND	300	ug/Kg	1	07/27/18	KCA	SW8270D
2-Chlorophenol	ND	300	ug/Kg	1	07/27/18	KCA	SW8270D
2-Methylnaphthalene	ND	300	ug/Kg	1	07/27/18	KCA	SW8270D
2-Methylphenol (o-cresol)	ND	300	ug/Kg	1	07/27/18	KCA	SW8270D
2-Nitroaniline	ND	430	ug/Kg	1	07/27/18	KCA	SW8270D
2-Nitrophenol	ND	300	ug/Kg	1	07/27/18	KCA	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	430	ug/Kg	1	07/27/18	KCA	SW8270D
3,3'-Dichlorobenzidine	ND	300	ug/Kg	1	07/27/18	KCA	SW8270D
3-Nitroaniline	ND	430	ug/Kg	1	07/27/18	KCA	SW8270D
4,6-Dinitro-2-methylphenol	ND	430	ug/Kg	1	07/27/18	KCA	SW8270D
4-Bromophenyl phenyl ether	ND	430	ug/Kg	1	07/27/18	KCA	SW8270D
4-Chloro-3-methylphenol	ND	300	ug/Kg	1	07/27/18	KCA	SW8270D
4-Chloroaniline	ND	300	ug/Kg	1	07/27/18	KCA	SW8270D
4-Chlorophenyl phenyl ether	ND	300	ug/Kg	1	07/27/18	KCA	SW8270D
4-Nitroaniline	ND	680	ug/Kg	1	07/27/18	KCA	SW8270D
4-Nitrophenol	ND	300	ug/Kg	1	07/27/18	KCA	SW8270D
Acenaphthene	ND	300	ug/Kg	1	07/27/18	KCA	SW8270D
Acenaphthylene	760	300	ug/Kg	1	07/27/18	KCA	SW8270D
Acetophenone	ND	300	ug/Kg	1	07/27/18	KCA	SW8270D
Aniline	ND	430	ug/Kg	1	07/27/18	KCA	SW8270D
Anthracene	540	300	ug/Kg	1	07/27/18	KCA	SW8270D
Benz(a)anthracene	2900	300	ug/Kg	1	07/27/18	KCA	SW8270D
Benzidine	ND	200	ug/Kg	1	07/27/18	KCA	SW8270D
Benzo(a)pyrene	3000	300	ug/Kg	1	07/27/18	KCA	SW8270D
Benzo(b)fluoranthene	2600	300	ug/Kg	1	07/27/18	KCA	SW8270D
Benzo(ghi)perylene	1400	300	ug/Kg	1	07/27/18	KCA	SW8270D
Benzo(k)fluoranthene	2500	300	ug/Kg	1	07/27/18	KCA	SW8270D
Benzoic acid	ND	850	ug/Kg	1	07/27/18	KCA	SW8270D
Benzyl butyl phthalate	ND	300	ug/Kg	1	07/27/18	KCA	SW8270D
Bis(2-chloroethoxy)methane	ND	300	ug/Kg	1	07/27/18	KCA	SW8270D
Bis(2-chloroethyl)ether	ND	430	ug/Kg	1	07/27/18	KCA	SW8270D
Bis(2-chloroisopropyl)ether	ND	300	ug/Kg	1	07/27/18	KCA	SW8270D
Bis(2-ethylhexyl)phthalate	ND	300	ug/Kg	1	07/27/18	KCA	SW8270D
Carbazole	ND	430	ug/Kg	1	07/27/18	KCA	SW8270D
Chrysene	2900	300	ug/Kg	1	07/27/18	KCA	SW8270D
Dibenz(a,h)anthracene	500	300	ug/Kg	1	07/27/18	KCA	SW8270D
Dibenzofuran	ND	300	ug/Kg	1	07/27/18	KCA	SW8270D
Diethyl phthalate	ND	300	ug/Kg	1	07/27/18	KCA	SW8270D
Dimethylphthalate	ND	300	ug/Kg	1	07/27/18	KCA	SW8270D

Project ID: ROCKVILLE MGP
Client ID: SB-43 (0.5-2FT)

Phoenix I.D.: CA98174

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Di-n-butylphthalate	ND	430	ug/Kg	1	07/27/18	KCA	SW8270D
Di-n-octylphthalate	ND	300	ug/Kg	1	07/27/18	KCA	SW8270D
Fluoranthene	3700	300	ug/Kg	1	07/27/18	KCA	SW8270D
Fluorene	ND	300	ug/Kg	1	07/27/18	KCA	SW8270D
Hexachlorobenzene	ND	300	ug/Kg	1	07/27/18	KCA	SW8270D
Hexachlorobutadiene	ND	300	ug/Kg	1	07/27/18	KCA	SW8270D
Hexachlorocyclopentadiene	ND	300	ug/Kg	1	07/27/18	KCA	SW8270D
Hexachloroethane	ND	300	ug/Kg	1	07/27/18	KCA	SW8270D
Indeno(1,2,3-cd)pyrene	1700	300	ug/Kg	1	07/27/18	KCA	SW8270D
Isophorone	ND	300	ug/Kg	1	07/27/18	KCA	SW8270D
Naphthalene	ND	300	ug/Kg	1	07/27/18	KCA	SW8270D
Nitrobenzene	ND	300	ug/Kg	1	07/27/18	KCA	SW8270D
N-Nitrosodimethylamine	ND	200	ug/Kg	1	07/27/18	KCA	SW8270D
N-Nitrosodi-n-propylamine	ND	200	ug/Kg	1	07/27/18	KCA	SW8270D
N-Nitrosodiphenylamine	ND	430	ug/Kg	1	07/27/18	KCA	SW8270D
Pentachloronitrobenzene	ND	430	ug/Kg	1	07/27/18	KCA	SW8270D
Pentachlorophenol	ND	430	ug/Kg	1	07/27/18	KCA	SW8270D
Phenanthrene	1400	300	ug/Kg	1	07/27/18	KCA	SW8270D
Phenol	ND	300	ug/Kg	1	07/27/18	KCA	SW8270D
Pyrene	4000	300	ug/Kg	1	07/27/18	KCA	SW8270D
Pyridine	ND	430	ug/Kg	1	07/27/18	KCA	SW8270D
QA/QC Surrogates							
% 2,4,6-Tribromophenol	57		%	1	07/27/18	KCA	30 - 130 %
% 2-Fluorobiphenyl	56		%	1	07/27/18	KCA	30 - 130 %
% 2-Fluorophenol	39		%	1	07/27/18	KCA	30 - 130 %
% Nitrobenzene-d5	69		%	1	07/27/18	KCA	30 - 130 %
% Phenol-d5	56		%	1	07/27/18	KCA	30 - 130 %
% Terphenyl-d14	67		%	1	07/27/18	KCA	30 - 130 %
Field Extraction	Completed				07/24/18		SW5035A

Project ID: ROCKVILLE MGP
Client ID: SB-43 (0.5-2FT)

Phoenix I.D.: CA98174

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Semi-Volatile Comment:
Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services.
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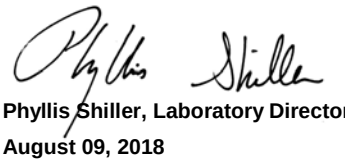

Phyllis Shiller, Laboratory Director
August 09, 2018
Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

August 09, 2018

FOR: Attn: Lynn Willey
Tighe & Bond
213 Court St, Suite 1100
Middletown, CT 06457

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		07/24/18	10:50
Location Code:	TIGHE-DAS	Received by:	CP	07/25/18	16:22
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	14-0755-44B				

Laboratory Data

SDG ID: GCA98174
Phoenix ID: CA98175

Project ID: ROCKVILLE MGP
Client ID: SB-43 (5-7FT)

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 2.5	2.5	mg/Kg	1	07/27/18	CPP	SW6010C
Arsenic	6.35	0.70	mg/Kg	1	07/27/18	CPP	SW6010C
Barium	65.0	0.35	mg/Kg	1	07/27/18	CPP	SW6010C
Beryllium	0.45	0.28	mg/Kg	1	07/27/18	CPP	SW6010C
Cadmium	< 0.35	0.35	mg/Kg	1	07/27/18	CPP	SW6010C
Chromium	15.2	0.35	mg/Kg	1	07/27/18	CPP	SW6010C
Copper	21.0	0.7	mg/kg	1	07/27/18	CPP	SW6010C
Mercury	0.10	0.03	mg/Kg	1	07/26/18	RS	SW7471B
Nickel	11.1	0.35	mg/Kg	1	07/27/18	CPP	SW6010C
Lead	49.0	0.35	mg/Kg	1	07/27/18	CPP	SW6010C
Antimony	< 3.5	3.5	mg/Kg	1	07/27/18	CPP	SW6010C
Selenium	< 1.4	1.4	mg/Kg	1	07/27/18	CPP	SW6010C
Thallium	< 3.2	3.2	mg/Kg	1	07/27/18	CPP	SW6010C
Vanadium	25.5	0.35	mg/Kg	1	07/27/18	CPP	SW6010C
Zinc	75.9	0.7	mg/Kg	1	07/27/18	CPP	SW6010C
Percent Solid	91		%		07/26/18	q	SW846-%Solid
Total Cyanide (SW9010C Distill.)	< 0.55	0.55	mg/Kg	1	07/27/18	O/GD	SW9012B
Soil Extraction SVOA PAH	Completed				07/26/18	VS/IG/CKV	SW3545A
Extraction of CT ETPH	Completed				07/26/18	VS/VCK	SW3545A
Mercury Digestion	Completed				07/26/18	I/I	SW7471B
Total Metals Digest	Completed				07/26/18	KD/AG	SW3050B
TPH by GC (Extractable Products)							
Ext. Petroleum H.C. (C9-C36)	630	270	mg/Kg	5	07/27/18	JRB	CTETPH 8015D
Identification	**		mg/Kg	5	07/27/18	JRB	CTETPH 8015D
QA/QC Surrogates							
% n-Pentacosane	Diluted Out		%	5	07/27/18	JRB	50 - 150 %

Ver 1

Project ID: ROCKVILLE MGP
Client ID: SB-43 (5-7FT)

Phoenix I.D.: CA98175

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Polynuclear Aromatic HC							
2-Methylnaphthalene	430	250	ug/Kg	1	07/27/18	KCA	SW8270D
Acenaphthene	280	250	ug/Kg	1	07/27/18	KCA	SW8270D
Acenaphthylene	3100	250	ug/Kg	1	07/27/18	KCA	SW8270D
Anthracene	10000	1300	ug/Kg	5	07/30/18	KCA	SW8270D
Benz(a)anthracene	35000	1000	ug/Kg	5	07/30/18	KCA	SW8270D
Benzo(a)pyrene	24000	1000	ug/Kg	5	07/30/18	KCA	SW8270D
Benzo(b)fluoranthene	23000	1000	ug/Kg	5	07/30/18	KCA	SW8270D
Benzo(ghi)perylene	12000	1000	ug/Kg	5	07/30/18	KCA	SW8270D
Benzo(k)fluoranthene	18000	1000	ug/Kg	5	07/30/18	KCA	SW8270D
Chrysene	33000	1000	ug/Kg	5	07/30/18	KCA	SW8270D
Dibenz(a,h)anthracene	4900	250	ug/Kg	1	07/27/18	KCA	SW8270D
Fluoranthene	33000	1300	ug/Kg	5	07/30/18	KCA	SW8270D
Fluorene	1900	250	ug/Kg	1	07/27/18	KCA	SW8270D
Indeno(1,2,3-cd)pyrene	16000	1000	ug/Kg	5	07/30/18	KCA	SW8270D
Naphthalene	870	250	ug/Kg	1	07/27/18	KCA	SW8270D
Phenanthrene	19000	1300	ug/Kg	5	07/30/18	KCA	SW8270D
Pyrene	30000	1300	ug/Kg	5	07/30/18	KCA	SW8270D
QA/QC Surrogates							
% 2-Fluorobiphenyl	71		%	1	07/27/18	KCA	30 - 130 %
% Nitrobenzene-d5	69		%	1	07/27/18	KCA	30 - 130 %
% Terphenyl-d14	73		%	1	07/27/18	KCA	30 - 130 %

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

TPH Comment:
**Petroleum hydrocarbon chromatogram contains a multicomponent hydrocarbon distribution in the range of C14 to C36. The sample was quantitated against a C9-C36 alkane hydrocarbon standard.

Semi-Volatile Comment:
Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services.
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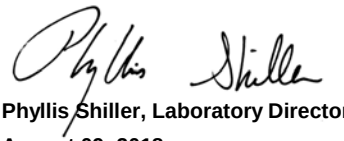

Phyllis Shiller, Laboratory Director
August 09, 2018
Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

August 09, 2018

FOR: Attn: Lynn Willey
Tighe & Bond
213 Court St, Suite 1100
Middletown, CT 06457

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		07/25/18	9:20
Location Code:	TIGHE-DAS	Received by:	CP	07/25/18	16:22
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	14-0755-44B				

Laboratory Data

SDG ID: GCA98174
Phoenix ID: CA98176

Project ID: ROCKVILLE MGP
Client ID: SB-58 (0.5-2FT)

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 2.5	2.5	mg/Kg	1	07/27/18	CPP	SW6010C
Arsenic	6.02	0.65	mg/Kg	1	07/27/18	CPP	SW6010C
Barium	47.9	0.32	mg/Kg	1	07/27/18	CPP	SW6010C
Beryllium	0.33	0.26	mg/Kg	1	07/27/18	CPP	SW6010C
Cadmium	0.70	0.32	mg/Kg	1	07/27/18	CPP	SW6010C
Chromium	24.8	0.32	mg/Kg	1	07/27/18	CPP	SW6010C
Copper	35.8	0.6	mg/kg	1	07/27/18	CPP	SW6010C
Mercury	0.24	0.03	mg/Kg	1	07/26/18	RS	SW7471B
Nickel	9.58	0.32	mg/Kg	1	07/27/18	CPP	SW6010C
Lead	147	3.2	mg/Kg	10	07/31/18	EK	SW6010C
Antimony	< 3.2	3.2	mg/Kg	1	07/27/18	CPP	SW6010C
Selenium	< 1.3	1.3	mg/Kg	1	07/27/18	CPP	SW6010C
SPLP Silver	< 0.010	0.010	mg/L	1	08/08/18	EK	SW6010C
SPLP Arsenic	0.008	0.004	mg/L	1	08/08/18	EK	SW6010C
SPLP Barium	< 0.010	0.010	mg/L	1	08/08/18	EK	SW6010C
SPLP Beryllium	< 0.001	0.001	mg/L	1	08/08/18	EK	SW6010C
SPLP Cadmium	< 0.005	0.005	mg/L	1	08/08/18	EK	SW6010C
SPLP Chromium	< 0.010	0.010	mg/L	1	08/08/18	EK	SW6010C
SPLP Copper	0.012	0.010	mg/L	1	08/08/18	EK	SW6010C
SPLP Mercury	< 0.0005	0.0005	mg/L	1	08/07/18	RS	SW7470A
SPLP Nickel	< 0.010	0.010	mg/L	1	08/08/18	EK	SW6010C
SPLP Lead	0.012	0.010	mg/L	1	08/08/18	EK	SW6010C
SPLP Antimony	< 0.005	0.005	mg/L	1	08/08/18	EK	SW6010C
SPLP Selenium	< 0.020	0.020	mg/L	1	08/08/18	EK	SW6010C
SPLP Thallium	< 0.005	0.005	mg/L	1	08/08/18	EK	SW6010C
SPLP Vanadium	0.014	0.010	mg/L	1	08/08/18	EK	SW6010C
SPLP Zinc	0.014	0.010	mg/L	1	08/08/18	EK	SW6010C
Thallium	< 2.9	2.9	mg/Kg	1	07/27/18	CPP	SW6010C

Ver 1

Project ID: ROCKVILLE MGP
Client ID: SB-58 (0.5-2FT)

Phoenix I.D.: CA98176

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
SPLP Metals Digestion	Completed				08/07/18	Q/I/Q	SW3010A
Vanadium	33.7	0.32	mg/Kg	1	07/27/18	CPP	SW6010C
Zinc	104	0.6	mg/Kg	1	07/27/18	CPP	SW6010C
Percent Solid	94		%		07/26/18	q	SW846-%Solid
Total Cyanide (SW9010C Distill.)	< 0.53	0.53	mg/Kg	1	07/27/18	O/GD	SW9012B
Soil Extraction SVOA PAH	Completed				07/26/18	VS/IG/CKV	SW3545A
Extraction of CT ETPH	Completed				07/26/18	VS/VCK	SW3545A
Mercury Digestion	Completed				07/26/18	I/I	SW7471B
SPLP Digestion Mercury	Completed				08/07/18	Q/Q	SW1312/SW7470A
SPLP Extraction for Metals	Completed				08/06/18	Q	SW1312
Total Metals Digest	Completed				07/26/18	KD/AG	SW3050B
TPH by GC (Extractable Products)							
Ext. Petroleum H.C. (C9-C36)	ND	260	mg/Kg	5	07/27/18	JRB	CTETPH 8015D
Identification	ND		mg/Kg	5	07/27/18	JRB	CTETPH 8015D
QA/QC Surrogates							
% n-Pentacosane	108		%	5	07/27/18	JRB	50 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
1,1,1-Trichloroethane	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	100	ug/Kg	50	07/27/18	JLI	SW8260C
1,1,2-Trichloroethane	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
1,1-Dichloroethane	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
1,1-Dichloroethene	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
1,1-Dichloropropene	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	390	ug/Kg	50	07/27/18	JLI	SW8260C
1,2,3-Trichloropropane	ND	390	ug/Kg	50	07/27/18	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	390	ug/Kg	50	07/27/18	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	390	ug/Kg	50	07/27/18	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
1,2-Dibromoethane	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
1,2-Dichlorobenzene	ND	390	ug/Kg	50	07/27/18	JLI	SW8260C
1,2-Dichloroethane	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
1,2-Dichloropropane	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	390	ug/Kg	50	07/27/18	JLI	SW8260C
1,3-Dichlorobenzene	ND	390	ug/Kg	50	07/27/18	JLI	SW8260C
1,3-Dichloropropane	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
1,4-Dichlorobenzene	ND	390	ug/Kg	50	07/27/18	JLI	SW8260C
2,2-Dichloropropane	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
2-Chlorotoluene	ND	390	ug/Kg	50	07/27/18	JLI	SW8260C
2-Hexanone	ND	31	ug/Kg	1	07/27/18	JLI	SW8260C
2-Isopropyltoluene	ND	390	ug/Kg	50	07/27/18	JLI	SW8260C
4-Chlorotoluene	ND	390	ug/Kg	50	07/27/18	JLI	SW8260C
4-Methyl-2-pentanone	ND	31	ug/Kg	1	07/27/18	JLI	SW8260C
Acetone	ND	310	ug/Kg	1	07/27/18	JLI	SW8260C
Acrylonitrile	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
Benzene	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
Bromobenzene	ND	390	ug/Kg	50	07/27/18	JLI	SW8260C
Bromochloromethane	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C

Ver 1

Project ID: ROCKVILLE MGP
Client ID: SB-58 (0.5-2FT)

Phoenix I.D.: CA98176

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Bromodichloromethane	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
Bromoform	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
Bromomethane	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
Carbon Disulfide	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
Carbon tetrachloride	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
Chlorobenzene	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
Chloroethane	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
Chloroform	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
Chloromethane	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
cis-1,2-Dichloroethene	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
cis-1,3-Dichloropropene	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
Dibromochloromethane	ND	3.8	ug/Kg	1	07/27/18	JLI	SW8260C
Dibromomethane	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
Dichlorodifluoromethane	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
Ethylbenzene	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
Hexachlorobutadiene	ND	390	ug/Kg	50	07/27/18	JLI	SW8260C
Isopropylbenzene	ND	390	ug/Kg	50	07/27/18	JLI	SW8260C
m&p-Xylene	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
Methyl Ethyl Ketone	ND	38	ug/Kg	1	07/27/18	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	13	ug/Kg	1	07/27/18	JLI	SW8260C
Methylene chloride	ND	13	ug/Kg	1	07/27/18	JLI	SW8260C
Naphthalene	ND	390	ug/Kg	50	07/27/18	JLI	SW8260C
n-Butylbenzene	ND	390	ug/Kg	50	07/27/18	JLI	SW8260C
n-Propylbenzene	ND	390	ug/Kg	50	07/27/18	JLI	SW8260C
o-Xylene	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
p-Isopropyltoluene	ND	390	ug/Kg	50	07/27/18	JLI	SW8260C
sec-Butylbenzene	ND	390	ug/Kg	50	07/27/18	JLI	SW8260C
Styrene	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
tert-Butylbenzene	ND	390	ug/Kg	50	07/27/18	JLI	SW8260C
Tetrachloroethene	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
Tetrahydrofuran (THF)	ND	13	ug/Kg	1	07/27/18	JLI	SW8260C
Toluene	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
Total Xylenes	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
trans-1,2-Dichloroethene	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
trans-1,3-Dichloropropene	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	770	ug/Kg	50	07/27/18	JLI	SW8260C
Trichloroethene	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
Trichlorofluoromethane	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
Trichlorotrifluoroethane	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
Vinyl chloride	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	100		%	50	07/27/18	JLI	70 - 130 %
% Bromofluorobenzene	99		%	50	07/27/18	JLI	70 - 130 %
% Dibromofluoromethane	97		%	1	07/27/18	JLI	70 - 130 %
% Toluene-d8	95		%	1	07/27/18	JLI	70 - 130 %
Polynuclear Aromatic HC							
2-Methylnaphthalene	ND	250	ug/Kg	1	07/27/18	KCA	SW8270D
Acenaphthene	ND	250	ug/Kg	1	07/27/18	KCA	SW8270D
Acenaphthylene	330	250	ug/Kg	1	07/27/18	KCA	SW8270D

Ver 1

Project ID: ROCKVILLE MGP
Client ID: SB-58 (0.5-2FT)

Phoenix I.D.: CA98176

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Anthracene	320	250	ug/Kg	1	07/27/18	KCA	SW8270D
Benz(a)anthracene	1400	250	ug/Kg	1	07/27/18	KCA	SW8270D
Benzo(a)pyrene	2500	250	ug/Kg	1	07/27/18	KCA	SW8270D
Benzo(b)fluoranthene	2300	250	ug/Kg	1	07/27/18	KCA	SW8270D
Benzo(ghi)perylene	1300	250	ug/Kg	1	07/27/18	KCA	SW8270D
Benzo(k)fluoranthene	1800	250	ug/Kg	1	07/27/18	KCA	SW8270D
Chrysene	1600	250	ug/Kg	1	07/27/18	KCA	SW8270D
Dibenz(a,h)anthracene	360	250	ug/Kg	1	07/27/18	KCA	SW8270D
Fluoranthene	2800	250	ug/Kg	1	07/27/18	KCA	SW8270D
Fluorene	ND	250	ug/Kg	1	07/27/18	KCA	SW8270D
Indeno(1,2,3-cd)pyrene	1700	250	ug/Kg	1	07/27/18	KCA	SW8270D
Naphthalene	ND	250	ug/Kg	1	07/27/18	KCA	SW8270D
Phenanthrene	1300	250	ug/Kg	1	07/27/18	KCA	SW8270D
Pyrene	2600	250	ug/Kg	1	07/27/18	KCA	SW8270D
QA/QC Surrogates							
% 2-Fluorobiphenyl	68		%	1	07/27/18	KCA	30 - 130 %
% Nitrobenzene-d5	61		%	1	07/27/18	KCA	30 - 130 %
% Terphenyl-d14	59		%	1	07/27/18	KCA	30 - 130 %
Field Extraction	Completed				07/25/18		SW5035A

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Volatile Comment:
There was a suppression of the last internal standard in the low level analysis, all affected compounds are reported from the methanol preserved high level analysis which did not exhibit this interference.

Volatile Comment:
Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services.
This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director
August 09, 2018
Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

August 09, 2018

FOR: Attn: Lynn Willey
Tighe & Bond
213 Court St, Suite 1100
Middletown, CT 06457

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		07/25/18	10:05
Location Code:	TIGHE-DAS	Received by:	CP	07/25/18	16:22
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	14-0755-44B				

Laboratory Data

SDG ID: GCA98174
Phoenix ID: CA98177

Project ID: ROCKVILLE MGP
Client ID: SB-57 (2-4FT)

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 2.5	2.5	mg/Kg	1	07/27/18	CPP	SW6010C
Arsenic	1.29	0.64	mg/Kg	1	07/27/18	CPP	SW6010C
Barium	36.1	0.32	mg/Kg	1	07/27/18	CPP	SW6010C
Beryllium	0.34	0.26	mg/Kg	1	07/27/18	CPP	SW6010C
Cadmium	< 0.32	0.32	mg/Kg	1	07/27/18	CPP	SW6010C
Chromium	9.84	0.32	mg/Kg	1	07/27/18	CPP	SW6010C
Copper	11.0	0.6	mg/kg	1	07/27/18	CPP	SW6010C
Mercury	< 0.03	0.03	mg/Kg	1	07/26/18	RS	SW7471B
Nickel	6.04	0.32	mg/Kg	1	07/27/18	CPP	SW6010C
Lead	9.47	0.32	mg/Kg	1	07/27/18	CPP	SW6010C
Antimony	< 3.2	3.2	mg/Kg	1	07/27/18	CPP	SW6010C
Selenium	< 1.3	1.3	mg/Kg	1	07/27/18	CPP	SW6010C
Thallium	< 2.9	2.9	mg/Kg	1	07/27/18	CPP	SW6010C
Vanadium	23.8	0.32	mg/Kg	1	07/27/18	CPP	SW6010C
Zinc	28.1	0.6	mg/Kg	1	07/27/18	CPP	SW6010C
Percent Solid	92		%		07/26/18	q	SW846-%Solid
Total Cyanide (SW9010C Distill.)	< 0.49	0.49	mg/Kg	1	07/27/18	O/GD	SW9012B
Soil Extraction for PCB	Completed				08/06/18	AA/V	SW3545A
Soil Extraction SVOA PAH	Completed				07/26/18	VS/IG/CKV	SW3545A
Extraction of CT ETPH	Completed				07/26/18	VS/VCK	SW3545A
Mercury Digestion	Completed				07/26/18	I/I	SW7471B
Total Metals Digest	Completed				07/26/18	KD/AG	SW3050B
TPH by GC (Extractable Products)							
Ext. Petroleum H.C. (C9-C36)	ND	53	mg/Kg	1	07/27/18	JRB	CTETPH 8015D
Identification	ND		mg/Kg	1	07/27/18	JRB	CTETPH 8015D
QA/QC Surrogates							
% n-Pentacosane	70		%	1	07/27/18	JRB	50 - 150 %

Ver 1

Project ID: ROCKVILLE MGP
Client ID: SB-57 (2-4FT)

Phoenix I.D.: CA98177

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Polychlorinated Biphenyls							
PCB-1016	ND	350	ug/Kg	10	08/08/18	AW	SW8082A
PCB-1221	ND	350	ug/Kg	10	08/08/18	AW	SW8082A
PCB-1232	ND	350	ug/Kg	10	08/08/18	AW	SW8082A
PCB-1242	ND	350	ug/Kg	10	08/08/18	AW	SW8082A
PCB-1248	ND	350	ug/Kg	10	08/08/18	AW	SW8082A
PCB-1254	ND	350	ug/Kg	10	08/08/18	AW	SW8082A
PCB-1260	ND	350	ug/Kg	10	08/08/18	AW	SW8082A
PCB-1262	ND	350	ug/Kg	10	08/08/18	AW	SW8082A
PCB-1268	ND	350	ug/Kg	10	08/08/18	AW	SW8082A
QA/QC Surrogates							
% DCBP	94		%	10	08/08/18	AW	30 - 150 %
% TCMX	91		%	10	08/08/18	AW	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
1,1,1-Trichloroethane	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	3.5	ug/Kg	1	07/27/18	JLI	SW8260C
1,1,2-Trichloroethane	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
1,1-Dichloroethane	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
1,1-Dichloroethene	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
1,1-Dichloropropene	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
1,2,3-Trichloropropane	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
1,2-Dibromoethane	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
1,2-Dichlorobenzene	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
1,2-Dichloroethane	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
1,2-Dichloropropane	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
1,3-Dichlorobenzene	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
1,3-Dichloropropane	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
1,4-Dichlorobenzene	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
2,2-Dichloropropane	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
2-Chlorotoluene	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
2-Hexanone	ND	29	ug/Kg	1	07/27/18	JLI	SW8260C
2-Isopropyltoluene	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
4-Chlorotoluene	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
4-Methyl-2-pentanone	ND	29	ug/Kg	1	07/27/18	JLI	SW8260C
Acetone	ND	290	ug/Kg	1	07/27/18	JLI	SW8260C
Acrylonitrile	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
Benzene	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
Bromobenzene	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
Bromochloromethane	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
Bromodichloromethane	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
Bromoform	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
Bromomethane	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C

Ver 1

Project ID: ROCKVILLE MGP
Client ID: SB-57 (2-4FT)

Phoenix I.D.: CA98177

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Carbon Disulfide	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
Carbon tetrachloride	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
Chlorobenzene	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
Chloroethane	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
Chloroform	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
Chloromethane	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
cis-1,2-Dichloroethene	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
cis-1,3-Dichloropropene	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
Dibromochloromethane	ND	3.5	ug/Kg	1	07/27/18	JLI	SW8260C
Dibromomethane	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
Dichlorodifluoromethane	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
Ethylbenzene	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
Hexachlorobutadiene	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
Isopropylbenzene	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
m&p-Xylene	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
Methyl Ethyl Ketone	ND	35	ug/Kg	1	07/27/18	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	12	ug/Kg	1	07/27/18	JLI	SW8260C
Methylene chloride	ND	12	ug/Kg	1	07/27/18	JLI	SW8260C
Naphthalene	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
n-Butylbenzene	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
n-Propylbenzene	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
o-Xylene	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
p-Isopropyltoluene	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
sec-Butylbenzene	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
Styrene	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
tert-Butylbenzene	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
Tetrachloroethene	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
Tetrahydrofuran (THF)	ND	12	ug/Kg	1	07/27/18	JLI	SW8260C
Toluene	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
Total Xylenes	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
trans-1,2-Dichloroethene	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
trans-1,3-Dichloropropene	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	12	ug/Kg	1	07/27/18	JLI	SW8260C
Trichloroethene	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
Trichlorofluoromethane	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
Trichlorotrifluoroethane	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
Vinyl chloride	ND	5.9	ug/Kg	1	07/27/18	JLI	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	100		%	1	07/27/18	JLI	70 - 130 %
% Bromofluorobenzene	97		%	1	07/27/18	JLI	70 - 130 %
% Dibromofluoromethane	95		%	1	07/27/18	JLI	70 - 130 %
% Toluene-d8	99		%	1	07/27/18	JLI	70 - 130 %
Polynuclear Aromatic HC							
2-Methylnaphthalene	ND	250	ug/Kg	1	07/30/18	HM	SW8270D
Acenaphthene	ND	250	ug/Kg	1	07/30/18	HM	SW8270D
Acenaphthylene	ND	250	ug/Kg	1	07/30/18	HM	SW8270D
Anthracene	ND	250	ug/Kg	1	07/30/18	HM	SW8270D
Benz(a)anthracene	ND	250	ug/Kg	1	07/30/18	HM	SW8270D
Benzo(a)pyrene	ND	250	ug/Kg	1	07/30/18	HM	SW8270D

Ver 1

Project ID: ROCKVILLE MGP
Client ID: SB-57 (2-4FT)

Phoenix I.D.: CA98177

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Benzo(b)fluoranthene	ND	250	ug/Kg	1	07/30/18	HM	SW8270D
Benzo(ghi)perylene	ND	250	ug/Kg	1	07/30/18	HM	SW8270D
Benzo(k)fluoranthene	ND	250	ug/Kg	1	07/30/18	HM	SW8270D
Chrysene	ND	250	ug/Kg	1	07/30/18	HM	SW8270D
Dibenz(a,h)anthracene	ND	250	ug/Kg	1	07/30/18	HM	SW8270D
Fluoranthene	ND	250	ug/Kg	1	07/30/18	HM	SW8270D
Fluorene	ND	250	ug/Kg	1	07/30/18	HM	SW8270D
Indeno(1,2,3-cd)pyrene	ND	250	ug/Kg	1	07/30/18	HM	SW8270D
Naphthalene	ND	250	ug/Kg	1	07/30/18	HM	SW8270D
Phenanthrene	ND	250	ug/Kg	1	07/30/18	HM	SW8270D
Pyrene	ND	250	ug/Kg	1	07/30/18	HM	SW8270D
QA/QC Surrogates							
% 2-Fluorobiphenyl	75		%	1	07/30/18	HM	30 - 130 %
% Nitrobenzene-d5	64		%	1	07/30/18	HM	30 - 130 %
% Terphenyl-d14	71		%	1	07/30/18	HM	30 - 130 %
Field Extraction	Completed				07/25/18		SW5035A

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services.
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Phyllis Shiller, Laboratory Director
August 09, 2018
Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

August 09, 2018

FOR: Attn: Lynn Willey
Tighe & Bond
213 Court St, Suite 1100
Middletown, CT 06457

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		07/25/18	10:20
Location Code:	TIGHE-DAS	Received by:	CP	07/25/18	16:22
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	14-0755-44B				

Laboratory Data

SDG ID: GCA98174
Phoenix ID: CA98178

Project ID: ROCKVILLE MGP
Client ID: SB-57 (8-10FT)

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 2.5	2.5	mg/Kg	1	07/27/18	CPP	SW6010C
Arsenic	3.06	0.86	mg/Kg	1	07/27/18	CPP	SW6010C
Barium	56.2	0.43	mg/Kg	1	07/27/18	CPP	SW6010C
Beryllium	0.48	0.34	mg/Kg	1	07/27/18	CPP	SW6010C
Cadmium	< 0.43	0.43	mg/Kg	1	07/27/18	CPP	SW6010C
Chromium	16.8	0.43	mg/Kg	1	07/27/18	CPP	SW6010C
Copper	11.8	0.9	mg/kg	1	07/27/18	CPP	SW6010C
Mercury	0.08	0.03	mg/Kg	1	07/26/18	RS	SW7471B
Nickel	8.71	0.43	mg/Kg	1	07/27/18	CPP	SW6010C
Lead	8.03	0.43	mg/Kg	1	07/27/18	CPP	SW6010C
Antimony	< 4.3	4.3	mg/Kg	1	07/27/18	CPP	SW6010C
Selenium	< 1.7	1.7	mg/Kg	1	07/27/18	CPP	SW6010C
SPLP Silver	< 0.010	0.010	mg/L	1	07/27/18	CPP	SW6010C
SPLP Arsenic	0.005	0.004	mg/L	1	07/27/18	EK	SW6010C
SPLP Barium	0.078	0.010	mg/L	1	07/27/18	EK	SW6010C
SPLP Beryllium	< 0.001	0.001	mg/L	1	07/27/18	CPP	SW6010C
SPLP Cadmium	< 0.005	0.005	mg/L	1	07/27/18	CPP	SW6010C
SPLP Chromium	0.022	0.010	mg/L	1	07/27/18	EK	SW6010C
SPLP Copper	0.019	0.010	mg/L	1	07/27/18	EK	SW6010C
SPLP Mercury	< 0.0005	0.0005	mg/L	1	07/27/18	RS	SW7470A
SPLP Nickel	< 0.010	0.010	mg/L	1	07/27/18	CPP	SW6010C
SPLP Lead	0.056	0.010	mg/L	1	07/27/18	EK	SW6010C
SPLP Antimony	< 0.005	0.005	mg/L	1	07/27/18	CPP	SW6010C
SPLP Selenium	< 0.020	0.020	mg/L	1	07/27/18	CPP	SW6010C
SPLP Thallium	< 0.005	0.005	mg/L	1	07/27/18	CPP	SW6010C
SPLP Vanadium	0.023	0.010	mg/L	1	07/27/18	EK	SW6010C
SPLP Zinc	0.072	0.010	mg/L	1	07/27/18	EK	SW6010C
Thallium	< 3.9	3.9	mg/Kg	1	07/27/18	CPP	SW6010C

Ver 1

Project ID: ROCKVILLE MGP
Client ID: SB-57 (8-10FT)

Phoenix I.D.: CA98178

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
SPLP Metals Digestion	Completed				07/27/18	I/Q/Q	SW3010A
Vanadium	39.6	0.43	mg/Kg	1	07/27/18	CPP	SW6010C
Zinc	50.5	0.9	mg/Kg	1	07/27/18	CPP	SW6010C
Percent Solid	82		%		07/26/18	q	SW846-%Solid
Soil Extraction SVOA PAH	Completed				07/26/18	VS/IG/CKV	SW3545A
Extraction of CT ETPH	Completed				07/26/18	VS/VCK	SW3545A
Mercury Digestion	Completed				07/26/18	I/I	SW7471B
SPLP Digestion Mercury	Completed				07/27/18	I/Q/I	SW1312/SW7470A
SPLP Extraction for Metals	Completed				07/26/18	I	SW1312
Total Metals Digest	Completed				07/26/18	KD/AG	SW3050B
TPH by GC (Extractable Products)							
Ext. Petroleum H.C. (C9-C36)	ND	60	mg/Kg	1	07/27/18	JRB	CTETPH 8015D
Identification	ND		mg/Kg	1	07/27/18	JRB	CTETPH 8015D
QA/QC Surrogates							
% n-Pentacosane	75		%	1	07/27/18	JRB	50 - 150 %
Polynuclear Aromatic HC							
2-Methylnaphthalene	ND	280	ug/Kg	1	07/27/18	KCA	SW8270D
Acenaphthene	ND	280	ug/Kg	1	07/27/18	KCA	SW8270D
Acenaphthylene	ND	280	ug/Kg	1	07/27/18	KCA	SW8270D
Anthracene	ND	280	ug/Kg	1	07/27/18	KCA	SW8270D
Benz(a)anthracene	ND	280	ug/Kg	1	07/27/18	KCA	SW8270D
Benzo(a)pyrene	ND	280	ug/Kg	1	07/27/18	KCA	SW8270D
Benzo(b)fluoranthene	ND	280	ug/Kg	1	07/27/18	KCA	SW8270D
Benzo(ghi)perylene	ND	400	ug/Kg	1	07/27/18	KCA	SW8270D
Benzo(k)fluoranthene	ND	280	ug/Kg	1	07/27/18	KCA	SW8270D
Chrysene	ND	280	ug/Kg	1	07/27/18	KCA	SW8270D
Dibenz(a,h)anthracene	ND	280	ug/Kg	1	07/27/18	KCA	SW8270D
Fluoranthene	ND	280	ug/Kg	1	07/27/18	KCA	SW8270D
Fluorene	ND	280	ug/Kg	1	07/27/18	KCA	SW8270D
Indeno(1,2,3-cd)pyrene	ND	480	ug/Kg	1	07/27/18	KCA	SW8270D
Naphthalene	ND	280	ug/Kg	1	07/27/18	KCA	SW8270D
Phenanthrene	ND	280	ug/Kg	1	07/27/18	KCA	SW8270D
Pyrene	ND	280	ug/Kg	1	07/27/18	KCA	SW8270D
QA/QC Surrogates							
% 2-Fluorobiphenyl	71		%	1	07/27/18	KCA	30 - 130 %
% Nitrobenzene-d5	65		%	1	07/27/18	KCA	30 - 130 %
% Terphenyl-d14	74		%	1	07/27/18	KCA	30 - 130 %

Project ID: ROCKVILLE MGP
Client ID: SB-57 (8-10FT)

Phoenix I.D.: CA98178

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

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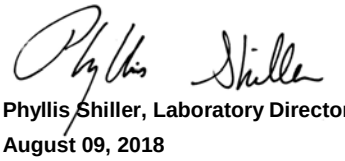

Phyllis Shiller, Laboratory Director
August 09, 2018
Reviewed and Released by: Greg Lawrence, Assistant Lab Director

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Analysis Report

August 09, 2018

FOR: Attn: Lynn Willey
Tighe & Bond
213 Court St, Suite 1100
Middletown, CT 06457

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		07/25/18	10:30
Location Code:	TIGHE-DAS	Received by:	CP	07/25/18	16:22
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	14-0755-44B				

Laboratory Data

SDG ID: GCA98174
Phoenix ID: CA98179

Project ID: ROCKVILLE MGP
Client ID: SB-56 (0.5-2FT)

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 2.5	2.5	mg/Kg	1	07/27/18	CPP	SW6010C
Arsenic	4.38	0.70	mg/Kg	1	07/27/18	CPP	SW6010C
Barium	46.4	0.35	mg/Kg	1	07/27/18	CPP	SW6010C
Beryllium	0.39	0.28	mg/Kg	1	07/27/18	CPP	SW6010C
Cadmium	0.40	0.35	mg/Kg	1	07/27/18	CPP	SW6010C
Chromium	15.4	0.35	mg/Kg	1	07/27/18	CPP	SW6010C
Copper	27.2	0.7	mg/kg	1	07/27/18	CPP	SW6010C
Mercury	0.04	0.03	mg/Kg	1	07/26/18	RS	SW7471B
Nickel	10.3	0.35	mg/Kg	1	07/27/18	CPP	SW6010C
Lead	66.4	0.35	mg/Kg	1	07/27/18	CPP	SW6010C
Antimony	< 3.5	3.5	mg/Kg	1	07/27/18	CPP	SW6010C
Selenium	< 1.4	1.4	mg/Kg	1	07/27/18	CPP	SW6010C
Thallium	< 3.1	3.1	mg/Kg	1	07/27/18	CPP	SW6010C
Vanadium	26.2	0.35	mg/Kg	1	07/27/18	CPP	SW6010C
Zinc	78.1	0.7	mg/Kg	1	07/27/18	CPP	SW6010C
Percent Solid	94		%		07/26/18	q	SW846-%Solid
Total Cyanide (SW9010C Distill.)	< 0.53	0.53	mg/Kg	1	07/27/18	O/GD	SW9012B
Soil Extraction SVOA PAH	Completed				07/26/18	VS/IG/CKV	SW3545A
Extraction of CT ETPH	Completed				07/26/18	VS/VCK	SW3545A
Mercury Digestion	Completed				07/26/18	I/I	SW7471B
Total Metals Digest	Completed				07/26/18	KD/AG	SW3050B
TPH by GC (Extractable Products)							
Ext. Petroleum H.C. (C9-C36)	ND	260	mg/Kg	5	07/27/18	JRB	CTETPH 8015D
Identification	ND		mg/Kg	5	07/27/18	JRB	CTETPH 8015D
QA/QC Surrogates							
% n-Pentacosane	119		%	5	07/27/18	JRB	50 - 150 %

Ver 1

Project ID: ROCKVILLE MGP
Client ID: SB-56 (0.5-2FT)

Phoenix I.D.: CA98179

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Volatiles							
1,1,1,2-Tetrachloroethane	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
1,1,1-Trichloroethane	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	3.8	ug/Kg	1	07/27/18	JLI	SW8260C
1,1,2-Trichloroethane	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
1,1-Dichloroethane	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
1,1-Dichloroethene	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
1,1-Dichloropropene	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
1,2,3-Trichloropropane	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
1,2-Dibromoethane	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
1,2-Dichlorobenzene	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
1,2-Dichloroethane	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
1,2-Dichloropropane	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
1,3-Dichlorobenzene	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
1,3-Dichloropropane	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
1,4-Dichlorobenzene	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
2,2-Dichloropropane	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
2-Chlorotoluene	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
2-Hexanone	ND	31	ug/Kg	1	07/27/18	JLI	SW8260C
2-Isopropyltoluene	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
4-Chlorotoluene	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
4-Methyl-2-pentanone	ND	31	ug/Kg	1	07/27/18	JLI	SW8260C
Acetone	ND	310	ug/Kg	1	07/27/18	JLI	SW8260C
Acrylonitrile	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
Benzene	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
Bromobenzene	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
Bromochloromethane	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
Bromodichloromethane	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
Bromoform	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
Bromomethane	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
Carbon Disulfide	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
Carbon tetrachloride	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
Chlorobenzene	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
Chloroethane	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
Chloroform	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
Chloromethane	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
cis-1,2-Dichloroethene	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
cis-1,3-Dichloropropene	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
Dibromochloromethane	ND	3.8	ug/Kg	1	07/27/18	JLI	SW8260C
Dibromomethane	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
Dichlorodifluoromethane	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
Ethylbenzene	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
Hexachlorobutadiene	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
Isopropylbenzene	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C

Project ID: ROCKVILLE MGP
Client ID: SB-56 (0.5-2FT)

Phoenix I.D.: CA98179

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
m&p-Xylene	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
Methyl Ethyl Ketone	ND	38	ug/Kg	1	07/27/18	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	13	ug/Kg	1	07/27/18	JLI	SW8260C
Methylene chloride	ND	13	ug/Kg	1	07/27/18	JLI	SW8260C
Naphthalene	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
n-Butylbenzene	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
n-Propylbenzene	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
o-Xylene	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
p-Isopropyltoluene	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
sec-Butylbenzene	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
Styrene	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
tert-Butylbenzene	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
Tetrachloroethene	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
Tetrahydrofuran (THF)	ND	13	ug/Kg	1	07/27/18	JLI	SW8260C
Toluene	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
Total Xylenes	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
trans-1,2-Dichloroethene	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
trans-1,3-Dichloropropene	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	13	ug/Kg	1	07/27/18	JLI	SW8260C
Trichloroethene	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
Trichlorofluoromethane	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
Trichlorotrifluoroethane	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
Vinyl chloride	ND	6.3	ug/Kg	1	07/27/18	JLI	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	103		%	1	07/27/18	JLI	70 - 130 %
% Bromofluorobenzene	94		%	1	07/27/18	JLI	70 - 130 %
% Dibromofluoromethane	95		%	1	07/27/18	JLI	70 - 130 %
% Toluene-d8	98		%	1	07/27/18	JLI	70 - 130 %
Polynuclear Aromatic HC							
2-Methylnaphthalene	ND	240	ug/Kg	1	07/27/18	KCA	SW8270D
Acenaphthene	ND	240	ug/Kg	1	07/27/18	KCA	SW8270D
Acenaphthylene	990	240	ug/Kg	1	07/27/18	KCA	SW8270D
Anthracene	900	240	ug/Kg	1	07/27/18	KCA	SW8270D
Benz(a)anthracene	3700	240	ug/Kg	1	07/27/18	KCA	SW8270D
Benzo(a)pyrene	3400	240	ug/Kg	1	07/27/18	KCA	SW8270D
Benzo(b)fluoranthene	3100	240	ug/Kg	1	07/27/18	KCA	SW8270D
Benzo(ghi)perylene	2100	240	ug/Kg	1	07/27/18	KCA	SW8270D
Benzo(k)fluoranthene	2800	240	ug/Kg	1	07/27/18	KCA	SW8270D
Chrysene	3800	240	ug/Kg	1	07/27/18	KCA	SW8270D
Dibenz(a,h)anthracene	470	240	ug/Kg	1	07/27/18	KCA	SW8270D
Fluoranthene	6800	240	ug/Kg	1	07/27/18	KCA	SW8270D
Fluorene	280	240	ug/Kg	1	07/27/18	KCA	SW8270D
Indeno(1,2,3-cd)pyrene	2500	240	ug/Kg	1	07/27/18	KCA	SW8270D
Naphthalene	ND	240	ug/Kg	1	07/27/18	KCA	SW8270D
Phenanthrene	3000	240	ug/Kg	1	07/27/18	KCA	SW8270D
Pyrene	6700	240	ug/Kg	1	07/27/18	KCA	SW8270D
QA/QC Surrogates							
% 2-Fluorobiphenyl	68		%	1	07/27/18	KCA	30 - 130 %
% Nitrobenzene-d5	57		%	1	07/27/18	KCA	30 - 130 %

Ver 1

Project ID: ROCKVILLE MGP
Client ID: SB-56 (0.5-2FT)

Phoenix I.D.: CA98179

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% Terphenyl-d14	69		%	1	07/27/18	KCA	30 - 130 %
Field Extraction	Completed				07/25/18		SW5035A

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

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Phyllis Shiller, Laboratory Director
August 09, 2018
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Analysis Report

August 09, 2018

FOR: Attn: Lynn Willey
Tighe & Bond
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Middletown, CT 06457

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		07/25/18	10:50
Location Code:	TIGHE-DAS	Received by:	CP	07/25/18	16:22
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	14-0755-44B				

Laboratory Data

SDG ID: GCA98174
Phoenix ID: CA98180

Project ID: ROCKVILLE MGP
Client ID: SB-55 (2-4FT)

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 2.5	2.5	mg/Kg	1	07/27/18	CPP	SW6010C
Arsenic	2.84	0.65	mg/Kg	1	07/27/18	CPP	SW6010C
Barium	35.3	0.32	mg/Kg	1	07/27/18	CPP	SW6010C
Beryllium	0.32	0.26	mg/Kg	1	07/27/18	CPP	SW6010C
Cadmium	< 0.32	0.32	mg/Kg	1	07/27/18	CPP	SW6010C
Chromium	18.5	0.32	mg/Kg	1	07/27/18	CPP	SW6010C
Copper	33.0	0.6	mg/kg	1	07/27/18	CPP	SW6010C
Mercury	0.04	0.03	mg/Kg	1	07/26/18	RS	SW7471B
Nickel	9.01	0.32	mg/Kg	1	07/27/18	CPP	SW6010C
Lead	88.9	0.32	mg/Kg	1	07/27/18	CPP	SW6010C
Antimony	< 3.2	3.2	mg/Kg	1	07/27/18	CPP	SW6010C
Selenium	< 1.3	1.3	mg/Kg	1	07/27/18	CPP	SW6010C
Thallium	< 2.9	2.9	mg/Kg	1	07/27/18	CPP	SW6010C
Vanadium	31.8	0.32	mg/Kg	1	07/27/18	CPP	SW6010C
Zinc	62.8	0.6	mg/Kg	1	07/27/18	CPP	SW6010C
Percent Solid	94		%		07/26/18	q	SW846-%Solid
Total Cyanide (SW9010C Distill.)	< 0.53	0.53	mg/Kg	1	07/27/18	O/GD	SW9012B
Soil Extraction for PCB	Completed				08/06/18	AA/V	SW3545A
Soil Extraction SVOA PAH	Completed				07/26/18	VS/IG/CKV	SW3545A
Extraction of CT ETPH	Completed				07/26/18	VS/VCK	SW3545A
Mercury Digestion	Completed				07/26/18	I/I	SW7471B
Total Metals Digest	Completed				07/26/18	KD/AG	SW3050B
TPH by GC (Extractable Products)							
Ext. Petroleum H.C. (C9-C36)	330	260	mg/Kg	5	07/27/18	JRB	CTETPH 8015D
Identification	**		mg/Kg	5	07/27/18	JRB	CTETPH 8015D
QA/QC Surrogates							
% n-Pentacosane	Interference		%	5	07/27/18	JRB	50 - 150 %

Ver 1

Project ID: ROCKVILLE MGP
Client ID: SB-55 (2-4FT)

Phoenix I.D.: CA98180

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Polychlorinated Biphenyls							
PCB-1016	ND	350	ug/Kg	10	08/08/18	AW	SW8082A
PCB-1221	ND	350	ug/Kg	10	08/08/18	AW	SW8082A
PCB-1232	ND	350	ug/Kg	10	08/08/18	AW	SW8082A
PCB-1242	ND	350	ug/Kg	10	08/08/18	AW	SW8082A
PCB-1248	ND	350	ug/Kg	10	08/08/18	AW	SW8082A
PCB-1254	ND	350	ug/Kg	10	08/08/18	AW	SW8082A
PCB-1260	ND	350	ug/Kg	10	08/08/18	AW	SW8082A
PCB-1262	ND	350	ug/Kg	10	08/08/18	AW	SW8082A
PCB-1268	ND	350	ug/Kg	10	08/08/18	AW	SW8082A
QA/QC Surrogates							
% DCBP	94		%	10	08/08/18	AW	30 - 150 %
% TCMX	97		%	10	08/08/18	AW	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
1,1,1-Trichloroethane	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	2.4	ug/Kg	1	07/27/18	JLI	SW8260C
1,1,2-Trichloroethane	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
1,1-Dichloroethane	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
1,1-Dichloroethene	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
1,1-Dichloropropene	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
1,2,3-Trichloropropane	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
1,2-Dibromoethane	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
1,2-Dichlorobenzene	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
1,2-Dichloroethane	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
1,2-Dichloropropane	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
1,3-Dichlorobenzene	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
1,3-Dichloropropane	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
1,4-Dichlorobenzene	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
2,2-Dichloropropane	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
2-Chlorotoluene	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
2-Hexanone	ND	20	ug/Kg	1	07/27/18	JLI	SW8260C
2-Isopropyltoluene	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
4-Chlorotoluene	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
4-Methyl-2-pentanone	ND	20	ug/Kg	1	07/27/18	JLI	SW8260C
Acetone	ND	200	ug/Kg	1	07/27/18	JLI	SW8260C
Acrylonitrile	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
Benzene	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
Bromobenzene	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
Bromochloromethane	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
Bromodichloromethane	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
Bromoform	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
Bromomethane	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C

Ver 1

Project ID: ROCKVILLE MGP
Client ID: SB-55 (2-4FT)

Phoenix I.D.: CA98180

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Carbon Disulfide	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
Carbon tetrachloride	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
Chlorobenzene	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
Chloroethane	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
Chloroform	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
Chloromethane	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
cis-1,2-Dichloroethene	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
cis-1,3-Dichloropropene	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
Dibromochloromethane	ND	2.4	ug/Kg	1	07/27/18	JLI	SW8260C
Dibromomethane	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
Dichlorodifluoromethane	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
Ethylbenzene	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
Hexachlorobutadiene	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
Isopropylbenzene	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
m&p-Xylene	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
Methyl Ethyl Ketone	ND	24	ug/Kg	1	07/27/18	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	8.1	ug/Kg	1	07/27/18	JLI	SW8260C
Methylene chloride	ND	8.1	ug/Kg	1	07/27/18	JLI	SW8260C
Naphthalene	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
n-Butylbenzene	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
n-Propylbenzene	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
o-Xylene	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
p-Isopropyltoluene	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
sec-Butylbenzene	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
Styrene	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
tert-Butylbenzene	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
Tetrachloroethene	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
Tetrahydrofuran (THF)	ND	8.1	ug/Kg	1	07/27/18	JLI	SW8260C
Toluene	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
Total Xylenes	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
trans-1,2-Dichloroethene	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
trans-1,3-Dichloropropene	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	8.1	ug/Kg	1	07/27/18	JLI	SW8260C
Trichloroethene	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
Trichlorofluoromethane	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
Trichlorotrifluoroethane	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
Vinyl chloride	ND	4.0	ug/Kg	1	07/27/18	JLI	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	103		%	1	07/27/18	JLI	70 - 130 %
% Bromofluorobenzene	94		%	1	07/27/18	JLI	70 - 130 %
% Dibromofluoromethane	97		%	1	07/27/18	JLI	70 - 130 %
% Toluene-d8	98		%	1	07/27/18	JLI	70 - 130 %
Polynuclear Aromatic HC							
2-Methylnaphthalene	ND	240	ug/Kg	1	07/27/18	HM	SW8270D
Acenaphthene	720	240	ug/Kg	1	07/27/18	HM	SW8270D
Acenaphthylene	1100	240	ug/Kg	1	07/27/18	HM	SW8270D
Anthracene	3800	1200	ug/Kg	5	07/30/18	HM	SW8270D
Benz(a)anthracene	14000	1000	ug/Kg	5	07/30/18	HM	SW8270D
Benzo(a)pyrene	11000	1000	ug/Kg	5	07/30/18	HM	SW8270D

Ver 1

Project ID: ROCKVILLE MGP
Client ID: SB-55 (2-4FT)

Phoenix I.D.: CA98180

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Benzo(b)fluoranthene	9900	1000	ug/Kg	5	07/30/18	HM	SW8270D
Benzo(ghi)perylene	6700	1000	ug/Kg	5	07/30/18	HM	SW8270D
Benzo(k)fluoranthene	9600	1000	ug/Kg	5	07/30/18	HM	SW8270D
Chrysene	14000	1000	ug/Kg	5	07/30/18	HM	SW8270D
Dibenz(a,h)anthracene	1700	1000	ug/Kg	5	07/30/18	HM	SW8270D
Fluoranthene	19000	1200	ug/Kg	5	07/30/18	HM	SW8270D
Fluorene	1300	1200	ug/Kg	5	07/30/18	HM	SW8270D
Indeno(1,2,3-cd)pyrene	7700	1000	ug/Kg	5	07/30/18	HM	SW8270D
Naphthalene	360	240	ug/Kg	1	07/27/18	HM	SW8270D
Phenanthrene	14000	1200	ug/Kg	5	07/30/18	HM	SW8270D
Pyrene	18000	1200	ug/Kg	5	07/30/18	HM	SW8270D
QA/QC Surrogates							
% 2-Fluorobiphenyl	66		%	1	07/27/18	HM	30 - 130 %
% Nitrobenzene-d5	59		%	1	07/27/18	HM	30 - 130 %
% Terphenyl-d14	72		%	1	07/27/18	HM	30 - 130 %
Field Extraction	Completed				07/25/18		SW5035A

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

TPH Comment:
**Petroleum hydrocarbon chromatogram contains a multicomponent hydrocarbon distribution in the range of C14 to C36. The sample was quantitated against a C9-C36 alkane hydrocarbon standard.

Semi-Volatile Comment:
Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services.
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Phyllis Shiller, Laboratory Director
August 09, 2018
Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

August 09, 2018

FOR: Attn: Lynn Willey
Tighe & Bond
213 Court St, Suite 1100
Middletown, CT 06457

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		07/25/18	10:55
Location Code:	TIGHE-DAS	Received by:	CP	07/25/18	16:22
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	14-0755-44B				

Laboratory Data

SDG ID: GCA98174
Phoenix ID: CA98181

Project ID: ROCKVILLE MGP
Client ID: SB-55 (8-9FT)

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 2.5	2.5	mg/Kg	1	07/27/18	CPP	SW6010C
Arsenic	2.08	0.87	mg/Kg	1	07/27/18	CPP	SW6010C
Barium	70.7	0.43	mg/Kg	1	07/27/18	CPP	SW6010C
Beryllium	0.55	0.35	mg/Kg	1	07/27/18	CPP	SW6010C
Cadmium	< 0.43	0.43	mg/Kg	1	07/27/18	CPP	SW6010C
Chromium	16.9	0.43	mg/Kg	1	07/27/18	CPP	SW6010C
Copper	13.0	0.9	mg/kg	1	07/27/18	CPP	SW6010C
Mercury	< 0.03	0.03	mg/Kg	1	07/26/18	RS	SW7471B
Nickel	9.65	0.43	mg/Kg	1	07/27/18	CPP	SW6010C
Lead	36.8	0.43	mg/Kg	1	07/27/18	CPP	SW6010C
Antimony	< 4.3	4.3	mg/Kg	1	07/27/18	CPP	SW6010C
Selenium	< 1.7	1.7	mg/Kg	1	07/27/18	CPP	SW6010C
SPLP Silver	< 0.010	0.010	mg/L	1	07/27/18	CPP	SW6010C
SPLP Arsenic	< 0.004	0.004	mg/L	1	07/27/18	CPP	SW6010C
SPLP Barium	< 0.010	0.010	mg/L	1	07/27/18	CPP	SW6010C
SPLP Beryllium	< 0.001	0.001	mg/L	1	07/27/18	CPP	SW6010C
SPLP Cadmium	< 0.005	0.005	mg/L	1	07/27/18	CPP	SW6010C
SPLP Chromium	< 0.010	0.010	mg/L	1	07/27/18	CPP	SW6010C
SPLP Copper	< 0.010	0.010	mg/L	1	07/27/18	CPP	SW6010C
SPLP Mercury	< 0.0005	0.0005	mg/L	1	07/27/18	RS	SW7470A
SPLP Nickel	< 0.010	0.010	mg/L	1	07/27/18	CPP	SW6010C
SPLP Lead	< 0.010	0.010	mg/L	1	07/27/18	CPP	SW6010C
SPLP Antimony	< 0.005	0.005	mg/L	1	07/27/18	CPP	SW6010C
SPLP Selenium	< 0.020	0.020	mg/L	1	07/27/18	CPP	SW6010C
SPLP Thallium	< 0.005	0.005	mg/L	1	07/27/18	CPP	SW6010C
SPLP Vanadium	< 0.010	0.010	mg/L	1	07/27/18	CPP	SW6010C
SPLP Zinc	< 0.010	0.010	mg/L	1	07/27/18	CPP	SW6010C
Thallium	< 3.9	3.9	mg/Kg	1	07/27/18	CPP	SW6010C

Ver 1

Project ID: ROCKVILLE MGP
Client ID: SB-55 (8-9FT)

Phoenix I.D.: CA98181

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
SPLP Metals Digestion	Completed				07/27/18	I/Q/Q	SW3010A
Vanadium	34.3	0.43	mg/Kg	1	07/27/18	CPP	SW6010C
Zinc	62.2	0.9	mg/Kg	1	07/27/18	CPP	SW6010C
Percent Solid	81		%		07/26/18	q	SW846-%Solid
Soil Extraction SVOA PAH	Completed				07/26/18	VS/IG/CKV	SW3545A
Extraction of CT ETPH	Completed				07/26/18	VS/VCK	SW3545A
Mercury Digestion	Completed				07/26/18	I/I	SW7471B
SPLP Digestion Mercury	Completed				07/27/18	I/Q/I	SW1312/SW7470A
SPLP Extraction for Metals	Completed				07/26/18	I	SW1312
Total Metals Digest	Completed				07/26/18	KD/AG	SW3050B
TPH by GC (Extractable Products)							
Ext. Petroleum H.C. (C9-C36)	ND	61	mg/Kg	1	07/26/18	JRB	CTETPH 8015D
Identification	ND		mg/Kg	1	07/26/18	JRB	CTETPH 8015D
QA/QC Surrogates							
% n-Pentacosane	78		%	1	07/26/18	JRB	50 - 150 %
Polynuclear Aromatic HC							
2-Methylnaphthalene	ND	290	ug/Kg	1	07/27/18	KCA	SW8270D
Acenaphthene	ND	290	ug/Kg	1	07/27/18	KCA	SW8270D
Acenaphthylene	ND	290	ug/Kg	1	07/27/18	KCA	SW8270D
Anthracene	ND	290	ug/Kg	1	07/27/18	KCA	SW8270D
Benz(a)anthracene	ND	290	ug/Kg	1	07/27/18	KCA	SW8270D
Benzo(a)pyrene	810	290	ug/Kg	1	07/27/18	KCA	SW8270D
Benzo(b)fluoranthene	500	290	ug/Kg	1	07/27/18	KCA	SW8270D
Benzo(ghi)perylene	590	290	ug/Kg	1	07/27/18	KCA	SW8270D
Benzo(k)fluoranthene	520	290	ug/Kg	1	07/27/18	KCA	SW8270D
Chrysene	ND	290	ug/Kg	1	07/27/18	KCA	SW8270D
Dibenz(a,h)anthracene	ND	290	ug/Kg	1	07/27/18	KCA	SW8270D
Fluoranthene	ND	290	ug/Kg	1	07/27/18	KCA	SW8270D
Fluorene	ND	290	ug/Kg	1	07/27/18	KCA	SW8270D
Indeno(1,2,3-cd)pyrene	770	290	ug/Kg	1	07/27/18	KCA	SW8270D
Naphthalene	ND	290	ug/Kg	1	07/27/18	KCA	SW8270D
Phenanthrene	ND	290	ug/Kg	1	07/27/18	KCA	SW8270D
Pyrene	ND	290	ug/Kg	1	07/27/18	KCA	SW8270D
QA/QC Surrogates							
% 2-Fluorobiphenyl	76		%	1	07/27/18	KCA	30 - 130 %
% Nitrobenzene-d5	67		%	1	07/27/18	KCA	30 - 130 %
% Terphenyl-d14	67		%	1	07/27/18	KCA	30 - 130 %

Project ID: ROCKVILLE MGP
Client ID: SB-55 (8-9FT)

Phoenix I.D.: CA98181

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services.
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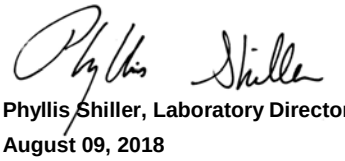


Phyllis Shiller, Laboratory Director
August 09, 2018
Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

August 09, 2018

FOR: Attn: Lynn Willey
Tighe & Bond
213 Court St, Suite 1100
Middletown, CT 06457

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		07/25/18	11:10
Location Code:	TIGHE-DAS	Received by:	CP	07/25/18	16:22
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	14-0755-44B				

Laboratory Data

SDG ID: GCA98174
Phoenix ID: CA98182

Project ID: ROCKVILLE MGP
Client ID: SB-54 (2-4FT)

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 2.5	2.5	mg/Kg	1	07/27/18	CPP	SW6010C
Arsenic	4.04	0.78	mg/Kg	1	07/27/18	CPP	SW6010C
Barium	77.5	0.39	mg/Kg	1	07/27/18	CPP	SW6010C
Beryllium	< 0.31	0.31	mg/Kg	1	07/27/18	CPP	SW6010C
Cadmium	0.62	0.39	mg/Kg	1	07/27/18	CPP	SW6010C
Chromium	32.8	0.39	mg/Kg	1	07/27/18	CPP	SW6010C
Copper	41.5	0.8	mg/kg	1	07/27/18	CPP	SW6010C
Mercury	0.17	0.03	mg/Kg	1	07/26/18	RS	SW7471B
Nickel	6.56	0.39	mg/Kg	1	07/27/18	CPP	SW6010C
Lead	125	0.39	mg/Kg	1	07/27/18	CPP	SW6010C
Antimony	< 3.9	3.9	mg/Kg	1	07/27/18	CPP	SW6010C
Selenium	< 1.6	1.6	mg/Kg	1	07/27/18	CPP	SW6010C
SPLP Silver	< 0.010	0.010	mg/L	1	08/08/18	EK	SW6010C
SPLP Arsenic	< 0.004	0.004	mg/L	1	08/08/18	EK	SW6010C
SPLP Barium	< 0.010	0.010	mg/L	1	08/08/18	EK	SW6010C
SPLP Beryllium	< 0.001	0.001	mg/L	1	08/08/18	EK	SW6010C
SPLP Cadmium	< 0.005	0.005	mg/L	1	08/08/18	EK	SW6010C
SPLP Chromium	< 0.010	0.010	mg/L	1	08/08/18	EK	SW6010C
SPLP Copper	< 0.010	0.010	mg/L	1	08/08/18	EK	SW6010C
SPLP Mercury	< 0.0005	0.0005	mg/L	1	08/07/18	RS	SW7470A
SPLP Nickel	< 0.010	0.010	mg/L	1	08/08/18	EK	SW6010C
SPLP Lead	0.027	0.010	mg/L	1	08/08/18	EK	SW6010C
SPLP Antimony	< 0.005	0.005	mg/L	1	08/08/18	EK	SW6010C
SPLP Selenium	< 0.020	0.020	mg/L	1	08/08/18	EK	SW6010C
SPLP Thallium	< 0.005	0.005	mg/L	1	08/08/18	EK	SW6010C
SPLP Vanadium	< 0.010	0.010	mg/L	1	08/08/18	EK	SW6010C
SPLP Zinc	0.014	0.010	mg/L	1	08/08/18	EK	SW6010C
Thallium	< 3.5	3.5	mg/Kg	1	07/27/18	CPP	SW6010C

Ver 1

Project ID: ROCKVILLE MGP
Client ID: SB-54 (2-4FT)

Phoenix I.D.: CA98182

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
SPLP Metals Digestion	Completed				08/07/18	Q/I/Q	SW3010A
Vanadium	19.9	0.39	mg/Kg	1	07/27/18	CPP	SW6010C
Zinc	83.8	0.8	mg/Kg	1	07/27/18	CPP	SW6010C
Percent Solid	92		%		07/26/18	q	SW846-%Solid
Total Cyanide (SW9010C Distill.)	< 0.54	0.54	mg/Kg	1	07/27/18	O/GD	SW9012B
Soil Extraction SVOA PAH	Completed				07/26/18	VS/IG/CKV	SW3545A
Extraction of CT ETPH	Completed				07/26/18	VS/VCK	SW3545A
Mercury Digestion	Completed				07/26/18	I/I	SW7471B
SPLP Digestion Mercury	Completed				08/07/18	Q/I/Q	SW1312/SW7470A
SPLP Extraction for Metals	Completed				08/06/18	Q	SW1312
Total Metals Digest	Completed				07/26/18	KD/AG	SW3050B
TPH by GC (Extractable Products)							
Ext. Petroleum H.C. (C9-C36)	140	54	mg/Kg	1	07/27/18	JRB	CTETPH 8015D
Identification	**		mg/Kg	1	07/27/18	JRB	CTETPH 8015D
QA/QC Surrogates							
% n-Pentacosane	73		%	1	07/27/18	JRB	50 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
1,1,1-Trichloroethane	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	3.8	ug/Kg	1	07/27/18	JLI	SW8260C
1,1,2-Trichloroethane	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
1,1-Dichloroethane	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
1,1-Dichloroethene	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
1,1-Dichloropropene	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
1,2,3-Trichloropropane	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
1,2-Dibromoethane	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
1,2-Dichlorobenzene	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
1,2-Dichloroethane	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
1,2-Dichloropropane	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
1,3-Dichlorobenzene	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
1,3-Dichloropropane	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
1,4-Dichlorobenzene	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
2,2-Dichloropropane	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
2-Chlorotoluene	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
2-Hexanone	ND	32	ug/Kg	1	07/27/18	JLI	SW8260C
2-Isopropyltoluene	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
4-Chlorotoluene	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
4-Methyl-2-pentanone	ND	32	ug/Kg	1	07/27/18	JLI	SW8260C
Acetone	ND	320	ug/Kg	1	07/27/18	JLI	SW8260C
Acrylonitrile	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
Benzene	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
Bromobenzene	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
Bromochloromethane	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C

Ver 1

Project ID: ROCKVILLE MGP
Client ID: SB-54 (2-4FT)

Phoenix I.D.: CA98182

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Bromodichloromethane	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
Bromoform	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
Bromomethane	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
Carbon Disulfide	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
Carbon tetrachloride	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
Chlorobenzene	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
Chloroethane	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
Chloroform	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
Chloromethane	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
cis-1,2-Dichloroethene	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
cis-1,3-Dichloropropene	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
Dibromochloromethane	ND	3.8	ug/Kg	1	07/27/18	JLI	SW8260C
Dibromomethane	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
Dichlorodifluoromethane	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
Ethylbenzene	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
Hexachlorobutadiene	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
Isopropylbenzene	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
m&p-Xylene	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
Methyl Ethyl Ketone	ND	38	ug/Kg	1	07/27/18	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	13	ug/Kg	1	07/27/18	JLI	SW8260C
Methylene chloride	ND	13	ug/Kg	1	07/27/18	JLI	SW8260C
Naphthalene	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
n-Butylbenzene	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
n-Propylbenzene	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
o-Xylene	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
p-Isopropyltoluene	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
sec-Butylbenzene	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
Styrene	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
tert-Butylbenzene	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
Tetrachloroethene	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
Tetrahydrofuran (THF)	ND	13	ug/Kg	1	07/27/18	JLI	SW8260C
Toluene	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
Total Xylenes	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
trans-1,2-Dichloroethene	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
trans-1,3-Dichloropropene	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	13	ug/Kg	1	07/27/18	JLI	SW8260C
Trichloroethene	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
Trichlorofluoromethane	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
Trichlorotrifluoroethane	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
Vinyl chloride	ND	6.4	ug/Kg	1	07/27/18	JLI	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	103		%	1	07/27/18	JLI	70 - 130 %
% Bromofluorobenzene	92		%	1	07/27/18	JLI	70 - 130 %
% Dibromofluoromethane	96		%	1	07/27/18	JLI	70 - 130 %
% Toluene-d8	98		%	1	07/27/18	JLI	70 - 130 %
Polynuclear Aromatic HC							
2-Methylnaphthalene	ND	250	ug/Kg	1	07/27/18	KCA	SW8270D
Acenaphthene	ND	250	ug/Kg	1	07/27/18	KCA	SW8270D
Acenaphthylene	330	250	ug/Kg	1	07/27/18	KCA	SW8270D

Ver 1

Project ID: ROCKVILLE MGP
Client ID: SB-54 (2-4FT)

Phoenix I.D.: CA98182

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Anthracene	600	250	ug/Kg	1	07/27/18	KCA	SW8270D
Benz(a)anthracene	2300	250	ug/Kg	1	07/27/18	KCA	SW8270D
Benzo(a)pyrene	2300	250	ug/Kg	1	07/27/18	KCA	SW8270D
Benzo(b)fluoranthene	2200	250	ug/Kg	1	07/27/18	KCA	SW8270D
Benzo(ghi)perylene	1300	250	ug/Kg	1	07/27/18	KCA	SW8270D
Benzo(k)fluoranthene	1700	250	ug/Kg	1	07/27/18	KCA	SW8270D
Chrysene	2300	250	ug/Kg	1	07/27/18	KCA	SW8270D
Dibenz(a,h)anthracene	330	250	ug/Kg	1	07/27/18	KCA	SW8270D
Fluoranthene	3900	250	ug/Kg	1	07/27/18	KCA	SW8270D
Fluorene	ND	250	ug/Kg	1	07/27/18	KCA	SW8270D
Indeno(1,2,3-cd)pyrene	1600	250	ug/Kg	1	07/27/18	KCA	SW8270D
Naphthalene	ND	250	ug/Kg	1	07/27/18	KCA	SW8270D
Phenanthrene	2000	250	ug/Kg	1	07/27/18	KCA	SW8270D
Pyrene	3700	250	ug/Kg	1	07/27/18	KCA	SW8270D
QA/QC Surrogates							
% 2-Fluorobiphenyl	76		%	1	07/27/18	KCA	30 - 130 %
% Nitrobenzene-d5	69		%	1	07/27/18	KCA	30 - 130 %
% Terphenyl-d14	76		%	1	07/27/18	KCA	30 - 130 %
Field Extraction	Completed				07/25/18		SW5035A

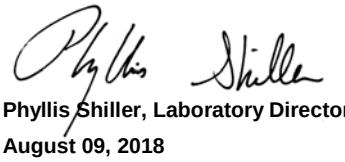
RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

TPH Comment:
**Petroleum hydrocarbon chromatogram contains a multicomponent hydrocarbon distribution in the range of C12 to C36. The sample was quantitated against a C9-C36 alkane hydrocarbon standard.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services.
This report must not be reproduced except in full as defined by the attached chain of custody.



Phyllis Shiller, Laboratory Director
August 09, 2018
Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

August 09, 2018

FOR: Attn: Lynn Willey
Tighe & Bond
213 Court St, Suite 1100
Middletown, CT 06457

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		07/25/18	13:30
Location Code:	TIGHE-DAS	Received by:	CP	07/25/18	16:22
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	14-0755-44B				

Laboratory Data

SDG ID: GCA98174
Phoenix ID: CA98183

Project ID: ROCKVILLE MGP
Client ID: SB-49 (3-5FT)

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 2.5	2.5	mg/Kg	1	07/27/18	CPP	SW6010C
Arsenic	147	0.76	mg/Kg	1	07/27/18	CPP	SW6010C
Barium	80.3	0.38	mg/Kg	1	07/27/18	CPP	SW6010C
Beryllium	0.86	0.30	mg/Kg	1	07/27/18	CPP	SW6010C
Cadmium	0.51	0.38	mg/Kg	1	07/27/18	CPP	SW6010C
Chromium	7.30	0.38	mg/Kg	1	07/27/18	CPP	SW6010C
Copper	42.6	0.8	mg/kg	1	07/27/18	CPP	SW6010C
Mercury	< 0.03	0.03	mg/Kg	1	07/26/18	RS	SW7471B
Nickel	14.1	0.38	mg/Kg	1	07/27/18	CPP	SW6010C
Lead	10.4	0.38	mg/Kg	1	07/27/18	CPP	SW6010C
Antimony	< 3.8	3.8	mg/Kg	1	07/27/18	CPP	SW6010C
Selenium	15.5	1.5	mg/Kg	1	07/27/18	EK	SW6010C
Thallium	< 3.4	3.4	mg/Kg	1	07/27/18	CPP	SW6010C
Vanadium	19.9	0.38	mg/Kg	1	07/27/18	CPP	SW6010C
Zinc	27.3	0.8	mg/Kg	1	07/27/18	CPP	SW6010C
Percent Solid	94		%		07/26/18	q	SW846-%Solid
Total Cyanide (SW9010C Distill.)	2.72	0.53	mg/Kg	1	07/27/18	O/GD	SW9012B
Soil Extraction SVOA PAH	Completed				07/26/18	VS/IG/CKV	SW3545A
Extraction of CT ETPH	Completed				07/26/18	VS/VCK	SW3545A
Mercury Digestion	Completed				07/26/18	I/I	SW7471B
Total Metals Digest	Completed				07/26/18	KD/AG	SW3050B
TPH by GC (Extractable Products)							
Ext. Petroleum H.C. (C9-C36)	ND	53	mg/Kg	1	07/26/18	JRB	CTETPH 8015D
Identification	ND		mg/Kg	1	07/26/18	JRB	CTETPH 8015D
QA/QC Surrogates							
% n-Pentacosane	89		%	1	07/26/18	JRB	50 - 150 %

Ver 1

Project ID: ROCKVILLE MGP
Client ID: SB-49 (3-5FT)

Phoenix I.D.: CA98183

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Volatiles							
1,1,1,2-Tetrachloroethane	ND	11	ug/Kg	1	07/27/18	JLI	SW8260C
1,1,1-Trichloroethane	ND	11	ug/Kg	1	07/27/18	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	100	ug/Kg	50	07/27/18	JLI	SW8260C
1,1,2-Trichloroethane	ND	11	ug/Kg	1	07/27/18	JLI	SW8260C
1,1-Dichloroethane	ND	11	ug/Kg	1	07/27/18	JLI	SW8260C
1,1-Dichloroethene	ND	11	ug/Kg	1	07/27/18	JLI	SW8260C
1,1-Dichloropropene	ND	11	ug/Kg	1	07/27/18	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	380	ug/Kg	50	07/27/18	JLI	SW8260C
1,2,3-Trichloropropane	ND	380	ug/Kg	50	07/27/18	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	380	ug/Kg	50	07/27/18	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	380	ug/Kg	50	07/27/18	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	11	ug/Kg	1	07/27/18	JLI	SW8260C
1,2-Dibromoethane	ND	7.0	ug/Kg	1	07/27/18	JLI	SW8260C
1,2-Dichlorobenzene	ND	380	ug/Kg	50	07/27/18	JLI	SW8260C
1,2-Dichloroethane	ND	11	ug/Kg	1	07/27/18	JLI	SW8260C
1,2-Dichloropropane	ND	11	ug/Kg	1	07/27/18	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	380	ug/Kg	50	07/27/18	JLI	SW8260C
1,3-Dichlorobenzene	ND	380	ug/Kg	50	07/27/18	JLI	SW8260C
1,3-Dichloropropane	ND	11	ug/Kg	1	07/27/18	JLI	SW8260C
1,4-Dichlorobenzene	ND	380	ug/Kg	50	07/27/18	JLI	SW8260C
2,2-Dichloropropane	ND	11	ug/Kg	1	07/27/18	JLI	SW8260C
2-Chlorotoluene	ND	380	ug/Kg	50	07/27/18	JLI	SW8260C
2-Hexanone	ND	54	ug/Kg	1	07/27/18	JLI	SW8260C
2-Isopropyltoluene	ND	380	ug/Kg	50	07/27/18	JLI	SW8260C
4-Chlorotoluene	ND	380	ug/Kg	50	07/27/18	JLI	SW8260C
4-Methyl-2-pentanone	ND	54	ug/Kg	1	07/27/18	JLI	SW8260C
Acetone	ND	540	ug/Kg	1	07/27/18	JLI	SW8260C
Acrylonitrile	ND	11	ug/Kg	1	07/27/18	JLI	SW8260C
Benzene	ND	11	ug/Kg	1	07/27/18	JLI	SW8260C
Bromobenzene	ND	380	ug/Kg	50	07/27/18	JLI	SW8260C
Bromochloromethane	ND	11	ug/Kg	1	07/27/18	JLI	SW8260C
Bromodichloromethane	ND	11	ug/Kg	1	07/27/18	JLI	SW8260C
Bromoform	ND	11	ug/Kg	1	07/27/18	JLI	SW8260C
Bromomethane	ND	11	ug/Kg	1	07/27/18	JLI	SW8260C
Carbon Disulfide	ND	11	ug/Kg	1	07/27/18	JLI	SW8260C
Carbon tetrachloride	ND	11	ug/Kg	1	07/27/18	JLI	SW8260C
Chlorobenzene	ND	11	ug/Kg	1	07/27/18	JLI	SW8260C
Chloroethane	ND	11	ug/Kg	1	07/27/18	JLI	SW8260C
Chloroform	ND	11	ug/Kg	1	07/27/18	JLI	SW8260C
Chloromethane	ND	11	ug/Kg	1	07/27/18	JLI	SW8260C
cis-1,2-Dichloroethene	ND	11	ug/Kg	1	07/27/18	JLI	SW8260C
cis-1,3-Dichloropropene	ND	11	ug/Kg	1	07/27/18	JLI	SW8260C
Dibromochloromethane	ND	6.5	ug/Kg	1	07/27/18	JLI	SW8260C
Dibromomethane	ND	11	ug/Kg	1	07/27/18	JLI	SW8260C
Dichlorodifluoromethane	ND	11	ug/Kg	1	07/27/18	JLI	SW8260C
Ethylbenzene	ND	11	ug/Kg	1	07/27/18	JLI	SW8260C
Hexachlorobutadiene	ND	380	ug/Kg	50	07/27/18	JLI	SW8260C
Isopropylbenzene	ND	380	ug/Kg	50	07/27/18	JLI	SW8260C

Project ID: ROCKVILLE MGP
Client ID: SB-49 (3-5FT)

Phoenix I.D.: CA98183

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
m&p-Xylene	ND	11	ug/Kg	1	07/27/18	JLI	SW8260C
Methyl Ethyl Ketone	ND	65	ug/Kg	1	07/27/18	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	22	ug/Kg	1	07/27/18	JLI	SW8260C
Methylene chloride	ND	22	ug/Kg	1	07/27/18	JLI	SW8260C
Naphthalene	ND	380	ug/Kg	50	07/27/18	JLI	SW8260C
n-Butylbenzene	ND	380	ug/Kg	50	07/27/18	JLI	SW8260C
n-Propylbenzene	ND	380	ug/Kg	50	07/27/18	JLI	SW8260C
o-Xylene	ND	11	ug/Kg	1	07/27/18	JLI	SW8260C
p-Isopropyltoluene	ND	380	ug/Kg	50	07/27/18	JLI	SW8260C
sec-Butylbenzene	ND	380	ug/Kg	50	07/27/18	JLI	SW8260C
Styrene	ND	11	ug/Kg	1	07/27/18	JLI	SW8260C
tert-Butylbenzene	ND	380	ug/Kg	50	07/27/18	JLI	SW8260C
Tetrachloroethene	ND	11	ug/Kg	1	07/27/18	JLI	SW8260C
Tetrahydrofuran (THF)	ND	22	ug/Kg	1	07/27/18	JLI	SW8260C
Toluene	ND	11	ug/Kg	1	07/27/18	JLI	SW8260C
Total Xylenes	ND	11	ug/Kg	1	07/27/18	JLI	SW8260C
trans-1,2-Dichloroethene	ND	11	ug/Kg	1	07/27/18	JLI	SW8260C
trans-1,3-Dichloropropene	ND	11	ug/Kg	1	07/27/18	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	770	ug/Kg	50	07/27/18	JLI	SW8260C
Trichloroethene	ND	11	ug/Kg	1	07/27/18	JLI	SW8260C
Trichlorofluoromethane	ND	11	ug/Kg	1	07/27/18	JLI	SW8260C
Trichlorotrifluoroethane	ND	11	ug/Kg	1	07/27/18	JLI	SW8260C
Vinyl chloride	ND	11	ug/Kg	1	07/27/18	JLI	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	100		%	50	07/27/18	JLI	70 - 130 %
% Bromofluorobenzene	99		%	50	07/27/18	JLI	70 - 130 %
% Dibromofluoromethane	101		%	1	07/27/18	JLI	70 - 130 %
% Toluene-d8	96		%	1	07/27/18	JLI	70 - 130 %
Polynuclear Aromatic HC							
2-Methylnaphthalene	ND	250	ug/Kg	1	07/30/18	HM	SW8270D
Acenaphthene	ND	250	ug/Kg	1	07/30/18	HM	SW8270D
Acenaphthylene	ND	250	ug/Kg	1	07/30/18	HM	SW8270D
Anthracene	ND	250	ug/Kg	1	07/30/18	HM	SW8270D
Benz(a)anthracene	ND	250	ug/Kg	1	07/30/18	HM	SW8270D
Benzo(a)pyrene	ND	250	ug/Kg	1	07/30/18	HM	SW8270D
Benzo(b)fluoranthene	ND	250	ug/Kg	1	07/30/18	HM	SW8270D
Benzo(ghi)perylene	ND	250	ug/Kg	1	07/30/18	HM	SW8270D
Benzo(k)fluoranthene	ND	250	ug/Kg	1	07/30/18	HM	SW8270D
Chrysene	ND	250	ug/Kg	1	07/30/18	HM	SW8270D
Dibenz(a,h)anthracene	ND	250	ug/Kg	1	07/30/18	HM	SW8270D
Fluoranthene	ND	250	ug/Kg	1	07/30/18	HM	SW8270D
Fluorene	ND	250	ug/Kg	1	07/30/18	HM	SW8270D
Indeno(1,2,3-cd)pyrene	ND	250	ug/Kg	1	07/30/18	HM	SW8270D
Naphthalene	ND	250	ug/Kg	1	07/30/18	HM	SW8270D
Phenanthrene	ND	250	ug/Kg	1	07/30/18	HM	SW8270D
Pyrene	330	250	ug/Kg	1	07/30/18	HM	SW8270D
QA/QC Surrogates							
% 2-Fluorobiphenyl	71		%	1	07/30/18	HM	30 - 130 %
% Nitrobenzene-d5	65		%	1	07/30/18	HM	30 - 130 %

Ver 1

Project ID: ROCKVILLE MGP
Client ID: SB-49 (3-5FT)

Phoenix I.D.: CA98183

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% Terphenyl-d14	69		%	1	07/30/18	HM	30 - 130 %
Field Extraction	Completed				07/25/18		SW5035A

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Volatile Comment:
Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

Volatile Comment:
There was a suppression of the last internal standard in the low level analysis, all affected compounds are reported from the methanol preserved high level analysis which did not exhibit this interference.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services.
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Phyllis Shiller, Laboratory Director
August 09, 2018
Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

August 09, 2018

FOR: Attn: Lynn Willey
Tighe & Bond
213 Court St, Suite 1100
Middletown, CT 06457

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		07/25/18	14:50
Location Code:	TIGHE-DAS	Received by:	CP	07/25/18	16:22
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	14-0755-44B				

Laboratory Data

SDG ID: GCA98174
Phoenix ID: CA98185

Project ID: ROCKVILLE MGP
Client ID: SB-52 (16-18FT)

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 2.5	2.5	mg/Kg	1	07/27/18	CPP	SW6010C
Arsenic	1.53	0.76	mg/Kg	1	07/27/18	CPP	SW6010C
Barium	36.9	0.38	mg/Kg	1	07/27/18	CPP	SW6010C
Beryllium	0.81	0.30	mg/Kg	1	07/27/18	CPP	SW6010C
Cadmium	0.45	0.38	mg/Kg	1	07/27/18	CPP	SW6010C
Chromium	26.5	0.38	mg/Kg	1	07/27/18	CPP	SW6010C
Copper	15.9	0.8	mg/kg	1	07/27/18	CPP	SW6010C
Mercury	< 0.03	0.03	mg/Kg	1	07/26/18	RS	SW7471B
Nickel	20.6	0.38	mg/Kg	1	07/27/18	CPP	SW6010C
Lead	8.75	0.38	mg/Kg	1	07/27/18	CPP	SW6010C
Antimony	< 3.8	3.8	mg/Kg	1	07/27/18	CPP	SW6010C
Selenium	< 1.5	1.5	mg/Kg	1	07/27/18	CPP	SW6010C
Thallium	< 3.4	3.4	mg/Kg	1	07/27/18	CPP	SW6010C
Vanadium	35.1	0.38	mg/Kg	1	07/27/18	CPP	SW6010C
Zinc	73.1	0.8	mg/Kg	1	07/27/18	CPP	SW6010C
Percent Solid	89		%		07/26/18	q	SW846-%Solid
Total Cyanide (SW9010C Distill.)	34.3	0.51	mg/Kg	1	07/27/18	O/GD	SW9012B
Soil Extraction SVOA PAH	Completed				07/26/18	VS/IG/CKV	SW3545A
Extraction of CT ETPH	Completed				07/26/18	VS/VCK	SW3545A
Mercury Digestion	Completed				07/26/18	I/I	SW7471B
Total Metals Digest	Completed				07/26/18	KD/AG	SW3050B
TPH by GC (Extractable Products)							
Ext. Petroleum H.C. (C9-C36)	4200	280	mg/Kg	5	07/27/18	JRB	CTETPH 8015D
Identification	**		mg/Kg	5	07/27/18	JRB	CTETPH 8015D
QA/QC Surrogates							
% n-Pentacosane	123		%	5	07/27/18	JRB	50 - 150 %

Ver 1

Project ID: ROCKVILLE MGP
Client ID: SB-52 (16-18FT)

Phoenix I.D.: CA98185

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Volatiles							
1,1,1,2-Tetrachloroethane	ND	200	ug/Kg	100	07/28/18	JLI	SW8260C
1,1,1-Trichloroethane	ND	680	ug/Kg	100	07/28/18	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	140	ug/Kg	100	07/28/18	JLI	SW8260C
1,1,2-Trichloroethane	ND	680	ug/Kg	100	07/28/18	JLI	SW8260C
1,1-Dichloroethane	ND	680	ug/Kg	100	07/28/18	JLI	SW8260C
1,1-Dichloroethene	ND	680	ug/Kg	100	07/28/18	JLI	SW8260C
1,1-Dichloropropene	ND	680	ug/Kg	100	07/28/18	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	680	ug/Kg	100	07/28/18	JLI	SW8260C
1,2,3-Trichloropropane	ND	680	ug/Kg	100	07/28/18	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	680	ug/Kg	100	07/28/18	JLI	SW8260C
1,2,4-Trimethylbenzene	3400	680	ug/Kg	100	07/28/18	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	140	ug/Kg	100	07/28/18	JLI	SW8260C
1,2-Dibromoethane	ND	68	ug/Kg	100	07/28/18	JLI	SW8260C
1,2-Dichlorobenzene	ND	680	ug/Kg	100	07/28/18	JLI	SW8260C
1,2-Dichloroethane	ND	200	ug/Kg	100	07/28/18	JLI	SW8260C
1,2-Dichloropropane	ND	680	ug/Kg	100	07/28/18	JLI	SW8260C
1,3,5-Trimethylbenzene	1600	680	ug/Kg	100	07/28/18	JLI	SW8260C
1,3-Dichlorobenzene	ND	680	ug/Kg	100	07/28/18	JLI	SW8260C
1,3-Dichloropropane	ND	680	ug/Kg	100	07/28/18	JLI	SW8260C
1,4-Dichlorobenzene	ND	680	ug/Kg	100	07/28/18	JLI	SW8260C
2,2-Dichloropropane	ND	680	ug/Kg	100	07/28/18	JLI	SW8260C
2-Chlorotoluene	ND	680	ug/Kg	100	07/28/18	JLI	SW8260C
2-Hexanone	ND	3400	ug/Kg	100	07/28/18	JLI	SW8260C
2-Isopropyltoluene	ND	680	ug/Kg	100	07/28/18	JLI	SW8260C
4-Chlorotoluene	ND	680	ug/Kg	100	07/28/18	JLI	SW8260C
4-Methyl-2-pentanone	ND	3400	ug/Kg	100	07/28/18	JLI	SW8260C
Acetone	ND	34000	ug/Kg	100	07/28/18	JLI	SW8260C
Acrylonitrile	ND	100	ug/Kg	100	07/28/18	JLI	SW8260C
Benzene	ND	200	ug/Kg	100	07/28/18	JLI	SW8260C
Bromobenzene	ND	680	ug/Kg	100	07/28/18	JLI	SW8260C
Bromochloromethane	ND	680	ug/Kg	100	07/28/18	JLI	SW8260C
Bromodichloromethane	ND	210	ug/Kg	100	07/28/18	JLI	SW8260C
Bromoform	ND	680	ug/Kg	100	07/28/18	JLI	SW8260C
Bromomethane	ND	680	ug/Kg	100	07/28/18	JLI	SW8260C
Carbon Disulfide	ND	680	ug/Kg	100	07/28/18	JLI	SW8260C
Carbon tetrachloride	ND	680	ug/Kg	100	07/28/18	JLI	SW8260C
Chlorobenzene	ND	680	ug/Kg	100	07/28/18	JLI	SW8260C
Chloroethane	ND	680	ug/Kg	100	07/28/18	JLI	SW8260C
Chloroform	ND	680	ug/Kg	100	07/28/18	JLI	SW8260C
Chloromethane	ND	680	ug/Kg	100	07/28/18	JLI	SW8260C
cis-1,2-Dichloroethene	ND	680	ug/Kg	100	07/28/18	JLI	SW8260C
cis-1,3-Dichloropropene	ND	100	ug/Kg	100	07/28/18	JLI	SW8260C
Dibromochloromethane	ND	140	ug/Kg	100	07/28/18	JLI	SW8260C
Dibromomethane	ND	680	ug/Kg	100	07/28/18	JLI	SW8260C
Dichlorodifluoromethane	ND	680	ug/Kg	100	07/28/18	JLI	SW8260C
Ethylbenzene	ND	680	ug/Kg	100	07/28/18	JLI	SW8260C
Hexachlorobutadiene	ND	680	ug/Kg	100	07/28/18	JLI	SW8260C
Isopropylbenzene	ND	680	ug/Kg	100	07/28/18	JLI	SW8260C

Ver 1

Project ID: ROCKVILLE MGP
Client ID: SB-52 (16-18FT)

Phoenix I.D.: CA98185

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
m&p-Xylene	ND	680	ug/Kg	100	07/28/18	JLI	SW8260C
Methyl Ethyl Ketone	ND	4100	ug/Kg	100	07/28/18	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	1400	ug/Kg	100	07/28/18	JLI	SW8260C
Methylene chloride	ND	1000	ug/Kg	100	07/28/18	JLI	SW8260C
Naphthalene	12000	680	ug/Kg	100	07/28/18	JLI	SW8260C
n-Butylbenzene	830	680	ug/Kg	100	07/28/18	JLI	SW8260C
n-Propylbenzene	ND	680	ug/Kg	100	07/28/18	JLI	SW8260C
o-Xylene	ND	680	ug/Kg	100	07/28/18	JLI	SW8260C
p-Isopropyltoluene	1800	680	ug/Kg	100	07/28/18	JLI	SW8260C
sec-Butylbenzene	ND	680	ug/Kg	100	07/28/18	JLI	SW8260C
Styrene	ND	680	ug/Kg	100	07/28/18	JLI	SW8260C
tert-Butylbenzene	ND	680	ug/Kg	100	07/28/18	JLI	SW8260C
Tetrachloroethene	ND	680	ug/Kg	100	07/28/18	JLI	SW8260C
Tetrahydrofuran (THF)	ND	800	ug/Kg	100	07/28/18	JLI	SW8260C
Toluene	ND	680	ug/Kg	100	07/28/18	JLI	SW8260C
Total Xylenes	ND	680	ug/Kg	100	07/28/18	JLI	SW8260C
trans-1,2-Dichloroethene	ND	680	ug/Kg	100	07/28/18	JLI	SW8260C
trans-1,3-Dichloropropene	ND	100	ug/Kg	100	07/28/18	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	1400	ug/Kg	100	07/28/18	JLI	SW8260C
Trichloroethene	ND	680	ug/Kg	100	07/28/18	JLI	SW8260C
Trichlorofluoromethane	ND	680	ug/Kg	100	07/28/18	JLI	SW8260C
Trichlorotrifluoroethane	ND	680	ug/Kg	100	07/28/18	JLI	SW8260C
Vinyl chloride	ND	320	ug/Kg	100	07/28/18	JLI	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	98		%	100	07/28/18	JLI	70 - 130 %
% Bromofluorobenzene	103		%	100	07/28/18	JLI	70 - 130 %
% Dibromofluoromethane	94		%	100	07/28/18	JLI	70 - 130 %
% Toluene-d8	99		%	100	07/28/18	JLI	70 - 130 %
Polynuclear Aromatic HC							
2-Methylnaphthalene	45000	2600	ug/Kg	10	07/27/18	KCA	SW8270D
Acenaphthene	31000	2600	ug/Kg	10	07/27/18	KCA	SW8270D
Acenaphthylene	9900	2600	ug/Kg	10	07/27/18	KCA	SW8270D
Anthracene	24000	2600	ug/Kg	10	07/27/18	KCA	SW8270D
Benz(a)anthracene	12000	1200	ug/Kg	10	07/27/18	KCA	SW8270D
Benzo(a)pyrene	7900	1200	ug/Kg	10	07/27/18	KCA	SW8270D
Benzo(b)fluoranthene	3900	1300	ug/Kg	10	07/27/18	KCA	SW8270D
Benzo(ghi)perylene	3700	1200	ug/Kg	10	07/27/18	KCA	SW8270D
Benzo(k)fluoranthene	6600	1200	ug/Kg	10	07/27/18	KCA	SW8270D
Chrysene	14000	1200	ug/Kg	10	07/27/18	KCA	SW8270D
Dibenz(a,h)anthracene	ND	1200	ug/Kg	10	07/27/18	KCA	SW8270D
Fluoranthene	17000	2600	ug/Kg	10	07/27/18	KCA	SW8270D
Fluorene	26000	2600	ug/Kg	10	07/27/18	KCA	SW8270D
Indeno(1,2,3-cd)pyrene	3500	1200	ug/Kg	10	07/27/18	KCA	SW8270D
Naphthalene	4800	2600	ug/Kg	10	07/27/18	KCA	SW8270D
Phenanthrene	53000	2600	ug/Kg	10	07/27/18	KCA	SW8270D
Pyrene	29000	2600	ug/Kg	10	07/27/18	KCA	SW8270D
QA/QC Surrogates							
% 2-Fluorobiphenyl	66		%	10	07/27/18	KCA	30 - 130 %
% Nitrobenzene-d5	66		%	10	07/27/18	KCA	30 - 130 %

Ver 1

Project ID: ROCKVILLE MGP
Client ID: SB-52 (16-18FT)
Phoenix I.D.: CA98185

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% Terphenyl-d14	70		%	10	07/27/18	KCA	30 - 130 %
Field Extraction	Completed				07/25/18		SW5035A

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Semi-Volatile Comment:
Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

Semi-Volatile Comment:
Due to a matrix interference and/or the presence of a large amount of non-target material in the sample, a dilution was required resulting in an elevated RL for the semivolatile analysis.

TPH Comment:
**Petroleum hydrocarbon chromatogram contains a multicomponent hydrocarbon distribution in the range of C9 to C36. The sample was quantitated against a C9-C36 alkane hydrocarbon standard.

Volatile Comment:
Elevated reporting limits for volatiles due to the presence of target and/or non-target compounds.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services.
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Phyllis Shiller, Laboratory Director
August 09, 2018
Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

August 09, 2018

QA/QC Data

SDG I.D.: GCA98174

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 440684 (mg/L), QC Sample No: CA96173 (CA98178, CA98181)													
ICP Metals - SPLP Extraction													
Antimony	BRL	0.005	<0.005	<0.005	NC	94.0			110			75 - 125	20
Arsenic	BRL	0.004	<0.004	<0.004	NC	91.4			105			75 - 125	20
Barium	BRL	0.010	0.025	0.026	NC	104			98.1			75 - 125	20
Beryllium	BRL	0.001	<0.001	<0.001	NC	98.6			97.1			75 - 125	20
Cadmium	BRL	0.005	<0.005	<0.005	NC	90.5			105			75 - 125	20
Chromium	BRL	0.010	0.003	0.003	NC	90.9			105			75 - 125	20
Copper	BRL	0.010	0.006	0.006	NC	100			94.4			75 - 125	20
Lead	BRL	0.010	0.011	0.011	NC	91.4			106			75 - 125	20
Nickel	BRL	0.010	0.005	0.003	NC	92.4			107			75 - 125	20
Selenium	BRL	0.020	<0.020	<0.020	NC	96.6			110			75 - 125	20
Silver	BRL	0.010	<0.010	<0.010	NC	93.8			92.0			75 - 125	20
Thallium	BRL	0.005	<0.005	<0.005	NC	91.4			106			75 - 125	20
Vanadium	BRL	0.010	0.005	0.006	NC	98.2			94.3			75 - 125	20
Zinc	BRL	0.010	0.024	0.024	NC	90.7			105			75 - 125	20
QA/QC Batch 440639 (mg/L), QC Sample No: CA96173 (CA98178, CA98181)													
Mercury - Water	BRL	0.0002	<0.0002	<0.0002	NC	99.0			87.6			80 - 120	20
Comment:													
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.													
QA/QC Batch 442012 (mg/L), QC Sample No: CA96215 (CA98176, CA98182)													
ICP Metals - SPLP Extraction													
Antimony	BRL	0.005	<0.005	<0.005	NC	104			105			75 - 125	20
Arsenic	BRL	0.004	<0.004	<0.004	NC	96.1			99.3			75 - 125	20
Barium	BRL	0.010	0.035	0.035	NC	104			104			75 - 125	20
Beryllium	BRL	0.001	<0.001	<0.001	NC	101			103			75 - 125	20
Cadmium	BRL	0.005	<0.005	<0.005	NC	99.9			102			75 - 125	20
Chromium	BRL	0.010	<0.010	<0.010	NC	99.3			99.1			75 - 125	20
Copper	BRL	0.010	<0.010	<0.010	NC	102			103			75 - 125	20
Lead	BRL	0.010	<0.010	<0.010	NC	99.3			99.4			75 - 125	20
Nickel	BRL	0.010	<0.010	<0.010	NC	98.7			99.2			75 - 125	20
Selenium	BRL	0.020	<0.020	<0.020	NC	99.1			100			75 - 125	20
Silver	BRL	0.010	<0.010	<0.010	NC	98.9			99.8			75 - 125	20
Thallium	BRL	0.005	<0.005	<0.005	NC	100			101			75 - 125	20
Vanadium	BRL	0.010	<0.010	<0.010	NC	99.7			101			75 - 125	20
Zinc	BRL	0.010	<0.010	<0.010	NC	101			102			75 - 125	20
QA/QC Batch 440453 (mg/L), QC Sample No: CA97658 (CA98174)													
ICP Metals - SPLP Extraction													
Antimony	BRL	0.005	<0.005	<0.005	NC	99.0			94.2			75 - 125	20
Arsenic	BRL	0.004	<0.004	<0.004	NC	98.4			92.9			75 - 125	20
Barium	BRL	0.010	<0.010	<0.010	NC	102			102			75 - 125	20
Beryllium	BRL	0.001	<0.001	<0.001	NC	99.5			99.6			75 - 125	20

QA/QC Data

SDG I.D.: GCA98174

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Cadmium	BRL	0.005	<0.005	<0.005	NC	101			93.9			75 - 125	20	
Chromium	BRL	0.010	<0.010	<0.010	NC	98.3			92.3			75 - 125	20	
Copper	BRL	0.010	<0.010	<0.010	NC	100			99.9			75 - 125	20	
Lead	BRL	0.010	<0.010	<0.010	NC	99.5			93.2			75 - 125	20	
Nickel	BRL	0.010	<0.010	<0.010	NC	101			94.4			75 - 125	20	
Selenium	BRL	0.020	<0.020	<0.020	NC	98.9			95.1			75 - 125	20	
Silver	BRL	0.010	<0.010	<0.010	NC	95.4			96.8			75 - 125	20	
Thallium	BRL	0.005	<0.005	<0.005	NC	97.9			92.7			75 - 125	20	
Vanadium	BRL	0.010	<0.010	<0.010	NC	97.6			98.3			75 - 125	20	
Zinc	BRL	0.010	<0.010	0.010	NC	101			101			75 - 125	20	
QA/QC Batch 440447 (mg/L), QC Sample No: CA97790 (CA98174)														
Mercury - Water	BRL	0.0002	<0.0002	0.0002	NC	87.9			77.0			80 - 120	20	
Comment:														
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.														
QA/QC Batch 440468 (mg/kg), QC Sample No: CA98143 (CA98174, CA98175, CA98176, CA98177, CA98178, CA98179, CA98180, CA98181, CA98182, CA98183, CA98185)														
Mercury - Soil	BRL	0.03	<0.03	<0.03	NC	81.8	72.5	12.1	35.5			70 - 130	30	m
Comment:														
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.														
QA/QC Batch 440564 (mg/kg), QC Sample No: CA98176 (CA98174, CA98175, CA98176, CA98177, CA98178, CA98179, CA98180, CA98181, CA98182, CA98183, CA98185)														
ICP Metals - Soil														
Antimony	BRL	3.4	<3.2	<3.7	NC	98.0			87.8			75 - 125	30	
Arsenic	BRL	0.68	6.02	5.19	14.8	101			86.2			75 - 125	30	
Barium	BRL	0.34	47.9	50.3	4.90	100			102			75 - 125	30	
Beryllium	BRL	0.27	0.33	0.34	NC	98.6			90.4			75 - 125	30	
Cadmium	BRL	0.34	0.70	0.75	NC	94.1			86.6			75 - 125	30	
Chromium	BRL	0.34	24.8	25.6	3.20	105			92.0			75 - 125	30	
Copper	BRL	0.68	35.8	31.8	11.8	96.7			92.9			75 - 125	30	
Lead	BRL	0.34	147	126	15.4	96.6			81.3			75 - 125	30	
Nickel	BRL	0.34	9.58	8.29	14.4	95.6			88.7			75 - 125	30	
Selenium	BRL	1.4	<1.3	<1.5	NC	112			77.6			75 - 125	30	
Silver	BRL	0.34	<2.5	<0.37	NC	101			92.2			75 - 125	30	
Thallium	BRL	3.0	<2.9	<3.4	NC	96.9			85.0			75 - 125	30	
Vanadium	BRL	0.34	33.7	26.0	25.8	109			89.6			75 - 125	30	
Zinc	BRL	0.68	104	117	11.8	98.3			103			75 - 125	30	
QA/QC Batch 442009 (mg/L), QC Sample No: CA98182 (CA98182)														
Mercury - Water	BRL	0.0002	<0.0002	<0.0002	NC	80.9			82.4			80 - 120	20	
Comment:														
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.														
QA/QC Batch 442008 (mg/L), QC Sample No: CB05482 (CA98176)														
Mercury - Water	BRL	0.0002	<0.0002	<0.0002	NC	86.9			84.5			80 - 120	20	
Comment:														
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.														

m = This parameter is outside laboratory MS/MSD specified recovery limits.

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QA/QC Report

August 09, 2018

QA/QC Data

SDG I.D.: GCA98174

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 440581 (mg/Kg), QC Sample No: CA98176 50X (CA98174, CA98175, CA98176, CA98177, CA98179, CA98180, CA98182, CA98183, CA98185)													
Total Cyanide (SW9010C Distill.)	BRL	0.50	<0.53	<0.53	NC	87.8			100			80 - 120	30

Comment:

Additional: LCS acceptance range is 80-120% for soils MS acceptance range 75-125% for soils