VOLUNTARY CLEANUP INVESTIGATION REPORT

Phase II Environmental Site Assessment

Former City Garage Operations
City of Leavenworth, Kansas
City Project Number 2020-930

2109 South 3rd Street
Leavenworth, Kansas 66048

Project Code: C4-052-73682

Kansas Department of Health and Environment
Bureau of Environmental Remediation
Voluntary Cleanup and Property Redevelopment Program
1000 SW Jackson, Suite 410
Topeka, Kansas 66612

SCS ENGINEERS

Project Number 27220109.01
November 2, 2020

8575 W. 110th St.
Overland Park, KS 66210
913-681-0030

November 2, 2020
Project 27220109.01

Mike McDonald, P.E.
Director of Public Works
City of Leavenworth
100 North 5th Street
Leavenworth, Kansas 66048

Subject: Voluntary Cleanup Investigation Report
Former City Garage/Old City Landfill
City Project Number 2020-930
2109 South 3rd Street
Leavenworth, Kansas

Dear Mr. McDonald:

Enclosed is our Voluntary Cleanup Investigation Report (VCI Report) prepared for the Former City Garage/Old City Landfill located at 2109 South 3rd Street, Leavenworth, Kansas. This environmental assessment was conducted in accordance with our VCI Work Plan submitted to the Kansas Department of Health & Environment (KDHE) – Bureau of Environmental Remediation (BER), Voluntary Cleanup and Property Redevelopment Program (VCPRP). The VCI Work Plan was approved by the VCPRP in project correspondence dated September 4, 2020. A copy of the VCI Report should be submitted to the VCPR for their review.

Please contact us at (913) 749-0706 if you have questions regarding the VCI Report. SCS Engineers greatly appreciates the opportunity to assist you with this project.

Sincerely,

Jeff Janzen
Staff Professional
SCS Engineers

Doug Dreiling, LRC
Senior Environmental Consultant
SCS Engineers

jdj/dnd

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1.0 EXECUTIVE SUMMARY

SCS Engineers (SCS) has completed a Phase II Environmental Site Assessment (ESA) for the City of Leavenworth Former City Garage Operation, addressed as 2109 South 3rd Street, Leavenworth, Kansas (Property or Subject Site). A detailed description for the Property and adjoining properties of relevance to this assessment is provided in Section 2.2 of this document. The Subject Site development history is discussed in Section 2.2.2.

There have been numerous past environmental assessments completed at the Subject Site and adjoining properties from 1989 through 2019; these are summarized in Section 2.2.3. This Voluntary Cleanup Investigation Report presents both past and current field and analytical data and provides a comprehensive evaluation of the combined assessment activities.

PRELIMINARY SUMMARY

The current investigation performed by SCS included advancement of eleven direct-push technology borings. Groundwater samples were collected from each boring with soil samples collected from four of the borings. Temporary piezometers were installed at each boring to facilitate collection of groundwater samples and also used to collect fluid-level monitoring data. Additionally, two indoor and one ambient air samples were collected from the Leavenworth Animal Control Building. Field assessment activities were performed in general accordance with the SCS *Voluntary Cleanup Investigation Work Plan – Revised* (VCI Work Plan) dated August 28, 2020. The VCI Work Plan was approved by the VCPRP in correspondence dated September 4, 2020.

An abbreviated summary of findings and conclusions are provided below. However, details are not included or fully developed in this section, and the report must be read in its entirety for a comprehensive understanding of the items contained herein. Analytical tables are included as **Section 9.0** and Figures are provided in **Section 10.0**.

Assessment Status of Identified COCs

Subject Site – Petroleum Hydrocarbons: Previous and the current assessments have identified primarily diesel- and oil-range petroleum hydrocarbons in soil and groundwater at the Subject Site. As groundwater is present at a shallow depth, a laterally pervasive impact to vadose zone soils is not expected. Therefore, it is our conclusion that additional vadose zone assessment in areas extending from the former fueling areas is unwarranted.

Conversely, it is expected that additional assessment of petroleum hydrocarbons and associated fuel-range volatile organic compounds (VOCs) and semi volatile organic compounds (SVOCs) in the capillary fringe and groundwater exceeding respective Kansas Department of Health & Environment (KDHE) Non-residential Tier 2 RSKs is warranted to the east. As the highest dissolved-phase total petroleum hydrocarbon (TPH) mid-range hydrocarbons (MRH) and TPH high-range hydrocarbons (HRH) concentrations have been shown to be present at the former fueling areas and migrating through the groundwater migration pathway, it is our conclusion that sufficient evidence has been obtained to enroll the Property with the KDHE Storage Tank Section. It would be the intention of the City of Leavenworth (City) to recover future assessment and potential remediation costs through the state reimbursement program. It is recommended that any future assessment be performed following enrollment. It is our evaluation that installation of monitoring wells at and near the Subject

Site would be beneficial to provide information for dissolved-phase plume stability and natural attenuation.

Offsite Properties – Petroleum Hydrocarbons: Specific to the south adjoining properties, historical information and previous field assessment and analytical data supports a conclusion that the subsurface at the northeast portion of the Price Chopper property and beneath South 3rd Street has also been impacted by petroleum hydrocarbons. Because of proximity, it is not unreasonable to conclude that the former onsite fueling areas could have affected the subsurface immediately north of the supermarket building, particularly through groundwater migration of contaminants. However, the possibility that some, most, or all of the observed contamination in this area originated from approximately 70 years of salvage operations at Lakes Auto Salvage. This would be expected to include releases at the surface that have migrated through vadose zone soil, with the potential to have also impacted shallow groundwater in this area. Therefore, we consider this entity to be a potentially responsible party.

Subject Site – VOCs in Proximity of East Asphalt Storage Area: The current assessment identified chlorinated solvent compounds including cis-1,2 dichloroethylene (cis-1,2 DCE), cis-1,2 dichloroethylene (trans-1,2 DCE), trichloroethene (TCE) and tetrachloroethene (PCE) in soil in the area of the former asphalt storage area. The compounds were identified in the shallow sample (approximately 1.5 to 3.5 feet below ground surface [bgs]) collected from Boring PB-3; however, they were not reported in the deeper sample collected at a depth of approximately 9 to 11 feet bgs. The associated groundwater sample at this location also did not report these compounds above minimum laboratory limits. This soil impact was not identified by previous assessments. It is possible that the origin may have been from past VOC use at the former City sign shop; however, this area is located near the northern portion of Lakes Auto Salvage operations. It is likely these compounds were introduced at the surface due to their presence in shallow soil, and are now effectively "capped" onsite by the engineered fill placed during site grading and construction of the Leavenworth Animal Control (LAC) Building. It is important to understand that grading was completed through this portion of the Subject Site in all directions to the approximate south Property boundary. Conversely, they may be present in surface soil at the south adjoining Lakes Auto Salvage operations. Because of the limited extent in soil, absence of detectable groundwater concentrations and placement of the soil cap, we consider this issue effectively addressed for the Subject Site.

Subject Site – VOCs in Proximity of Former Sign Shop: VOCs were used at the former sign shop and paint and paint thinner waste was identified in surface soil during a KDHE compliance inspection in 1991. The location of the reported area was immediately north of the former building. Soil samples were collected to a maximum depth of approximately 24 inches in this area in late 1991 and analyzed for Toxicity Characteristic Leaching Potential (TCLP) Resource Conservation and Recovery Act (RCRA) metals, TCLP SVOCs and TCLP VOCs. The soil samples were also analyzed for VOCs, with ethylbenzene and toluene reported above minimum detection limits. Subsequently, approximately 60 tons of contaminated soil was excavated at disposed of offsite.

As this area is located beneath the LAC Building footprint, soil samples could not be collected by SCS. However, this area was assessed by collecting groundwater samples from Borings PB-3, PB-7 and PB-8 surrounding the former sign shop. A number of VOCs were reported in Borings PB-7 and PB-8; however, only benzene (PB-7 and PB-8) and naphthalene (PB-8) exceeded the Tier 2 Residential and Non-residential Groundwater Pathway RSKs. The groundwater sample collected from Boring PB-11 located in the northeast most part of the Subject Site also reported benzene, but below the Tier 2 Residential Groundwater Pathway RSK; no naphthalene, toluene or ethylbenzene was reported above minimum laboratory limits. Additionally, the aforementioned Boring PB-3 at the former east asphalt storage area reported only 1,4-dichlorobenzene and naphthalene (0.0028 mg/L)

in groundwater, slightly above the Tier 2 Residential and Non-residential Groundwater Pathway RSKs of 0.00111 and 0.00211 mg/L.

The occurrence of dissolved-phase benzene, naphthalene and other non-chlorinated solvent VOCs in this area may be related to the former sign shop or associated with the TPH-MRH and TPH-HRH impact. In either case, the identified VOCs have been assessed in groundwater to below the Tier 2 RSKs in all directions aside to the east and southeast. If additional assessment is considered appropriate specifically for these VOCs, it can be accomplished while conducting the additional assessment recommended above for petroleum hydrocarbons.

Subject Site – RCRA Metals at Former East Asphalt Storage Area: The only RCRA metal in soil samples collected as part of current and previous onsite assessments exceeding a Tier 2 Residential or Non-residential RSK was total lead at Boring PB-3 (4,770 mg/kg; approximately 9 to 11 feet bgs). However, elevated lead was not indicated in the sample collected immediately above this depth from approximately 1.5 to 3.5 feet bgs. The elevated concentration observed only at depth would not be expected unless it is associated with fill material placed during or after realignment of the Creek channel. No dissolved lead exceeding the minimum laboratory reporting limit was exhibited in the associated groundwater sample at this location. As no direct human exposure is expected in this area, we conclude additional onsite assessment is not warranted. It is noted that elevated metals were identified in the south portion of the Property during the Brownfields Targeted Assessment (BTA) conducted by the United States Environmental Protection Agency (USEPA) in 1999. However, based on our sampling results, the previous data is expected to have been for total lead, rather than dissolved lead in groundwater.

Subject Site – Dissolved RCRA Metals: Groundwater results from six sampling locations exhibited only three dissolved metal concentrations exceeding Tier 2 Non-residential and Residential RSKs across the Subject Site. They include arsenic (PB-5; 0.0486 mg/L), barium (PB-8; 5.19 mg/L) and lead (PB-10; 0.02161 mg/L); the remaining seven metals at all these locations were below the Tier 2 RSKs. The elevated lead present in the northwest portion of the Subject Site is likely associated with known lead contamination at the former GNB, Inc. facility identified in the 1999 BTA. The origin for the elevated dissolved arsenic and barium is not known; however, it is noted that both locations are near the former Creek channel filled by USACE in the late 1960's. As these limited occurrences are not laterally continuous, it is our conclusion that additional groundwater assessment is not necessary as human and ecological receptors are adequately protected. Also as discussed in the preceding paragraph, it is our conclusion that elevated metal concentrations identified at the Subject Site by USEPA in 1999 were analyzed as total, rather than dissolved metals.

South Adjoining Property – RCRA Metals: The 2019 Environmental Works, Incorporated (EWI) investigation at the south adjoining property identified elevated total lead in soil in the general vicinity of present day South 3rd Street. Elevated lead is present near the northeastern corner of the supermarket building, extending southward along the west side of the street. However, no dissolved-phase total lead concentrations were reported above minimum laboratory limits in groundwater samples from Borings SB-5 and SB-7. The analytical data supports a conclusion that lead impacts in this area are likely due to former Lakes Auto Salvage operations in this area, and not related to former City operations further to the north.

Subject Site and South Adjoining Properties – Other Regulated Compounds: Other regulated compounds identified by previous studies, including pesticides, 2,6-dinitrotoluene and polychlorinated biphenyls (PCBs) were not detected above minimum laboratory reporting limits in SCS soil or groundwater samples collected within the Subject Site boundary. Therefore, we conclude these compounds are adequately assessed onsite. Furthermore, it is our professional opinion these

compounds are more likely to have originated from the former Lakes Auto Salvage. Our research has identified that 2,6-dinitrotoluene is commonly used for explosives, including automotive air bags. It should be noted that the KDHE-BER Site Assessment Unit will conduct a separate field assessment for 2,6-dinitrotoluene in this area and south and east in proximity to Five Mile Creek. Per previous agreement, the resulting analytical data will be submitted to the City for review.

Recommendations

SCS recommends that the Kansas Voluntary Cleanup and Property Redevelopment Program (VCPRP) reevaluate what future regulatory oversight is necessary for this Property, as in our professional opinion, the identified contaminants of concern (COC) that requires additional groundwater assessment or potential remediation are petroleum hydrocarbons (and associated VOCs/SVOCs). We recommended that the City enroll and submit this Property for oversight and reimbursement costs through the KDHE Bureau of Environmental Remediation (BER) Storage Tank Reimbursement Program. We therefore, also ask the VCPRP to provide a specific determination whether non-fuel related substances identified at the Subject Site have been effectively addressed. Also in our professional opinion, additional assessment for the south adjoining properties, if required, should be led by Lakes Auto Salvage as the potentially responsible party.

LIMITATIONS

It should be understood our Phase II ESA findings and conclusions will not be scientific certainties, but rather opinions based on our professional judgment concerning the significance of the data reviewed or obtained during the course of the study. SCS does not and cannot represent that the Property contains no hazardous or toxic materials, products, or other latent conditions beyond that observed by SCS during the soil, groundwater and air sampling activities. Further, the services herein shall in no way be construed, designed, or intended to be relied upon as legal interpretation or advice.

2.0 INTRODUCTION

This Voluntary Cleanup Investigation Report (VCI Report) has been prepared on behalf of the City of Leavenworth, Kansas (City) for submission to the Kansas Department of Health and Environment (KDHE) – Voluntary Cleanup and Property Redevelopment Program (VCPRP) for real property herein identified as the City of Leavenworth Former City Garage Operation (Property or Subject Site). The Subject Site is listed in correspondence from the KDHE VCPRP (dated May 28, 2020) with an address of 2109 South 3rd Street, Leavenworth, Kansas 66048. The affiliated KDHE Project ID #C4-052-73682 was provided in earlier KDHE correspondence dated February 24, 2020.

A Subject Site Vicinity Map is shown in **Figure 1**. The Subject Site is generally located east of South 4th Street and north of Marion Street, with South 3rd Street entering the south-central portion of the Subject Site. The Subject Site boundaries as defined for the VCPRP are shown on **Figure 2**.

The Subject Site was enrolled in the VCPRP in response to KDHE – Bureau of Environmental Remediation (BER) correspondence dated February 24, 2020. This letter specifies the Subject Site as the City of Leavenworth Former City Garage/Old City Landfill. In this correspondence, KDHE summarizes environmental assessments completed as part of a property transaction due-diligence effort for land containing the commercial business located immediately to the south and southwest (Price Chopper Supermarket; 2107 South 4th Street). Work completed by another environmental consultant in 2019 identified petroleum hydrocarbons and metals in groundwater exceeding allowable state concentrations. Additionally, polychlorinated biphenyls (PCBs) were identified in soil below the 50 milligrams per kilograms (mg/kg) action level documented in the Toxic Substance Control Act (TSCA) guidance.

As required by the program, a site-specific Voluntary Cleanup Work Plan (VCI Work Plan) was prepared by SCS. This document, dated August 4, 2020, was submitted by the City to the program on that date. Review comments were subsequently issued by the VCPRP by correspondence dated August 24, 2020. The revised VCI Work Plan was dated August 28, 2020 and forwarded to the program for second review. The VCI Work Plan was approved (with comments) on September 4, 2020. The field investigation was scheduled and conducted by SCS from September 17 through 23, 2020. This VCI Report presents the results of these activities.

2.2 PROPERTY BACKGROUND

There is an extensive site development history and numerous environmental assessments have been completed at the Subject Site and adjoining properties. The detailed relevant information is provided in this section.

2.2.1 Property Location and Demographics

The Subject Site is located on land owned by the City since 1960 and presently includes the Leavenworth Animal Control (LAC) operations initiated in 2013 (**Figure 3**); the facility address is 2109 South 3rd Street. This facility includes one single-story building constructed as slab on grade supported by piers. Affiliated parking areas are located to the north (employees) and to the west-southwest. The north parking area was constructed with the building in 2013 and the south-southwest parking area existed previously. The balance of the Subject Site is presently undeveloped land.

The Subject Site is located in a commercial use area with immediately adjoining properties consisting of commercial businesses located to the south and west. Population density is less than the commercial district immediately adjoining South 4th Street/Kansas State Highway 7 and residential areas located further to the west and south-southeast. Immediately adjoining properties to the Subject Site are shown on **Figure 2** and include:

- **North** – Land to the north and northeast is undeveloped and was part of the former Leavenworth Municipal Landfill (Landfill). The Landfill is described in greater detail in Section 2.2.2. The area immediately northwest of the Subject Site is owned by Tire Town and is presently used for tractor-trailer parking.

- **West** – The immediately adjoining properties include Great Western Manufacturing Company (west and northwest) and parking area for the Price Chopper (west and southwest).

- **South** – The Price Chopper building and northern vehicle access area is located immediately to the south. Lakes Auto Salvage is located immediately south of the southeast portion of the Subject Site. South 3rd Street, constructed in a north-south orientation, extends to the Subject Site from Marion Street located one block south. An additional portion of Lakes Auto Salvage is also present immediately south of Marion Street.

- **East** – Five-Mile Creek (Creek) and the associated flood plain is located immediately east; land in this area is presently owned by the City. This area in part formerly included City Landfill operations. South 2nd Street is located further east of the Creek approximately 500 feet east of the eastern Subject Site boundary.

2.2.2 Property History

This summary of Subject Site history has been developed using numerous sources. The sources include discussions with former and current City Public Works personnel, environmental and geotechnical investigations conducted from 1989 through 2019, aerial photography and Google imagery, and City operational documents. Sources are referenced as applicable in the provided summary.

As mentioned earlier, the Subject Site and surrounding land has been owned by the City since 1960. Prior to establishing the former Landfill and former City Garage, the Subject Site as defined in this work plan and adjoining land to the north has historically been undeveloped as it included the Creek and the associated floodplain; this area was best described at the time as unusable for property development. The Creek has historically trended north-south and meandered throughout the Subject Site and the northern and southern adjoining properties. According to the McKinzie Construction, Inc. (McKinzie), *Brownfields Targeted Assessment Report* dated June 25, 1999, the Creek channel was redirected eastward to the present day location by the United States Corps of Engineers (USACE). This is described in the Brownfields Targeted Assessment (BTA) report as having occurred "Several years prior to operation of the landfill". It is our understanding that the former channel and floodplain were generally leveled at this time. The historic creek alignment can be seen in 1966 aerial photographs. Aerial photographs from 1972 and 1976 show the realigned Creek location present today.

Former City Landfill – 1969 through 1972

The former Landfill was operated from approximately 1969 through 1972. The extent of the former facility included land north of present day Thornton Street. Land between present day Marion Street (south) and Thornton Street was not extensively used for landfill operations. The former east landfill boundary was the redirected Creek channel that extending north to land currently containing the City Wastewater Treatment Plant. The western former landfill boundary appears to have extended toward South 4th Street, but did not cross the railroad tracks. The land area received waste material that was placed in pits approximately 12 feet in depth (McKinzie, 1999). The pits are reported to have extended into sandy subgrade materials and groundwater was reported to have been present at a depth of approximately 13 feet below ground surface (bgs). Overlying soil cover was reported to have been placed on top of the waste.

At some point following the cessation of operations at the Landfill, the City requested assistance from the United States Environmental Protection Agency (EPA) Region 7 Superfund Division to assess the environmental condition of the former Landfill property to facilitate eventual property redevelopment. EPA conducted the aforementioned BTA in late 1998 and early 1999. KDHE was listed as a stakeholder in the Federal Brownfields program and provided assistance with the BTA. The primary objectives of the investigation included:

- To assist the City in determining the nature and extent of potential contamination;
- To assess risks presented by contamination, and to
- Assess the Site in regard to American Society of Testing and Materials (ASTM) standards for environmental site assessments.

The BTA included performance of both a Phase I and II Environmental Site Assessment (ESA). The work was completed by McKinzie under contract with EPA. The Phase II ESA consisted of sediment, onsite and perimeter surface soil, subsurface soil and groundwater sampling across the former Landfill, including in part the former City Garage operations presently enrolled in the VCPRP. Specific operational areas of the Subject Site that were assessed at this time included:

- The Maintenance Building Area;
- Two asphalt aboveground storage tank (AST) areas (west and east), and
- One former diesel AST fueling area.

Generally, low-level concentrations of regulated substances were identified in some locations of the investigation area. The final report was issued by McKinzie on June 25, 1999. These assessments were evaluated by the EPA Superfund Division with subsequent correspondence issued to the City on August 13, 1999. Only one environmental condition was specifically mentioned in the EPA correspondence. It stated that "soil sampling analytical results suggest the property may have been impacted to a limited extent by lead waste." The McKinzie BTA report also noted that the lead impact was in a "perimeter surface sample" near west-adjoining properties that included GNB Inc. (presently Tire Town) and the Great Western Manufacturing Company. The BTA report identified that GNB Inc. is a State Hazardous Waste Site property.

The report also stated that "There were no records of large quantity of hazardous substances being disposed of at the former landfill, although unconfirmed reports of disposal of calcium hydroxide and unknown solvents were noted in an EPA report." The primary determination was that although the

Landfill had been previously recorded in the Comprehensive Environmental Response and Liability Information System (CERCLIS), "The EPA Superfund Program has determined that No Further Federal Action is appropriate at this property, unless new information warranting further Superfund consideration or conditions not previously known to the EPA regarding the property are discovered." The City was directed to contact the KDHE-BER for assistance with future redevelopment of the property.

Former City Garage Operations – 1972 through 1991

The Subject Site as defined for the VCPRP includes land containing former structures and garage maintenance facilities as shown on **Figure 3**. Operational dates reported by the City are to be from approximately 1972 through 1991. The facility was primarily decommissioned in 1992 with some structures remaining for an additional few years. Structures and past operations of environmental significance included:

- **Maintenance Building** – The building was constructed in 1972 and was used for vehicle repairs. It contained multiple service bays with a two story office/storage space located on the western end. A 300-gallon capacity waste oil AST was present in the northeastern portion of the building from approximately the late 1970s or early 1980's until decommissioning in 1992. The tank was used to store waste oil that fed an oil-burning heater for at least a portion of this time. The KDHE *Buried Tank Leak Assessment* dated November 11, 1992 was obtained from the Northeast District Office. The report specifies that the tank and lines were removed; a "Closed" status was assigned under KDHE Project Code U4-052-00868B.

  Regulated materials expected to have been used, generated and/or stored at the Maintenance Building are expected to include volatile organic compounds (VOCs - degreasers), waste oil, and spent vehicle fluids and fuel-range petroleum hydrocarbons.

- **Sign (Paint) Shop** – The Sign Shop was formerly located east of the Maintenance Building. It is reported by the City to have been primarily used as the base for painting operations and construction of signs. It is expected that substances containing VOCs were used; however, information specific to handling and potentially storing wastes are not available for review. It is known that a KDHE compliance inspection report from September 1991 indicated that paint/paint thinner waste had been introduced to surface soil north of the Sign Shop. This event is discussed in Section 2.2.3.

- **Equipment Storage Shed** – This structure contained equipment and non-regulated materials used for Public Works operations. According to former and current City employees, it is not expected the shed would have been used to store wastes generated from the operations.

- **Vehicle Fueling Areas** – There were formerly two generations of fuel storage tanks at the Subject Site that have been previously removed. Both were located in areas south of the Maintenance Building. The first fueling operation included either one or two 6,000-gallon capacity underground storage tanks (USTs) containing gasoline; dispensing is reported to have been at the UST locations. These were located south of the southwest corner of the maintenance building (**Figure 3**). Additionally, one 3,500-gallon capacity diesel AST was located further south and east of the gasoline USTs at this time. Due to the distance between the tanks, it is assumed that diesel fueling occurred at the AST. The

aforementioned tanks are reported by the City to have been installed in 1971. The gasoline USTs were removed in approximately 1980 or 1981; however, no removal report was on file with the KDHE Northeast District Office. The diesel AST is reported to have been removed in 1991 during decommissioning. Again, no removal report could be located for the AST by KDHE district personnel.

The second vehicle fueling area was located southeast of the first fueling area near the southern boundary of the Subject Site as presently defined. The KDHE *Tank Registration Renewal Form* dated April 1990 specifies that three 6,000-gallon capacity gasoline USTs were present in this area; they are noted to have been installed in 1981. The City has reported the USTs were removed in 1991 prior to facility decommissioning. SCS obtained a *Buried Tank Leak Assessment* report February 25, 1991 from the Northeast District Office. The report specifies that one 6,000-gallon capacity "fuel oil no 2 UST" was removed; a Closed status was assigned under KDHE Project Code U4-052-00868A. There is no mention of other USTs, piping or dispensers being removed, although the City has reported the other facilities were also removed at this time.

Also noteworthy, correspondence from the Northeast District Office to the City issued prior to UST removal (dated December 21, 1990) provides evidence that the USTs removed in 1991 qualified for the Petroleum Storage Tank Release Trust Fund. ***Therefore, the City and SCS assumes that additional environmental assessment and/or remedial actions could be eligible for KDHE reimbursement.***

On June 29, 2020, SCS reviewed the online KDHE-BER Identified Sites List (ISL) Information for the City of Leavenworth Garage (Project Code C4-052-73682). Specific to former fuel storage tanks, the ISL specifies that one former 4,000-gallon capacity diesel UST was present at the Subject Site. Based on information from numerous sources, SCS expects this is referring to the 3,500-gallon capacity AST installed in 1971 and removed in 1991. It should be noted that both soil and groundwater samples were collected from this area as part of the 1999 BTA; no significant petroleum hydrocarbon impact was reported. The ISL also mentions a 500-gallon waste oil tank was present and removed before 2013. SCS assumes this refers to the 300-gallon capacity AST identified in the November 1992 *Buried Tank Leak Assessment* report. No other petroleum fuel tanks are identified in the ISL.

- **Asphalt AST Areas** – The former City Garage also maintained asphalt oil storage for roadway projects. There were two areas including the southeast portion of the Subject Site (**Figure 3**) and north of the northwest boundary established for this VCPRP enrollment. These facilities are referred to in the 1999 BTA as "AST Tank Farms". The KDHE ISL cites the BTA as having identified six 10,000-gallon capacity asphalt ASTs in 1999.

  The Southeast Asphalt Storage Area included three 10,000-gallon capacity ASTs and a pump and heater house; loading occurred immediately to the west. These facilities were removed in 2013 to accommodate construction of the LAC Building. SCS reviewed select construction field reports issued by Williams, Spurgeon, Kuhl and Freshnock Architects, Inc. (WSKF Architects) for the Leavenworth Animal Control Project. A photograph included in Field Report 002 (dated June 24, 2013) shows soil excavation immediately north of the ASTs and pump/heater house. The excavation was completed per the new building plan specifications. A petroleum hydrocarbon impact was observed in this area during excavation and the affected soil was segregated and stockpiled. In Field Report

009 (August 21, 2013), it is stated that "contaminated dirt was dumped to the north of the Price Chopper lot." City Public Works personnel believe the petroleum-impacted soil was not reused onsite as it was subsequently disposed at the Gilman Road City Landfill located south of Lansing. However, offsite disposal records for this soil have not been located. No environmental sampling is discussed in the construction field reports.

The Northwest Tank Farm was located approximately 100 feet north of the north Subject Site boundary immediately east of the tractor-trailer storage area for Tire Town. This facility is no longer operable. Soil and groundwater samples were collected in this area during performance of the 1999 BTA; no significant detections of petroleum hydrocarbons were noted. Because of the BTA findings, additional assessment of the area was not performed by SCS.

No Active Property Use – 1992 Through 2013

The Subject Site was undeveloped and not used by the City following decommissioning of the Garage operations. It remained in this condition until construction of the LAC facility in 2013.

Current Site Use – City Animal Control Operations – 2013 to Present Day

The Subject Site currently contains LAC operations initiated in 2013. There is presently one single-story building constructed as slab on grade supported by piers. Affiliated parking areas are located to the north and west-southwest. The north lot was constructed in 2013 and the south-southwest parking area was previously constructed by 2011. It is noteworthy that the LAC building was constructed with a 15-mil vapor barrier incorporated in the foundation design due to the location at a former landfill. Construction details prepared by CFS Engineers specify the vapor barrier was overlapped and sealed per manufacturer's specifications; sealing of penetrations was also noted on the plans.

2.2.2.1 Relevant History for Adjoining Properties

The following is a summary of the general development history of properties adjoining the Subject Site:

- North – Land to the north and northeast has historically consisted of the Creek and associated flood plain. As described earlier, a portion of this area was formerly operated as the former City Landfill. The **City Wastewater Treatment Plant** is located on former Landfill property further to the north. **Great Western Manufacturing** and **Tire Town** are the commercial businesses located to the northwest; **GNB, Inc.** also formerly operated in this general area.

- West – A portion of **Great Western Manufacturing Company** is also currently located west of the Subject Site. The **Price Chopper** parking area is located to the southwest; single family residential homes were initially located in this area. Smaller commercial businesses were also present to the southwest (fronting South 4th Street) prior to construction of the Price Chopper.

- South – The area located immediately south of the Subject Site boundary was developed in 1990 as a **Price Chopper Supermarket**. The north side of the building is located approximately 60 feet south of the south boundary of the Subject Site. The area currently

comprising the approximate southwest quarter of the Subject Site has been historically used as the Price Chopper northern parking area (**Figure 3**). These commercial operations are observed today generally the same as since initial development. This land area was previously included the former Creek and associated flood plain. The former Landfill extended to the northern portion of the property for the years it was operational.

An auto salvage yard presently containing vehicles (**Lakes Auto Salvage**) is located immediately south of the southeast portion of the Subject Site. According to information obtained from City Directory review and recent City communication with the Lake Family, the commercial property has been present at this location since 1949. The Polk's City Directory lists the business as 235 Marion Street (south side of road) in 1954. The 1958 directory lists the business as both 235 and 236 Marion Street (north side of road). This information suggests that the family residence was located to the north with the business present on both sides of the roadway.

Additional historical information was researched to evaluate the history of operations for Lakes Auto Salvage. An aerial photograph from 1985 clearly shows that salvaged vehicle storage extended further west than presently observed. This includes the area where South 3rd Street and the east-most portion of the Price Chopper building are presently located. This is significant as it is an area of known contamination. South 3rd Street was formerly located further west than at present.

- East – The Creek and associated flood plain is located immediately east and southeast of the Subject Site. Aside from a portion used for former Landfill operations it has been undeveloped natural land.

2.2.3 Previous Investigations at and Near the Subject Site

Past environmental and geotechnical assessments have been performed at the Subject Site and adjoining properties by various parties for varying reasons. They are summarized below in chronological order. For each event summary, we provide professional opinions as to significance for the Subject Site and the current site assessment activities detailed in the previously approved VCI Work Plan.

Figures showing data collection locations and tables providing previous analytical data are referenced as applicable. It should be noted that the figures and tables include only data of significance to the current assessment completed by SCS. Unless otherwise noted, existing environmental and geotechnical assessment reports summarized below have been previously submitted to the VCPRP with the initial application.

- South Adjoining Property: *Subsurface Exploration Report, Proposed Supermarket Site, Fourth & Marion Streets, Leavenworth, Kansas*, Terracon Environmental, Inc. dated October 26, 1989. This report was prepared for Four-B Corporation. The geotechnical investigation was performed to provide recommendations concerning the design and construction of foundations and pavements for the Price Chopper building constructed in 1990. A total of 21 borings were advanced to depths ranging between approximately 8 and 42.8 feet below ground surface (bgs). Subsurface materials and bedrock were logged and geotechnical samples were collected. No environmental sampling and laboratory analysis was completed. Boring locations are considered to be non-critical information and are therefore not shown on VCI work plan figures.

Significance – Subsurface materials are described as including native unconsolidated soil and bedrock, overlain by varying thickness of fill material. The native unconsolidated soil consist primarily of silty clay and clay, with subordinate lenses of silt and sand seams. Underlying bedrock is described as limestone. The overlying fill material is primarily described as clay and silty clay with construction debris included. The fill was noted as containing wood, cinders, brick, concrete and glass; gravel and trace gravel was also noted. The construction debris is expected to have originated from demolition of residential structures previously located in this area. The fill material was identified in over half the borings with thicknesses varying from approximately one foot to 16.5 feet bgs. Groundwater was identified during drilling as ranging between approximately 11.5 to 22 feet bgs.

These findings are consistent with the site history. This area includes the former location of the Creek channel prior to redirection by USACE. Presence of fill material is not unexpected as this area was included in City Municipal Landfill operations from 1969 through 1972.

- South Adjoining Property: *Environmental Assessment – Phase II, Proposed Supermarket Site, Leavenworth, Kansas*, Terracon Environmental, Inc. dated December 26, 1989. This report was also prepared for Four-B Corporation. The Phase II ESA was performed following completion of a Phase I ESA. Per the report transmittal letter, "The primary focus of this work was to assess the subsurface conditions to help determine whether potential off-site contaminant sources may have adversely affected the area of study." The scope of work included advancing nine borings for the collection of environmental samples (**Figures 4A** and **5A**). Six of the boring locations were converted to groundwater monitoring wells (MW-1 through MW-6) for the collection of groundwater samples (**Figure 5A**). Soil samples were also collected from two of these wells (MW-3 and MW-4), as well as from three additional borings (B-1 through B-3) located along the east side of the relocated South 3rd Street (**Figure 4A**).

  A primary finding of the assessment was that total petroleum hydrocarbons (TPH) were identified in soil in Boring B-1 and Monitoring Well MW-4 located near the southern Subject Site boundary (**Figures 4A-1** and **4B**). Additionally, a higher TPH concentration was exhibited above minimum laboratory reporting limits further south within South 3rd Street (MW-4; **Figure 4A-1**); this is adjacent to Lakes Auto Salvage. Total lead concentrations in soil were reported at 20 parts per million (ppm) from the three borings. Soil analytical results are included in **Tables 1A** and **1C**.

  Analytical results for groundwater samples collected from the six monitoring wells did not exhibit regulated petroleum hydrocarbons exceeding minimum laboratory detection limits for benzene, toluene or xylenes (BTX) or for VOCs and SVOCs analyzed as a survey search. However, it should be noted that not all samples were analyzed for BTX or the VOCs/SVOCs survey search (**Tables 2A and 2B**). No TPH analysis was completed for any of the monitoring wells. Dissolved-phase arsenic, cadmium, chromium and lead concentrations were reported above minimum laboratory limits in only Monitoring Well MW-4 (**Table 2C**).

  Significance – Soil sampling conducted along the south Subject Site boundary (north of the Price Chopper building) indicates the presence of generally low-level concentrations of petroleum hydrocarbons. However, groundwater sampling suggested it is not an extensive impact as no BTX or VOCs were reported above minimum laboratory reporting limits. It should be noted that the highest TPH concentration was present approximately 40 feet south of the Subject Site property boundary. This sample is located adjacent west of present day Lakes Auto Salvage. Metals reported in the groundwater sample from Monitoring Well

MW-4 exceed their respective current KDHE Tier 2 Risk-Based Standards (RSKs) for the Residential and Non-Residential Groundwater Pathway. However, it is not known if the results are for total or dissolved metals.

- Subject Site: *Report of Testing – City Service Center*, Kansas City Testing Laboratory (KCTL) dated December 18, 1991. A KDHE compliance inspection report from September 1991 indicated that paint/paint thinner waste had been disposed by employees to the surface soil located north of the Sign Shop. To evaluate this possibility, two soil samples were collected for the City by KCTL in the area shown on **Figure 4A-1**. The samples were obtained from six composite sampling locations at depths of approximately 6 inches bgs and approximately 18 to 24 inches bgs. Samples were analyzed for Toxicity Characteristic Leaching Potential (TCLP) for RCRA metals, SVOCs and VOCs. None of these TCLP analytical results exceeded the method detection limits. Additionally, the soil samples were also analyzed for VOCs. Results indicated three compounds exceeding minimum laboratory reporting limits in the 6-inch composite sample including toluene (19,000 parts per billion [ppb]), ethylbenzene (12 ppb) and xylenes (28 ppb) as shown in **Table 1B** and **Figure 4A-1**. Although contamination was present, TCLP results indicated the material would not satisfy the definition of hazardous waste if excavated and disposed. The *Phase I Environmental Site Assessment*, *Price Chopper Property* prepared by Environmental Works (dated September 9, 2019; Page 4) specified that KDHE recommended the impacted soil be removed and properly disposed. Furthermore, approximately 60 cubic yards of contaminated soil was removed and disposed of at the former Leavenworth Landfill located on Gilman Road; no post-excavation confirmation sampling is documented and it is unknown if it was completed.

  Significance – The analytical data identified VOCs present in surficial soil to a depth between surface grade and no deeper that above 18 inches bgs. Historical information indicated that soil in this area was excavated by the City. As shown on Figure 4A, the existing LAC Building overlies this sampling area. The VCI Work Plan included advancing borings surrounding the existing building for collection of groundwater samples.

- Subject Site and North Adjoining Property: *Brownfields Targeted Assessment Report, The Leavenworth Landfill Site, Leavenworth, Kansas,* United States Environmental Protection Agency/McKinzie Construction, Inc. dated June 25, 1999. The BTA was performed by an EPA contractor at the former Landfill property and included collection of surface soil, subsurface soil, groundwater, and sediment samples. The land area formerly operated as the former City Garage was included in the assessment. Samples collected at the Subject Site included four from surface/subsurface soil (**Figure 4A**) and two from groundwater (**Figure 5A**). Surface soil and subsurface soil samples did not exhibit detectable concentrations of TPH, VOCs or SVOCs exceeding minimum laboratory reporting limits (**Tables 1A** and **1B** and **Figure 4A-1**); RCRA metals analytical results was reported as no significant detections for the parameters tested (**Table 1C**).

  Groundwater samples were generally analyzed for the same parameters as soil samples. As shown on **Figure 5A-1,** benzene and methyl chloride were the only VOCs exceeding minimum laboratory reporting limits (Sample 100). The benzene concentration of 0.0069 mg/L slightly exceeds the Tier 2 RSK of 0.005 mg/L for both the Residential and Non-Residential Scenario Groundwater Pathway. Similarly, the methylene chloride concentration of 0.37 mg/L exceeds the Tier 2 RSK of 0.005 mg/L for both the Residential and Non-Residential Scenario Groundwater Pathway (**Table 2A**). For TPH, SVOC and pesticide analysis, detections were

limited to the pesticide compounds D,D,D-4,4' and pentachlorophenol (**Table 2B** and **Figure 5A-1**). A number of RCRA metals were exhibited exceeding minimum laboratory limits as shown in **Table 2C**. Metals exceeding Tier 2 RSKs for the Residential and Non-Residential Scenario Groundwater Pathway included arsenic, barium, cadmium, chromium and lead (**Table 2C** and **Figure 5A-2**). However, it was not noted in the BTA report whether these results were for total metals or dissolved metals. The EPA contractor did not recommend additional evaluation of metals in their summary report.

Significance – When viewed collectively, the absence of VOCs in soil and limited number in groundwater did not suggest there was a significant petroleum hydrocarbon or VOC impact in the central and southern portions of the Subject Site. Limited pesticide compounds were present in 1999 and warranted additional evaluation. The significance of RCRA metals exceeding Tier 2 RSKs is difficult to currently evaluate as the results may be for total metals. It should be noted that dissolved metal analytical results collected south and west of these data points in 2019 are significantly lower than the BTA results (Figure 5A-2 and Table 2C). The more recent results are discussed later in this section.

- Subject Site and East Adjoining Property: *Preliminary Geotechnical Engineering Services Report for the Proposed Animal Control Facility, Marion Street, Just East of 4th Street, Leavenworth, Kansas*, **Professional Service Industries, Inc. March 21, 2012.** This report was prepared for the City to assist in structural design for the LAC Building. A total of three borings were advanced to maximum drilling depths ranging between approximately 38.5 and 40.5 feet bgs. Subsurface materials and bedrock were logged and geotechnical samples were collected. No environmental sampling and laboratory analysis was completed. Boring locations are considered to be non-critical information and are therefore not shown on report figures.

  Significance – Similar to that for the south adjoining property, subsurface materials consisted of native unconsolidated soil and bedrock, overlain by varying thickness of fill material. The native unconsolidated soil consist primarily of silty clay and clay, with subordinate lenses of silt and sand seams. Underlying bedrock is described as limestone. The overlying fill material is primarily described as clay with construction debris including rock, brick and asphalt; the material is present from demolition of residential homes previously located in the area. The fill material was encountered to approximately 6 feet bgs across the study area. Groundwater was identified during drilling as ranging between approximately 10 to 11 feet bgs.

In addition to those studies discussed above, a due-diligence environmental assessment was performed by Environmental Works, Inc. (EWI) in 2019 for the south adjoining property. Work was completed for Associated Wholesale Grocers (AWG) of Kansas City, Kansas. A Phase I ESA was completed in September 2019 and a follow-up Limited Phase II ESA was completed in November 2019. These reports were not submitted as part of the City VCPRP application as they had been previously submitted to KDHE by AWG. The Phase I ESA identified the Subject Site as a Recognized Environmental Condition, which warranted performance of the limited Phase II ESA. The data and key findings are discussed below.

- South Adjoining Property: *Limited Phase II Environmental Site Assessment, Price Chopper Property, 2107 South 4th Street, Leavenworth, Kansas*, **Environmental Works, Inc. dated November 6, 2019.** The limited Phase II ESA was performed exclusively at the Price Chopper

property. Analytical data for soil and groundwater was primarily collected west and south of the western half of the Subject Site. Additionally, three soil gas samples were collected to evaluate subsurface vapor conditions in proximity to the Price Chopper Building; these are also located south of the Subject Site.

Soil sampling identified petroleum hydrocarbons (mid-range and high-range hydrocarbons) in soil near the south and southwest boundaries of the Subject Site (**Figure 4A-1**). None of these results exceeded Tier 2 RSKs for the TPH fractions (**Table 1A**). No BTX, ethylbenzene or other VOCs were reported exceeding minimum laboratory reporting limits (**Table 1B**). An area exhibiting elevated total lead concentrations is identified east of the Price Chopper building; however, the condition is not present further west of the building. Only one detectable PCB compound (Arochlor 1254) was identified and is located in the South 3rd Street area between the Price Chopper building and Lakes Auto Salvage (Boring SB-5; **Table 1D** and **Figure 4A-1**).

Groundwater sampling also identified petroleum hydrocarbons (mid-range hydrocarbons [MRH] and high-range hydrocarbons [HRH]) near the south and southwest boundaries of the Subject Site (**Figure 5A-1**). The highest TPH-MRH and TPH-HRH concentrations were noted south of the Subject Site along South 3rd Street and exceeded the Tier 2 RSK for TPH-MRH and TPH-HRH (**Table 2B**). However, aside from one generally low p-isopropyltoluene concentration from the sample collected from Monitoring Well MW-5 (0.0016 mg/L), no other VOCs exceeded minimum laboratory reporting limits (**Table 2A**). Additionally, the only detectable SVOC reported was 2,6-dinitrotoluene (0.0182 mg/L) from the sample collected from Monitoring Well MW-7 (**Table 2B**); the result exceeds the Tier 2 RSKs for the Residential and Non-Residential Scenario Groundwater Pathway (0.000557 and 0.00187 mg/L, respectively). The only RCRA dissolved metal concentrations above minimum laboratory reporting limits were arsenic and barium (**Table 2C** and **Figure 5A-2**). The arsenic concentrations in samples collected from Monitoring Wells MW-1 and MW-2 (0.015 mg/L) slightly exceeded the Tier 2 RSKs for the Residential Scenario Groundwater Pathway (0.01 mg/L). The barium concentrations were significantly below the Tier 2 RSK for the Residential Scenario Groundwater Pathway (2.0 mg/L).

Soil gas samples were collected north, northwest and northeast of the Price Chopper building. Analytical results indicated a number of common VOCs exceeding minimum laboratory reporting limits (**Table 3** and **Figure 6**). The concentrations were evaluated by EWI using the EPA Vapor Intrusion Screening Level (VISL) Calculator. No VOCs identified in the soil gas samples exceeded the EPA VISL Commercial Target Concentrations for Exterior Soil Gas. Only chloroform was identified above these threshold concentrations for Residential use.

Significance – Soil and groundwater sampling results have identified TPH-MRH and TPH-HRH in the area immediately north and east of the Price Chopper building. This area is immediately south of the Subject Site where two generations of fueling areas were formerly located. This area was also used for vehicle storage in the past by Lakes Auto Salvage, which is presently limited to the area east of South 3rd Street. Comparatively lower TPH-MRH and TPH-HRH concentrations are also present further west of the Subject Site below the main parking lot.

There were other isolated detections of regulated substances in soil and groundwater located south of the Subject Site. This includes PCB soil detections in one boring located at the northeast corner of the Price Chopper building near both the Subject Site and the auto salvage yard. The two elevated total lead concentrations in soil were also present in this boring and further south along South 3rd Street. Also of note for groundwater, one 2,6-dinitrotoluene concentration of 0.0182 mg/L was identified in the sample collected from the southern portion of South 3rd Street (in proximity to Marion Street). One common use of this compound is as an explosive for vehicle air bags.

The only RCRA metal in groundwater samples exceeding Tier 2 RSKs for the Residential and Non-Residential Scenario Groundwater Pathway was arsenic in the area west of the Subject Site. Conversely, sample results for areas nearer former garage operations that handled or stored regulated substances are below their applicable Tier 2 RSKs. These dissolved metal results are significantly lower than those reported in the BTA performed in 1999. This comparative evaluation provides some analytical evidence that earlier results were for total metals rather than dissolved metals.

Current Environmental Investigation

SCS environmental assessment field activities as presented in the approved VCI Work Plan were conducted from September 17 through 23, 2020. Investigative activities are summarized in the following section.

3.0 INVESTIGATIVE ACTIVITIES

Based on the findings of past assessments at and near the Subject Site, the potential regulated contaminants of concern (COC) were expected to potentially include total petroleum hydrocarbons, VOCs, SVOCs, RCRA metals, organochlorine pesticides, and PCBs. As discussed in Section 2.2.3 and shown in Figures and Tables, the previously identified COCs were found to be present in portions of the Subject Site, rather than pervasively present across its entirety. Therefore, the data needs varied by COC and was the basis of the Phase II ESA design presented in the VCI Work Plan. The types of data needed to achieve the VCI objectives included surface soil, subsurface soil, groundwater, and indoor air sampling.

3.1 VCI Assessment Objectives and Approach

The VCI Work Plan presented our detailed approach for surface/subsurface soil, groundwater, and indoor air sampling to be completed during planned Phase II ESA activities. It included the selected points of sampling and the intended numbers, volumes, and types of samples to be collected. The VCI Work Plan addressed these issues generically and in detail for the Subject Site.

The technical approach for developing the Phase II ESA design was to utilize data from previous investigations to identify COC data gaps so that a more thorough assessment of potential Subject Site source areas would be completed. Existing environmental data identified:

Subject Site

- ***Generally low-level concentrations of petroleum hydrocarbons and total lead in soil and limited VOCs and SVOCs in groundwater near the southern property boundary.*** None of the soil concentrations exceeded current Tier 2 RSKs for both Residential and Non-Residential uses. ***For groundwater, only benzene and methylene chloride in one location exceeded both the Residential and Nonresidential Tier 2 RSKs.*** Additionally, two SVOCs in groundwater were identified in this area, including pentachlorophenol and D,D,D-4,4'; the pentachlorophenol exceeded Residential and Non-Residential Tier 2 RSKs.

- ***Toluene, ethylbenzene and xylenes were formerly identified in surface soil samples exceeding minimum laboratory reporting limits north of the former Sign Shop (Figure 4B)***. The LAC building is currently present in this area. Soil was excavated by the City prior to the building being constructed. No previous groundwater data exists for this general area.

- ***Other limited COC were reported by analytical laboratories in groundwater.*** This includes D,D,D-4,4' (SVOC) north of the northeast corner of the former Maintenance Garage building. Elevated RCRA metals were also identified in this area and at the southern property boundary; however, it should be noted that it is not known if these results are for total or dissolved metals.

Adjoining Properties

Existing environmental data from properties immediately adjoining the Subject Site have identified:

- ***TPH-MRH, TPH-HRH and RCRA metals have been identified in soil at the Price Chopper supermarket (south and west adjoining property).*** The TPH concentrations do not exceed current RSK Manual Tier 2 RSKs for both Residential and Non-Residential uses. One total

lead result in soil (432 mg/kg) exceeds the Residential Tier 2 RSK, but is below the value for Non-Residential use. Remaining metals are considered to be within expected background concentrations. Additionally, PCBs were identified in soil at two depths in one boring located approximately 40 feet south of the Subject Site.

- ***Organic COCs in groundwater at the Price Chopper in proximity to the Subject Site include TPH-MRH, TPH-HRH, p-isopropyltoluene (VOC) and 2,6-dinitrotoluene (SVOC).*** Three of five analytical data points for TPH-MRH exceed Residential Tier 2 RSKs but not the Non-Residential use value. One TPH-HRH concentration exceeds both the Residential and Non-Residential Tier 2 RSKs (south of the Subject Site below South 3rd Street). The 2,6-dinitrotoluene identified further to the south exceeds both the Residential and Non-Residential Tier 2 RSKs. No Tier 2 RSK has been established for p-isopropyltoluene. A common industrial use for 2,6-dinitrotoluene is in explosives, and is not expected to have been used at the Subject Site.

  Dissolved-phase arsenic and barium was also reported above minimum laboratory detection limits. The two arsenic concentrations of 0.015 mg/L exceeding minimum laboratory reporting limits slightly exceed the Residential/Non-Residential use Tier 2 RSK of 0.01 mg/L. Barium concentrations are all below the Residential/Non-Residential use Tier 2 RSK of 2 mg/L. It should be noted these concentrations are significantly lower than those reported in the 1999 BTA.

- ***Although a number of VOCs were exhibited in the three soil gas samples, no VOCs identified exceeded the EPA VISL Commercial Target Concentrations for Exterior Soil Gas.*** Only chloroform was identified above these threshold concentrations for Residential use.

Known Locations of Identified COC

When viewed collectively, COCs in soil and groundwater are generally present in the southern portion of the Subject Site and the north-most and northwest-most portions of the Price Chopper property. The offsite areas impacted by regulated substances include:

- The offsite area immediately west of the Subject Site is located approximately 250 feet from the former onsite gasoline UST facilities operated from approximately 1971 through 1980/1981. However, it is significant that no detectable gasoline-range (TPH-LRH) concentrations were identified during the previous assessments. Petroleum hydrocarbons exceeding minimum laboratory reporting limits have only included diesel- (MRH) and oil-range compounds (HRH).

- The area immediately north of the Price Chopper building is located in proximity to the former Subject Site gasoline fueling area (operated from 1981 to 1991) and the diesel fueling area (operated from 1971 to 1991). Again, detectable petroleum hydrocarbon concentrations identified to date have been TPH-MRH and TPH-HRH compounds.

- The highest offsite petroleum hydrocarbon concentrations have been previously identified east of the Price Chopper building near and within the present day South 3rd Street. This area was formerly used for salvage automobile storage prior to construction of the relocated roadway; auto salvage operations remain immediately to the east. It is noteworthy this area also exhibits the highest total lead concentrations in soil, as well as the PCBs in soil and 2,6-dinitrotoluene in groundwater.

Work Plan Approach – General Assessment Strategy

The planned assessment design included sampling soil in former operational garage areas considered to have a higher potential for a COC release(s) to the subsurface (**Figure 7**). Groundwater sampling was also conducted to further evaluate potential source areas and the lateral extent of COC(s) in groundwater. Additionally, air samples were collected from the LAC Building to evaluate the condition of indoor air quality for VOCs. The specific objectives for the field investigation included:

- **Site-Wide Assessment:** The overall objective was to obtain additional information to fill site-wide "data gaps" from previous investigations not specifically intended to assess the Subject Site and former operations as presently defined.

- **Potential COC Source Areas:** To assess the potential for petroleum hydrocarbons being present in soil and/or groundwater in the area of the two former onsite gasoline UST fueling areas not specifically assessed as part of the 1999 EPA BTA. We also assessed the former 3,500-gallon diesel fuel AST and the former east AST asphalt tank/heater building areas. Additionally, groundwater sampling was conducted north, east and west of the area surrounding the former Sign Shop where VOC-impacted soil was previously identified.

- **Lateral Assessment of COCs in Groundwater:** Additional groundwater samples were collected to enhance the current understanding of COCs at the Subject Site. The data set included sampling the source areas described above and four additional locations near the north and southwest property boundaries. As the data collected in 2019 at the Price Chopper property used currently required field procedures and analytical methods, no additional groundwater sampling was conducted at this adjoining property.

  Specific to RCRA metals, dissolved metals analysis were performed for samples from six locations across the Subject Site. This data is compared to the existing 1989 Terracon, 1999 BTA and 2019 Price Chopper results to provide an effective site-wide assessment.

  We also installed 1-inch diameter polyvinyl chloride (PVC) piezometers at each of the groundwater sampling locations. A top of casing elevation survey was completed and a groundwater gradient calculated.

- **Evaluation of Indoor Air Quality:** Two indoor air samples were collected to evaluate indoor air quality in the LAC building (**Figure 8**). Indoor sampling was selected rather than subsurface soil gas sampling as a 15-mil vapor barrier was installed during building construction. The results were compared to the Residential Indoor Air Tier 2 RSKs.

3.2 Field Activities

A total of eleven direct-push technology borings were advanced at the Subject Site (**Figure 7**). Groundwater samples were collected from each boring with soil samples collected from four of the borings. Temporary piezometers were installed at each boring to facilitate collection of groundwater samples and also used to collect fluid-level monitoring data. Additionally, two indoor and one ambient air samples were collected from the LAC Building. Field assessment activities were performed in general accordance with the SCS *Voluntary Cleanup Investigation Work Plan – Revised*

(VCI Work Plan) dated August 28, 2020. The VCI Work Plan was approved by the VCPRP in correspondence dated September 4, 2020.

3.2.1 Direct-Push Technology – Borehole Advancement

A total of eleven direct-push technology boreholes were advanced on September 17 and 18, 2020 using a Geoprobe® Model 54DT direct-push, track-mounted drilling unit. The borings were advanced at least five feet below the assumed static groundwater table or a maximum depth of 20 feet bgs. Boring logs are presented in **Attachment A**. A photographic log of field boring locations are included as **Attachment B.**

It should be noted that during the advancement of Boring PB-1 drilling refusal was met at 9 feet bgs on metallic debris (in part recovered in the Macrocore liner). The boring location was relocated approximately 8 feet to the south and advanced to a depth of approximately 20 feet bgs. This boring was designated as PB-1A.

3.2.2 Soil Sampling

Soil samples were collected from Borings PB-1A, PB-2, PB-3 and PB-9 by advancing a Macrocore soil sampling tool that is 4-feet long and 2.5-inches in diameter. The Macrocore contains a disposable acetate liner that collects a continuous soil core. Soil samples designated for laboratory analysis were collected directly from the acetate liner and transferred into laboratory-provided sample containers.

The Field Scientist collected one soil sample from the upper vadose zone for each of the borings for laboratory analysis, obtained at depths ranging from approximately 1 to 4 feet bgs. A second sample was collected for laboratory analysis from subsurface soil in each of the borings at depths ranging from approximately 9 to 14 feet bgs. Sampling depths are noted on individual borings logs.

During the drilling activities, each recovered soil core contained in the Macrocore liners was field-screened for VOCs using ambient temperature headspace analysis. This consisted of filling a plastic bag approximately half-full with a composite sample from the 4-foot long soil core and allowing sufficient time for organic vapors to volatize. The air contained in the headspace of the sample was then analyzed using a MiniRAE 2000 (Model PGM 7600) photoionization detector (PID) equipped with a 10.6eV lamp. PID measurements are recorded on the borings logs (**Attachment A**).

3.2.3 Piezometer Installation & Groundwater Sampling

The VCI Work Plan specified groundwater samples be collected from each boring with groundwater accumulation. Temporary 1-inch diameter PVC piezometers were installed in each borehole as a method to collect water samples. Each PVC casing was cut slightly below the ground surface and capped to mitigate the potential for trip-and-fall hazards. Additionally, the upper portion of the borehole was sealed with plastic and bentonite chips were placed on top of the plastic to mitigate the potential for surface water to flow into the borehole. Groundwater levels were measured throughout drilling activities to evaluate the rate of groundwater flow into the borehole/piezometers.

Fluid-level monitoring of static water levels was also completed immediately prior to collecting groundwater samples on September 21, 2020. The depth to groundwater varied in the piezometers from approximately 5.84 feet bgs (Boring PB-10, the boring advanced in the northwest corner of the Property) to 17.74 feet bgs (Boring PB-4, the boring advanced in the southwest corner of the Subject

Site). Groundwater samples were obtained from the piezometers using a peristaltic pump and disposable polyethylene (PE) tubing. Three borehole volumes from the boreholes/piezometers were purged before collecting the groundwater samples from each location. Groundwater accumulation did not immediately recharge at Boring PB-5 following purging and collection of containers for VOC/TPH-LRH analysis; additional sample volume for remaining parameters were collected the same day at a later time. All other groundwater samples were collected immediately following purging.

An elevation survey of the temporary piezometers was conducted by a State of Kansas Licensed Surveyor (Wilson & Company) on September 21, 2020. Elevations for the top-of-casings were obtained at each location; survey elevation data is provided on the boring logs.

3.2.4 Indoor Air Sampling

Two indoor air samples and one outside ambient sample were collected on September 21, 2020. The indoor air samples were collected from the employee cubicle area and storage hallway adjacent to the kitchen to provide representative data coverage as shown on **Figure 8**. The ambient air sample was collected upwind, immediately south of the LAC Building. A duplicate sample was collected with AS-1 located in employee cubicle area.

Both the indoor and ambient air samples were collected with 6-Liter SUMMA canisters equipped with a valve, vacuum gauge, particulate filter and flow regulator. The flow regulators were set by the laboratory to sample at a constant flow rate over an 8-hour sample interval. The canisters were individually certified and shipped with a brass cap over the sampling port, which was removed and replaced before and after the sampling period. A KDHE air sampling data sheet was completed for the air sampling event, and is included in **Attachment C**.

3.2.5 Quality Assurance/Quality Control Sampling

Quality Assurance and Quality Control (QA/QC) samples were collected during the assessment activities as described in the VCI Work Plan. This data is used to evaluate field and laboratory procedures. The total number of QA/QC samples collected included:

- Three trip blanks contained in the laboratory coolers with soil and groundwater samples designated for VOC analysis;
- One soil sample duplicate was collected from Boring PB-1A (9.5 to 11.5 feet bgs);
- One groundwater sample duplicate was collected from Boring PB-1A;
- One air sample duplicate, collected with Sample AS-1.
- One field blank collected during soil sampling activities;
- One equipment blank collected during soil sampling activities, and
- One field blank collected during groundwater sampling activities.

3.2.6 Analytical Testing

The soil and groundwater samples were transferred into laboratory-supplied containers and placed in a cooler with ice to maintain the temperature near 4 degrees Celsius (°C). The SUMMA air sampling canisters were shipped without temperature control during transportation. All samples were transported to Pace Analytical National Center for Testing & Innovation (Pace) in Mt. Juliet, Tennessee under standard chain-of-custody procedures.

Soil Samples were submitted for the following analysis:

- Full scan VOCs using EPA Method 8260B;
- TPH-LRH, TPH-MRH and TPH-HRH using EPA Modified Method 8015;
- RCRA Metals using EPA Methods 6010/7471, and
- Organochlorine pesticides using EPA Method 8141.

In addition to the above analysis, three soil samples (PB-1A - 9.5-11 feet bgs, PB-3 - 1.5-3.5 feet bgs and PB-9 - 9-11 feet bgs) were analyzed for SVOCs using EPA Method 8270C. The soil samples from Borings PB-2, PB-3 and PB-9 were also analyzed for PCBs using EPA Method 8082.

Groundwater samples were submitted and analyzed for:

- Full scan VOCs using EPA Method 8260B;
- TPH-LRH, TPH-MRH and TPH-HRH using EPA Modified Method 8015, and
- SVOCs using EPA Method 8270C.

In addition to the above analysis, groundwater samples from Borings PB-1, PB-3, PB-5, PB-6, PB-8 and PB-10 were analyzed for dissolved RCRA Metals using EPA Methods 6010/7471, and three samples from Borings PB-1A, PB-2 and PB-3 were analyzed for organochlorine pesticides using EPA Method 8081B.

Indoor Air and Ambient Samples were analyzed for VOCs using EPA Method TO-15.

The **QA/QC Samples** were analyzed for the same constituents as described above for the three media types.

A summary of soil analytical results are presented in **Tables 1A** through **1D,** and groundwater analytical results are presented in **Tables 2A** through **2C.** Soil vapor analytical results from the EWI soil gas investigation are presented in **Table 3** and indoor air sample results collected by SCS are shown in **Table 4**. The laboratory analytical reports are provided in **Attachment D**.

3.2.7 Investigation Derived Wastes

Soil waste generated during advancement of and sampling of borings was thin spread in a grassy area located at the southwest corner of the former equipment storage shed. Decontamination water generated during direct-push technology drilling was discharged directly to the soil surface and purge water generated during groundwater sampling activities also discharged directly to the soil surface in accordance with KDHE Policy SOP BER-08 (*Characterization and Disposal of Investigation-Derived Waste*), Section 5.0. Personal protective equipment and disposable sampling equipment were disposed of as municipal solid waste at the SCS office located in Overland Park, Kansas.

4.0 PHYSICAL PROPERTY CHARACTERISTICS

This section provides a summary of the current field assessment findings and analytical results. Previously collected environmental data is also discussed where applicable in this and subsequent sections.

4.1 Geology and Hydrogeology

The majority of the Subject Site is located within a portion of the historic Five Mile Creek Channel that was relocated by USACE in the late 1960's. This former channel is shown in **Figure 9**, and is observed as an "oxbow" geomorphic feature. It is assumed that this portion of the former channel was at least partially filled at this time, most likely with steam deposits reused from the general area. The figure also shows the location of the current LAC building and South 3rd Street. The present day creek channel is located immediately south of the southeast portion of the Subject Site generally appears as it did prior to the creek realignment. It should be noted that municipal solid waste was also placed in this area as is evidenced by earlier geotechnical and environmental studies and in soil cores obtained during this assessment.

Subsurface material encountered during the SCS field investigation primarily consisted of fine-grained fill material previously placed in the former channel and surrounding area. Fill was present in all borings, although a considerably lesser thickness was observed at Borings PB-4 and PB-5, located along the western property boundary. The fill material primarily consisted of silty clay without and with municipal solid waste included (Borings Logs; **Attachment A**). Construction debris and general municipal trash was also present in the fill material. No asbestos containing material was observed in the recovered soil cores. The fill material was noted in all borings to the maximum drilling depth of approximately 20 feet bgs. Although not encountered during this assessment, previous geotechnical investigations at the Subject Site and south adjoining property have identified the upper surface of limestone bedrock at depths ranging between 37.8 and 42.5 feet bgs. Subsurface materials encountered during the SCS assessment are shown in Cross Sections A-A' and B-B', presented as **Figures 10-A** and **10-B**.

As mentioned above, Borings PB-5 and PB-4 were primarily advanced into unconsolidated native materials. However, fill material was identified from surface grade to approximately 3.5 to four feet bgs in these borings. The fill was underlain by native silty clay and clay to the maximum drilling depths of approximately 19.5 and 20 feet bgs. No bedrock was encountered in either borings. It appears that this area represents the west side of the former oxbow channel shown in **Figure 9**.

Groundwater was encountered in all SCS borings advanced. For borings located in areas of extensive fill, the approximate upper eight feet of the material was noted as damp and moist to a maximum depth of approximately 11 feet bgs; a significant increase in soil moisture content was noted below in the borings advanced into fill material. Groundwater immediately accumulated in these boreholes during drilling with saturated soil cores recovered. Conversely, the increase in moisture content in native unconsolidated soil at Borings PB-4 and PB-5 was observed at a depth ranging between approximately 11 and 12 feet bgs. These field observations indicate that groundwater is at a higher elevation and exhibits higher yield in the fill material as compared to the undisturbed native sediments.

Groundwater monitoring data was collected from the temporary piezometers on September 21, 2020, three to four days following installation. The depth to groundwater varied between 6.39 and 10.49 feet bgs in all borings except Borings PB-4 and PB-5. The depth of static groundwater in these

two borings was 17.74 and 17.35 feet bgs, respectively. This data supports an interpretation that groundwater characteristics differ between the fill material and native soil and has relevance to the fate and transport of COCs identified in groundwater, discussed further in Section 6.0. The potentiometric surface as measured exhibits a primary groundwater gradient directed to the east-southeast with an average approximate magnitude of 0.01 foot-per-foot (**Figure 11**). Groundwater measurements obtained from the two boring piezometers advanced into native silty clay and clay (PB-4 and PB-5) were noted as approximately five to nine feet lower elevation as compared to piezometers installed in the fill material. This supports the geologic and hydrogeologic field observations and conclusions discussed above.

4.2 Analytical Results

Analytical results of samples collected during this Phase II ESA are summarized on **Tables 1A** through **1D** (Soil), **Tables 2A** though **2C** (Groundwater) and **Tables 3** and **4** (soil gas and onsite indoor air), presented as Section 9.0. These tables also include analytical results from previous investigations.

Laboratory results are compared to the KDHE *Risk Based Standards for Kansas, RSK Manual – 5th Version* dated October 2010 (including subsequent updates). The initial screening process is a Tier 1 evaluation which is a comparison of a naturally occurring contaminant to the background concentration of that contaminant in the affected medium, using methods approved by KDHE-BER. Tier 2 is a comparison of the concentration of a contaminant to the risk-based cleanup values in the KDHE Tier 2 Risk-Based Summary Table (RSK Manual; Appendix A).

Analytical data is primarily presented and discussed in Section 5.0 – Nature and Extent of Contamination. A series of figures presenting the previous and current multi-medium analytical data are provided as Figures 12-A, 12-B, 13-A, 13-B and 14, provided as Section 10.0.

4.3 QA/QC Sampling Analytical Results

Field QA/QC sampling was conducted as described in Section 3.2.5. Analytical results are discussed below:

- **Soil Field Blank:** Selenium was detected in the soil field blank at a concentration of 0.0154 milligrams per liter (mg/l). No other RCRA-8 metals, TPH-LRH, TPH-MRH, TPH-HRH, VOCs, SVOCs, pesticides or PCBs were detected above laboratory reporting limits.

- **Groundwater Field Blank:** Naphthalene (8270C analysis) was detected at a concentration of 0.00122 mg/L. No other RCRA-8 metals, TPH-LRH, TPH-MRH, TPH-HRH, VOCs, SVOCs or pesticides were not detected above laboratory reporting limits.

- **Trip Blanks:** VOCs were not detected above laboratory reporting limits for the soil or groundwater trip blanks.

- **Soil Duplicate Samples:** The duplicate soil sample was collected from Boring PB-1A at the depth interval of approximately 9.5 to 11.5 feet bgs. Analytical results detected above laboratory reporting limits for the original and duplicate samples are provided on **Tables 1A through 1D.** Calculated Relative Percent Differences (RPDs) between the two data sets ranged from approximately 0.54 to 58.50 percent for evaluated parameters. RPDs greater than 20 percent were calculated for benzene, naphthalene, barium and lead in the sample

and duplicate. As analytical results are compared to Tier 2 RSKs, the highest concentration of the sample and duplicate are used for comparison. Both benzene and naphthalene sample and duplicate results were below the Tier 2 Residential and Non-residential RSKs; therefore, our interpretation is consistent. Specific to metals, it is not uncommon to have higher RPDs as a high degree of variability commonly occurs within a sampling core.

- Groundwater Duplicate Sample: A duplicate groundwater sample was collected from Boring PB-1A. Analytical results detected above laboratory reporting limits for the original and duplicate samples are provided on **Tables 2A through 2C.** Calculated RPDs between the two data sets ranged from approximately 0.77 to 42.23 percent for evaluated parameters. RPDs greater than 20 percent were calculated for TPH-HRH and naphthalene. Both the original and duplicate TPH-HRH concentrations were below Tier 2 Residential and Non-residential KDHE RSK levels. Conversely, naphthalene concentrations exceeded both RSKs. Therefore, our interpretation with RSKs is consistent, and the data is considered useable. The duplicate sample exhibited a Bis(2-ethylhexyl)-phthalate of 0.00697 mg/L while the original sample was reported below minimum laboratory reporting limits. The reportable concentration was used in data evaluation.

SCS reviewed the quality control reports provided by the laboratory. The following describes our data evaluation of the laboratory report qualifiers.

- A limited number of "J0" laboratory data qualifiers were identified for soil and groundwater sample results. This included the soil results for both surficial and subsurface samples collected from PB-1A (and duplicate), PB-2, PB-3 and PB-9 from laboratory batch L1264151 for acetone and 1,2,3-trichlorobenzene and all of the groundwater results from laboratory batch L1265359 for a detection of acrylonitrile and acrolein. The J0 qualifier indicates that while the identification of the analyte is acceptable, the reported concentration is an estimate. As these compounds are reported significantly below applicable Tier 2 RSKs, the data is considerable useable.

- The "J3" qualifier was present for the soil sample PB-1A 9.5 to 11 feet bgs and the soil field blank, equipment blank and trip blank in laboratory batch L1264151 for reported detections of anthracene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(a)pyrene, chrysene, fluoranthene, phenanthrene, bis(2-ethylhexyl)phthalate, pyrene, chloromethane, 2-chlorotoluene, 4-chlorotoluene, 1,1-dichloroethane, cis-1,2-dichloroethane, trans-1,2-dichloroethane, cis-1,3-dichloropropene, methylene chloride, naphthalene, n-propylbenzene, 1,1,2,2-tetrachloroethane, 1,1,2-trichlorotrifluoroethane, 1,2,3-trichloropropane, 1,3,5-trimethylbenzene and vinyl chloride. The J3 qualifier indicates that the associated batch QC was outside the established quality control range for precision. Data was accepted as reliable at the reported concentrations and compared to Tier 2 RSKs.

- A limited number of "J4" laboratory data qualifiers were identified for soil and groundwater sample results. This included the soil results for the field blank, equipment bland and trip blank samples from laboratory batch L1264151 for vinyl chloride and the groundwater results for the field blank sample from laboratory batch L1265359 for benzidine data. The J4 qualifier indicates the associated batch QC was outside the established quality control range for accuracy. As these compounds were not reported above minimum laboratory reporting limits which are significantly below their applicable Tier 2 RSKs, the data is considered useable.

- The “J5” qualifier was present in laboratory batch L1264151 for a detection of acenaphthene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(a)pyrene, chrysene, fluoranthene, fluorine, phenanthrene, Bis(2-ethylhexyl)phthalate and pyrene in the soil sample collected from Boring PB-1A at approximately 9.5 to 11 feet bgs. The J5 qualifier indicates that the sample matrix interfered with the ability to make any accurate determination because the spike value was high. This data was reviewed to Tier 2 RSKs, and as all compounds were significantly below these concentration, the data is considered useable.

- The “J6” qualifier was present in the soil results for sample PB-1A collected at approximately 9.5 to 11 feet bgs from laboratory batch L1264151 for a detection of hexachlorocyclopentadiene and 2,4-dinitrophenol. The J6 qualifier indicates that the sample matrix interfered with the ability to make any accurate determination because the spike value was low. This data was reviewed to Tier 2 RSKs, and as all compounds were significantly below these concentrations, the data is considered useable.

- The “J7” qualifier was present in the groundwater results for Boring PB-9 from laboratory batch L1265359 for surrogates 1-chloro-octadecane, 2-fluorophenol, phenol-d5, nitrobenzene-d5, 2-fluorobiphenyl, 2,4,6-tribromophenol, p-terphenyl-d14. The J7 qualifier indicates the surrogate recovery cannot be used for control limit evaluation due to dilution. The TPH-MRH and TPH-HRH are the highest exhibited in groundwater samples and exceed the Tier 2 RSKs. Only acenaphthalene, fluorene and phenanthrene were reported exceeding minimum laboratory detection limits, with the first two compounds below their Tier 2 RSKs. There is no Tier 2 RSK for phenanthrene. The data is considered acceptable for use.

- A limited number of “B” laboratory data qualifiers were present in the soil results for samples PB-1A 9.5 to 11 feet bgs (and duplicate), PB-3 9 to 11 feet bgs and PB-9 9 to 11 feet bgs from laboratory batch L1264151 for a detection of TPH-HRH and 1,4-dichlorobenzene and in the groundwater results for the field blank from laboratory batch L1265359 for naphthalene. The B qualifier indicates the analyte was found in the associated blank sample. Although these compounds are also in the blank samples, the results are considered useable as the results do not exceed their respective KDHE Tier 2 RSKs.

- The “P” qualifier was present in the groundwater results for the samples collected from Boring PB-3 and the groundwater duplicate from laboratory batch L1265359 for D,D,D-4,4’. The P qualifier indicates the RPD between the primary and confirmatory analysis exceeded 40%. However, the compound was not reported above minimum laboratory reporting limits.

- The “E” qualifier was present in air sample results for the air sample duplicate from laboratory batch L1265287 for a detection of ethanol. The E qualifier indicates the analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration. There is no Tier 2 RSK for ethanol and the result was considered useable.

During this data validation review, laboratory data qualifiers were noted as described herein. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods, it is common to find data qualifiers. These exceptions have been noted by this data validation review. Based on the evaluation completed on this data, sample results are determined to be valid and useable for their intended purposes.

5.0 NATURE AND EXTENT OF CONTAMINATION

COCs in Soil

Petroleum Hydrocarbons – SCS samples were collected from upper surface soil (grade to approximately four feet bgs) and from the lower vadose zone and capillary fringe as evidenced by field soil core examination (between approximately 9.5 to 14 feet bgs). It should be noted that static groundwater was encountered in piezometers ranging between approximately 5.84 and 17.74 feet bgs (**Table 5**), so the depth interval for a number of the lower-most samples was within the saturated zone as evidenced for the week of field activities.

As shown in **Table 1A**, the TPH fractions present in soil consists primarily of TPH-MRH and TPH-HRH. Only detectable HRH concentrations were exhibited at Boring PB-1/1A (former gasoline UST area) and both TPH-MRH and TPH-HRH were exhibited at Boring PB-9 located in the area of the former AST diesel fueling area (**Figure 12-A**). No detectable TPH concentrations were indicated from the samples collected at the other former gasoline UST area (Boring PB-2), located between Borings PB-1/1A and PB-9. Analytical results for the assessment completed by EWI near the former Subject Site fueling facilities at the south-adjoining property also exhibit TPH-MRH and TPH-HRH concentrations. No TPH-LRH concentrations exceeding minimum laboratory reporting limits were indicated in samples collected from both companies in 2019 and 2020.

SCS also collected soil samples in the loading area immediately north of the former east asphalt storage area removed during construction of the LAC building in 2013 (Boring PB-3; **Figure 12-A**). These samples exhibited both detectable TPH-MRH and TPH-HRH concentrations in both the upper and lower samples. The upper sample was collected from fill material at a depth ranging between approximately 1.5 to 3.5 feet bgs. Soil from the surface to the sampling interval consisted of newer fill material placed during construction of the LAC building. Construction reports from 2013 documented that soil at the surface was removed as part of overall grading for the building.

With respect to the nature and extent of contamination in onsite former fueling areas, it is important to note that only approximately eight to nine vertical feet of vadose zone soil is present, and it is expected that the former gasoline UST areas would have been excavated either near or into groundwater present in the fill material. Therefore, a significant impact in vadose zone soil would not necessarily be required to have also impacted groundwater. Conversely, petroleum hydrocarbons in the former AST area would have likely entered the subsurface from the surface and migrated downward. The lateral extent of TPH-MRH and TPH-HRH is also present at the south adjoining property as evidenced by environmental data obtained by EWI in 2019. The combined SCS and EWI analytical data indicates the occurrence of petroleum hydrocarbons in soil across this area, suggests a source area at the former onsite fueling areas. However, the identified offsite impact may have resulted from releases of petroleum hydrocarbons from Lakes Auto Salvage that had operations formerly present in the area of South 3rd Street and immediately north of the Price Chopper Building.

It is our interpretation that TPH-MRM and TPH-HRH present in vadose zone soil at the former AST storage area is likely not related to the fueling areas. The presence of petroleum hydrocarbons in the upper soil sample suggests a source area in this area, either due to former asphalt storage, impacts from Lakes Auto Salvage, or both. Petroleum hydrocarbons present in the lower soil sample is either related to a localized source area, or due to lateral migration of impacted groundwater.

VOCs – As shown in **Table 1B**, VOCs present in SCS soil samples exceeding minimum laboratory detection limits included benzene, toluene, ethylbenzene, xylenes and naphthalene. These compounds are commonly associated with fuel-range petroleum hydrocarbons and their presence in these areas are not unexpected where TPH-LRH and TPH-MRH is present. A limited number of other VOCs, including isopropylbenzene, n-propylbenzene, methyl tert-butyl ether (MtBE), 1,2,3-trimeythlbenzene, 1,2,4-trimeythlbenzene, chlorobenzene, 1,2-dichlorobenzene, and 1,4-dichlorobenzene were also present and not unexpected for petroleum hydrocarbon impacts. None of these results exceed their respective Tier 2 RSKs.

The shallow soil sample collected from Boring PB-3 in the area of the former asphalt storage area also exhibited generally low concentrations of chlorinated solvent compounds, including cis-1,2 dichloroethene (cis-1,2 DCE), trans-1,2 dichloroethene (trans-1,2 DCE), trichloroethene (TCE) and tetrachloroethene (PCE) as shown on **Figure 12-A**. None of these compounds exceeded their respective Tier 2 RSK concentrations. Also of note, the sample collected at a depth approximately 5.5 feet lower did not report detectable concentrations of any of the compounds.

SVOCs – SVOC analysis was completed for SCS samples expected to contain the highest TPH-MRH and TPH-HRH concentrations; sample selection was completed based on field screening and observations. The samples selected included PB-1/1A and duplicate (9.5 to 11 feet bgs), PB-3 (1.5 to 3.5 feet bgs) and PB-9 (9 to 11 feet bgs). As shown in **Table 1D**, there were a number of common SVOCs exceeding minimum laboratory detection limits. However, none of the detections exceeded their respective Tier 2 RSK concentrations. EWI also completed limited SVOC analysis at the south adjoining property; however, no results exceeded minimum laboratory reporting limits (**Table 1D**).

Results indicate the presence and distribution of SVOCs present in the lower samples are generally consistent with where TPH-MRH and TPH-HRH is also present. They are expected to be laterally persistent with the fuel impact and may be present at greater depths of the saturated zone. SVOCs present in the upper sample collected near the former eastern asphalt storage area is likely related to oil-range hydrocarbons formerly handled in this area, from vehicle storage operations at Lakes Auto Salvage, or both. The lateral extent of these compounds in vadose zone soil is not known; however, due to their physical characteristics these compounds do not typically extensively migrate laterally.

The SVOCs analysis also included reporting 2,6-dinitrotoleune as the EWI investigation in 2019 had identified this compound in groundwater at one location on the south adjoining property north of the intersection of South 3rd Street and Marion Street (**Figure 13-A**). This compound was not identified above minimum laboratory limits in any of the three SCS soil samples analyzed.

RCRA Metals – As shown in **Table 1C**, RCRA metals in SCS soil samples exceeding minimum laboratory detection limits included arsenic, barium, cadmium, chromium, lead and mercury. Aside from an elevated lead concentration in one sample (Boring PB-3 at approximately 9 to 11 feet bgs – 4,770 mg/kg), all results are below their respective Tier 2 RSKs (**Figure 12-B**). Even though the majority of samples were collected from fill material, the resulting concentrations appear to be generally within naturally-occurring concentrations. Similar results were exhibited in the sample collected by EWI at the south adjoining property. As with SCS, one elevated lead concentration was also indicated (Boring SB-5 from approximately four to five feet bgs – 432 mg/kg). The two elevated lead concentrations are present in the southwest portion of the Subject Site and below South 3rd Street. This includes the area within and immediately adjacent to where Lakes Auto Salvage has historically operated. The combined soil sampling results did not suggest the elevated lead occurrence is either laterally or vertically continuous.

Pesticides – Pesticides analysis was completed for all eight SCS soil samples as isolated pesticide occurrences (D,D,D-4,4' and pentachlorophenol) were noted in groundwater samples during completion of the EPA BTA in 1999. The location of the two occurrences included near the northwest corner of the LAC Building and near the former AST diesel storage area (**Figure 5A-1**). Although no soil detections were noted, SCS completed the soil analysis to augment that also completed for groundwater. No pesticides were identified above minimum laboratory limits in any of the soil samples.

PCBs – PCB analysis was completed for both upper and lower soil samples obtained from borings located along the southern Subject Site boundary as a PCB occurrence (Aroclor 1254) was identified in a soil sample collected by EWI in 2019. The location is at the northeast corner of the Price Chopper Building. No PCBs were identified above minimum laboratory limits in any of the SCS soil samples analyzed.

COCs in Groundwater

Petroleum Hydrocarbons – Petroleum hydrocarbons analysis, including TPH-LRH, TPH-MRH and TPH-HRH) was completed for all eleven groundwater samples collected by SCS (**Table 2B**). Only one sample (and duplicate) exceeded the minimum laboratory detection limit for TPH-LRH (Boring PB-1/1A). This boring is located in the area of the western-most former gasoline UST area (**Figure 13-A**). The results of 1.41 mg/L and 1.43 mg/L (duplicate) exceeded the Residential and Non-Residential Tier 2 RSKs of 0.35 and 0.95 mg/L, respectively. However, TPH-LRH is not laterally extensive as the surrounding SCS sample locations in the southwest and west-central portions of the Subject Site do not exhibit detectable concentrations. Additionally, groundwater samples collected from the northern portion of the south adjoining property did not exhibit TPH-LRH above minimum laboratory reporting limits (**Table 2B** and **Figure 13-A**).

As shown in **Table 2B and Figure 13-A,** the TPH fractions present in groundwater consists primarily of TPH-MRH and TPH-HRH; this was also noted in soil samples collected from the former onsite fueling areas. Nine of eleven groundwater samples exhibited detectable TPH-MRH concentrations, of which eight exceeded either the Residential or Non-Residential Tier 2 RSK. The highest concentrations were at Borings PB-7 and PB-9. Similarly, TPH-HRH fractions were detected in eight of the samples; however, only two locations exceeded the Residential Tier 2 RSK (Borings PB-7 and PB-9), with Boring PB-9 also exceeding the Non-residential Tier 2 RSK.

Figure 14 presents TPH-MRH and TPH-HRH concentrations at the Subject Site and south adjoining Price Chopper property. The figure is also an isoconcentration map for TPH-MRH. The maximum TPH-MRH concentration is noted at Boring PB-9, the former location of a diesel AST fueling area. Surrounding sampling points show the approximate lateral extent of this petroleum hydrocarbon fraction. Two of the TPH-MRH isoconcentration lines represent the Tier 2 Residential and Non-residential RSK values; these are 0.15 and 0.4 mg/L, respectively. The approximate south-central and eastern portion of the Subject Site exhibits TPH-MRH exceeding the Tier 2 Non-residential RSK. The majority of the Subject Site has TPH-MRH concentrations exceeding the Tier 2 Residential RSK, with the plume likely extending easterly toward the present Five Mile Creek Channel.

VOCs – As shown in **Table 2A**, there were a number of VOCs present in SCS groundwater samples exceeding minimum laboratory detection limits. These are primarily associated with refined petroleum hydrocarbons and degradation products. Although detected in the shallow soil sample at Boring PB-3, no chlorinated solvents (PCE, TCE, cis-1,2 DCE or trans-1,2 DCE) were exhibited in any of the samples.

The VOCs that exceeded Tier 2 Residential and Non-residential RSKs at the Subject Site included benzene and naphthalene (**Table 2A**). The maximum benzene and naphthalene concentrations were noted at the west-most former gasoline UST area; lesser concentrations are present in groundwater to the central and east-central areas (**Figure 13-A**). No benzene or naphthalene concentrations exceeding minimum laboratory detection limits in groundwater samples collected by EWI at the adjoining Price Chopper property. Additionally, methylene chloride exceeding the Tier 2 RSKs was identified by EPA in 1999 near Boring PB-9. However, this compound was not identified by SCS in that area.

SVOCs – SVOC analysis was completed for all eleven groundwater samples collected by SCS (**Table 2B**). The primary compound encountered exceeding laboratory reporting limits was naphthalene, present in four boring locations across the central, southern and southeast portions of the Subject Site; the detections appear to be associated with TPH-MRH concentrations (**Figure 13-A**). All detections are noted as exceeding both the Residential and Non-residential Tier 2 RSK values. Groundwater samples collected by EWI at the south adjoining property were not analyzed for SVOCs. It is expected that naphthalene could also be present in the northern portion of the Price Chopper property where TPH-MRH has been identified.

There were a limited number of other detectable SVOCs, including acenaphthene, fluorene, phenanthrene at Boring PB-9. However, none exceeded their respective Tier 2 RSKs. There were also two bis(2-ethylhexyl)-phthalate concentrations exceeding minimum laboratory reporting limits. This included Borings PB-1/1A (0.00697 mg/L) and PB-11 (0.00607 mg/L). The detections slightly exceed the Residential/Non-Residential Tier 2 RSK of 0.006 mg/L and the compound is not present laterally across the Subject Site.

RCRA Metals – Dissolved RCRA metals analysis was completed for six groundwater samples collected by SCS to provide representative data across the Subject Site (**Table 2C**). Metals analysis was completed as part of previous investigations at the Subject Site and south adjoining property, including Terracon in 1989, EPA in 1999 and EWI in 2019. Results from the 1989 and 1999 assessments identified metal concentrations exceeding the current Residential/Non-residential Tier 2 RSKs for arsenic, barium, cadmium, chromium and lead (**Table 2C**) However, summary reports did not identify if these results reported total metal or dissolved metal concentrations.

Additional metal analysis (dissolved) was completed by EWI in 2019 at the Price Chopper property. This assessment identified arsenic and barium exceeding the laboratory reporting limits, with the arsenic concentration of 0.015 mg/L for both samples slightly exceeding the Residential/Non-residential Tier 2 RSK of 0.01 mg/L (**Figure 13-B**). Our dissolved metal results have identified arsenic, barium and lead exceeding laboratory reporting limits (**Table 2C**). Only three occurrences exceeded their respective Tier 2 RSK values, including Borings PB-5 (arsenic; 0.0486 mg/L), Boring PB-8 (barium; 5.19 mg/L) and Boring PB-10 (lead; 0.0261 mg/L) as shown on **Figure 13-B**. None of these exceedances are observed as laterally continuous.

Pesticides – Pesticides analysis was completed for three groundwater samples collected by SCS along the southern portion of the Subject Site (**Table 2B**). The sampling locations were selected due to D,D,D-4,4' and pentachlorophenol present in the groundwater sample near the former AST diesel storage area (**Figure 13-A**). Neither of these, or other pesticide compounds, were identified above minimum laboratory limits in the SCS groundwater samples.

Air Sampling – LAC Building

VOCs – As discussed in Section 3.2.4, two air samples (and duplicate) were collected from inside of the LAC Building at the staff cubicle area and storage hallway adjacent to the kitchen. An ambient air sample was also collected outside of the LAC Building. The samples were submitted for VOC analysis; results are shown in **Table 4**. Analytical results exhibited a limited number of compounds exceeding minimum laboratory reporting limits, none of which exceeded their respective Tier 2 RSKs for the Residential Indoor Air Pathway. Based on COC present in the subsurface, compounds of particular interest included benzene, naphthalene and chlorinated solvents. Benzene and naphthalene were not reported above laboratory method limits. PCE was the only chlorinated solvent present in indoor air; the maximum result of 5.11 ug/m3. This concentration is approximately eight times lower than the Tier 2 RSK.

Indoor air conditions were previously evaluated for the Price Chopper Supermarket building by EWI in 2019. Three soil gas samples were collected along the north side of the building, near the southern portion of the Subject Site (**Figure 6**). The resulting data was evaluated using the EPA VISL Calculator. Although analytical results indicated a number of common VOCs exceeding minimum laboratory reporting limits (**Table 3**), none exceeded EPA VISL Commercial Target Concentrations for Exterior Soil Gas. Only chloroform was identified above these threshold concentrations for Residential use.

6.0 CONTAMINANT FATE AND TRANSPORT

Field observations and analytical results indicate that petroleum hydrocarbons and related VOCs and SVOCs are the primary regulated substances present in soil and groundwater. The potential source areas for this observed contamination includes UST and AST fueling facilities formerly operated by the City and in the area of the former Lakes Auto Salvage. Other lesser and limited occurrences of regulated substances are also present, including RCRA metals, pesticide compounds, PCBs and 2,6,-Dinitrotoluene, an SVOC not specifically related to fuel releases. The presence and expected fate and transport of contamination is summarized in this section.

6.1 Potential Migration Routes

Petroleum Hydrocarbons & Related VOCs/SVOCs: City garage operational data and historical sources of information for Lakes Auto Salvage indicate that the majority of currently identified impact(s) to soil and groundwater occurred a considerable time in the past.

City research and historical sources of information indicate that Lakes Auto Salvage has operated from at least 1949. Aerial photographs and City Directory information shows that this business has historically formerly operated on both the north and south sides of Marion Street. Additionally, salvaged vehicles were present in the area of the current South 3rd Street and the eastern-most portion of the Price Chopper property as shown in **Figure 15**. Common COC for salvage operations include fuel- and oil-range hydrocarbons, SVOCs, VOCs and metals. The substances typically enter the subsurface at the ground surface and migrate downward in the soil column through natural leaching mechanisms. Groundwater can also be impacted if significant contaminant mass exists with a sufficient amount of time.

Onsite areas where petroleum hydrocarbon impacts to shallow soil have likely occurred include the east asphalt storage area and in the area of the former AST fueling area. In both these areas if spills had occurred, it is typically during filling fuel or loading asphalt in areas without surface asphalt or concrete surface. Additionally, potential fuel releases from underground piping and USTs could have occurred. In this case, it is important to note that vadose zone soil is limited from grade to above the shallow water table (measured as high during this assessment as approximately 6.5 feet bgs). Potential releases from piping would migrate through the soil to groundwater. Conversely, potential releases from the USTs would be expected to directly impact groundwater and associated capillary fringe directly as the tank basin would have likely been excavated to at least that depth. Once in the subsurface, contaminants from the fueling facilities would mostly migrate laterally through the groundwater pathway.

As the Subject Site AST and USTs were operable between 1972 and 1991, petroleum hydrocarbons present in the subsurface represent an older release(s). Although site records indicate that both diesel and gasoline fuel was dispensed, analytical data exhibits primarily an MRH fraction in soil and groundwater. This data supports a conclusion that shorter-chain hydrocarbons have likely degraded over the last thirty to fifty years. This may also explain in part the presence of HRH compounds. Additionally, it is also reasonable to assume that petroleum hydrocarbons (fuel and oil range) were primarily introduced directly to the ground surface in the area of the former Lakes Auto Salvage.

Other Regulated Compounds: The remaining regulated substances previously and currently identified in subsurface soil are minor occurrences of PCBs (Aroclor 1254), chlorinated solvents (1,2-DCE, TCE and PCE) and RCRA metals including lead exceeding the Tier 2 RSK. In groundwater, these regulated substances include a pesticide (D,D,D-4,4'), an SVOC commonly associated with

explosives manufacturing and use (2,6-Dinitrotoluene) and RCRA metals. The metals in SCS groundwater samples exceeding Tier 2 RSKs include arsenic, barium and lead.

It is common for pesticides to be applied at the surface, with downward migration into subsurface soil, and potentially groundwater, leaching with precipitation. Areas exhibiting elevated metal concentrations in soil also leach downward. It is important to note that these detections are limited in quantity and lateral and vertical extent in soil, and in the case of metals exceeding Tier 2 RSKs, are identified at isolated sampling points rather than being laterally continuous.

6.2 Contaminant Characteristics

The primary regulated substance identified at the Subject Site are petroleum hydrocarbons; the predominant fraction is identified as TPH-MRH with comparatively lesser concentrations of TPH-HRH. Only one detection of TPH-LRH was identified in a groundwater samples. A limited number of VOCs are assumed to be associated with the TPH-MRH including BTX and naphthalene. Migration of TPH-MRH in the vadose soil and groundwater is generally less extensive than expected for TPH-LRH as it consists of comparatively longer chain hydrocarbons. The TPH-HRH fraction includes hydrocarbon molecules commonly described as "oil". This fraction does not readily migrate through vadose zone soil or groundwater, and therefore are typically present at and in proximity to a source area. SVOC compounds are generally present when TPH-HRH and TPH-MRH occurrences are identified.

With TPH-MRH, the BTX and naphthalene are shorter chain hydrocarbon compounds and are expected to migrate the greatest distance from a source area through the groundwater pathway. The TPH and VOCs partition to the vapor phase and are therefore considered when evaluating the potential for vapor encroachment conditions in structures/buildings. Benzene and naphthalene are compounds of specific interest for indoor air. Conversely, SVOCs (excluding naphthalene) generally do not typically pose a high risk for migration into overlying structures because of their physical characteristics.

Chlorinated solvents, including cis-1,2 DCE, trans-1,2 DCE, TCE and PCE have been identified in one soil sample collected near the former east asphalt storage area; these VOCs were not exhibited in groundwater samples collected at the Subject Site. As it is for BTX and naphthalene, these VOCs can readily migrate as vapor from the subsurface into buildings. All four are priority compounds when evaluating indoor air quality. They also readily migrate through soil and groundwater pathway. Exposure via direct contact in soil and groundwater includes inhalation, dermal contact and ingestion.

The RCRA metals naturally occur in soil. However, there are numerous potential adverse health effects when human receptors are exposed to elevated concentrations in soil or groundwater. Metals generally migrate downward in upper vadose soil through leaching from precipitation. Dissolved metals also migrate laterally through the saturated zone with groundwater flow. The primary route of exposure is through direct contact including inhalation, dermal contact and ingestion. As metals do not volatilize, they are not considered when evaluating for vapor encroachment conditions.

6.3 Contaminant Migration

As described above, the primary contamination at the Subject Site are petroleum hydrocarbons and associated fuel-range VOCs (BTX and naphthalene) and SVOCs. Assumed releases to the surface are expected to include Lakes Auto Salvage, in the area of the former AST fueling area and in the area of

the former east asphalt storage area. If a spill occurred at the surface in these areas, there would be downward contaminant migration potentially to the capillary fringe and shallow groundwater. In the case of a UST fueling system release, contaminants can be released directly to subsurface soil (ground spills or subgrade piping) or directly to groundwater from USTs and other basin releases.

For this property, we conclude the majority of petroleum hydrocarbon mass is present in the capillary fringe and saturated zone and dissolved in groundwater. Concentrations of and the estimated lateral extent of petroleum hydrocarbons in groundwater are shown in **Figure 14**. The assumed extent of contamination encompasses former Subject Site fueling areas and east asphalt storage area, as well as the location of historic operations of Lakes Auto Salvage at the south Property boundary, beneath current day South 3rd Street and eastern-most portion of the Price Chopper property.

The dissolved phase petroleum hydrocarbon plume extends generally eastward toward the current Five Mile Creek channel located immediately east of the Subject Site and former auto salvage. When evaluating migration of contaminants in groundwater, there are site-specific factors to consider. Firstly, the Property is located within the stream and fluvial deposits system of Five Mile Creek. This subsurface area has been reworked and altered by both USACE during realignment of the system channel in the late 1960's and with placement of mixed soil, construction debris and municipal wastes between 1969 through 1972. Soil cores recovered during previous geotechnical and environmental assessments, as well as the current assessment have described this area as having lower degree of density and higher degree of saturation when compared to immediately surrounding areas. This "fill area" also exhibits a higher static groundwater level as compared to the land area to the west portion of the Subject Site. These relationships are apparent when comparing subsurface data near the west boundary of the Subject Site. All SCS borings are located within the "fill area" with the exception of PB-4 and PB-5, which exhibit fill material to only approximately four feet bgs, as compared to borings located immediately east (PB-1, PB-2 and PB-6) which encountered fill to the maximum drilling depth. Static groundwater was measured in the natural deposits at Borings PB-4 and PB-5 more than ten feet lower than in the fill material present in the east. The fill area can be visualized as a "bathtub" that retains surface water and having physical characteristics that encourages a higher flow regime and lateral migration potential as compared to the area with mostly natural deposits and limited fill material. The effect can also be seen in contaminant distribution. As shown on **Figure 14**, there are no detections of TPH-LRH, MRH or HRH at Borings PB-4 and PB-5. Further to the west, EWI Borings MW-1 and MW-2 exhibit lower comparative petroleum hydrocarbon concentrations also, with fill material only present in the upper three feet below ground surface.

The groundwater gradient direction was calculated for September 21, 2020 as being primarily directed toward the east-southeast (**Figure 11**), while dissolved-phase petroleum hydrocarbons are shown across the majority of the Subject Site (**Figure 14**). Furthermore, the highest concentrations appear to be migrating from the apparent source areas to the east-northeast. This can be better understood when considering the location of the former oxbow portion of the stream channel. **Figure 9** shows the location of the Five Mile Creek channel in 1966 prior to USACE realignment. It is our opinion that this portion of the former backfilled channel has an effect on the overall flow dynamics below the Subject Site and likely influences contaminant migration. Interestingly, other isolated occurrences of contaminants in groundwater exceeding Tier 2 RSKs are present within or near the former oxbow channel (**Figure 13-A**). These include pentachlorophenol (BTA Boring 100) and Bis (2-ethylhexyl)phthalate in Borings PB-1A and PB-11. Similarly, isolated occurences of dissolved metals exceeding Tier 2 RSKs are also present, including arsenic in Boring PB-5, lead in Boring PB-10 and barium in Boring PB-8 (**Figure 13-B**).

7.0 IDENTIFICATION OF POTENTIAL RECEPTORS AND LAND USE

A pre-field assessment receptor evaluation was included in the VCI Work Plan as Section 2.5. This section presents an update of potential receptors following completion of the field data acquisition activities. All current and future receptors in the vicinity of the Subject Site are discussed immediately below in Section 7.1; those identified as having a potential for being impacted by contamination are identified in Section 7.2. Land use information follows in Section 7.3.

7.1 Receptors

Current Potential Human Receptors

ONSITE

- **Onsite Commercial Workers – LAC Building:** The potential for vapor encroachment was evaluated by collecting indoor air samples and an ambient outdoor sample during the SCS field assessment. The air samples were analyzed for VOCs and compared to Tier 2 RSKs for Residential Indoor Air. A number of VOCs were reported above minimum laboratory reporting limits; however, the individual compound results were significantly below the applicable RSKs. ***Based on this representative sampling event, an adverse vapor encroachment condition is not expected.***

  Direct exposure to surface soil is limited to grassy areas at the LAC property (dermal contact, ingestion and inhalation). ***The current and previous assessments have not identified COCs exceeding Tier 2 Non-Residential RSKs in surface soil/vadose zone across the Subject Site. Therefore, a potential adverse exposure is not expected.***

  As there are no public or private water wells onsite, it is our evaluation that onsite commercial workers are not currently exposed to contaminated groundwater at the Subject Site. Water is provided by the City of Leavenworth.

- **Onsite Construction Workers** – ***Workers could be potentially exposed to contaminants in soil and groundwater through dermal contact, ingestion and inhalation if construction work is planned.*** The potential exposure is further discussed in Section 7.2

- **Onsite Residents** – ***There are currently no residents at the Subject Site.*** A search for residential properties in proximity to the Subject Site was provided in Section 2.5 of the VCI Work Plan. The nearest current residence (2113 South 2nd Street) was identified as located approximately 450 east of the Subject Site. This residence is located east of Five Mile Creek, which is located between the two properties.

OFFSITE

- **Offsite Commercial Workers – Price Chopper Property:** Exposure to VOCs through the indoor Inhalation pathway was evaluated. However, an adverse exposure is considered unlikely as subsurface soil gas data collected by EWI in 2019 did not exhibit results exceeding EPA VISL Calculator threshold concentrations, which predicts indoor air quality.

  Direct exposure to surface soil is limited to grassy areas located along the south and west property boundaries (dermal contact, ingestion and inhalation). ***The previous assessments***

have not identified COCs exceeding Tier 2 Non-residential RSKs in surface soil/upper portion of the vadose zone across the portions of this offsite property where COCs have been identified. Therefore, a potential adverse exposure is not expected.

As there are no public or private water wells being used, it is our evaluation that offsite commercial workers are not currently exposed to contaminated groundwater present in the north or east portions at the property. Water is provided by the City of Leavenworth.

- Offsite Construction Workers – *Workers could be potentially exposed to contaminants in soil and groundwater through dermal contact, ingestion and inhalation if construction work is planned in the near future.* The potential exposure is discussed in Section 7.2

- Offsite Residents – *There are currently no potential residential receptors at immediately adjoining properties*.

- Offsite Commercial Workers – Properties Located to West and Northwest: Commercial properties are also located west and northwest of the Subject Site. *As contaminated soil and groundwater exceeding Residential RSKs are not expected in these areas, adverse exposure through direct contact or through the indoor Inhalation pathway is not expected*.

Future Potential Human Receptors

As described below in Section 7.3, current land zoning at and in the area of the Subject Site is non-residential. It is expected this zoning will continue in the foreseeable future. Therefore, the potential future receptors are presently identified as:

ONSITE

- Onsite Commercial Workers – LAC Building: *Future exposure to potential VOC vapors within the building is not expected as air sampling data was below Tier 2 RSKs for Residential Indoor Air.* Additionally, it should be noted that a 15-mil vapor barrier was installed as part of the foundation system when the building was constructed. No building additions are expected in the foreseeable future.

  Direct exposure to surface soil is limited to grassy areas at the LAC property (dermal contact, ingestion and inhalation). *The current and previous assessments have not identified COCs exceeding Tier 2 Non-residential RSKs in surface soil/vadose zone across the Subject Site. Therefore, a potential adverse exposure is not expected in the future.*

  Municipal water is provided to the Property and there are currently no public or private water wells located onsite. The City does not plan to install any supply wells in the future. *For this reason, we do not expect there will be a potentially adverse exposure to contaminated groundwater in the future.* Additional protection from potential future exposure could be provided if a deed restriction for water well installation is established.

- Onsite Construction Workers – *Workers could be potentially exposed to contaminants in soil and groundwater in the future through dermal contact, ingestion and inhalation.* The potential exposure is further discussed in Section 7.2

- **Onsite Residents** – A change in land use and zoning from Commercial to Residential is not expected in the foreseeable future. ***Therefore the potential exposure to contaminants is not expected in the future.***

OFFSITE

- **Offsite Commercial Workers – Price Chopper Property**: Exposure to VOCs through the indoor Inhalation pathway was evaluated by EWI in 2019. ***Soil gas sampling results did not exceed EPA VISL Calculator threshold concentrations which predict indoor air quality. It is expected that the risk potential in the future will be similarly unexpected.***

  Direct exposure to surface soil is limited to grassy areas located along the south and west property boundaries (dermal contact, ingestion and inhalation). ***The current and previous assessments have not identified COCs exceeding Tier 2 Non-residential RSKs in surface soil/upper portion of the vadose zone across the portions of the property where COCs have been identified. Therefore, a potential adverse exposure is not expected in the future.***

  As there are no public or private water wells being used, it is our evaluation that adverse exposure for offsite commercial workers to contaminated groundwater present in the north or east portions at the property would not be expected in the future. Additional protection from potential future exposure could be provided if a deed restriction for water well installation is established.

- **Offsite Commercial Workers – Properties Located to West and Northwest:** Commercial properties are also located west and northwest of the Subject Site. ***As existing contaminated soil and groundwater exceeding Residential RSKs is not expected in these areas, future adverse exposure through direct contact or through the indoor inhalation pathway is not expected.***

- **Offsite Construction Workers – Properties Located to West and Northwest:** ***As contaminated soil and groundwater exceeding Residential RSKs are not expected in these areas, workers at these commercial properties are not expected to be exposed in the future.***

- **Offsite Residents** – A change in land use and zoning from Commercial to Residential is not expected in the foreseeable future. ***Therefore the potential exposure to contaminants is not expected in the future.***

The potential ecological receptors are discussed as part of Section 7.2.

Water Wells

As presented in Section 2.5 of the VCI Work Plan, a water well survey was conducted by SCS to locate public and private water supply wells within a 1-mile radius of the site. The Subject Site area is serviced by Leavenworth Waterworks, which uses treated surface water from the Missouri River alluvial aquifer for the municipal water supply (http://www.lvnwater.com/20wqr.pdf). Based on information obtained from the Kansas Geological Survey (KGS) Water Well Record (WWC5) database (https://maps.kgs.ku.edu/wwc5/index.html?t=wwc5), multiple monitoring/observation wells are located within 1 mile from the Subject Site. However, there do not appear to be any public water supply (PWS) wells or private/domestic wells located within one mile from the Subject Site. A well

location map obtained from the KGS WWC5 well database is included in Attachment C of the VCI Work Plan.

7.2 Potential Risk

Using the information presented in the preceding section, the following are identified as potential human receptors:

- **Onsite Construction Workers** – Previous and current site assessment data indicates that contaminated vadose soil is primarily present at a minimum depth of six feet bgs. This depth is expected to represent the upper extent of the capillary fringe; groundwater at and below this depth is impacted. There could be impacted soil above this depth; however, it would be expected to be limited to areas where former asphalt ASTs and fuel storage and dispensing operations were present in the southern portion of the Property. The primary COC in both soil and groundwater are petroleum hydrocarbons and associated VOCs and SVOCs

  Therefore, workers could be potentially exposed to contaminants if trenches or other excavations are extended to a depth of at least six feet bgs and greater. Exposure could occur through dermal contact, inhalation and ingestion (groundwater). Site assessment information will be retained by the City Public Works Department so notification of the conditions can be made before construction proceeds on this City property.

- **Offsite Construction Workers – Price Chopper Property:** Previous site assessment data along the northern portion of this property indicates that contaminated vadose soil could be present at a minimum depth of approximately eight feet bgs. As with the Subject Site immediately north, this depth is expected to represent the upper extent of the capillary fringe; groundwater at and below this depth is impacted. However, it is our perspective that impacted soil could be present in surface soil and vadose zone in the area immediately east and northeast of the supermarket building and below South 3rd Street. This is where Lakes Auto Salvage operations extended in the past. The primary COC in both soil and groundwater are petroleum hydrocarbons and associated VOCs and SVOCs. Other isolated compounds were also formerly identified, including 2,6-dinitrotoluene, PCBs and pesticide compounds, although none exceeded their respective Tier 2 RSKs.

  It is conservative to assume offsite construction workers could be potentially exposed to contaminants at any trench depth in the area immediately north and east of the supermarket building and within the right-of-way of South 3rd Street. West and southwest of the Subject Site, potential exposure could occur within trenches or other excavations extending to a depth of at least six to eight feet bgs and greater. Exposure could occur through dermal contact, inhalation and ingestion (groundwater). Construction work completed further west and south of this area would not be expected to encounter regulated substances originating from the Subject Site or Lakes Auto Salvage.

Ecological Receptors

The Subject Site is located immediately west-northwest of the current channel of Five Mile Creek (**Figure 2**). As discussed earlier, an oxbow channel backfilled by USACE is present below the Property. Therefore, groundwater immediately below the Subject Site is considered to be part of the Creek hydrogeologic system. The primary contaminant in groundwater are petroleum hydrocarbons. **Figure 14** presents the approximate lateral extent of the dissolved-phase hydrocarbon plume. It is

our professional opinion that the groundwater impact has been adequately assessed in all directions except to the east/east-southeast in the direction of the Creek.

Based on review of the United States Geological Survey (USGS) topographic map; the USGS National Map Advanced Viewer (https://viewer.nationalmap.gov/advanced-viewer/), which denotes state and federal parks, wilderness and wildlife areas, public lands, and significant natural features; and the Unites States Fish and Wildlife Service (USFWS) National Wetlands Inventory mapper (https://www.fws.gov/wetlands/data/mapper.html), there are no known nearby sensitive receptors, such as state parks or wetlands within a 500-foot radius of the Subject Site. The noted maps did identify Five Mile Creek located approximately 300 feet east-southeast of the Subject Site. Five Mile Creek flows north and east approximately ½-mile before draining into the Missouri River. Based on additional review of the Leavenworth County GIS Web Map noted above, the Federal Emergency Management Administration (FEMA) Flood Hazard Overlay indicates the Subject Site is located outside of the Five Mile Creek floodway, although 0.2% Annual Chance Flood Hazard areas do appear to touch on the northeast and southeast corners of the approximate Subject Site boundary. There are no other known surface water bodies within ¼-mile of the subject site. A copy of the USGS National Map and USFWS Wetlands Map are included in **Attachment C** in the VCI Work Plan.

An informal United States Fish and Wildlife Survey (USFWS) Information for Planning and Consultation (IPaC) query was performed for threatened and/or endangered species near the Subject Site on July 22, 2020 (https://ecos.fws.gov/ipac/). Results of the IPaC query indicated four species for potential consideration, as discussed below.

- **Northern long-eared bat (*Myotis septentrionalis*)** Threatened: Northern long-eared bats spend winter hibernating in caves and mines, most often in small crevices or cracks, with only the nose and ears visible. During the summer, northern long-eared bats roost singly or in colonies underneath bark, in cavities or crevices of both live trees and snags (dead trees). Males and non-reproductive females may also roost in cooler places, like caves and mines. The IPaC query indicates no critical habitat has been designated for this species.

- **Pallid Sturgeon (*Scaphirhynchus albus*)** Endangered: Pallid sturgeons evolved and adapted to living close to the bottom of large, silty rivers with a natural hydrograph. Their preferred habitat has a diversity of depths and velocities formed by braided channels, sand bars, sand flats and gravel bars. The pallid sturgeon is scarce in most Missouri River reaches. The IPaC query indicates no critical habitat has been designated for this species.

- **Mead's Milkweed *(Asclepias meadii)*** Threatened: Mead's milkweed requires moderately wet (mesic) to moderately dry (dry mesic) upland tallgrass prairie or glade/barren habitat characterized by vegetation adapted for drought and fire. It persists in stable late-successional prairie. The IPaC query indicates no critical habitat has been designated for this species.

- **Western Prairie Fringed Orchid *(Platanthera praeclara)*** Threatened: Occur most often in mesic to wet unplowed tallgrass prairies and meadows but have been found in old fields and roadside ditches. The IPaC query indicates no critical habitat has been designated for this species.

As the eastern lateral extent of dissolved-phase petroleum hydrocarbons is not specifically known at this time, it is possible that it may extend to the surface water body. However, this is considered unlikely as the majority of the identified impact are MRH and HRH fractions. These longer-chain hydrocarbons typically do not migrate large distances from the source area. The lateral distance

from the southeastern Subject Site boundary south to the nearest portion of the Creek is measured as approximately 125 feet. The data point in closest proximity in this area is Boring PB-3 which exhibits a TPH-MRH concentration of 0.249 mg/L; this result is below the Tier 2 Non-residential RSK of 0.4 mg/L and slightly above the Tier 2 Non-residential RSK of 0.15 mg/L (**Figure 14**). The lateral distance from the eastern Subject Site boundary east to the nearest portion of the Creek is measured as approximately 300 feet. The data point at the eastern Property boundary is Boring PB-7 which exhibits a TPH-MRH concentration of 1.97 mg/L. This result exceeds both the Tier 2 Non-residential and Residential RSKs.

As discussed above, at this time we are unable to provide an opinion as to whether the threatened and/or endangered species would be impacted by the known petroleum hydrocarbon impact. It should be noted that a critical habitat has not been designated locally for any of these species.

7.3 Land Use

The Subject Site is located in a commercial use area with immediately adjoining properties consisting of commercial businesses located to the south and west (**Figure 2**). The area immediately north is presently undeveloped and was the location of a City solid waste municipal landfill operation. Historically undeveloped land and Five Mile Creek is located immediately to the east. Viewed collectively, the Subject Site and immediately adjoining properties are located within the former and current creek channel area and associated floodplain.

Based on review of City of Leavenworth Zoning, obtained from City of Leavenworth GIS (http://gis.firstcity.org/), the Subject Site and adjoining properties to the north, east, and southeast of the site are zoned industrial (I-2), while adjoining properties to the west and southwest are zoned general business (GBD). The nearest residential zoning (R1-6) is located approximately 600 feet to the west/northwest of the Subject Site, on the west side of South 4th Street, as well as multi-family zoning (R-MF) located approximately 600 feet to the southeast of the Subject Site, on the east side of South 2nd Street. A parcel map identifying property lines, address points, and owner names within approximately 500 feet of the Subject Site was also obtained from the Leavenworth County GIS Web Map (https://leavenworthgis.integritygis.com/H5/Index.html?viewer=leavenworth). A copy of the zoning map and parcel map were included in Attachment C of the VCI Work Plan.

8.0 SUMMARY AND CONCLUSIONS

Past environmental assessments were performed by numerous other parties at and near the Subject Site from 1989 through 2019. These findings identified potential regulated COCs including total petroleum hydrocarbons, VOCs, SVOCs, RCRA metals, pesticides, and PCBs. The previously identified COCs were found to be present in portions of the Subject Site, rather than pervasively present across its entirety. Therefore, the data needs for this assessment varied by COC and was the basis of our Phase II ESA design presented in the approved VI Work Plan. SCS environmental assessment field activities were conducted from September 17 through 23, 2020.

Geology and Hydrogeology

The majority of the Subject Site is located within a portion of the historic Creek channel that was relocated by USACE in the late 1960's. This former channel is shown in **Figure 9**, and is observed as an "oxbow" geomorphic feature. It is assumed that this portion of the former channel was at least partially filled at this time, most likely with steam deposits reused from the general area. The figure also shows the location of the current LAC building and South 3rd Street. The present day Creek channel is located immediately south of the southeast portion of the Subject Site and generally appears as it did prior to the creek realignment. It should be noted that municipal solid waste was also placed in this area as is evidenced by earlier geotechnical and environmental studies and in soil cores obtained during this assessment.

Subsurface material encountered during the SCS field investigation primarily consisted of fine-grained fill material previously placed in the former channel and surrounding area. Fill was present in all borings, although a considerably lesser thickness was observed at Borings PB-4 and PB-5, located along the western Property boundary. Native deposits were identified in these two borings, consisting of silty clay and clay, below the fill material (3.5 to four feet bgs downward). It appears that this area represents the west side of the former oxbow channel shown in **Figure 9**. Subsurface materials encountered during the SCS assessment are shown in Cross Sections A-A' and B-B', presented as **Figures 10-A** and **10-B.**

The fill material primarily consisted of silty clay without and with municipal solid waste included. Construction debris and general municipal trash was also present in the fill material. The fill material was noted in all borings to the maximum drilling depth of approximately 20 feet bgs. No suspect asbestos containing materials were identified by SCS during the field assessment.

Groundwater was encountered across the Subject Site. For borings located in areas of extensive fill, the approximate upper eight feet of the material was noted as damp and moist to a maximum depth of approximately 11 feet bgs; a significant increase in soil moisture content was noted below in the borings advanced into fill material. Groundwater immediately accumulated in these boreholes during drilling with saturated soil cores recovered. Conversely, the increase in moisture content in native unconsolidated soil at Borings PB-4 and PB-5 was observed at a depth ranging between approximately 11 and 12 feet bgs. These field observations indicate that groundwater is at a higher elevation and exhibits higher yield in the fill material as compared to the undisturbed native sediments.

Groundwater monitoring data was collected from the temporary piezometers installed by SCS. The depth to groundwater varied between 6.39 and 10.49 feet bgs in all borings except Borings PB-4 and PB-5 (17.74 and 17.35 feet bgs, respectively). This data supports the conclusion above that groundwater characteristics differ between the fill material and native soil, and is relevant to fate

and transport of COCs identified in groundwater. The potentiometric surface as measured exhibits a primary groundwater gradient directed to the east-southeast with an average magnitude of 0.01 foot-per-foot (**Figure 11**).

8.1 Summary of VCI Results

8.1.1 Nature and Extent of Contamination

Petroleum Hydrocarbons

The primary regulated substance identified at the Subject Site and south adjoining property is petroleum hydrocarbons. The predominant fraction present was TPH-MRH with lesser concentrations of TPH-HRH. No TPH-LRH was exhibited in soil samples; only one groundwater sample contained that fraction.

Soil – Former Fueling Areas: As shown in **Table 1A**, only detectable HRH concentrations were exhibited at Boring BP-1/1A (former gasoline UST area) and both TPH-MRH and TPH-HRH were exhibited at Boring BP-9 located in the area of the former AST diesel fueling area (**Figure 12-A**). No detectable TPH concentrations were indicated from the samples collected at the other former gasoline UST area (Boring PB-2), located between Borings BP-1/1A and PB-9. Analytical results for the assessment completed by EWI near the former Subject Site fueling facilities at the south-adjoining property also exhibit TPH-MRH and TPH-HRH concentrations.

With respect to the nature and extent of contamination at onsite former fueling areas, it is important to note that only approximately eight to nine vertical feet of vadose zone soil is present, and it is expected that the former gasoline UST areas would have been excavated either near or into groundwater present in the fill material. Therefore, a significant impact in vadose zone soil would not necessarily be required to have also impacted groundwater. Conversely, petroleum hydrocarbons in the former AST area would have likely entered the subsurface from the surface and migrated downward. The lateral extent of TPH-MRH and TPH-HRH is also present at the south adjoining property as evidenced by environmental data obtained by EWI in 2019. The combined SCS and EWI analytical data indicates the occurrence of petroleum hydrocarbons in soil across this area, suggests a source area at the former onsite fueling areas. However, the identified offsite impact may have also resulted from releases of petroleum hydrocarbons from Lakes Auto Salvage that had operations formerly present in the area of South 3rd Street and immediately north of the Price Chopper Building.

Soil – Former East Asphalt Storage Area: SCS also collected soil samples in the loading area immediately north of the former east asphalt storage area (Boring PB-3; **Figure 12-A**). These samples exhibited both detectable TPH-MRH and TPH-HRH concentrations in both the upper and lower samples. Soil encountered from the surface to the shallow soil sampling interval consisted of newer fill material placed during construction of the LAC building in 2013. It is our conclusion that TPH-MRM and TPH-HRH present in vadose zone soil at the former AST storage area is likely not related to the fueling areas located to the west. The presence of petroleum hydrocarbons in the upper soil sample suggests a source area in this area, either due to former asphalt storage, impacts from Lakes Auto Salvage, or both. Petroleum hydrocarbons present in the lower soil sample is either related to a localized source area, or due to lateral migration of impacted groundwater from the west near the former fueling areas.

Groundwater – Subject Site and South Adjoining Property: Again, petroleum hydrocarbons (TPH-MRH and TPH-HRH) are the primary regulated substance present in Subject Site groundwater. Nine of eleven groundwater samples exhibited detectable TPH-MRH concentrations, of which eight exceeded either the Residential or Non-Residential Tier 2 RSK (**Figure 13-A**). The highest concentrations were at Borings PB-1, PB-7 and PB-9. Similarly, TPH-HRH fractions were detected in eight of the samples; however, only two locations exceeded the Residential Tier 2 RSK (Borings PB-7 and PB-9), with Boring PB-9 also exceeding the Non-residential Tier 2 RSK. Only one sample (and duplicate) exceeded the minimum laboratory detection limit for TPH-LRH (Boring PB-1/1A). This boring is located in the area of the western-most former gasoline UST area. The results of 1.41 mg/L and 1.43 mg/L (duplicate) exceeded the Residential and Non-Residential Tier 2 RSKs of 0.35 and 0.95 mg/L, respectively.

Figure 14 presents TPH concentrations at the Subject Site and south adjoining Price Chopper property. The figure is also an isoconcentration map for TPH-MRH. The maximum TPH-MRH concentration is noted at Boring PB-9, the former location of the diesel AST fueling area. Surrounding sampling locations show the approximate lateral extent of this petroleum hydrocarbon fraction. Two of the TPH-MRH isoconcentration lines represent the Tier 2 Residential and Non-residential RSK values; these are 0.15 and 0.4 mg/L, respectively. The approximate south-central and eastern portion of the Subject Site exhibits TPH-MRH exceeding the Tier 2 Non-residential RSK. The majority of the Subject Site has TPH-MRH concentrations exceeding the Tier 2 Residential RSK, with the plume likely extending easterly toward the present Five Mile Creek Channel.

Volatile Organic Compounds

Soil – Subject Site: As shown in **Table 1B**, VOCs present in SCS soil samples exceeding minimum laboratory detection limits included benzene, toluene, ethylbenzene, xylenes and naphthalene. These compounds are commonly associated with fuel-range petroleum hydrocarbons and their presence in these areas are not unexpected as TPH-LRH and TPH-MRH is present. A limited number of other VOCs, including isopropylbenzene, n-propylbenzene, methyl tert-butyl ether (MtBE), 1,2,3-trimeythlbenzene, 1,2,4-trimeythlbenzene, chlorobenzene, 1,2-dichlorobenzene, and 1,4-dichlorobenzene were also present and not unexpected for petroleum hydrocarbon impacts. None of these results exceed their respective Tier 2 RSKs.

The shallow soil sample collected from Boring PB-3 in the area of the former asphalt storage area also exhibited generally low concentrations of chlorinated solvent compounds, including cis-1,2 DCE, trans-1,2 DCE, TCE) and PCE. However, none of these compounds exceeded their respective Tier 2 RSK concentrations. Also of note, the sample collected at a depth approximately 5.5 feet lower did not report detectable concentrations of any of the compounds.

Groundwater – Subject Site and South Adjoining Property: As shown in **Table 2A**, there were a number of VOCs present in SCS groundwater samples. These are primarily associated with refined petroleum hydrocarbons and degradation products. Although detected in the shallow sample at Boring B-3, no chlorinated solvents (PCE, TCE, cis-1,2 DCE or trans-1,2 DCE) were exhibited in any of the samples.

The VOCs that exceeded Tier 2 Residential and Non-residential RSKs at the Subject Site included benzene and naphthalene (**Table 2A**). The maximum benzene and naphthalene concentrations were noted at the west-most former gasoline UST area; lesser concentrations are present in groundwater to the central and east-central areas (**Figure 13-A**). No benzene or naphthalene concentrations exceeded minimum laboratory detection limits in groundwater samples collected by EWI at the adjoining Price Chopper property.

Semi-Volatile Organic Compounds

Soil – Subject Site and South Adjoining Property: SVOC analysis was completed for onsite samples expected to contain the highest TPH-MRH and TPH-HRH concentrations, including PB-1/1A and duplicate (9.5 to 11 feet bgs), PB-3 (1.5 to 3.5 feet bgs) and PB-9 (9 to 11 feet bgs). As shown in **Table 1D**, there were a number of common SVOCs exceeding minimum laboratory detection limits. However, none of the detections exceeded their respective Tier 2 RSK concentrations. EWI also completed limited SVOC analysis at the south adjoining property; however, no results exceeded minimum laboratory reporting limits.

Results indicate the presence and distribution of SVOCs present in the lower samples are generally consistent with where TPH-MRH and TPH-HRH is also present. They are expected to be laterally persistent with the fuel impact and may be present at greater depths of the saturated zone. SVOCs present in the upper sample collected near the former eastern asphalt storage area is likely related to oil-range hydrocarbons formerly handled in this area, from vehicle storage operations at Lakes Auto Salvage, or both. The lateral extent of these compounds in vadose zone soil is not known; however, due to their physical characteristics, do not typically migrate laterally as pervasively as VOCs.

The SVOCs analysis also included reporting 2,6-dinitrotoleune as the EWI investigation in 2019 had identified this compound in groundwater at one location on the south adjoining property north of the intersection of South 3rd Street and Marion Street (MW-7; **Figure 13-A**). This compound was not identified above minimum laboratory limits in the soil samples analyzed.

Groundwater – Subject Site and South Adjoining Property: Analysis was completed for all eleven groundwater samples collected by SCS (**Table 2B**). The primary SVOC encountered exceeding laboratory reporting limits was naphthalene, present in four boring locations across the central, southern and southeast portions of the Subject Site. The detections appear to be associated with TPH-MRH concentrations (**Figure 13-A**), and exceed the both the Residential and Non-residential Tier 2 RSK values. Groundwater samples collected by EWI at the south adjoining property were not analyzed for SVOCs. It is expected that naphthalene could also be present in the northern portion of the Price Chopper property where TPH-MRH has been identified.

There were a limited number of other detectable SVOCs, including acenaphthene, fluorene, phenanthrene at Boring PB-9. However, none exceeded their respective Tier 2 RSKs. There were also two bis(2-ethylhexyl)-phthalate concentrations exceeding minimum laboratory reporting limits. This included Borings PB-1/1A (0.00697 mg/L) and PB-11 (0.00607 mg/L). The detections slightly exceed the Residential/Non-Residential Tier 2 RSK of 0.006 mg/L; however, the compound is not present laterally across the Subject Site. It should be noted that no 2,6-dinitrotoleune was identified in groundwater exceeding minimum laboratory reporting limits.

RCRA Metals

Soil – Subject Site and South Adjoining Property: As shown in **Table 1C**, RCRA metals in SCS soil samples exceeding minimum laboratory detection limits included arsenic, barium, cadmium, chromium, lead and mercury. Aside from an elevated lead concentration in one sample (Boring PB-3 at approximately 9 to 11 feet bgs – 4,770 mg/kg), all results are below their respective Tier 2 RSKs. Even though the majority of samples were collected from fill material, the resulting concentrations appear to be generally within naturally-occurring concentrations. Similar results were exhibited in the sample collected by EWI at the south adjoining property. As with SCS, one elevated lead

concentration was also indicated (Boring SB-5 from approximately four to five feet bgs – 432 mg/kg). The two elevated lead concentrations are present in the southwest portion of the Subject Site and below South 3rd Street. This includes the area within and immediately adjacent to where Lakes Auto Salvage has historically operated. The combined soil sampling results did not suggest the elevated lead occurrence is either laterally or vertically continuous.

Groundwater – Subject Site and South Adjoining Property: SCS collected six groundwater samples to provide representative metals data across the Subject Site (**Table 2C**). Metals analysis was also completed as part of previous investigations at the Subject Site and south adjoining property, including Terracon in 1989, EPA in 1999 and EWI in 2019. Results from the 1989 and 1999 assessments identified metal concentrations exceeding the current Residential/Non-residential Tier 2 RSKs for arsenic, barium, cadmium, chromium and lead (**Table 2C**) However, summary reports did not identify if these results reported total metal or dissolved metal concentrations. SCS dissolved metal results have identified arsenic, barium and lead exceeding laboratory reporting limits (**Table 2C**). Only three occurrences exceeded their respective Tier 2 RSK values, including Borings PB-5 (arsenic; 0.0486 mg/L), Boring PB-8 (barium; 5.19 mg/L) and Boring PB-10 (lead; 0.0261 mg/L) as shown on **Figure 13-B**. None of these exceedances are observed as laterally continuous.

Additional dissolved metal analysis was completed by EWI in 2019 at the Price Chopper property. This assessment identified arsenic and barium exceeding the laboratory reporting limits, with the arsenic concentration of 0.015 mg/L for both samples slightly exceeding the Residential/Non-residential Tier 2 RSK of 0.01 mg/L (**Figure 13-B**).

Pesticides

Soil and Groundwater – Subject Site: Pesticides analysis was completed for all eight SCS soil samples as isolated pesticide occurrences (D,D,D-4,4' and pentachlorophenol) were noted in groundwater samples during completion of the EPA BTA in 1999 (Samples 100 and 105; **Figure 13-A**). The location of the two occurrences included near the northwest corner of the LAC Building and near the former AST diesel storage area (**Figure 5A-1**). Although no past soil detections were noted, SCS completed soil analysis to augment that also previously completed for groundwater. No pesticides were identified above minimum laboratory limits in any of the soil samples. Pesticides analysis was completed for three groundwater samples collected by SCS along the southern portion of the Subject Site (**Table 2B**). Neither of these, or other pesticide compounds, were identified above minimum laboratory limits in the SCS groundwater samples.

PCBs

Soil - Subject Site: PCB analysis was completed for both upper and lower soil samples obtained from borings located along the southern Subject Site boundary as a PCB occurrence (Aroclor 1254) was identified in a soil sample collected by EWI in 2019. The location is at the northeast corner of the Price Chopper Building (**Figure 4A-1**). No PCBs were identified above minimum laboratory limits in any of the SCS soil samples analyzed.

Air Sampling – LAC Building

Two air samples were collected from inside of the LAC Building and submitted for VOC analysis (**Table 4**). Analytical results exhibited a limited number of compounds exceeding minimum laboratory reporting limits, none of which exceeded their respective Tier 2 RSKs for the Residential Indoor Air Pathway. Based on COC present in the subsurface, compounds of particular interest included benzene, naphthalene and chlorinated solvents. Benzene and naphthalene were not

reported above laboratory method limits. PCE was the only chlorinated solvent present in indoor air with a maximum result of 5.11 ug/m3. This concentration is approximately eight times lower than the Tier 2 RSK.

Indoor air conditions were previously evaluated for the Price Chopper Supermarket building by EWI in 2019. Three soil gas samples were collected along the north side of the building, near the southern portion of the Subject Site (**Figure 6**). The resulting data was evaluated using the EPA VISL Calculator. Although analytical results indicated a number of common VOCs exceeding minimum laboratory reporting limits (**Table 3**), none exceeded EPA VISL Commercial Target Concentrations for Exterior Soil Gas. Only chloroform was identified above these threshold concentrations for Residential use.

8.1.2 Contaminant Fate and Transport

Potential Migration Routes

Petroleum Hydrocarbons and Related VOCs/SVOCs: City garage operational data and historical sources of information for Lakes Auto Salvage indicate that the majority of currently identified impact(s) to soil and groundwater occurred a considerable time in the past. A fuel AST and USTs operated at the Subject Site between 1972 and 1991. Although site records indicate that both diesel and gasoline fuel was dispensed, analytical data exhibits primarily a TPH-MRH fraction present in soil and groundwater. This data supports a conclusion that shorter-chain hydrocarbons have undergone natural degradation though time. This may also explain why there is TPH-HRH compounds present. Additionally, it is also reasonable to assume that petroleum hydrocarbons (fuel and oil range) were primarily introduced directly to the ground surface in the area of the former Lakes Auto Salvage.

Onsite areas where petroleum hydrocarbon impacts to shallow soil have likely occurred include the east asphalt storage area and in the area of the former AST fueling area. In both these areas if spills had occurred, it is typically during filling fuel or loading asphalt in areas without a surface asphalt or concrete surface. Potential releases from piping would migrate through the soil to groundwater. Conversely, potential releases from the USTs would be expected to directly impact groundwater and associated capillary fringe directly as the tank basin would have likely been excavated to at least that depth. Once in the subsurface, contaminants from the fueling facilities would mostly migrate laterally through the groundwater pathway.

Lakes Auto Salvage has operated from at least 1949, historically on both the north and south sides of Marion Street. Additionally, salvaged vehicles were present in the area of the current South 3rd Street and the eastern-most portion of the Price Chopper property (**Figure 15**). Common COCs for salvage operations include fuel- and oil-range hydrocarbons, SVOCs, VOCs and metals. The substances typically enter the subsurface at the ground surface and migrate downward in the soil column through natural leaching mechanisms. Groundwater can also be impacted if sufficient contaminant mass exists.

Other Regulated Compounds: The remaining regulated substances previously and currently identified in subsurface soil are minor occurrences of PCBs, chlorinated solvents and RCRA metals including lead exceeding the Tier 2 RSK. In groundwater, these regulated substances include a pesticide (D,D,D-4,4'), an SVOC commonly associated with explosives manufacturing and use (2,6-Dinitrotoluene) and RCRA metals. The metals in SCS groundwater samples exceeding Tier 2 RSKs include arsenic, barium and lead.

It is common for pesticides to be applied at the surface, with downward migration into subsurface soil, and potentially groundwater, leaching with precipitation. Areas exhibiting elevated metal concentrations in soil also leach downward. It is important to note that these detections are limited in quantity and lateral and vertical extent in soil, and in the case of metals exceeding Tier 2 RSKs, are identified at isolated sampling points rather than being laterally continuous.

Contaminant Migration

If a spill occurred at the surface, downward contaminant migration to the capillary fringe and shallow groundwater would be expected. In the case of a UST fueling system release, contaminants can be released directly to subsurface soil (ground spills or subgrade piping) or directly to groundwater from USTs and other basin releases.

For this Property, we conclude the majority of petroleum hydrocarbon mass is present in the capillary fringe and saturated zone and dissolved in groundwater. Concentrations of and the estimated lateral extent of petroleum hydrocarbons in groundwater are shown in **Figure 14**. The assumed extent of contamination encompasses former onsite fueling areas and east asphalt storage area, as well as the location of historic operations of Lakes Auto Salvage beneath current day South 3rd Street and eastern-most portion of the Price Chopper property.

The dissolved phase petroleum hydrocarbon plume extends generally eastward toward the current Creek channel located immediately east of the Subject Site and former auto salvage. When evaluating migration of contaminants in groundwater, there are site-specific factors to consider. Firstly, the Property is located within the stream and fluvial deposits system of Five Mile Creek. This subsurface area has been reworked and altered by both USACE during realignment of the system channel. Placement of mixed soil, construction debris and municipal wastes occurred between 1969 through 1972. Soil cores recovered during previous geotechnical and environmental assessments, as well as the current assessment have described the fill area as having a lower degree of density and higher degree of saturation when compared to immediately surrounding areas. This “fill area” also exhibits a higher static groundwater level as compared to the land area to the west portion of the Subject Site. Static groundwater was measured in the natural deposits at Borings PB-4 and PB-5 more than ten feet lower than in the fill material. The fill area can be visualized as a “bathtub” that retains surface water and having physical characteristics that encourages a higher flow regime and lateral migration potential as compared to the area with mostly natural deposits and limited fill material.

The groundwater gradient direction for September 21, 2020 is primarily directed toward the east-southeast (**Figure 11**), while dissolved-phase petroleum hydrocarbons are shown across the majority of the Subject Site (**Figure 14**). Furthermore, the highest concentrations appear to be migrating from the apparent source areas to the east-northeast. This can be better understood when considering the location of the former oxbow portion of the stream channel prior to USACE alignment (**Figure 9**). It is our conclusion that the former backfilled channel has an effect on the overall flow dynamics below the Subject Site and likely influences contaminant migration. Interestingly, other isolated occurrences of contaminants in groundwater exceeding Tier 2 RSKs are present within or near the former channel area (**Figure 13-A**). These include pentachlorophenol and Bis (2-ethylhexyl)phthalate in Borings PB-1 and PB-11. Similarly, isolated occurrences of dissolved metals exceeding Tier 2 RSKs are also present, including arsenic in Boring PB-5, lead in Boring PB-10 and barium in Boring PB-8 (**Figure 13-B**).

8.1.3 Identified Receptors/Risk

Based on the information presented in Section 7.1, the following are identified as potential human receptors:

- **Onsite Construction Workers** – Previous and current site assessment data indicates that contaminated vadose soil is primarily present at a minimum depth of six feet bgs. This depth is expected to represent the upper extent of the capillary fringe; groundwater at and below this depth is impacted. There could be impacted soil above this depth; however, it would be expected to be limited in areas where former asphalt ASTs and fuel storage and fuel dispensing and storage were formerly present in the southern portion of the Property. The primary COC in both soil and groundwater are petroleum hydrocarbons and associated VOC and SVOCs

  Therefore, workers could be potentially exposed to contaminants if trenches or other excavations are extended to a depth of at least six feet bgs and greater. Exposure could occur through dermal contact, inhalation and ingestion (groundwater). Site assessment information will be retained by the City Public Works Department so notification of the conditions can be made before construction proceeds on this Property.

- **Offsite Construction Workers – Price Chopper Property:** Previous site assessment data along the northern portion of this property indicates that contaminated vadose soil could be present at a minimum depth of approximately eight feet bgs. As with the Subject Site immediately north, this depth is expected to represent the upper extent of the capillary fringe; groundwater at and below this depth is impacted. However, it is our perspective that impacted soil could be present in surface soil and vadose zone in the area immediately east and northeast of the supermarket building and below South 3rd Street. This is where Lakes Auto Salvage operations extended in the past. The primary COC in both soil and groundwater are petroleum hydrocarbons and associated VOC and SVOCs. Other isolated compounds were also formerly identified, including 2,6-dinitrotoluene, PCBs and pesticide compounds, although none exceeded their respective Tier 2 RSKs.

  It is conservative to assume offsite construction workers could be potentially exposed to contaminants at any trench depth in the area immediately north and east of the supermarket building and within the right-of-way of South 3rd Street. West and southwest of the Subject Site, potential exposure could occur within trenches or other excavations extending to a depth of at least six to eight feet bgs and greater. Exposure could occur through dermal contact, inhalation and ingestion of groundwater. Construction work completed further west and south of this area would not be expected to encounter regulated substances originating from the Subject Site or Lakes Auto Salvage.

Ecological Receptors

As the eastern lateral extent of dissolved-phase petroleum hydrocarbons is not specifically known at this time, it is possible that it may extend to the surface water body. However, this is considered unlikely as the majority of the identified impact are TPH-MRH and TPH-HRH fractions. These longer-chain hydrocarbons typically do not migrate large distances from the source area. The lateral distance from the southeastern Subject Site boundary south to the nearest portion of the Creek is measured as approximately 125 feet. The data point in closest proximity in this area is Boring PB-3

which exhibits a TPH-MRH concentration of 0.249 mg/L; this result is below the Tier 2 Non-residential RSK of 0.4 mg/L and slightly above the Tier 2 Non-residential RSK of 0.15 mg/L (**Figure 14**). The lateral distance from the eastern Subject Site boundary east to the nearest portion of the Creek is measured as approximately 300 feet. The data point at the eastern Property boundary is Boring PB-7 which exhibits a TPH-MRH concentration of 1.97 mg/L. This result exceeds both the Tier 2 Non-residential and Residential RSKs.

At this time we are unable to provide an opinion as to whether the threatened and/or endangered species could be impacted by the known petroleum hydrocarbon impact. It should be noted that a critical habitat has not been designated for any of these species in this area.

8.2 Conclusions

Assessment Status of Identified COCs

Subject Site – Petroleum Hydrocarbons: Previous and the current assessments have identified primarily diesel- and oil-range petroleum hydrocarbons in soil and groundwater at the Subject Site. As groundwater is present at a shallow depth, a laterally pervasive impact to vadose zone soils is not expected. Therefore, it is our conclusion that additional vadose zone assessment in areas extending from the former fueling areas is unwarranted.

Conversely, it is expected that additional assessment of petroleum hydrocarbons and associated fuel-range VOCs/SVOCs in the capillary fringe and groundwater exceeding respective Non-residential Tier 2 RSKs is warranted to the east. As the highest dissolved-phase TPH-MRH and TPH-HRH concentrations have been shown to be present at the former fueling areas and migrating through the groundwater migration pathway, it is our conclusion that sufficient evidence has been obtained to enroll the Property with the Storage Tank Section. It would be the intention of the City to recover future assessment and potential remediation costs through the state reimbursement program. It is recommended that any future assessment be performed following enrollment. It is our evaluation that installation of monitoring wells at and near the Subject Site would be beneficial to provide information for dissolved-phase plume stability and natural attenuation.

Offsite Properties – Petroleum Hydrocarbons: Specific to the south adjoining properties, historical information and previous field assessment and analytical data supports a conclusion that the subsurface at the northeast portion of the Price Chopper property and beneath South 3rd Street has also been impacted by petroleum hydrocarbons. Because of proximity, it is not unreasonable to conclude that the former onsite fueling areas could have affected the subsurface immediately north of the supermarket building, particularly through groundwater migration of contaminants. However, the possibility that some, most, or all of the observed contamination in this area originated from approximately 70 years of salvage operations at Lakes Auto Salvage (**Figure 15**). This would be expected to include releases at the surface that have migrated through vadose zone soil, with the potential to have also impacted shallow groundwater in this area. Therefore, we consider this entity to be a potentially responsible party.

Subject Site – VOCs in Proximity of East Asphalt Storage Area: The current assessment identified chlorinated solvent compounds including cis-1,2 DCE, trans-1,2 DCE, TCE and PCE in soil in the area of the former asphalt storage area. The compounds were identified in the shallow sample (approximately 1.5 to 3.5 feet bgs) collected from Boring PB-3; however, they were not reported in the deeper sample collected at a depth of approximately 9 to 11 feet bgs. The associated groundwater sample at this location also did not report these compounds above minimum laboratory

limits. This soil impact was not identified by previous assessments. It is possible that the origin may have been from past VOC use at the former City sign shop; however, this area is located near the northern portion of Lakes Auto Salvage operations. It is likely these compounds were introduced at the surface due to their presence in shallow soil, and are now effectively "capped" onsite by the engineered fill placed during site grading and construction of the LAC Building. It is important to understand that grading was completed through this portion of the Subject Site in all directions to the approximate south Property boundary. Conversely, they may be present in surface soil at the south adjoining Lakes Auto Salvage operations. Because of the limited extent in soil, absence of detectable groundwater concentrations and placement of the soil cap, we consider this issue effectively addressed for the Subject Site.

Subject Site – VOCs in Proximity of Former Sign Shop: As discussed previously in Section 2.2.2, VOCs were used at the former sign shop and paint and paint thinner waste was identified in surface soil during a KDHE compliance inspection in 1991. The location of the reported area was immediately north of the former building. Soil samples were collected to a maximum depth of approximately 24 inches in this area in late 1991 and analyzed for TCLP RCRA metals, TCLP SVOCs and TCLP VOCs. The soil samples were also analyzed for VOCs, with ethylbenzene and toluene reported above minimum detection limits. Subsequently, approximately 60 tons of contaminated soil was excavated at disposed of offsite.

As this area is located beneath the LAC Building footprint, soil samples could not be collected by SCS. However, this area was assessed by collecting groundwater samples from Borings PB-3, PB-7 and PB-8 surrounding the former sign shop (**Figure 13-A**). A number of VOCs were reported in PB-7 and PB-8; however, only benzene (PB-7 and PB-8) and naphthalene (PB-8) exceeded the Tier 2 Residential and Non-residential Groundwater Pathway RSKs. The groundwater sample collected from Boring PB-11 located in the northeast most part of the Subject Site also reported benzene, but below the Tier 2 Residential Groundwater Pathway RSK; no naphthalene, toluene or ethylbenzene was reported above minimum laboratory limits. Additionally, the aforementioned Boring PB-3 at the former east asphalt storage area reported only 1,4-dichlorobenzene and naphthalene (0.0028 mg/L) in groundwater, slightly above the Tier 2 Residential and Non-residential Groundwater Pathway RSKs of 0.00111 and 0.00211 mg/L.

The occurrence of dissolved-phase benzene, naphthalene and other non-chlorinated solvent VOCs in this area may be related to the former sign shop or associated with the TPH-MRH and TPH-HRH impact. In either case, the identified VOCs have been assessed in groundwater to below the Tier 2 RSKs in all directions aside to the east and southeast. If additional assessment is considered appropriate specifically for these VOCs, it can be accomplished while conducting the additional assessment recommended above for petroleum hydrocarbons.

Subject Site – RCRA Metals at Former East Asphalt Storage Area: The only RCRA metal in soil samples collected as part of current and previous onsite assessments exceeding a Tier 2 Residential or Non-residential RSK was total lead at Boring PB-3 (4,770 mg/kg; approximately 9 to 11 feet bgs). However, elevated lead was not indicated in the sample collected immediately above this depth from approximately 1.5 to 3.5 feet bgs. The elevated concentration observed only at depth would not be expected unless it is associated with fill material placed during or after realignment of the Creek channel. No dissolved lead exceeding the minimum laboratory reporting limit was exhibited in the associated groundwater sample at this location. As no direct human exposure is expected in this area, we conclude additional onsite assessment is not warranted. It is noted that elevated metals were identified in the south portion of the Property during the 1999 BTA. However, based on our sampling results, the previous data is expected to have been for total lead, rather than dissolved lead in groundwater.

Subject Site – Dissolved RCRA Metals: Groundwater results from six sampling locations exhibited only three dissolved metal concentrations exceeding Tier 2 Non-residential and Residential RSKs across the Subject Site (**Table 2C** and **Figure 13-B**). They include arsenic (PB-5; 0.0486 mg/L), barium (PB-8; 5.19 mg/L) and lead (PB-10; 0.02161 mg/L); the remaining seven metals at all these locations were below the Tier 2 RSKs. The elevated lead present in the northwest portion of the Subject Site is likely associated with known lead contamination at the former GNB, Inc. facility identified in the 1999 BTA. The origin for the elevated dissolved arsenic and barium is not known; however, it is noted that both locations are near the former Creek channel filled by USACE in the late 1960's. As these limited occurrences are not laterally continuous, it is our conclusion that additional groundwater assessment is not necessary as human and ecological receptors are adequately protected. Also as discussed in the preceding paragraph, it is our conclusion that elevated metal concentrations identified at the Subject Site by USEPA in 1999 were analyzed as total, rather than dissolved metals.

South Adjoining Property – RCRA Metals: The 2019 EWI investigation at the south adjoining property identified elevated total lead in soil in the general vicinity of present day South 3rd Street. As shown on **Figure 4A-1**, elevated lead is present near the northeastern corner of the supermarket building, extending southward along the west side of the street. However, no dissolved-phase total lead concentrations were reported above minimum laboratory limits in groundwater samples from Borings SB-5 and SB-7. The analytical data supports a conclusion that lead impacts in this area are likely due to former Lakes Auto Salvage operations in this area, and not related to former City operations further to the north.

Subject Site and South Adjoining Properties – Other Regulated Compounds: Other regulated compounds identified by previous studies, including pesticides, 2,6-dinitrotoluene and PCBs were not detected above minimum laboratory reporting limits in SCS soil or groundwater samples collected within the Subject Site boundary. Therefore, we conclude these compounds are adequately assessed onsite. Furthermore, it is our professional opinion these compounds are more likely to have originated from the former Lakes Auto Salvage. Our research has identified that 2,6-dinitrotoluene is commonly used for explosives, including automotive air bags. It should be noted that the KDHE-BER Site Assessment Unit will conduct a separate field assessment for 2,6-dinitrotoluene in this area and south and east in proximity to Five Mile Creek. Per previous agreement, the resulting analytical data will be submitted to the City for review.

8.2.1 Data Limitations

The VI Work Plan presented the proposed field and analytical data to be obtained for this assessment. No deviations occurred while conducting the field portion of the VI Assessment. Also as discussed in Section 4.3, QA/QC data and laboratory report qualifiers were evaluated. Analytical results were deemed to be acceptable for use in entirety to assist in evaluating the presence, concentrations and distribution of potential COCs.

8.2.2 Recommendations

Recommendations specific to the assessment for individual regulated substances are provided above in Section 8.2.

SCS recommends that the VCPRP reevaluate what future regulatory oversight is necessary for this Property, as in our professional opinion, the identified COC that requires additional groundwater assessment or potential remediation are petroleum hydrocarbons (and associated VOCs/SVOCs).

We recommended that the City enroll and submit this Property for oversight and reimbursement costs through the KDHE-BER Storage Tank Reimbursement Program. We therefore, also ask the VCPRP to provide a specific determination whether non-fuel related substances identified at the Subject Site have been effectively addressed. Also in our professional opinion, additional assessment for the south adjoining properties, if required, should be led by Lakes Auto Salvage as the potentially responsible party.

9.0 TABLES

Table 1A - Applicable Soil Analytical Results - Previous and Current Assessments
TCLP and TPH Analysis - Varying Methods

Former City Garage Operations
2109 South 3rd Street
Leavenworth, Kansas

SCS Engineers Project Number 27220109.01
KDHE Project Code: C4-052-73682

Boring/Sample ID	Date Sampled	Sample Depth (feet bgs)	Laboratory Analytical Results (milligrams per kilogram) and Test Methods							
			TCLP - VOCs	TCLP - SVOCs	TPH	TPH	TPH - (all fractions)	TPH-LRH	TPH-MRH	TPH-HRH
			Not Identified	Not Identified	OA-1	OA-2	Not Identified	KS LRH	KS MRH	KS HRH
Terracon - 1989										
B-1	*11/24/89*	*2*	*NA*	*NA*	*NA*	*NA*	*ND [1]*	*NA*	*NA*	*NA*
B-2	*11/24/89*	*2*	*NA*	*NA*	*NA*	*NA*	*ND [1]*	*NA*	*NA*	*NA*
B-3	*11/24/89*	*2*	*NA*	*NA*	*NA*	*NA*	*ND [1]*	*NA*	*NA*	*NA*
MW-3	*11/24/89*	*2*	*NA*	*NA*	*NA*	*NA*	***140***	*NA*	*NA*	*NA*
MW-4	*11/24/89*	*2*	*NA*	*NA*	*NA*	*NA*	***260***	*NA*	*NA*	*NA*
Kansas City Testing Laboratory - 1991										
6" Composite	*10/31/91*	*0.5*	*ND [2]*	*ND [2]*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*
18-24" Composite	*10/31/91*	*1.5-2*	*ND [2]*	*ND [2]*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*
EPA BTA - 1999										
003	*12/02/98*	*12-16*	*NA*	*NA*	*ND [3]*	*ND [3]*	*NA*	*NA*	*NA*	*NA*
023	*12/02/98*	*0-4*	*NA*	*NA*	*ND [3]*	*ND [3]*	*NA*	*NA*	*NA*	*NA*
024	*12/02/98*	*0-4*	*NA*	*NA*	*ND [3]*	*ND [3]*	*NA*	*NA*	*NA*	*NA*
025	*12/02/98*	*4-8*	*NA*	*NA*	*ND [3]*	*ND [3]*	*NA*	*NA*	*NA*	*NA*
Environmental Works - 2019										
SB-1	*10/10/19*	*26-27*	*NA*	*NA*	*NA*	*NA*	*NA*	*ND*	*ND*	***30.4***
SB-2	*10/10/19*	*22-23*	*NA*	*NA*	*NA*	*NA*	*NA*	*ND*	*ND*	***21.8***
SB-3	*10/10/19*	*18-19*	*NA*	*NA*	*NA*	*NA*	*NA*	*ND*	*ND*	***34.2***
SB-4	*10/10/19*	*11.5-12.5*	*NA*	*NA*	*NA*	*NA*	*NA*	*ND*	***16.7***	***88.8***
SB-5	*10/10/19*	*4-5* *8-10*	*NA* *NA*	*NA* *NA*	*NA* *NA*	*NA* *NA*	*NA* *NA*	*NA* *ND*	*NA* ***29.5***	*NA* ***327***
SB-6	*10/10/19*	*4-6*	*NA*	*NA*	*NA*	*NA*	*NA*	*ND*	***12.7***	***92.5***
SB-7	*10/10/19*	*24-25*	*NA*	*NA*	*NA*	*NA*	*NA*	*ND*	*ND*	***43.4***
SCS Engineers - 2020										
PB-1A *(PB-1)*	*09/17/20*	*2-4* *9.5-11*	*NA* *NA*	*NA* *NA*	*NA* *NA*	*NA* *NA*	*NA* *NA*	*ND* *ND*	*ND* *ND*	*ND* ***18.6***
Soil Dup Collected with PB-1A	*09/17/20*	*9.5-11*	*NA*	*NA*	*NA*	*NA*	*NA*	*ND*	*ND*	***18.7***
PB-2	*09/17/20*	*1-3* *12-14*	*NA* *NA*	*NA* *NA*	*NA* *NA*	*NA* *NA*	*NA* *NA*	*ND* *ND*	*ND* *ND*	*ND* *ND*
PB-3	*09/18/20*	*1.5-3.5* *9-11*	*NA* *NA*	*NA* *NA*	*NA* *NA*	*NA* *NA*	*NA* *NA*	*ND* *ND*	***321*** ***43.4***	***209*** ***301***
PB-9	*09/17/20*	*2-4* *9-11*	*NA* *NA*	*NA* *NA*	*NA* *NA*	*NA* *NA*	*NA* *NA*	*ND* *ND*	*ND* ***15.8***	***57.5*** ***69.0***
KDHE Split Sample Collected with PB-9	*09/17/20*	*2-4*	*NA*	*NA*	*NA*	*NA*	*NA*	*ND*	*ND*	*ND*
KDHE Tier 2 Risk-based Screening Levels										
Residential Scenario, Soil Pathway			*NE*	*NE*	*NE*	*NE*	*NE*	*550*	*250*	*6,000*
Residential Scenario, Soil to Groundwater Protection Pathway			*NE*	*NE*	*NE*	*NE*	*NE*	*50*	*50*	*6,000*
Non-Residential Scenario, Soil Pathway			*NE*	*NE*	*NE*	*NE*	*NE*	*950*	*350*	*27,500*
Non-Residential Scenario, Soil to Groundwater Protection Pathway			*NE*	*NE*	*NE*	*NE*	*NE*	*150*	*150*	*13,000*

Notes:

bgs = below ground surface
NA = not analyzed
ND = not detected above laboratory reporting limit
NE = not established
[1] = Less than 50 mg/kg
[2] = Less than varying minimum laboratory detection limits
[3] = Identified in BTA report as "no significant detections for the parameters tested"

TCLP = toxic characteristic leaching procedure
VOCs = volatile organic compounds
SVOCs = semi-volatile organic compounds
TPH = total petroleum hydrocarbons

LRH = low range hydrocarbons
MRH = mid range hydrocarbons
HRH = high range hydrocarbons
KS = Kansas
Detected concentratrions shown in **bold**
Concentrations above Residential Tier 2 Risk-based Screening Levels highlighted in yellow

Table 1B - Applicable Soil Analytical Results - Previous and Current Assessments
VOC Analysis

Former City Garage Operations
2109 South 3rd Street
Leavenworth, Kansas

SCS Engineers Project Number 27220109.01
KDHE Project Code: C4-052-73682

Boring/Sample ID	Date Sampled	Sample Depth (feet bgs)	Laboratory Analytical Results (milligrams per kilogram) and Test Method					
			Benzene	Toluene	Ethylbenzene	Xylenes	p-Isopropyltoluene	Naphthalene
			8260	8260	8260	8260	8260	8260
Kansas City Testing Laboratory - 1991								
6" Composite	*10/31/91*	*0.5*	*ND [1,2]*	***19*** *[1]*	***0.012*** *[1]*	***0.028*** *[1]*	*NA*	*NA*
18-24" Composite	*10/31/91*	*1.5-2*	*ND [1,2]*	*ND [1,2]*	*ND [1,2]*	*ND [1,2]*	*NA*	*NA*
EPA BTA - 1999								
003	*12/02/98*	*12-16*	*ND [3]*	*ND [3]*	*ND [3]*	*ND [3]*	*ND [3]*	*NA*
023	*12/02/98*	*0-4*	*ND [3]*	*ND [3]*	*ND [3]*	*ND [3]*	*ND [3]*	*NA*
024	*12/02/98*	*0-4*	*ND [3]*	*ND [3]*	*ND [3]*	*ND [3]*	*ND [3]*	*NA*
025	*12/02/98*	*4-8*	*ND [3]*	*ND [3]*	*ND [3]*	*ND [3]*	*ND [3]*	*NA*
Environmental Works - 2019								
SB-1	*10/10/19*	*26-27*	*ND [2]*	*ND [2]*	*ND [2]*	*ND [2]*	*ND [2]*	*NA*
SB-2	*10/10/19*	*22-23*	*ND [2]*	*ND [2]*	*ND [2]*	*ND [2]*	*ND [2]*	*NA*
SB-3	*10/10/19*	*18-19*	*ND [2]*	*ND [2]*	*ND [2]*	*ND [2]*	*ND [2]*	*NA*
SB-4	*10/10/19*	*11.5-12.5*	*ND [2]*	*ND [2]*	*ND [2]*	*ND [2]*	*ND [2]*	*NA*
SB-5	*10/10/19*	*4-5* *8-10*	*ND [2]* *ND [2]*	*ND [2]* *ND [2]*	*ND [2]* *ND [2]*	*ND [2]* *ND [2]*	*ND [2]* *ND [2]*	*NA* *NA*
SB-6	*10/10/19*	*4-6*	*ND [2]*	*ND [2]*	*ND [2]*	*ND [2]*	*ND [2]*	*NA*
SB-7	*10/10/19*	*24-25*	*ND [2]*	*ND [2]*	*ND [2]*	*ND [2]*	*ND [2]*	*NA*
SCS Engineers - 2020								
PB-1A *(PB-1)*	*09/17/20*	*2-4* *9.5-11*	*ND* ***0.0111***	*ND* *ND*	*ND* *ND*	*ND* *ND*	*ND* *ND*	*ND* ***0.0254***
Soil Dup *Collected with PB-1A*	*09/17/20*	*9.5-11*	***0.0192***	*ND*	***0.00726***	***0.0311***	*ND*	***0.0464***
PB-2	*09/17/20*	*1-3* *12-14*	*ND* *ND*	*ND* *ND*	*ND* *ND*	*ND* *ND*	*ND* *ND*	*ND* *ND*
PB-3	*09/18/20*	*1.5-3.5* *9-11*	***0.0199*** ***0.0297***	*ND* ***0.0350***	*ND* ***0.0477***	***0.0128*** ***0.152***	*ND* *ND*	*ND* ***0.128***
PB-9	*09/17/20*	*2-4* *9-11*	*ND* *ND*	*ND* *ND*	*ND* *ND*	*ND* *ND*	*ND* *ND*	*ND* *ND*
KDHE Tier 2 Risk-based Screening Levels								
Residential Scenario, Soil Pathway			*15.9*	*4,320*	*82*	*936*	*NE*	*30.5*
Residential Scenario, Soil to Groundwater Protection Pathway			*0.168*	*51.2*	*65.6*	*809*	*NE*	*0.349*
Non-Residential Scenario, Soil Pathway			*28.2*	*29,800*	*145*	*1,410*	*NE*	*64.7*
Non-Residential Scenario, Soil to Groundwater Protection Pathway			*0.168*	*51.2*	*65.6*	*809*	*NE*	*0.659*

Notes:
bgs = below ground surface
ND = not detected above laboratory reporting limit
NA = not analyzed
NE = not established
VOC = volatile organic compounds
Detected laboratory concentrations are shown in **bold**

[1] = EPA Method 8240
[2] = Less than minimum laboratory detection limits
[3] = Identified in BTA report as "no significant detections for the parameters tested"

Other VOCs exceeding minimum laboratory detection limits include:

- **PB-1A 9.5-11' - Isopropylbenzene (0.00489) and n-Propylbenzene (0.00911)**
- **Soil Dup 9.5-11' - Isopropylbenzene (0.00506), Methyl tert-butyl ether (0.00286), n-Propylbenzene (0.00796), 1,2,4-Trimethylbenzene (0.0145), and 1,2,3-Trimethylbenzene (0.00810)**
- **PB-3 1.5-3.5' - Chlorobenzene (0.00724), cis-1,2-Dichloroethene (0.175), trans-1,2-Dichloroethene (0.00823), Tetrachloroethene (0.0788), Trichloroethene (0.0572), 1,2,4-Trimethylbenzene (0.00866), and 1,2,3-Trimethylbenzene (0.00789)**
- **PB-3 9-11' - Chlorobenzene (0.181), 1,2-Dichlorobenzene (0.100), 1,4-Dichlorobenzene (0.0139), Isopropylbenzene (0.0370), p-Isopropyltoluene (0.112), n-Propylbenzene (0.0367), 1,2,4-Trimethylbenzene (0.0472), 1,2,3-Trimethylbenzene (0.0276), and 1,3,5-Trimethylbenzene (0.0137)**

Table 1C - Applicable Soil Analytical Results - Previous and Current Assessments
RCRA Metals and TCLP Metals Analysis

Former City Garage Operations
2109 South 3rd Street
Leavenworth, Kansas

SCS Engineers Project Number 27220109.01
KDHE Project Code: C4-052-73682

Boring/Sample ID	Date Sampled	Sample Depth (feet bgs)	Laboratory Analytical Results (milligrams per kilogram) and Test Methods								
			Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver	TCLP
			6010	6010	6010	6010	6010	7471	6010	6010	NA
Terracon - 1989											
B-1	11/24/89	2	NA	NA	NA	NA	**20** [1]	NA	NA	NA	NA
B-2	11/24/89	2	NA	NA	NA	NA	**20** [1]	NA	NA	NA	NA
B-3	11/24/89	2	NA	NA	NA	NA	**20** [1]	NA	NA	NA	NA
MW-3	11/24/89	2	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4	11/24/89	2	NA	NA	NA	NA	NA	NA	NA	NA	NA
Kansas City Testing Laboratory - 1991											
6" Composite	10/31/91	0.5	NA	NA	NA	NA	NA	NA	NA	NA	ND [2]
18-24" Composite	10/31/91	1.5-2	NA	NA	NA	NA	NA	NA	NA	NA	ND [2]
EPA BTA - 1999											
003	12/02/98	12-16	Not Reported [3]	Not Reported [3]	Not Reported [3]	Not Reported [3]	Not Reported [3]	Not Reported [3]	Not Reported [3]	Not Reported [3]	NA
023	12/02/98	0-4	Not Reported [3]	Not Reported [3]	Not Reported [3]	Not Reported [3]	Not Reported [3]	Not Reported [3]	Not Reported [3]	Not Reported [3]	NA
024	12/02/98	0-4	Not Reported [3]	Not Reported [3]	Not Reported [3]	Not Reported [3]	Not Reported [3]	Not Reported [3]	Not Reported [3]	Not Reported [3]	NA
025	12/02/98	4-8	Not Reported [3]	Not Reported [3]	Not Reported [3]	Not Reported [3]	Not Reported [3]	Not Reported [3]	Not Reported [3]	Not Reported [3]	NA
Environmental Works - 2019											
SB-1	10/10/19	26-27	**4.0**	**200**	ND	**21.6**	**12.2**	ND	ND	ND	NA
SB-2	10/10/19	22-23	**3.0**	**183**	ND	**20.0**	**11.1**	ND	ND	ND	NA
SB-3	10/10/19	18-19	**8.2**	**156**	ND	**20.7**	**27.2**	ND	ND	ND	NA
SB-4	10/10/19	11.5-12.5	**8.1**	**242**	**0.52**	**19.4**	**23.4**	ND	ND	ND	NA
SB-5	10/10/19	4-5 8-10	**14.0** **4.0**	**244** **156**	**0.51** ND	**27.2** **19.5**	**432** **25.9**	**0.064** ND	ND ND	ND ND	NA NA
SB-6	10/10/19	4-6	**8.0**	**228**	**1.1**	**16.6**	**118**	**0.057**	ND	ND	NA
SB-7	10/10/19	24-25	**3.6**	**243**	ND	**26.3**	**14.0**	ND	ND	ND	NA
SCS Engineers - 2020											
PB-1A (PB-1)	09/17/20	2-4 9.5-11	ND ND	**141** **108**	ND ND	**23.2** **19.2**	**15.7** **31.2**	ND ND	ND ND	ND ND	NA NA
Soil Dup Collected with PB-1A	09/17/20	9.5-11	ND	**169**	**0.840**	**17.5**	**21.9**	ND	ND	ND	NA
PB-2	09/17/20	1-3 12-14	ND ND	**195** **168**	ND ND	**24.2** **20.2**	**21.4** **18.1**	ND ND	ND ND	ND ND	NA NA
PB-3	09/18/20	1.5-3.5 9-11	**8.36** **5.04**	**48.4** **152**	ND **0.764**	**17.4** **21.0**	**24.0** **4,770**	ND **0.0544**	ND ND	ND ND	NA NA
PB-9	09/17/20	2-4 9-11	**4.01** ND	**232** **180**	ND ND	**18.9** **18.2**	**38.2** **33.3**	**0.0513** **0.112**	ND ND	ND ND	NA NA
KDHE Split Sample Collected with PB-9	09/17/20	2-4	**8.1**	**171**	ND	NA	**15.4**	ND	ND	ND	NA
KDHE Tier 2 Risk-based Screening Levels											
Residential Scenario, Soil Pathway			18.9	15,300	39	33.6	400	2	391	391	NA
Residential Scenario, Soil to Groundwater Protection Pathway			NE	NE	NE	NE	NE	NE	NE	NE	NE
Non-Residential Scenario, Soil Pathway			63.2	277,000	965	111	1,000	20	10,200	10,200	NA
Non-Residential Scenario, Soil to Groundwater Protection Pathway			NE	NE	NE	NE	NE	NE	NE	NE	NE

Notes:

bgs = below ground surface
NA = not analyzed
ND = not detected above laboratory reporting limit
NE = not established
RCRA = Resource Concervation and Recovery Act
TCLP = toxic characteristic leaching procedure

Detected laboratory concentrations are shown in bold
Concentrations above Residential Tier 2 Risk-based Screening Levels highlighted in yellow
Concentrations above Non-Residential Tier 2 Risk-based Screening Levels highlighted in green

[1] = Noted in report as "detected at concentrations of 20 ppm in each of the three samples"
[2] = Less than minimum laboratory detection limits
[3] = Identified in BTA report as "no significant detections for the parameters tested"

Table 1D - Applicable Soil Analytical Results - Previous and Current Assessments
SVOCs, D,D,D-4,4' and PCBs Analysis

Former City Garage Operations
2109 South 3rd Street
Leavenworth, Kansas

SCS Engineers Project Number 27220109.01
KDHE Project Code: C4-052-73682

Boring/Sample ID	Date Sampled	Sample Depth (feet bgs)	Laboratory Analytical Results (milligrams per kilogram) and Test Method																
			2,6-Dinitrotoluene	D,D,D-4,4'	Acenaphthene	Anthracene	Benzo(a) anthracene	Benzo(b) fluoranthene	Benzo(a) pyrene	Chrysene	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene	Benzo(g,h,i) perylene	Indeno(1,2,3-cd) pyrene	Benzo(k) fluoranthene	PCBs
			8270C	8081B	8270C	8270C	8270C	8270C	8270C	8270C	8270C	8270C	8270C	8270C	8270C	8270C	8270C	8270C	8082
Kansas City Testing Laboratory - 1991																			
6" Composite	*10/31/91*	*0.5*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*
18-24" Composite	*10/31/91*	*1.5-2*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*
EPA BTA - 1999																			
003	*12/02/98*	*12-16*	*ND [1]*	*ND [1]*	*NA*	*NA*	*ND [1]*	*ND [1]*	*ND [1]*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*ND [1]*	*NA*
023	*12/02/98*	*0-4*	*ND [1]*	*ND [1]*	*NA*	*NA*	*ND [1]*	*ND [1]*	*ND [1]*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*ND [1]*	*NA*
024	*12/02/98*	*0-4*	*ND [1]*	*ND [1]*	*NA*	*NA*	*ND [1]*	*ND [1]*	*ND [1]*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*ND [1]*	*NA*
025	*12/02/98*	*4-8*	*ND [1]*	*ND [1]*	*NA*	*NA*	*ND [1]*	*ND [1]*	*ND [1]*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*ND [1]*	*NA*
Environmental Works - 2019																			
SB-1	*10/10/19*	*26-27*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*
SB-2	*10/10/19*	*22-23*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*
SB-3	*10/10/19*	*18-19*	*NA*	*NA*	*NA*	*NA*	*ND [2]*	*ND [2]*	*ND [2]*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*ND [2]*	*ND*
SB-4	*10/10/19*	*11.5-12.5*	*NA*	*NA*	*NA*	*NA*	*ND [2]*	*ND [2]*	*ND [2]*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*ND [2]*	*ND*
SB-5	*10/10/19*	*4-5*	*NA*	*NA*	*NA*	*NA*	*ND [2]*	*ND [2]*	*ND [2]*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*ND [2]*	***0.71*** [3]
		8-10	*NA*	*NA*	*NA*	*NA*	*ND [2]*	*ND [2]*	*ND [2]*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*ND [2]*	***0.10*** [3]
SB-6	*10/10/19*	*4-6*	*NA*	*NA*	*NA*	*NA*	*ND [2]*	*ND [2]*	*ND [2]*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*ND [2]*	*ND*
SB-7	*10/10/19*	*24-25*	*NA*	*NA*	*NA*	*NA*	*ND [2]*	*ND [2]*	*ND [2]*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*ND [2]*	*ND*
SCS Engineers - 2020																			
PB-1A	*09/17/20*	*2-4*	*NA*	*ND*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*
(PB-1)		*9.5-11*	*ND*	*ND*	***0.274***	***0.133***	***0.133***	***0.148***	***0.108***	***0.141***	***0.401***	***0.243***	***0.135***	***0.581***	***0.304***	*ND*	*ND*	*ND*	*NA*
Soil Dup	*09/17/20*	*9.5-11*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Collected with PB-1A																			
PB-2	*09/17/20*	*1-3*	*NA*	*ND*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*ND*
		12-14	*NA*	*ND*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*ND*
PB-3	*09/18/20*	*1.5-3.5*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	***0.0876***	***0.137***	***0.0802***	*ND*	*ND*	*ND*	*ND*
		9-11	*NA*	*ND*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*ND*
PB-9	*09/17/20*	*2-4*	*NA*	*ND*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*ND*
		9-11	*ND*	*ND*	*ND*	***0.0401***	***0.0895***	***0.106***	***0.0822***	***0.0872***	***0.219***	*ND*	***0.0511***	***0.198***	***0.187***	***0.0512***	***0.0561***	*ND*	*ND*
KDHE Tier 2 Risk-based Screening Levels																			
Residential Scenario, Soil Pathway			*5.31*	*NE*	*3,420*	*18,000*	*10.9*	*10.9*	*1.09*	*1,090*	*2,440*	*2,360*	*30.5*	*NE*	*1,830*	*NE*	*10.9*	*109*	*50 [4]*
Residential Scenario, Soil to Groundwater Protection Pathway			*0.0677*	*NE*	*255*	*3,770*	*7.89*	*19.2*	*23.5*	*805*	*2,830*	*297*	*0.349*	*NE*	*2,190*	*NE*	*45.5*	*190*	*50 [4]*
Non-Residential Scenario, Soil Pathway			*16.4*	*NE*	*30,600*	*221,000*	*33.8*	*33.8*	*3.38*	*3,380*	*35,200*	*25,900*	*64.7*	*NE*	*26,400*	*NE*	*33.8*	*338*	*50 [4]*
Non-Residential Scenario, Soil to Groundwater Protection Pathway			*0.227*	*NE*	*526*	*8,180*	*26.5*	*64.4*	*23.5*	*2,710*	*15,200*	*626*	*0.659*	*NE*	*11,900*	*NE*	*153*	*638*	*50 [4]*

Notes:

bgs = below ground surface
ND = not detected above laboratory reporting limit
NA = not analyzed
NE = not established
VOCs = volatile organic compounds
SVOCs = semi-volatile organic compounds
PCBs = polychlorinated biphenyls
D,D,D-4,4' = dichlorodiphenyldichloroethane
Detected laboratory concentrations are shown in **bold**

[1] = Identified in BTA report as "no significant detections for the parameters tested"
[2] = Less than minimum laboratory detection limits
[3] = Detected compound was Aroclor 1254
[4] = Action levels of 50 mg/kg for PCBs are set in the Toxic Substance Control Act (TSCA) guidelines

Table 2A - Applicable Groundwater Analytical Results - Previous and Current Assessments
VOC Analysis

Former City Garage Operations
2109 South 3rd Street
Leavenworth, Kansas

SCS Engineers Project Number 27220109.01
KDHE Project Code: C4-052-73682

Probe/Well ID	Date Sampled	Laboratory Analytical Results (milligrams per liter) and Test Methods																		
		Benzene	Toluene	Ethylbenzene	Total Xylenes	VOCs Survey Search	Methylene Chloride	p-Isopropyltoluene	n-Butylbenzene	sec-Butylbenzene	Isopropyl-benzene	Naphthalene	n-Propylbenzene	1,2,4-Trimethylbenzene	1,2,3-Trimethylbenzene	1,4-Dichlorobenzene	Chlorobenzene	Trichlorofluro-methane	1,2-Dichlorobenzene	Dichlorodifluro-methane
		8260	8260	8260	8260	8260	8260	8260	8260	8260	8260	8260	8260	8260	8260	8260	8260	8260	8260	8260
Terracon - 1989																				
MW-1	*11/24/89*	*ND*	*ND*	*NA*	*ND*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*
MW-2	*11/24/89*	*ND*	*ND*	*NA*	*ND*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*
MW-3	*11/24/89*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*
MW-4	*11/24/89*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*
MW-5	*11/24/89*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*
MW-6	*11/24/89*	*NA*	*NA*	*NA*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*
EPA BTA - 1999																				
100	*12/02/98*	***0.0069***	*ND*	*ND*	*ND*	*NA*	***0.37***	*ND*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*
105	*12/02/98*	*ND*	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*
Environmental Works - 2019																				
MW-1	*10/10/19*	*ND*	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*
MW-2	*10/10/19*	*ND*	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*
MW-3	*10/10/19*	*ND*	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*
MW-5	*10/10/19*	*ND*	*ND*	*ND*	*ND*	*NA*	*ND*	***0.0016***	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*
MW-7	*10/10/19*	*ND*	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*
SCS Engineers - 2020																				
PB-1A (PB-1)	*09/21/20*	***0.591***	***0.00534***	***0.00296***	***0.0176***	*NA*	*ND*	*ND*	***0.0101***	***0.00853***	***0.0448***	***0.164***	***0.0741***	***0.00216***	***0.00471***	*ND*	*ND*	*ND*	*ND*	*ND*
Dup Collected with PB-1A	*09/21/20*	***0.485***	***0.00526***	***0.00301***	***0.0172***	*NA*	*ND*	*ND*	***0.00869***	***0.00815***	***0.0456***	***0.149***	***0.0693***	***0.00183***	***0.00416***	*ND*	*ND*	*ND*	*ND*	*ND*
PB-2	*09/21/20*	*ND*	*ND*	*ND*	*ND*	*NA*	*ND*	***0.00118***	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
PB-3	*09/21/20*	*ND*	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	***0.00153***	*ND*	*ND*	*ND*	*ND*
PB-4	*09/21/20*	*ND*	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
PB-5	*09/21/20*	*ND*	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
PB-6	*09/21/20*	*ND*	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	***0.0017***	***0.00982***	*ND*	*ND*	*ND*	*ND*	***0.00169***	***0.00593***	*ND*	*ND*
PB-7	*09/21/20*	***0.00547***	*ND*	*ND*	*ND*	*NA*	*ND*	***0.00648***	*ND*	*ND*	***0.00153***	*ND*	*ND*	*ND*	*ND*	***0.00203***	***0.00348***	*ND*	***0.0018***	***0.0301***
PB-8	*09/21/20*	***0.00649***	*ND*	***0.00183***	***0.00326***	*NA*	*ND*	*ND*	*ND*	***0.00118***	***0.00328***	***0.0056***	***0.00281***	***0.00274***	***0.00154***	***0.00114***	***0.00242***	*ND*	*ND*	*ND*
PB-9	*09/21/20*	*ND*	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	***0.128***	***0.0823***	*ND*	*ND*	***0.0947***	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
PB-10	*09/21/20*	***0.00203***	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
PB-11	*09/21/20*	***0.00444***	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	***0.00258***	*ND*	***0.0024***	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
KDHE Tier 2 Risk-based Screening Levels																				
Residential Scenario, Groundwater Pathway		*0.005*	*1*	*0.7*	*10*	*NE*	*0.005*	*NE*	*0.169*	*0.305*	*NE*	*0.00111*	*0.66*	*0.00844*	*NE*	*0.075*	*0.1*	*1.09*	*0.6*	*0.366*
Non-Residential Scenario, Groundwater Pathway		*0.005*	*1*	*0.7*	*10*	*NE*	*0.005*	*NE*	*0.392*	*0.745*	*NE*	*0.00211*	*1.91*	*0.0174*	*NE*	*0.075*	*0.1*	*1.9*	*0.6*	*0.567*

Notes:
VOC = volatile organic compounds
ND = not detected above laboratory reporting limit
NA = not analyzed
NE = not established
Detected laboratory concentrations are shown in **bold**
Concentrations above Non-Residential Tier 2 Risk-based Screening Levels are highlighted in green

Table 2B - Applicable Groundwater Analytical Results - Previous and Current Assessments
TPH, SVOC and D,D,D-4,4' Analysis

Former City Garage Operations
2109 South 3rd Street
Leavenworth, Kansas

SCS Engineers Project Number 27220109.01
KDHE Project Code: C4-052-73682

Probe/Well ID	Date Sampled	Laboratory Analytical Results (milligrams per liter) and Test Methods											
		TPH-LRH	TPH-MRH	TPH-HRH	2,6-Dinitrotoluene	D,D,D-4,4'	SVOCs Survey Search	Pentachloro-phenol	Naphthalene	Acenaphthene	Fluorene	Phenanthrene	Bis(2-ethylhexyl)-phthalate
		KS LRH	KS MRH	KS HRH	8270C	8081B	Not Identified	8270C	8270C	8270C	8270C	8270C	8270C
Terracon - 1989													
MW-1	*11/24/89*	*NA*	*NA*	*NA*	*ND* [1]	*NA*	*NA*	*ND* [1]	*NA*	*NA*	*NA*	*NA*	*NA*
MW-2	*11/24/89*	*NA*	*NA*	*NA*	*ND* [1]	*NA*	*NA*	*ND* [1]	*NA*	*NA*	*NA*	*NA*	*NA*
MW-3	*11/24/89*	*NA*	*NA*	*NA*	*ND* [1]	*NA*	*ND* [1]	*ND* [1]	*NA*	*NA*	*NA*	*NA*	*NA*
MW-4	*11/24/89*	*NA*	*NA*	*NA*	*ND* [1]	*NA*	*ND* [1]	*ND* [1]	*NA*	*NA*	*NA*	*NA*	*NA*
MW-5	*11/24/89*	*NA*	*NA*	*NA*	*ND* [1]	*NA*	*ND* [1]	*ND* [1]	*NA*	*NA*	*NA*	*NA*	*NA*
MW-6	*11/24/89*	*NA*	*NA*	*NA*	*ND* [1]	*NA*	*ND* [1]	*ND* [1]	*NA*	*NA*	*NA*	*NA*	*NA*
EPA BTA - 1999													
100	*12/02/98*	*NA*	*NA*	*NA*	*ND* [2]	***0.003***	*NA*	***0.0011***	*NA*	*NA*	*NA*	*NA*	*NA*
105	*12/02/98*	*NA*	*NA*	*NA*	*ND* [2]	***0.0039***	*NA*	*ND*	*NA*	*NA*	*NA*	*NA*	*NA*
Environmental Works - 2019													
MW-1	*10/10/19*	*ND*	***0.15***	***0.95***	*ND*	*NA*	*NA*	*ND*	*NA*	*NA*	*NA*	*NA*	*NA*
MW-2	*10/10/19*	*ND*	***0.13***	***0.77***	*ND*	*NA*	*NA*	*ND*	*NA*	*NA*	*NA*	*NA*	*NA*
MW-3	*10/10/19*	*ND*	***0.14***	***0.80***	*ND*	*NA*	*NA*	*ND*	*NA*	*NA*	*NA*	*NA*	*NA*
MW-5	*10/10/19*	*ND*	***0.33***	***3.1***	*ND*	*NA*	*NA*	*ND*	*NA*	*NA*	*NA*	*NA*	*NA*
MW-7	*10/10/19*	*ND*	***0.16***	***0.78***	***0.0182***	*NA*	*NA*	*ND*	*NA*	*NA*	*NA*	*NA*	*NA*
SCS Engineers - 2020													
PB-1A (PB-1)	*09/21/20*	***1.41***	***1.85***	***0.44***	*ND*	*ND*	*NA*	*ND*	***0.0723***	*ND*	*ND*	*ND*	*ND*
Dup Collected with PB-1A	*09/21/20*	***1.43***	***1.82***	***0.344***	*ND*	*ND*	*NA*	*ND*	***0.111***	***0.00103***	*ND*	*ND*	***0.00697***
PB-2	*09/21/20*	*ND*	***0.122***	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
PB-3	*09/21/20*	*ND*	***0.249***	***0.14***	*ND*	*ND*	*NA*	*ND*	***0.0028***	*ND*	*ND*	*ND*	*ND*
PB-4	*09/21/20*	*ND*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
PB-5	*09/21/20*	*ND*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
PB-6	*09/21/20*	*ND*	***0.276***	***0.265***	*ND*	*NA*	*NA*	*ND*	***0.00712***	*ND*	*ND*	*ND*	*ND*
PB-7	*09/21/20*	*ND*	***1.97***	***2.39***	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
PB-8	*09/21/20*	*ND*	***0.472***	***0.367***	*ND*	*NA*	*NA*	*ND*	***0.0042***	*ND*	*ND*	*ND*	*ND*
PB-9	*09/21/20*	*ND*	***247***	***94.6***	*ND*	*NA*	*NA*	*ND*	*ND*	***0.0663***	***0.062***	***0.199***	*ND*
PB-10	*09/21/20*	*ND*	***0.221***	***0.695***	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
PB-11	*09/21/20*	*ND*	***0.286***	***0.817***	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	***0.00607***
KDHE Tier 2 Risk-based Screening Levels													
Residential Scenario, Groundwater Pathway		*0.35*	*0.15*	*1*	*0.000557*	*NE*	*NE*	*0.001*	*0.00111*	*0.253*	*0.162*	*NE*	*0.006*
Non-Residential Scenario, Groundwater Pathway		*0.95*	*0.4*	*2.5*	*0.00187*	*NE*	*NE*	*0.001*	*0.00211*	*0.521*	*0.341*	*NE*	*0.006*

Notes:

Detected laboratory concentrations are shown in **bold**

MRH = mid range hydrocarbons

ND = not detected above laboratory reporting limit

TPH = total petroleum hydrocarbons

HRH = high range hydrocarbons

NA = not applicable

SVOC = semi-volatile organic compounds

KS = Kansas

NE = not established

LRH = low range hydrocarbons

D,D,D-4,4' = dichlorodiphenyldichloroethane

Concentrations above Tier 2 Risk-based Screening Levels (residential scenario) are highlighted in yellow

Concentrations above Tier 2 Risk-based Screening Levels (non-residential scenario) are highlighted in green

[1] = Assumed to be below the minimum laboratory reporting limits for the SVOC Survey Search

[2] = Assumed to be below the minimum laboratory reporting limits for the SVOC method used in 1999

Table 2C - Applicable Groundwater Analytical Results - Previous and Current Assessments
RCRA Metals Analysis

Former City Garage Operations
2109 South 3rd Street
Leavenworth, Kansas

SCS Engineers Project Number 27220109.01
KDHE Project Code: C4-052-73682

Probe/Well ID	Date Sampled	Laboratory Analytical Results (milligrams per liter) and Test Methods							
		Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
		6010	6010	6010	6010	6010	7471	6010	6010
Terracon - 1989									
MW-1	*11/24/89*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*NA*	*NA*
MW-2	*11/24/89*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*NA*	*NA*
MW-3	*11/24/89*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*NA*	*NA*
MW-4	*11/24/89*	***0.06***	*NA*	***0.07***	***0.17***	***3.0***	*ND*	*ND*	*ND*
MW-5	*11/24/89*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*NA*	*NA*
MW-6	*11/24/89*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
EPA BTA - 1999									
100	*12/02/98*	***0.187***	***8.38***	***0.237***	***0.272***	***4.89***	***0.0048***	*NA*	*NA*
105	*12/02/98*	***0.0281***	***0.153***	*ND*	***0.006***	***0.453***	***0.000344***	*NA*	*NA*
Environmental Works - 2019									
MW-1	*10/10/19*	***0.015***	***0.22***	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
MW-2	*10/10/19*	***0.015***	***0.19***	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
MW-3	*10/10/19*	*ND*	***0.13***	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
MW-5	*10/10/19*	*ND*	***0.40***	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
MW-7	*10/10/19*	*ND*	***0.035***	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
SCS Engineers - 2020									
PB-1A (PB-1)	*09/21/20*	*ND*	***0.779***	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Dup Collected with PB-1A	*09/21/20*	*ND*	***0.773***	*ND*	*ND*	*ND*	*ND*	***0.0107***	*ND*
PB-2	*09/21/20*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*
PB-3	*09/21/20*	*ND*	***0.722***	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
PB-4	*09/21/20*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*
PB-5	*09/21/20*	***0.0486***	***0.536***	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
PB-6	*09/21/20*	*ND*	***0.796***	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
PB-7	*09/21/20*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*
PB-8	*09/21/20*	*ND*	***5.19***	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
PB-9	*09/21/20*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*
PB-10	*09/21/20*	*ND*	***0.668***	*ND*	*ND*	***0.0261***	*ND*	*ND*	*ND*
KDHE Split Sample Collected with PB-10	*09/21/20*	*ND*	***0.835***	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
PB-11	*09/21/20*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*
KDHE Tier 2 Risk-based Screening Levels									
Residential Scenario, Groundwater Pathway		*0.01*	*2*	*0.005*	*0.1*	*0.015*	*0.002*	*0.05*	*0.0779*
Non-Residential Scenario, Groundwater Pathway		*0.01*	*2*	*0.005*	*0.1*	*0.015*	*0.002*	*0.05*	*0.508*

Notes:
Detected laboratory concentrations are shown in **bold**
NA = not applicable
RCRA = Resource Concervation and Recovery Act
ND = not detected above laboratory reporting limit
Concentrations above Tier 2 Risk-based Screening Levels (non-residential scenario) are highlighted in green

Table 3 - Previous Soil Vapor Analytical Results
VOCs Analysis

Former City Garage Operations
2109 South 3rd Street
Leavenworth, Kansas

SCS Engineers Project Number 27220109.01
KDHE Project Code: C4-052-73682

Sample ID	Date Sampled	Laboratory Analytical Results (micrograms per cubic meter) and Test Method																												
		Acetone	Benzene	Bromodichloromethane	Carbon Disulfide	Chloroform	Chloromethane	Cyclohexane	Ethyl Acetate	Ethylbenzene	4-Ethyltoluene	Freon 11	Freon 114	Freon 12	Heptane	Hexane	Isopropyl alcohol	MEK	Methylene chloride	Naphthalene	Styrene	PCE	Toluene	TCE	1,1,1-Trichloroethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	2,2,4-Trimethylpentane	m&p-Xylene	o-Xylene
		TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15
Environmental Works - 2019																														
SVW-1	*10/11/19*	***53***	***7.2***	***2.5***	***32***	***49***	*ND*	***11***	*ND*	***7.2***	***1.5***	***3.3***	***68***	***6.8***	***23***	***16***	***5.0***	***11J***	***0.80***	***0.89***	***1.2***	***0.68J***	***14***	*ND*	*ND*	***3.8***	***2.7***	***1.9***	***6.5***	***2.6***
SVW-2	*10/11/19*	***43***	***12***	***0.80J***	***15***	***36***	***0.76***	***19***	***1.0***	***3.2***	*ND*	***1.5***	*ND*	***2.5***	***11J***	***19***	***4.0***	***8.8J***	***0.59***	***1.3***	*ND*	*ND*	***12***	***1.3***	*ND*	***1.9***	***0.93***	***3.6***	***5.0***	***1.7***
SVW-3	*10/11/19*	***20***	***3.2***	***3.7***	***7.5J***	***120***	*ND*	***11***	***0.76J***	***1.5***	*ND*	***2.6***	*ND*	***2.7***	***11***	***8.5J***	***4.2***	***5.7***	***0.42J***	***1.0***	*ND*	***0.95J***	***5.2***	*ND*	***12***	***2.5***	***1.2***	***4.3***	***3.9***	***1.4***
EPA VISL																														
Target Exterior Soil Gas - Residential		*1.1E+06*	*120*	*25*	*2.4E+04*	*4.1E+01*	*3.1E+03*	*2.1E+05*	*2.4E+03*	*374*	*NE*	*NE*	*NE*	*3.5E+03*	*1.4E+04*	*2.4E+04*	*7.0E+03*	*1.7E+05*	*2.1E+04*	*28*	*3.5E+04*	*1.4E+03*	*1.7E+05*	*7.0E+01*	*1.7E+05*	*2.1E+03*	*2.1E+03*	*NE*	*7.0E+03*	*3.5E+03*
Target Exterior Soil Gas - Commercial		*4.5E+06*	*524*	*110*	*1.0E+05*	*1.8E+02*	*1.3E+04*	*8.8E+05*	*1.0E+04*	*1,640*	*NE*	*NE*	*NE*	*1.5E+04*	*5.8E+04*	*1.0E+05*	*2.9E+04*	*7.3E+05*	*8.8E+04*	*120*	*1.5E+05*	*5.8E+03*	*7.3E+05*	*2.9E+02*	*7.3E+05*	*8.8E+03*	*8.8E+03*	*NE*	*2.9E+04*	*1.5E+04*

Notes:
VOCs = volatile organic compounds
MEK = Methyl Ethyl Ketone
PCE = Tetrachloroethylene
TCE = Trichloroethylen
J = analyte detected below quantitation limit
ND = not detected above laboratory reporting limit
EPA VISL = U.S. Environmental Protection Agency Vapor Intrusion Screening Level
NE = not established
Detected laboratory concentrations are shown in bold
Samples collected by Environmental Works, Inc. in October 2019
Concentrations above EPA VISL Target Exterior Soil Gas concentrations for residential land use are highlighted in yellow

Table 4 - Current Indoor Air Analytical Results
VOC Analysis

Former City Garage Operations
2109 South 3rd Street
Leavenworth, Kansas

SCS Engineers Project Number 27220109.01
KDHE Project Code: C4-052-73682

Sample ID	Date Sampled	Laboratory Analytical Results (micrograms per cubic meter) and Test Method																	
		Benzene	Toluene	Ethylbenzene	m&p-Xylene	o-Xylene	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Acetone	Chloromethane	Ethanol	Trichlorofluoro-methane	Dichlorodifluoro-methane	Methylene chloride	Naphthalene	2-Propanol	1,2,4-Trimethylbenzene
		TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15	TO-15
SCS Engineers - 2020																			
AS-1	*09/21/20*	*ND*	***0.915***	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	***7.13***	***0.516***	***95.8***	*ND*	***1.14***	***1.05***	*ND*	*ND*	*ND*
Dup Collected with AS-1	*09/21/20*	*ND*	***1.98***	*ND*	*ND*	*ND*	***1.58***	*ND*	*ND*	*ND*	***15.8***	***1.27***	***224***	***1.40***	***2.85***	*ND*	*ND*	***5.85***	*ND*
AS-2	*09/21/20*	*ND*	***1.74***	*ND*	*ND*	*ND*	***5.11***	*ND*	*ND*	*ND*	***21.6***	***1.32***	***78.4***	***1.46***	***2.80***	*ND*	*ND*	***55.6***	*ND*
AS-AMB	*09/21/20*	*ND*	***1.86***	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	***13.1***	***1.21***	***8.31***	***1.36***	***2.72***	*ND*	*ND*	***4.25***	*ND*
KDHE Tier 2 Risk-based Screening Levels																			
Residential Scenario, Indoor Air Pathway		*3.12*	*5,210*	*9.73*	*104*	*104*	*41.7*	*2.09*	*7.3*	*62.6*	*32,300*	*93.9*	*NE*	*730*	*209*	*626*	*0.716*	*NE*	*7.3*

Notes:
VOC = volatile organic compounds
MEK = Methyl Ethyl Ketone
PCE = Tetrachloroethylene
TCE = Trichloroethylene
DCE = Dichloroethene
ND = not detected above laboratory reporting limit
NE = not established
Detected laboratory concentrations are shown in **bold**

Table 5 - Groundwater Elevation Data

Former City Garage Operations
2109 South 3rd Street
Leavenworth, Kansas

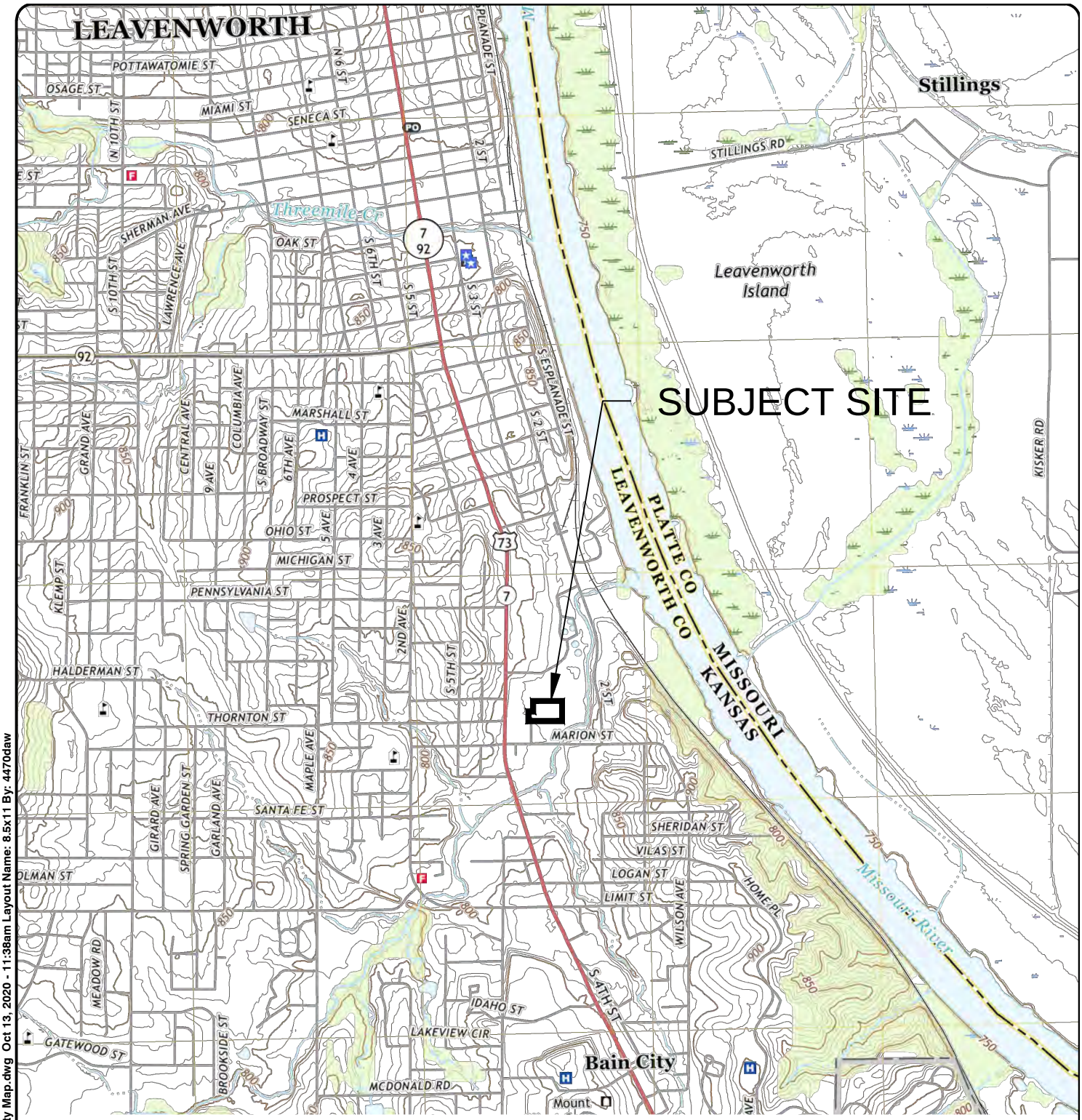
SCS Engineers Project Number 27220109.01
KDHE Project Code: C4-052-73682

Boring/ Piezometer ID	Date Measured	Top of Casing Elevation (feet)	Total Depth of Piezometer (feet bTOC)	Measured Depth to Groundwater (feet bTOC)	Groundwater Elevation (feet)
PB-1A (PB-1)	*09/21/20*	*778.19*	*18.12*	*6.55*	*771.64*
PB-2	*09/21/20*	*777.38*	*19.03*	*6.39*	*770.99*
PB-3	*09/21/20*	*778.39*	*19.58*	*9.45*	*768.94*
PB-4	*09/21/20*	*779.16*	*20.13*	*17.74*	*761.42*
PB-5	*09/21/20*	*779.63*	*19.47*	*17.35*	*762.28*
PB-6	*09/21/20*	*777.52*	*14.88*	*5.92*	*771.60*
PB-7	*09/21/20*	*778.71*	*19.98*	*10.03*	*768.68*
PB-8	*09/21/20*	*779.39*	*19.08*	*9.23*	*770.16*
PB-9	*09/21/20*	*777.57*	*19.02*	*10.49*	*767.08*
PB-10	*09/21/20*	*777.61*	*19.63*	*5.84*	*771.77*
PB-11	*09/21/20*	*777.05*	*13.85*	*8.14*	*768.91*

bTOC = below the top of the well casing

Top of casing elevations provided by Wilson, Missouri-Licensed Surveyor (September 21, 2020)

10.0 FIGURES



LEAVENWORTH QUADRANGLE
KANSAS-MISSOURI
2018 7.5-MINUTE SERIES

2000 0 2000 4000

SCALE FEET

SCS ENGINEERS
8575 W. 110th St, Ste. 100
Overland Park, Kansas 66210
PH. (913) 681-0030 FAX. (913) 681-0012

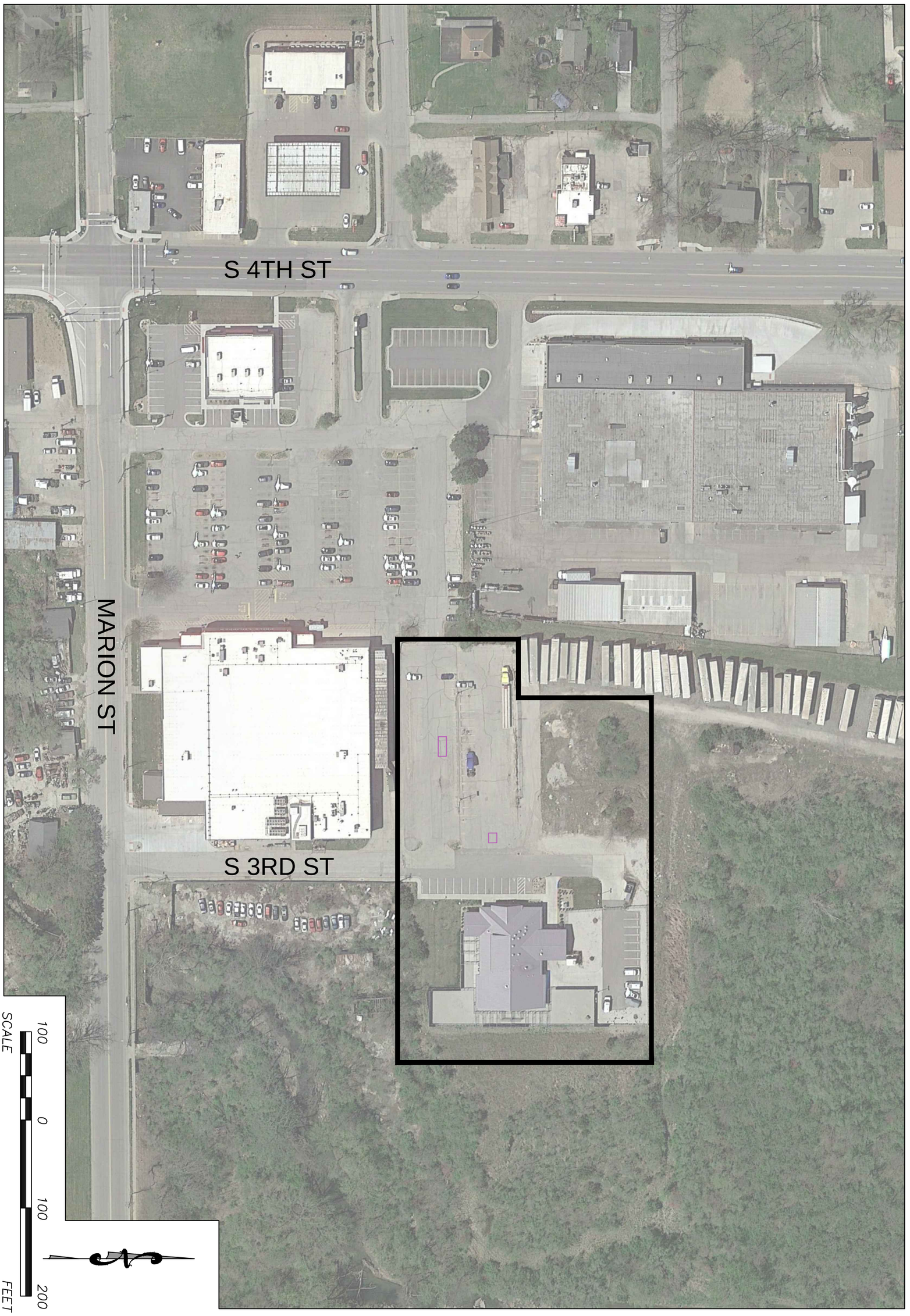
FIGURE 1 - VICINITY MAP

FORMER CITY OF LEAVENWORTH GARAGE
2109 S. 3RD STREET
LEAVENWORTH, KANSAS 66048
KDHE PROJECT CODE C4-052-73682

CHK. BY: DND	DWN. BY: DAW	DSN. BY: DND	PROJ. NO. 27220109.01
PROJ. MGR: DND	DATE: 6/12/20	CADD FILE: FIGURE 1 – VICINITY MAP.DWG	DRAWING NO. 1

T:\27220109.00\Data and Calculations\DWG\Figure 1 - Vicinity Map.dwg Oct 13, 2020 - 11:38am Layout Name: 8.5x11 By: 4470daw

T:\27220109.00\Data and Calculations\DWG\Figure 2 and 3 - Former Location of Former City Garage Operations v0.02.dwg Oct 13, 2020 - 11:40am Layout Name: 2 By: 4470daw



DRAWING NO. 2

DATE: 7/16/20

CADD FILE: T:\27220109.00\Data and Calculations\DWG\Figure 2 and 3 - Former Location of Former City Garage Operations v0.02.dwg

SCS ENGINEERS
8575 W. 110th St, Ste. 100
Overland Park, Kansas 66210
PH. (913) 681-0030 FAX. (913) 681-0012

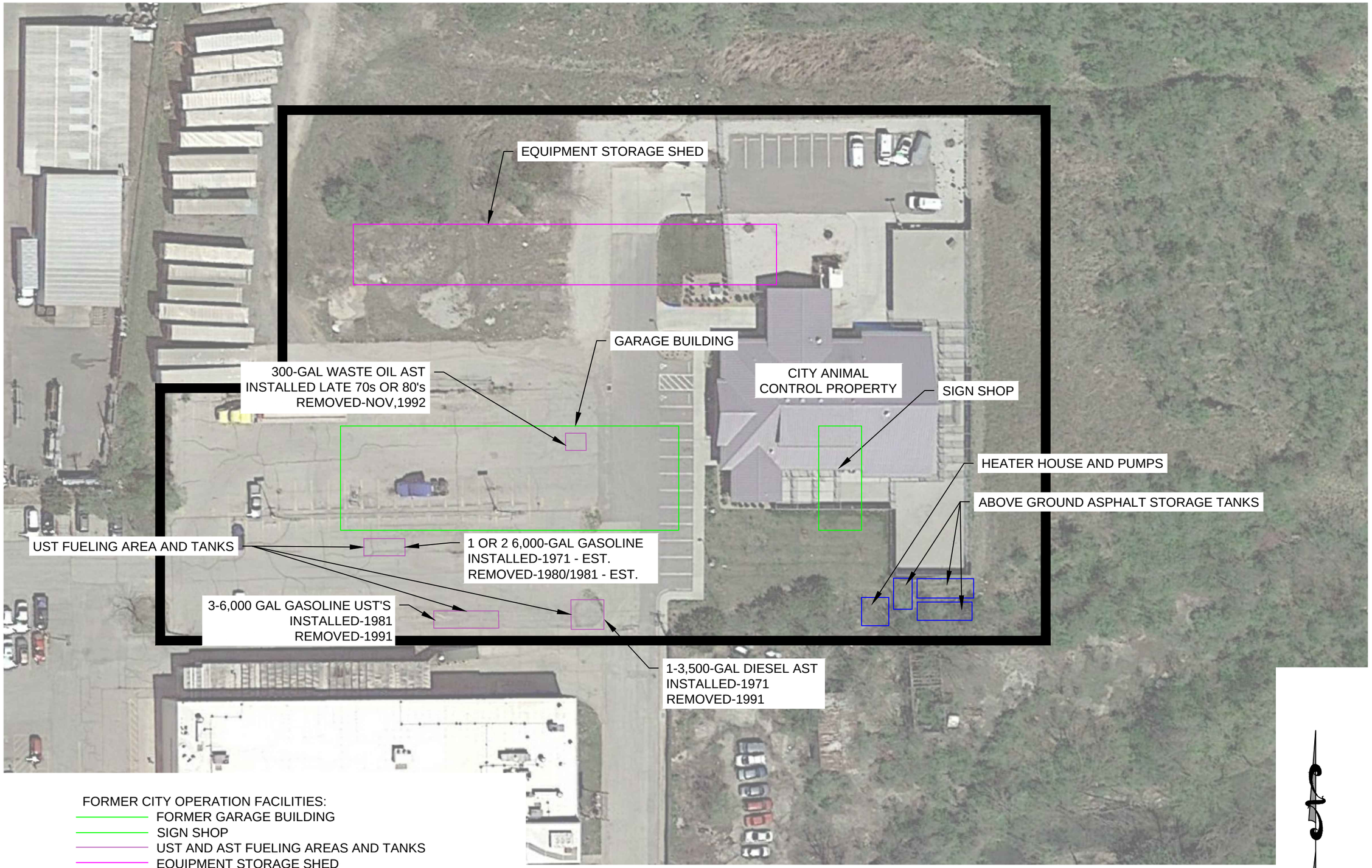
PROJ. NO.	DWN. BY:	Q/A RVW BY:
27220109.01	DAW	DND
DSN. BY: DND	CHK. BY: DND	PROJ. MGR DND

CLIENT
FORMER CITY OF LEAVENWORTH GARAGE
2109 S. 3RD STREET
LEAVENWORTH, KANSAS 66048
KDHE PROJECT CODE C4-052-73682

SHEET TITLE
FIGURE 2 - SITE PROPERTY BOUNDARY

PROJECT TITLE
CITY OF LEAVENWORTH

REV.	DATE		CK. BY
1	-		-
2	-		-
3	-		-
4	-		-
5	-		-
6	-		-



FORMER CITY OPERATION FACILITIES:
- FORMER GARAGE BUILDING
- SIGN SHOP
- UST AND AST FUELING AREAS AND TANKS
- EQUIPMENT STORAGE SHED
- ASPHALT OIL TANKS AND HEATER HOUSE

100 0 100 200
SCALE FEET

N

REV.	DATE	CK. BY
1	–	–
2	–	–
3	–	–
4	–	–
5	–	–
6	–	–

SHEET TITLE
FIGURE 3 - FORMER LOCATION OF CITY GARAGE OPERATIONS

PROJECT TITLE
CITY OF LEAVENWORTH

CLIENT
FORMER CITY OF LEAVENWORTH GARAGE
2109 S. 3RD STREET
LEAVENWORTH, KANSAS 66048
KDHE PROJECT CODE C4-052-73682

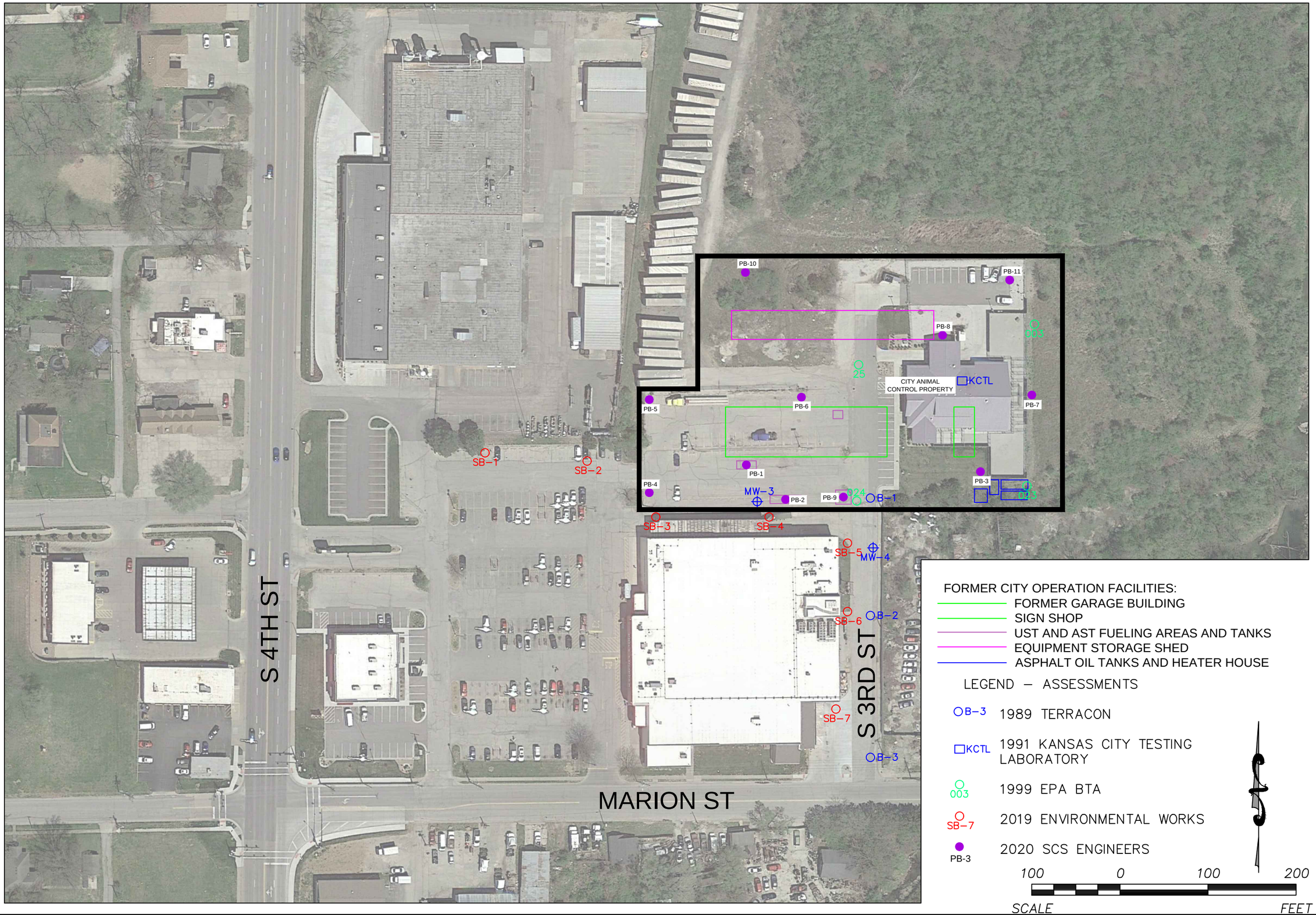
SCS ENGINEERS
8575 W. 110th St, Ste. 100
Overland Park, Kansas 66210
PH: (913) 681-0030 FAX: (913) 681-0012

PROJ. NO.	DWN. BY:	CHK. BY:	QA/QC BY:	PROJ. MGR.
27220109.01	DAW	DND	DND	DND
DSN. BY: DND				

CADD FILE:
FIGURE 2 AND 3 – FORMER LOCATION OF FORMER CITY GARAGE OPERATIONS V0.02.DWG

DATE: 7/16/20

DRAWING NO.
3



FORMER CITY OPERATION FACILITIES:

- FORMER GARAGE BUILDING
- SIGN SHOP
- UST AND AST FUELING AREAS AND TANKS
- EQUIPMENT STORAGE SHED
- ASPHALT OIL TANKS AND HEATER HOUSE

LEGEND – ASSESSMENTS

- B-3 — 1989 TERRACON
- KCTL — 1991 KANSAS CITY TESTING LABORATORY
- 003 — 1999 EPA BTA
- SB-7 — 2019 ENVIRONMENTAL WORKS
- PB-3 — 2020 SCS ENGINEERS

100 0 100 200

SCALE FEET

REV.	DATE	CK. BY
1	–	–
2	–	–
3	–	–
4	–	–
5	–	–
6	–	–
7	–	–

SHEET TITLE
FIGURE 4A - PRIOR ASSESSMENT LOCATIONS - SOIL

PROJECT TITLE
CITY OF LEAVENWORTH

CLIENT
FORMER CITY OF LEAVENWORTH GARAGE
2109 S. 3RD STREET
LEAVENWORTH, KANSAS 66048
KDHE PROJECT CODE C4-052-73682

SCS ENGINEERS
8575 W. 110th St, Ste. 100
Overland Park, Kansas 66210
PH. (913) 681-0030 FAX. (913) 681-0012

PROJ. NO.	DWN. BY:	CHK. BY:	QA/A RVW BY:	PROJ. MGR
27220109.01	DAW	DND	DND	DND
DSN. BY: DND				

CADD FILE: FIGURE 4A.DWG

DATE: 10/1/20

DRAWING NO. **4A**

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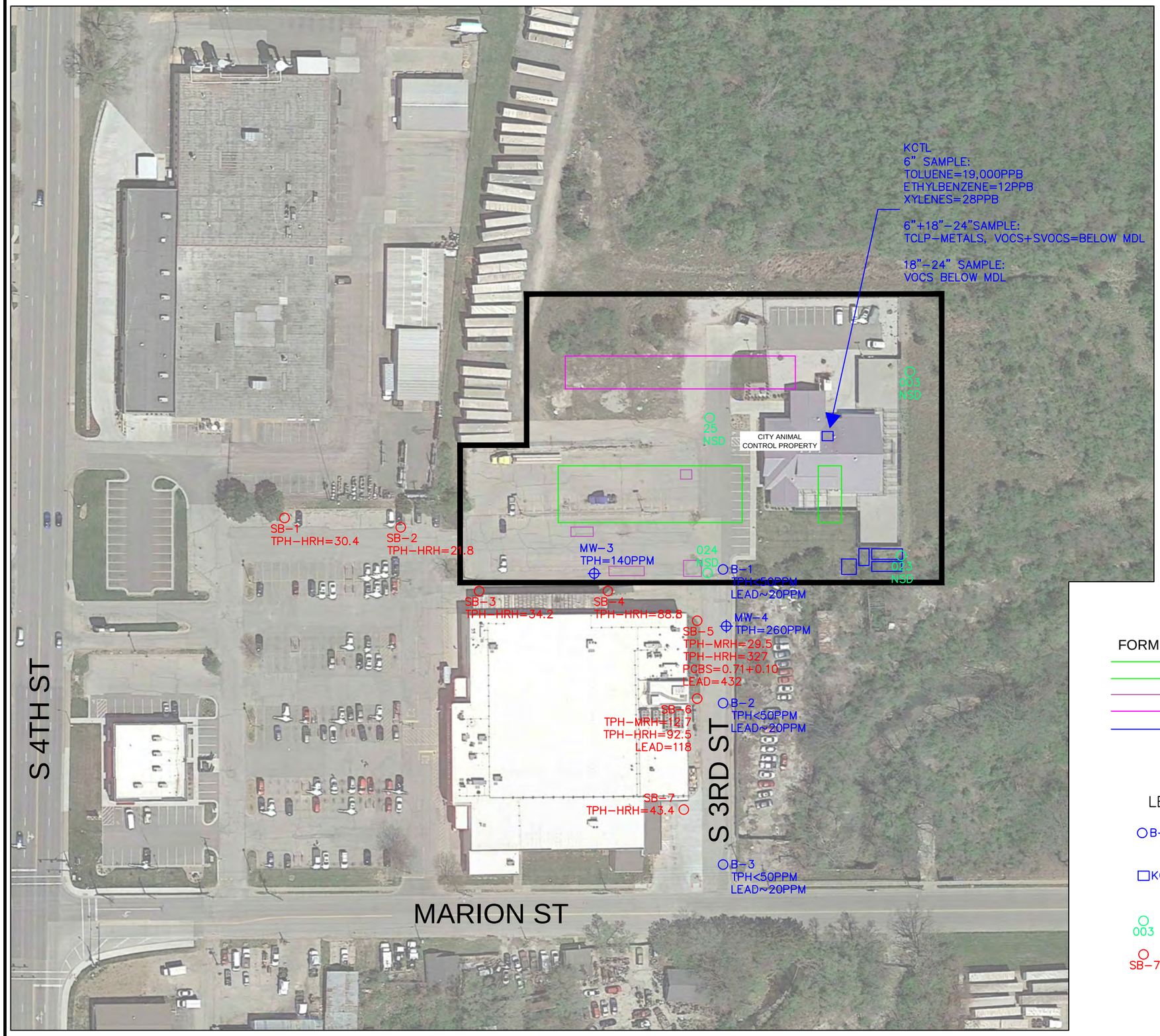


NOTES:

- NSD=NO SIGNIFICANT DETECTIONS, ANALYSIS INCLUDED METALS, VOLATILES, SEMI-VOLATILES, PESTICIDES AND MERCURY.
- PPM=PARTS PER MILLION
- PPB=PARTS PER BILLION
- MDL=BELOW METHOD DETECTION LIMIT
- VOCs=VOLATILE ORGANIC COMPOUNDS
- PCBs=POLYCHLORINATED BIPHENYL
- SVOC'S=SEMI-VOLATILE ORGANIC COMPOUNDS

ALL 2019 ENVIRONMENTAL WORKS LOCATIONS REPORTED IN MILLIGRAMS PER KILOGRAMS.

RESULTS SHOWN EXCEED MINIMUM LABORATORY DETECTION LIMITS, HOWEVER, KCTL RESULTS SHOWN BELOW MDL'S TO COMMUNICATE ANALYSIS PERFORMED.

FORMER CITY OPERATION FACILITIES:
- FORMER GARAGE BUILDING
- SIGN SHOP
- UST AND AST FUELING AREAS AND TANKS
- EQUIPMENT STORAGE SHED
- ASPHALT OIL TANKS AND HEATER HOUSE

LEGEND - PREVIOUS ASSESSMENTS

B-3 1989 TERRACON

KCTL 1991 KANSAS CITY TESTING LABORATORY

003 1999 EPA BTA

SB-7 2019 ENVIRONMENTAL WORKS

100 0 100 200

SCALE FEET

REV.	DATE	CK. BY
1	-	-
2	-	-
3	-	-
4	-	-
5	-	-
6	-	-

SHEET TITLE
FIGURE 4A1 - SOIL RESULTS FOR TPH, VOCS, SVOCS, PCBS AND METALS

PROJECT TITLE
CITY OF LEAVENWORTH

CLIENT
FORMER CITY OF LEAVENWORTH GARAGE
2109 S. 3RD STREET
LEAVENWORTH, KANSAS 66048
KDHE PROJECT CODE C4-052-73682

SCS ENGINEERS
8575 W. 110th St, Ste. 100
Overland Park, Kansas 66210
PH. (913) 681-0030 FAX: (913) 681-0012

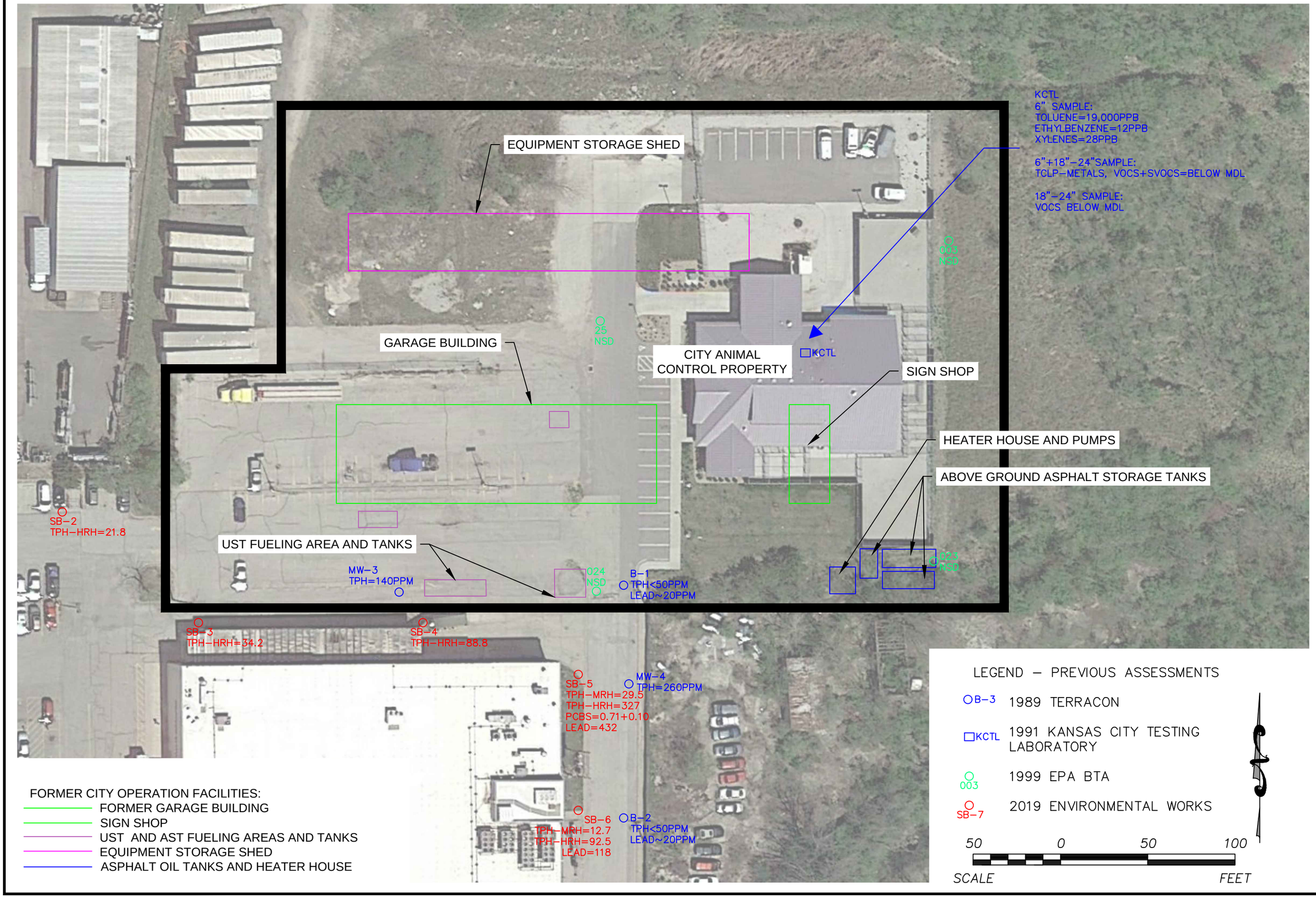
PROJ. NO. 27220109.01	DSN. BY: DND	DWN. BY: DAW	CHK. BY: DND
Q/A REV BY: DND	PROJ. MGR: DND		

CADD FILE:
FIGURE 4A-1 - RESULTS FOR TPH, VOCS, SVOCS, PCBS AND METALS.DWG

DATE:
11/2/20

DRAWING NO.
4A-1

T:\27220109.00\Data and Calculations\DWG\Figure 4A-1 - Results for TPH, VOCs, SVOCs, PCBs and Metals.dwg Nov 02, 2020 - 9:30am Layout Name: A By: 4470daw



T:\2720109.00\Data and Calculations\DWG\Figure 4B - Prior Assesment Locations - Soil.dwg Oct 13, 2020 - 11:46am Layout Name: B By: 4470daw

REV.	DATE	CK. BY
1	-	-
2	-	-
3	-	-
4	-	-
5	-	-
6	-	-

SHEET TITLE
FIGURE 4B - SITE DETAIL AND PRIOR ASSESSMENT LOCATIONS - SOIL

PROJECT TITLE
CITY OF LEAVENWORTH

CLIENT
FORMER CITY OF LEAVENWORTH GARAGE
2109 S. 3RD STREET
LEAVENWORTH, KANSAS 66048
KDHE PROJECT CODE C4-052-73682

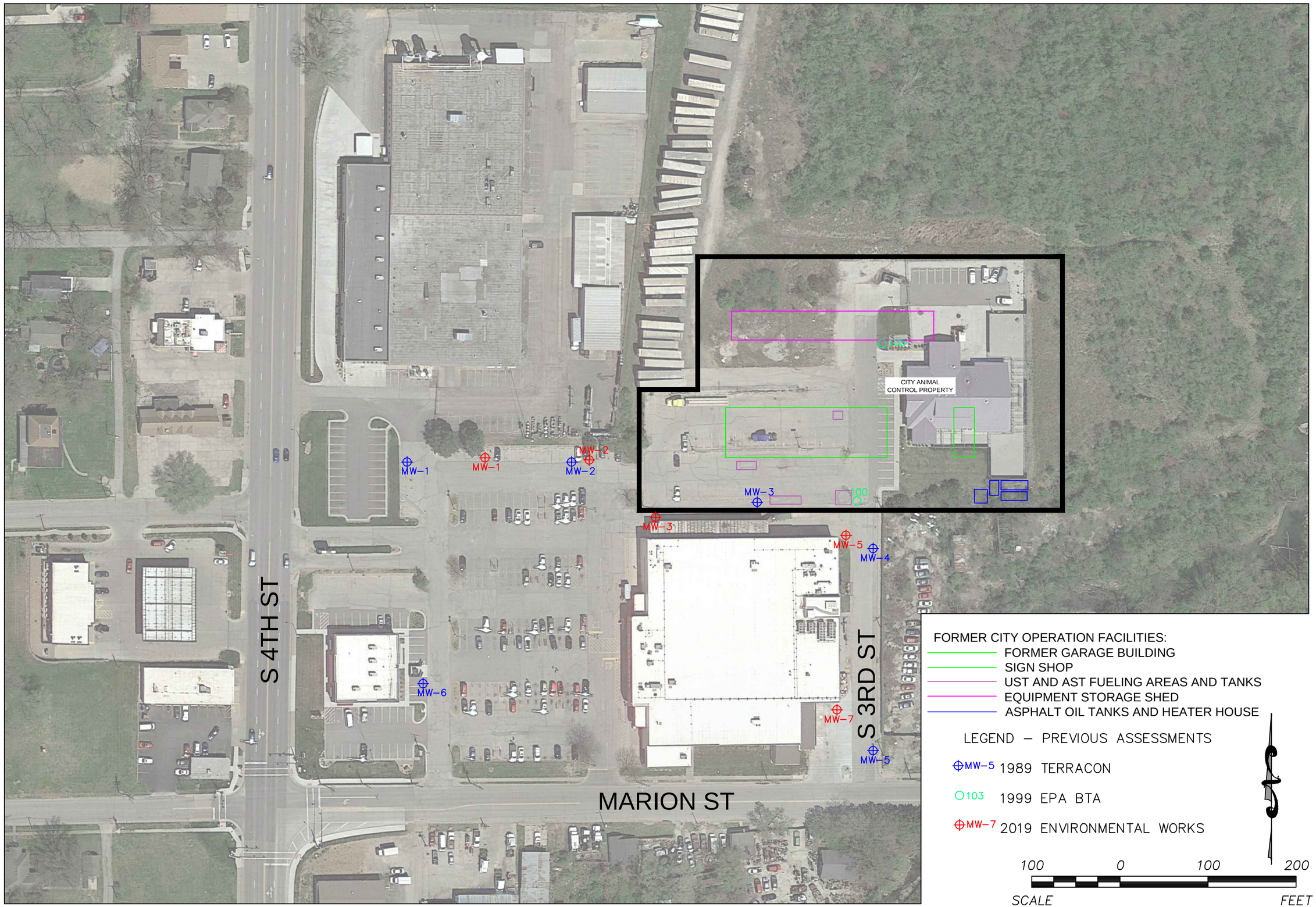
SCS ENGINEERS
8575 W. 110th St, Ste. 100
Overland Park, Kansas 66210
PH: (913) 681-0030 FAX: (913) 681-0012

PROJ. NO.	DSN. BY:	CHK. BY:	QA/A RVW BY:	PROJ. MGR.
27220109.01	DAW	DND	DND	DND

CADD FILE:
FIGURE_4B - PRIOR ASSESMENT LOCATIONS - SOIL.DWG

DATE:
10/13/20

DRAWING NO.
4B



REV.	DATE	CK. BY
1	–	–
2	–	–
3	–	–
4	–	–
5	–	–
6	–	–

SHEET TITLE
FIGURE 5A - PRIOR ASSESSMENT LOCATIONS - GROUNDWATER

PROJECT TITLE
CITY OF LEAVENWORTH

CLIENT
FORMER CITY OF LEAVENWORTH GARAGE
2109 S. 3RD STREET
LEAVENWORTH, KANSAS 66048
KDHE PROJECT CODE C4-052-73682

SCS ENGINEERS
8575 W. 110th St, Ste. 100
Overland Park, Kansas 66210
PH. (913) 681-0030 FAX. (913) 681-0012

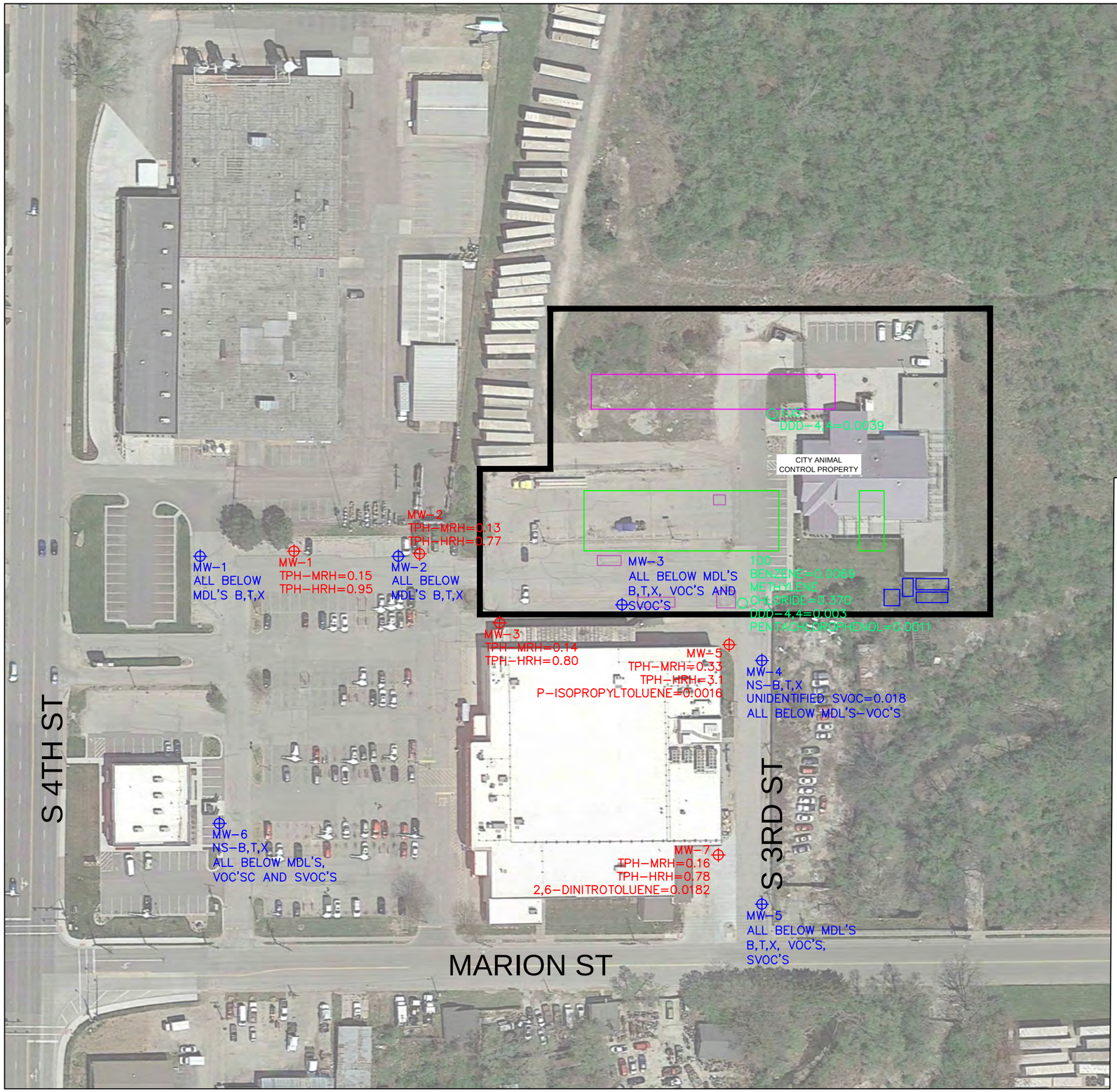
PROJ. NO.	DWN. BY:	CHK. BY:	QA/A RVW BY:	PROJ. MGR.
27220109.01	DAW	DND	DND	DND
DSN. BY: DND				

CADD FILE:
FIGURE 5 – PRIOR ASSESMENT LOCATIONS – GROUNDWATER.DWG

DATE:
10/13/20

DRAWING NO.
5A

T:\27220109.00\Data and Calculations\DWG\Figure 5 - Prior Assesment Locations - Groundwater.dwg Oct 13, 2020 - 11:47am Layout Name: A By: 4470daw



NOTES:

- TPH-MRH=TOTAL PETROLEUM HYDROCARBONS-MID RANGE HYDROCARBONS
- TPH-HRH=TOTAL PETROLEUM HYDROCARBONS-HIGH RANGE HYDROCARBONS
- VOC'S=VOLATILE ORGANIC COMPOUNDS
- SVOC'S=SEMI-VOLATILE ORGANIC COMPOUNDS

RESULTS SHOWN EXCEED MINIMUM LABORATORY DETECTION LIMITS (MDL). HOWEVER, TERRACON RESULTS BELOW MDL SHOWN TO COMMUNICATE ANALYSIS PERFORMED.

ALL LOCATIONS REPORTED IN MILLIGRAMS PER LITER

B=BENZENE
T=TOLUENE
X=XYLENES

FORMER CITY OPERATION FACILITIES:

- FORMER GARAGE BUILDING
- SIGN SHOP
- UST AND AST FUELING AREAS AND TANKS
- EQUIPMENT STORAGE SHED
- ASPHALT OIL TANKS AND HEATER HOUSE

LEGEND - PREVIOUS ASSESSMENTS

- MW-5 1989 TERRACON
- 103 1999 EPA BTA
- MW-7 2019 ENVIRONMENTAL WORKS

100 0 100 200
SCALE FEET

REV.	DATE	CK. BY
1	-	-
2	-	-
3	-	-
4	-	-
5	-	-
6	-	-

SHEET TITLE
FIGURE 5A1 - GROUNDWATER RESULTS FOR VOC'S, TPH'S & SVOC'S

PROJECT TITLE
CITY OF LEAVENWORTH

CLIENT
FORMER CITY OF LEAVENWORTH GARAGE
2109 S. 3RD STREET
LEAVENWORTH, KANSAS 66048
KDHE PROJECT CODE C4-052-73682

SCS ENGINEERS
8575 W. 110th St, Ste. 100
Overland Park, Kansas 66210
PH. (913) 681-0030 FAX: (913) 681-0012

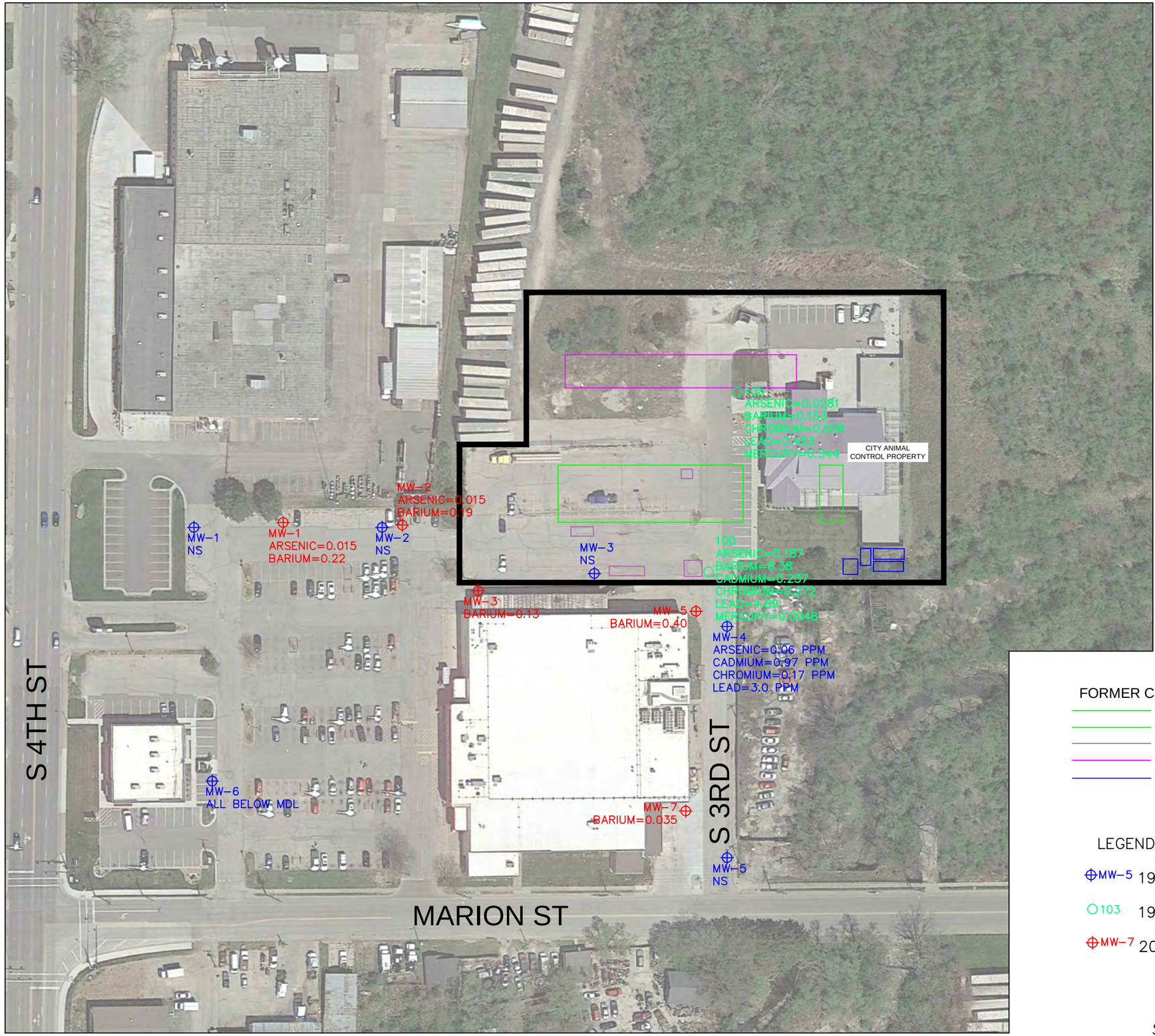
PROJ. NO.	DWN. BY:	CHK. BY:	QA/QC BY:
27220109.01	DAW	DND	DND
TASK NO.			PROJ. MGR.
DND			DND

CADD FILE:
FIGURE 5A-1 - RESULTS FOR VOC'S, TPH'S, SVOCS.DWG

DATE:
10/13/20

DRAWING NO.
5A-1

T:\27220109.00\Data and Calculations\DWG\Figure 5A-1 - Results for VOC's, TPH's, SVOCs.dwg Oct 13, 2020 - 11:48am Layout Name: A By: 4470daw



NOTES:

- NS = NOT SAMPLED
- PPM = PARTS PER MILLION
- MDL = METHOD DETECTION LIMIT

ALL 2019 ENVIRONMENTAL WORKS LOCATIONS REPORTED IN MILLIGRAMS PER LITER

RESULTS SHOWN EXCEED MINIMUM LABORATORY DETECTION LIMITS

FORMER CITY OPERATION FACILITIES:

- FORMER GARAGE BUILDING
- SIGN SHOP
- UST AND AST FUELING AREAS AND TANKS
- EQUIPMENT STORAGE SHED
- ASPHALT OIL TANKS AND HEATER HOUSE

LEGEND – PREVIOUS ASSESSMENTS

- MW-5 1989 TERRACON
- 103 1999 EPA BTA
- MW-7 2019 ENVIRONMENTAL WORKS

100 0 100 200

SCALE FEET

REV.	DATE	CK. BY
1	-	-
2	-	-
3	-	-
4	-	-
5	-	-
6	-	-

SHEET TITLE
FIGURE 5A2 - GROUNDWATER RESULTS - RCRA 8 METALS

PROJECT TITLE
CITY OF LEAVENWORTH

CLIENT
FORMER CITY OF LEAVENWORTH GARAGE
2109 S. 3RD STREET
LEAVENWORTH, KANSAS 66048
KDHE PROJECT CODE C4-052-73682

SCS ENGINEERS
8575 W. 110th St, Ste. 100
Overland Park, Kansas 66210
PH. (913) 681-0030 FAX. (913) 681-0012

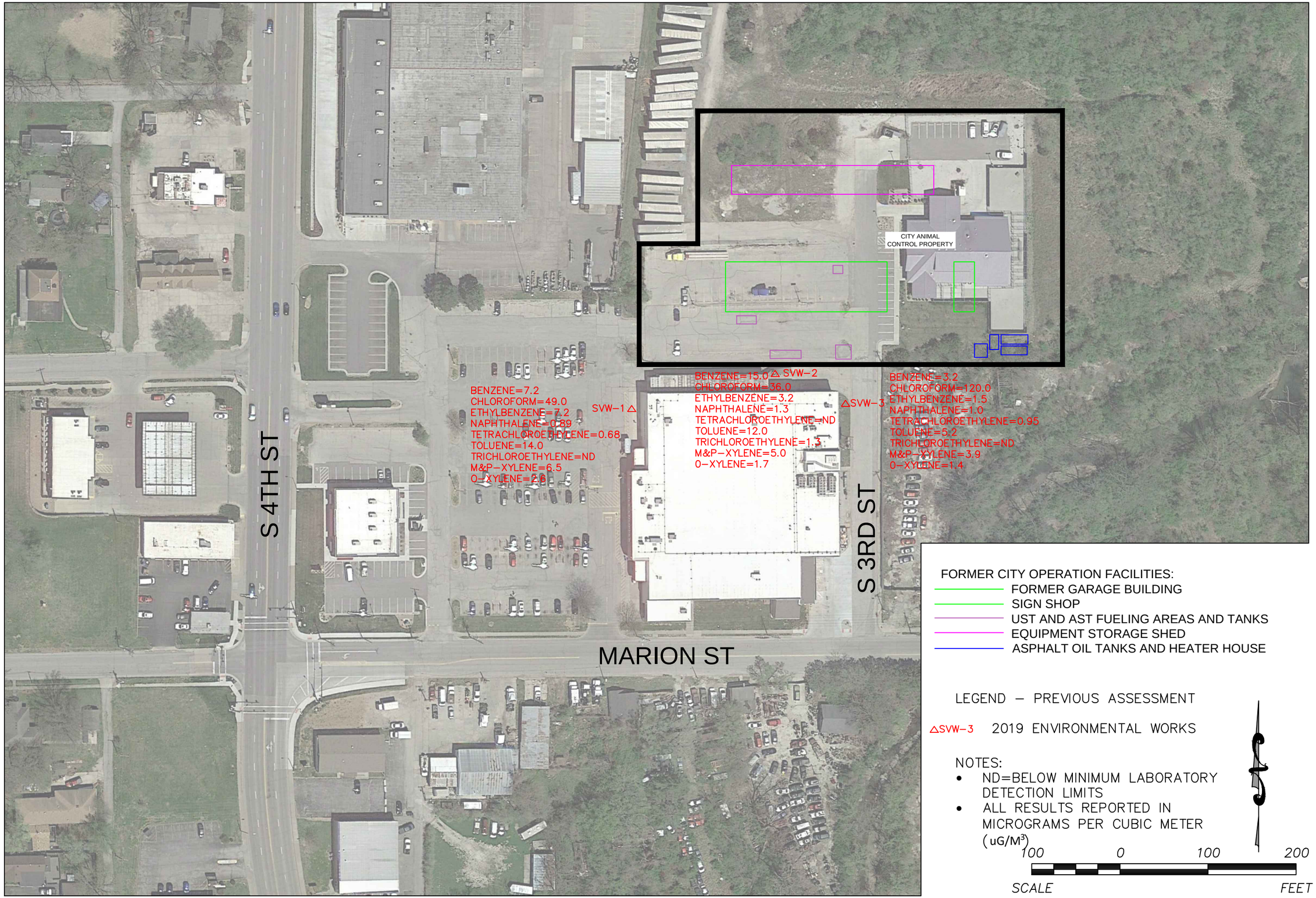
PROJ. NO. 27220109.01	DWN. BY: DAW	C/A REVIEW BY: DND	
DSN. BY: DND	CHK. BY: DND	PROJ. MGR. DND	

CADD FILE: FIGURE 5A-2 – RESULTS-RCRA 8 METALS.DWG

DATE: 7/16/20

DRAWING NO.
5A-2

T:\27220109.00\Data and Calculations\DWG\Figure 5A-2 - Results-RCRA 8 Metals.dwg Oct 13, 2020 - 11:50am Layout Name: A By: 4470daw



FORMER CITY OPERATION FACILITIES:

- FORMER GARAGE BUILDING
- SIGN SHOP
- UST AND AST FUELING AREAS AND TANKS
- EQUIPMENT STORAGE SHED
- ASPHALT OIL TANKS AND HEATER HOUSE

LEGEND – PREVIOUS ASSESSMENT

△SVW-3 2019 ENVIRONMENTAL WORKS

NOTES:

- ND=BELOW MINIMUM LABORATORY DETECTION LIMITS
- ALL RESULTS REPORTED IN MICROGRAMS PER CUBIC METER (uG/M^3)

100 0 100 200

SCALE FEET

REV.	DATE	CK. BY
1	-	-
2	-	-
3	-	-
4	-	-
5	-	-
6	-	-

SHEET TITLE
FIGURE 6 - SOIL GAS PREVIOUS RESULTS

PROJECT TITLE
CITY OF LEAVENWORTH

CLIENT
FORMER CITY OF LEAVENWORTH GARAGE
2109 S. 3RD STREET
LEAVENWORTH, KANSAS 66048
KDHE PROJECT CODE C4-052-73682

SCS ENGINEERS
8575 W. 110th St, Ste. 100
Overland Park, Kansas 66210
PH. (913) 681-0030 FAX. (913) 681-0012

PROJ. NO.	DWN. BY:	Q/A REW BY:
27220109.01	DAW	DND
DSN. BY:	CHK. BY:	PROJ. MGR.
DND	DND	DND

CADD FILE:
FIGURE 6 - SOIL GAS PREVIOUS RESULTS.DWG

DATE:
10/12/20

DRAWING NO.
6

PB-10

EQUIPMENT STORAGE SHED

PB-11

PB-8

GARAGE BUILDING

300-GAL WASTE OIL AST
INSTALLED LATE 70s OR 80's
REMOVED-NOV,1992

CITY ANIMAL
CONTROL PROPERTY

SIGN SHOP

PB-5

PB-6

PB-7

HEATER HOUSE AND PUMPS

1 OR 2 6,000-GAL GASOLINE
INSTALLED-1971 - EST.
REMOVED-1980/1981 - EST.

ABOVE GROUND ASPHALT STORAGE TANKS

UST FUELING AREA AND TANKS

PB-1/PB-1A

PB-3

1-3,500-GAL DIESEL AST
INSTALLED-1971
REMOVED-1991

PB-4

3-6,000 GAL GASOLINE UST'S
INSTALLED-1981
REMOVED-1991

PB-2

PB-9

FORMER CITY OPERATION FACILITIES:
- FORMER GARAGE BUILDING
- SIGN SHOP
- UST AND AST FUELING AREAS AND TANKS
- EQUIPMENT STORAGE SHED
- ASPHALT OIL TANKS AND HEATER HOUSE

LEGEND
BORING LOCATIONS:

PB-1 SOIL AND GROUNDWATER SAMPLING LOCATION

PB-4 GROUNDWATER SAMPLING LOCATION

100 0 100 200
SCALE FEET

REV.	DATE	CK. BY
1	-	-
2	-	-
3	-	-
4	-	-
5	-	-
6	-	-

SHEET TITLE
FIGURE 7 - SCS PHASE II ESA BORING LOCATIONS

PROJECT TITLE
CITY OF LEAVENWORTH

CLIENT
FORMER CITY OF LEAVENWORTH GARAGE
2109 S. 3RD STREET
LEAVENWORTH, KANSAS 66048
KDHE PROJECT CODE C4-052-73682

SCS ENGINEERS
8575 W. 110th St, Ste. 100
Overland Park, Kansas 66210
PH. (913) 681-0030 FAX. (913) 681-0012

PROJ. NO. 27220109.01
DSN. BY: DND
DWN. BY: DAW
CHK. BY: DND
QA/A RVW BY: DND
PROJ. MGR: DND

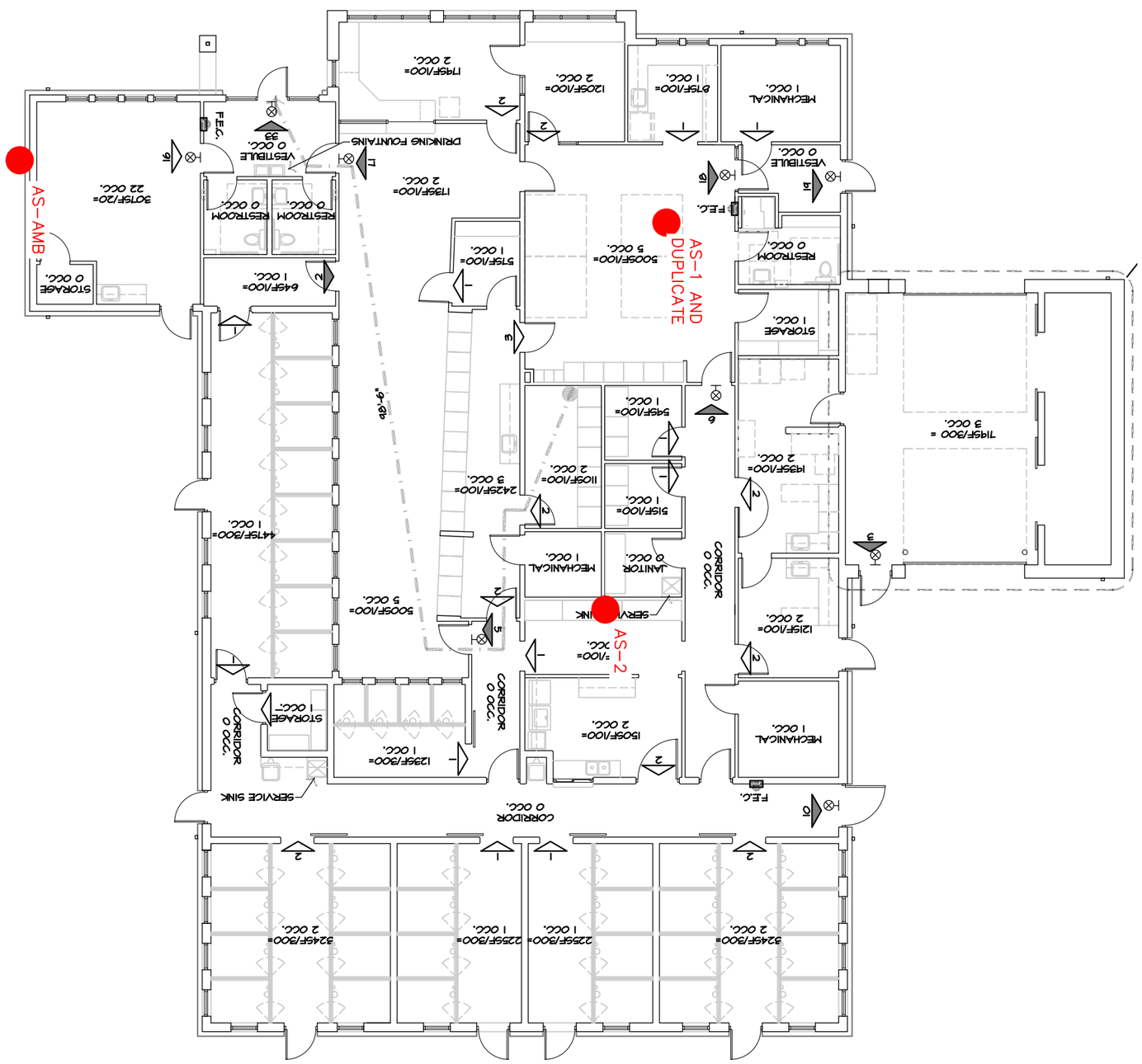
CADD FILE:
FIGURE 7.DWG

DATE:
10/28/20

DRAWING NO.
7

T:\27220109.00\Data and Calculations\DWG\DWG 2020 Sampling Event\Figure 7.dwg Oct 28, 2020 - 9:28am Layout Name: 1 By: 4470daw

T:\27220109.00\Data and Calculations\DWG\Groundwater Topo and Air Samples\Figure 8 - Air Samples.dwg Oct 13, 2020 - 11:54am Layout Name: 11x17 By: 4470daw



SCS ENGINEERS
8575 W. 110th St, Ste. 100
Overland Park, Kansas 66210
PH. (913) 681-0030 FAX. (913) 681-0012

PROJ. NO.	27220109.01
DSN. BY:	DND
DWN. BY:	DAW
CHK. BY:	DND
Q/A RVW BY:	DND
PROJ. MGR	DND

CADD FILE: FIGURE 8 - AIR SAMPLES.DWG

DATE: 10/12/20

DRAWING NO. 8

CLIENT
FORMER CITY OF LEAVENWORTH GARAGE

2109 S. 3RD STREET
LEAVENWORTH, KANSAS 66048
KDHE PROJECT CODE C4-052-73682

SHEET TITLE
FIGURE 8 - AIR SAMPLING LOCATIONS

PROJECT TITLE
CITY OF LEAVENWORTH

REV.	DATE		CK. BY
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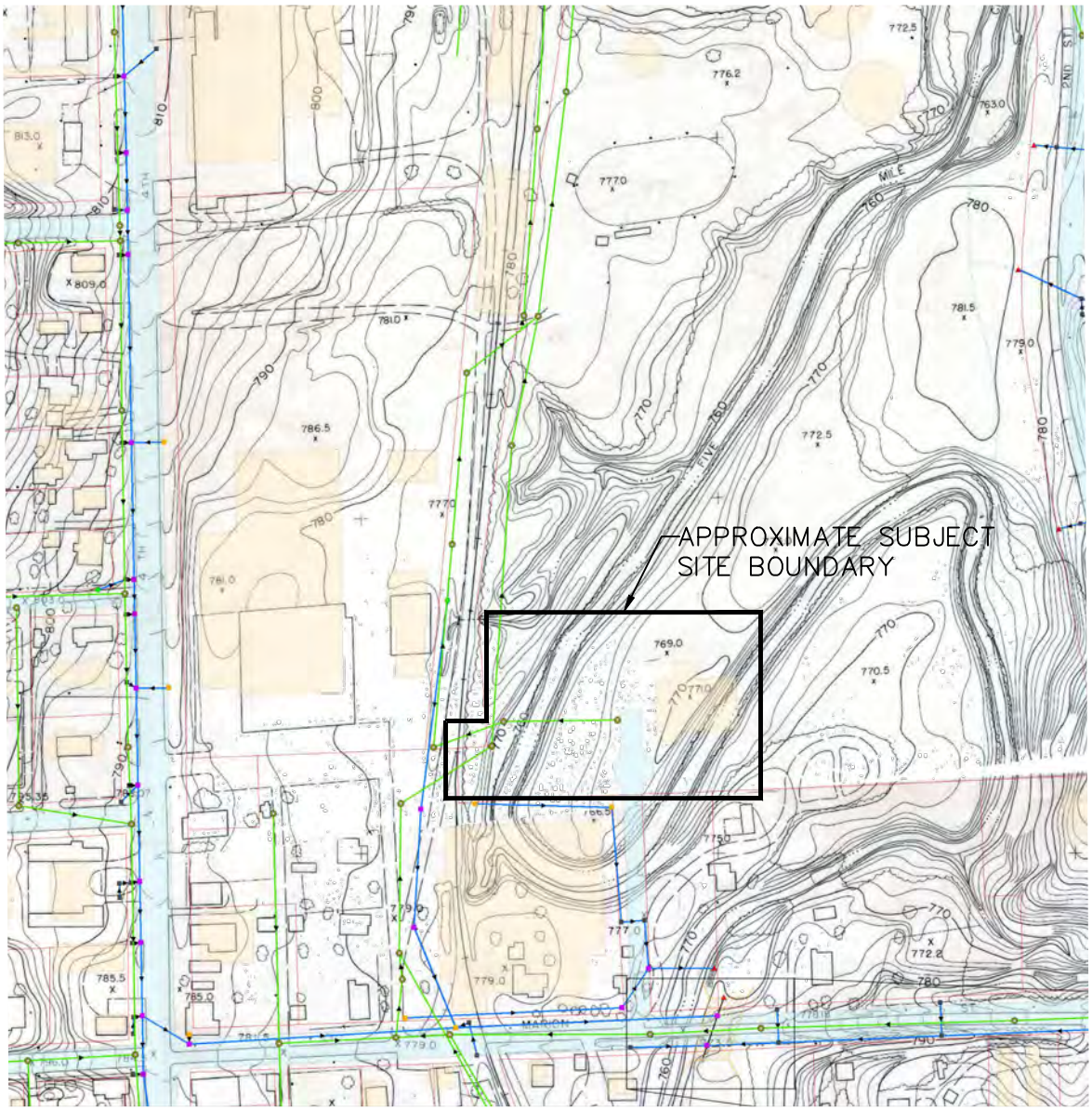
5	-		-



SOURCE: CITY OF LEAVENWORTH - TOPOGRAPHY FROM 1966 AERIAL PHOTOGRAPHY AND BASE MAP DEVELOPED BY GIS DEPARTMENT

250 0 250 500

SCALE FEET

SCS ENGINEERS

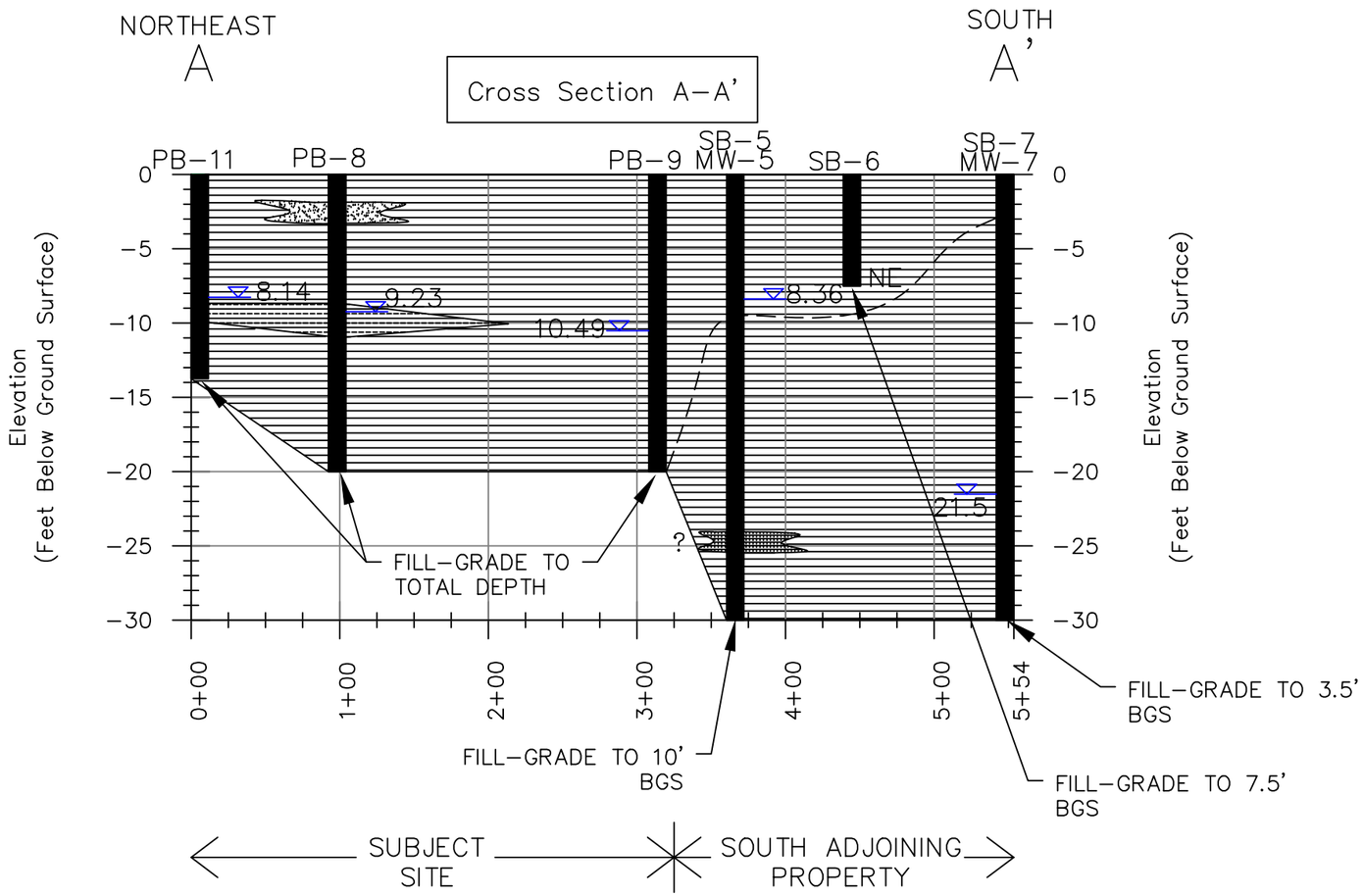
8575 W. 110th St, Ste. 100
Overland Park, Kansas 66210
PH. (913) 681-0030 FAX. (913) 681-0012

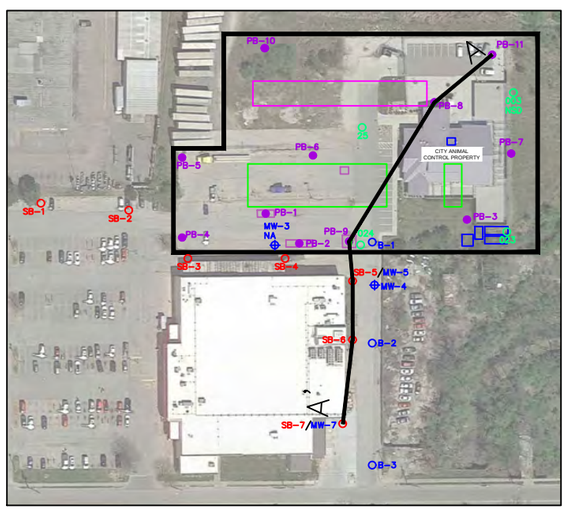
FIGURE 9 - LOCATION OF FORMER FIVE MILE CREEK CHANNEL PRIOR TO USACE REALIGNMENT

FORMER CITY OF LEAVENWORTH GARAGE
2109 S. 3RD STREET
LEAVENWORTH, KANSAS 66048
KDHE PROJECT CODE C4-052-73682

CHK. BY: DND	DWN. BY: DAW	DSN. BY: DND	PROJ. NO. 27220109.01
PROJ. MGR: DND	DATE: 11/2/20	FIGURE 9 – LOCATION OF FORMER FIVE MILE CREEK CHANNEL PRIOR TO USACE REALIGNMENT.DWG	DRAWING NO. 9

T:\27220109.00\Data and Calculations\DWG\October Drawings\20201028 - Renumbered\Figure 9 - Location of Former Five Mile Creek Channel Prior to USACE Realignment.dwg Nov 02, 2020 - 10:30am Layout Name: 8.5x11 By: 4470daw





LEGEND

- SILTY CLAY
- SANDY, SILTY CLAY
- SAND
- SANDY CLAY
- STATIC GROUNDWATER AT TIME OF SAMPLING WITH FEET BGS
- ESTIMATED EXTENT OF FILL MATERIAL

VERTICAL EXAGGERATION=10X

HORIZONTAL SCALE

100 0 100 200

SCALE FEET

VERTICAL SCALE

20 FEET

10

0

10 SCALE

NOTES

BGS = BELOW GROUND SURFACE

NE = NOT ENCOUNTERED

? = LATERAL EXTENT UNKNOWN

REV.	DATE	CK. BY
1	-	-
2	-	-
3	-	-
4	-	-
5	-	-
6	-	-

SHEET TITLE
FIGURE 10-A - CROSS SECTION A-A'

PROJECT TITLE
CITY OF LEAVENWORTH

CLIENT
FORMER CITY OF LEAVENWORTH GARAGE
2109 S. 3RD STREET
LEAVENWORTH, KANSAS 66048
KDHE PROJECT CODE C4-052-73682

SCS ENGINEERS
8575 W. 110th St, Ste. 100
Overland Park, Kansas 66210
PH. (913) 681-0030 FAX. (913) 681-0012

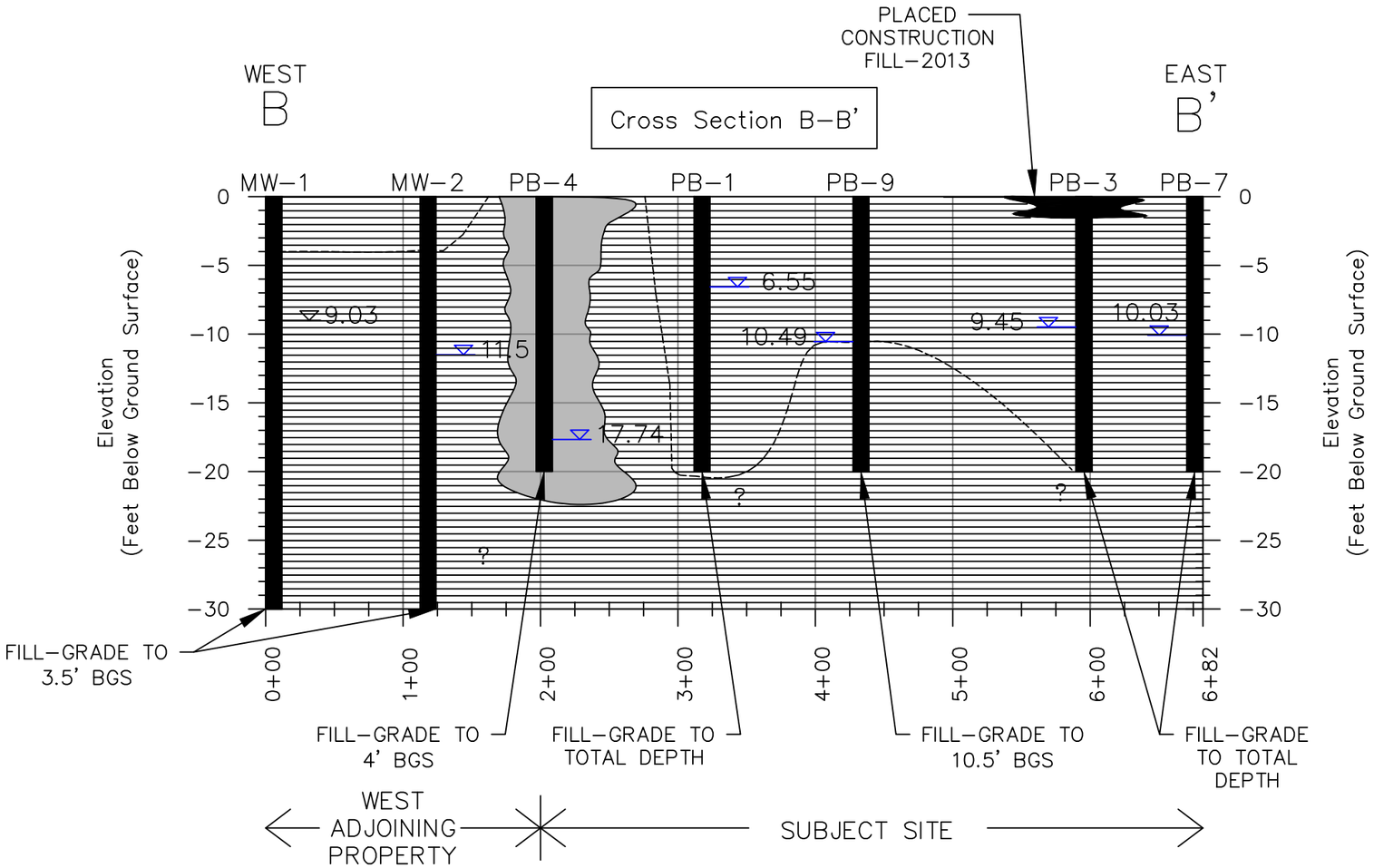
PROJ. MGR.	DWN. BY:	Q/A RVW BY:
27220109.01	DAW	DND
DSN. BY:	CHK. BY:	PROJ. MGR
DND	DND	DND

CADD FILE:
FIGURE 10A – CROSS SECTION A-A'.DWG

DATE:
10/28/20

DRAWING NO.
10-A

T:\27220109.00\Data and Calculations\DWG\October Drawings\20201028 - Renumbered\Figure 10A - Cross Section A-A'.dwg Oct 28, 2020 - 9:31am Layout Name: A By: 4470daw



LEGEND

- SILTY CLAY
- CLAY
- STATIC GROUNDWATER AT TIME OF SAMPLING WITH FEET BGS
- – – – ESTIMATED EXTENT OF FILL MATERIAL

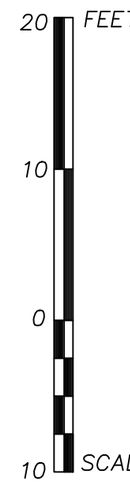
VERTICAL EXAGGERATION=10X

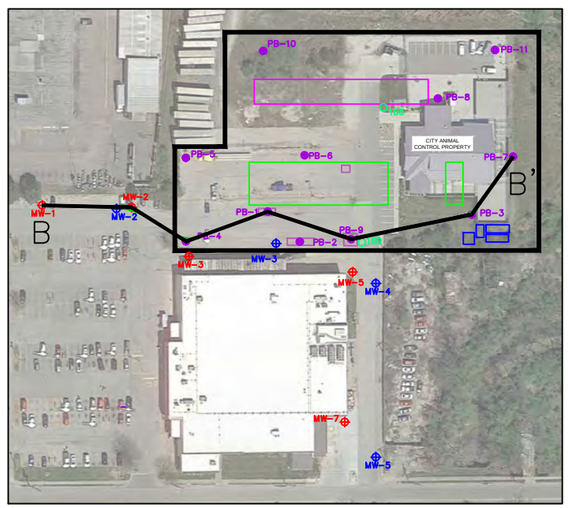
HORIZONTAL SCALE

100 0 100 200

SCALE FEET

VERTICAL SCALE





NOTES

BGS = BELOW GROUND SURFACE

? = LATERAL EXTENT UNKNOWN

REV.	DATE	CK. BY
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–	–	–
–	–	–
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SHEET TITLE
FIGURE 10-B - CROSS SECTION B-B'

PROJECT TITLE
CITY OF LEAVENWORTH

CLIENT
FORMER CITY OF LEAVENWORTH GARAGE
2109 S. 3RD STREET
LEAVENWORTH, KANSAS 66048
KDHE PROJECT CODE C4-052-73682

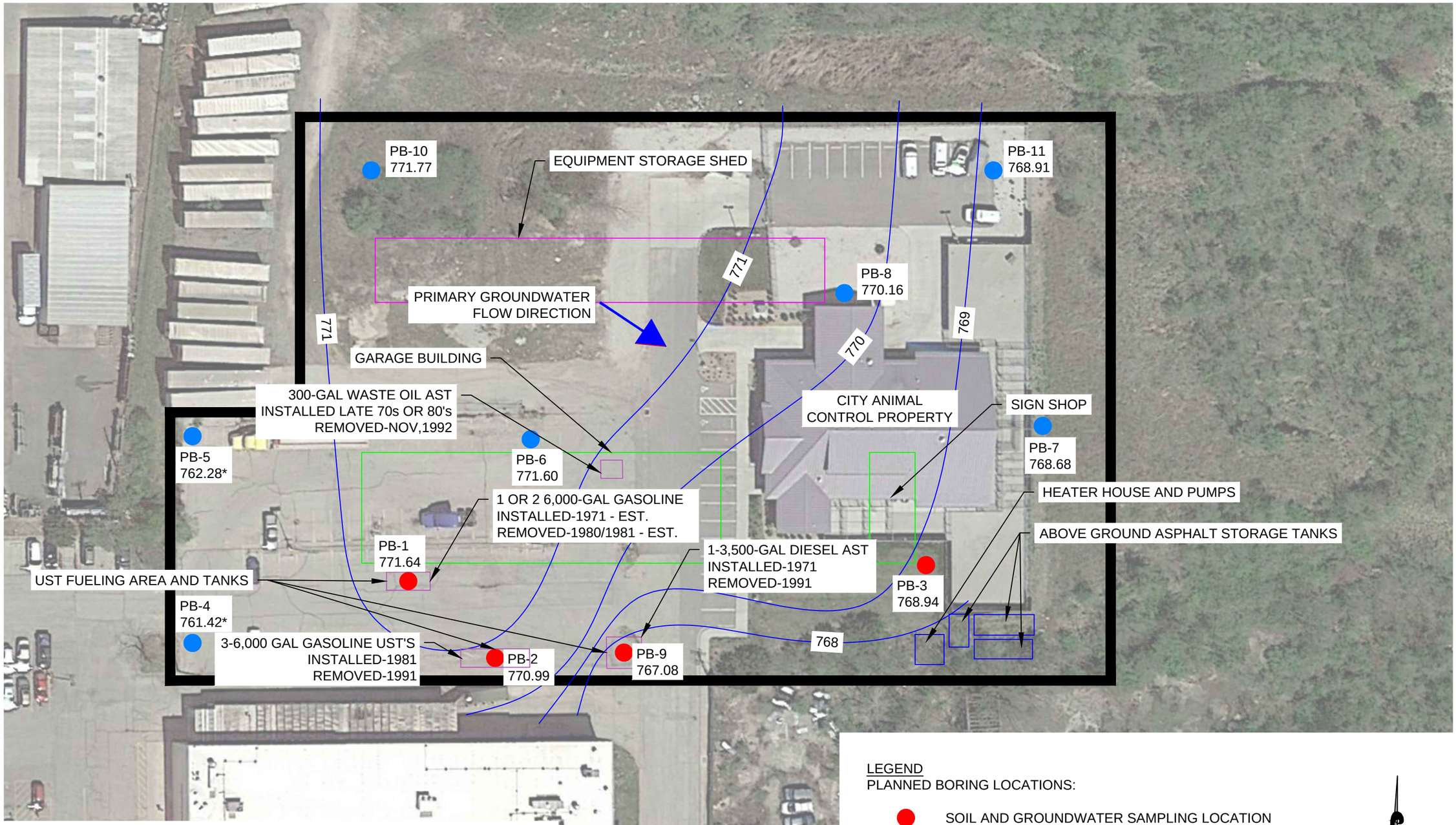
SCS ENGINEERS
8575 W. 110th St, Ste. 100
Overland Park, Kansas 66210
PH. (913) 681-0030 FAX. (913) 681-0012

PROJ. NO.	DSN. BY:	CHK. BY:	Q/A RVW BY:	PROJ. MGR.
27220109.10	DAW	DND	DND	DND
DSN: BY: DND				

CADD FILE:
FIGURE 10B – CROSS SECTION B–B'.DWG

DATE:
10/28/20

DRAWING NO.
10-B



FORMER CITY OPERATION FACILITIES:

- FORMER GARAGE BUILDING
- SIGN SHOP
- UST AND AST FUELING AREAS AND TANKS
- EQUIPMENT STORAGE SHED
- ASPHALT OIL TANKS AND HEATER HOUSE

* NOT USED IN GROUNDWATER GRADIENT CALCULATION

LEGEND

PLANNED BORING LOCATIONS:

PB-1 — SOIL AND GROUNDWATER SAMPLING LOCATION

PB-4 — GROUNDWATER SAMPLING LOCATION

768 — GROUNDWATER GRADIENT CONTOUR

NOTE: 1-FOOT CONTOUR INTERVAL

100 0 100 200

SCALE FEET

REV.	DATE	CK. BY
0	-	-
1	-	-
2	-	-
3	-	-
4	-	-
5	-	-

SHEET TITLE
FIGURE 11 - GROUNDWATER POTENTIOMETRIC SURFACE MAP - SEPTEMBER 21, 2020

PROJECT TITLE
CITY OF LEAVENWORTH

CLIENT
FORMER CITY OF LEAVENWORTH GARAGE
2109 S. 3RD STREET
LEAVENWORTH, KANSAS 66048
KDHE PROJECT CODE C4-052-73682

SCS ENGINEERS
8575 W. 110th St, Ste. 100
Overland Park, Kansas 66210
PH. (913) 681-0030 FAX. (913) 681-0012

PROJ. NO.	DSN. BY:	DWN. BY:	CHK. BY:	QA/A RVW BY:	PROJ. MGR.
27220109.01	DND	DAW	DND	DND	DND

CADD FILE:
FIGURE 11 – GROUNDWATER POTENTIOMETRIC SURFACE MAP – SEPTEMBER 21, 2020.DWG

DATE:
10/28/20

DRAWING NO.
11

T:\27220109.00\Data and Calculations\DWG\October Drawings\20201028 - Renumbered\Figure 11 - Groundwater Potentiometric Surface Map - September 21, 2020.dwg Oct 28, 2020 - 9:51am Layout Name: 1 By: 4470daw

KCTL
6" SAMPLE:
TOLUENE=19,000PPB
ETHYLBENZENE=12PPB
XYLENES=28PPB

6"+18"-24"SAMPLE:
TCLP-METALS, VOCS+SVOCS=BELOW MDL

18"-24" SAMPLE:
VOCS BELOW MDL

PB-3
SHALLOW
BENZENE-0.0199
CIS-1,2-DICHLOROETHENE-0.175
TRANS-1,2-DICHLOROETHENE-0.00823
TETRACHLOROETHYLENE-0.0788
TRICHLOROETHENE-0.0572
TPH-MRH-321
TPH-HRH-209
NAPHTHALENE-0.0876
SVOC'S-2 COMPOUNDS; NONE EXCEED RSK SOIL PATHWAY*
DEEP
BENZENE-0.0297
VOC'S-13 OTHER COMPOUNDS; NONE EXCEED RSK SOIL PATHWAY*
TPH-MRK-43.4
TPH-HRH-301

PB-9
SHALLOW
TPH-HRH-57.5
DEEP
TPH-MRH-15.8
TPH-HRH-69.0
SVOCS-11 COMPOUNDS; NONE EXCEED RSK SOIL PATHWAY*

PB-1
SHALLOW
ALL BMDL
DEEP
BENZENE-0.0111
TPH-HRH-18.6
SVOCS-11 COMPOUNDS-NONE EXCEED RSK SOIL PATHWAY*
VOC'S-3 COMPOUNDS-NONE EXCEED RSK SOIL PATHWAY*

DUPLICATE PB-1
BENZENE-0.0192
TPH-HRH-18.7
VOC'S-8 OTHER COMPOUNDS; NONE EXCEED RSK SOIL PATHWAY

PB-10 NS
PB-11 NS
PB-8 NS
PB-7 NS
PB-6 NS
PB-5 NS
PB-4 NS
PB-1
PB-2
PB-3
PB-9
MW-3 TPH=140PPM
MW-4 TPH=260PPM
B-1 TPH<50PPM
B-2 TPH<50PPM
B-3 TPH<50PPM
003 NSD
025 NSD
024 NSD
CITY ANIMAL CONTROL PROPERTY

SB-1 TPH-HRH=30.4
SB-2 TPH-HRH=21.8
SB-3 TPH-HRH=34.2
SB-4 TPH-HRH=88.8
SB-5 TPH-MRH=29.5 TPH-HRH=327 PCBS=0.71+0.10
SB-6 TPH-MRH=12.7 TPH-HRH=92.5
SB-7 TPH-HRH=43.4

PB-2
SHALLOW
ALL BMDL
DEEP
ALL BMDL

S 4TH ST
S 3RD ST
MARION ST

NOTES:
- NS=NOT SAMPLED
- NSD=NO SIGNIFICANT DETECTIONS, ANALYSIS INCLUDED VOLATILES, SEMI-VOLATILES, PESTICIDES AND MERCURY.
- PPM=PARTS PER MILLION
- PPB=PARTS PER BILLION
- BMDL=BELOW METHOD DETECTION LIMIT
- VOCs=VOLATILE ORGANIC COMPOUNDS
- PCBs=POLYCHLORINATED BIPHENYL
- SVOC'S=SEMI-VOLATILE ORGANIC COMPOUNDS
- *=NON RESIDENTIAL RSK

ALL 2019 ENVIRONMENTAL WORKS AND 2020 SCS ENGINEERS LOCATIONS REPORTED IN MILLIGRAMS PER KILOGRAMS.

RESULTS SHOWN EXCEED MINIMUM LABORATORY DETECTION LIMITS, HOWEVER, KCTL RESULTS SHOWN BELOW MDL'S TO COMMUNICATE ANALYSIS PERFORMED.

CONCENTRATIONS EXCEEDING TIER 2 RSKs SHOWN IN **BOLD** FONT

FORMER CITY OPERATION FACILITIES:
- FORMER GARAGE BUILDING
- SIGN SHOP
- UST AND AST FUELING AREAS AND TANKS
- EQUIPMENT STORAGE SHED
- ASPHALT OIL TANKS AND HEATER HOUSE

LEGEND
- B-3 1989 TERRACON
- KCTL 1991 KANSAS CITY TESTING LABORATORY
- 003 1999 EPA BTA
- SB-7 2019 ENVIRONMENTAL WORKS
- PB-1 2020 SCS ENGINEERS

100 0 100 200
SCALE FEET

REV.	DATE	CK. BY
1	-	-
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SHEET TITLE
FIGURE 12A - PREVIOUS AND CURRENT SOIL RESULTS FOR TPH, VOCS, SVOCS AND PCBS

PROJECT TITLE
CITY OF LEAVENWORTH

CLIENT
FORMER CITY OF LEAVENWORTH GARAGE
2109 S. 3RD STREET
LEAVENWORTH, KANSAS 66048
KDHE PROJECT CODE C4-052-73682

SCS ENGINEERS
8575 W. 110th St. Ste. 100
Overland Park, Kansas 66210
PH. (913) 681-0030 FAX. (913) 681-0012

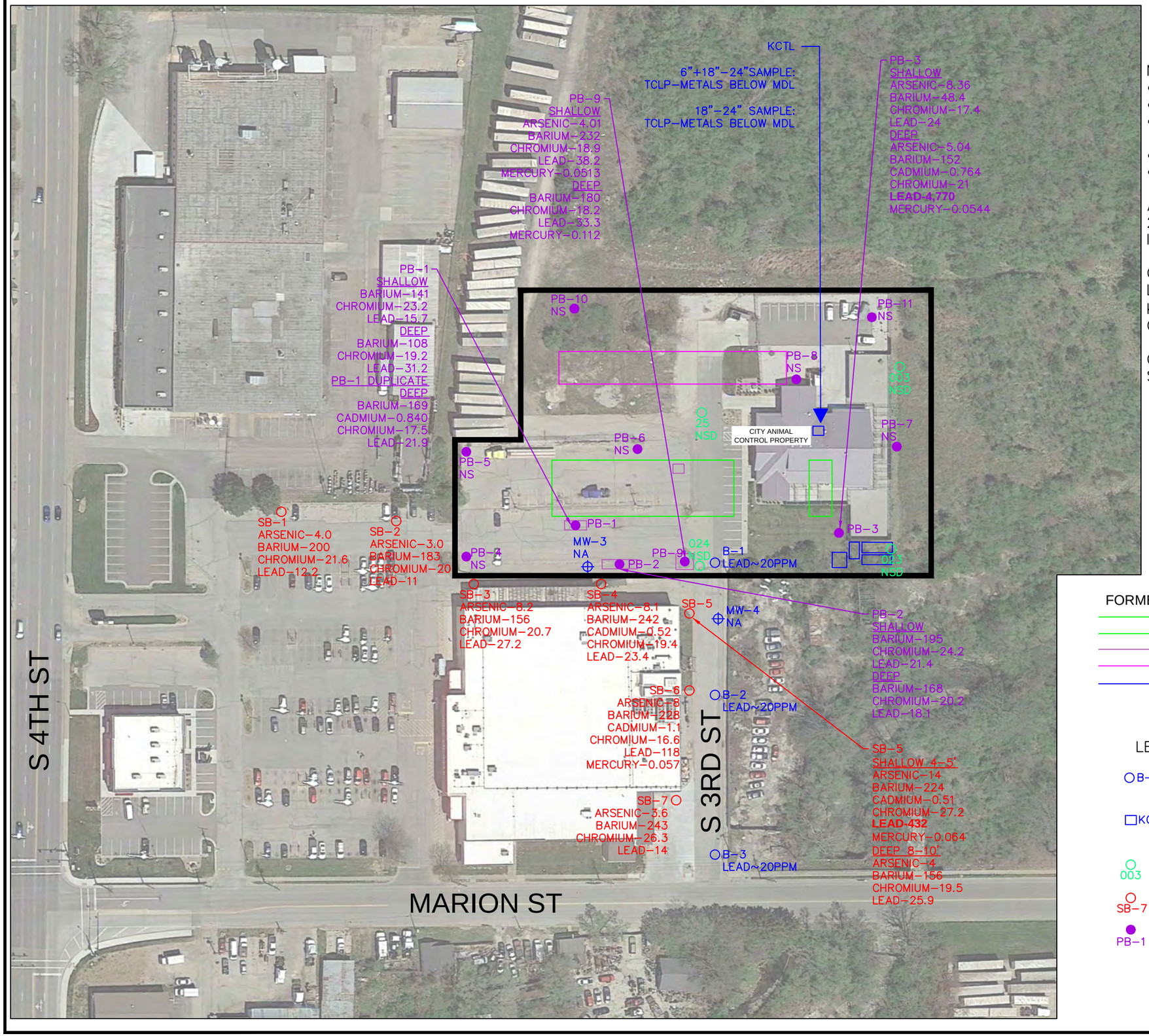
PROJ. NO. 27220109.01
DSN. BY: DND
DWN. BY: DAW
CHK. BY: DND
QA/A RVW BY: DND
PROJ. MGR. DND

CADD FILE:
FIGURE 12A - PREVIOUS AND CURRENT SOIL RESULTS FOR TPH, VOCS, AND PCBS.DWG

DATE:
10/28/20

DRAWING NO.
12-A

T:\27220109.00\Data and Calculations\DWG\October Drawings\20201028 - Renumbered\Figure 12A - Previous and Current Soil Results for TPH, VOCS, and PCBS.dwg Nov 02, 2020 - 9:32am Layout Name: A By: 4470daw



NOTES:

- NS=NOT SAMPLED
- NA=NOT ANALYZED
- NSD=NO SIGNIFICANT DETECTIONS, ANALYSIS FOR METALS.
- PPM=PARTS PER MILLION
- BMDL=BELOW METHOD DETECTION LIMIT

ALL 2019 ENVIRONMENTAL WORKS AND 2020 SCS ENGINEERS LOCATIONS REPORTED IN MILLIGRAMS PER KILOGRAMS.

ONLY RESULTS SHOWN EXCEEDING MINIMUM LABORATORY DETECTION LIMITS, HOWEVER, KCTL RESULTS SHOWN BELOW MDL'S TO COMMUNICATE ANALYSIS PERFORMED.

CONCENTRATIONS EXCEEDING TIER 2 RSKs SHOWN IN **BOLD** FONT.

FORMER CITY OPERATION FACILITIES:

- FORMER GARAGE BUILDING
- SIGN SHOP
- UST AND AST FUELING AREAS AND TANKS
- EQUIPMENT STORAGE SHED
- ASPHALT OIL TANKS AND HEATER HOUSE

LEGEND

- B-3 1989 TERRACON
- KCTL 1991 KANSAS CITY TESTING LABORATORY
- 003 1999 EPA BTA
- SB-7 2019 ENVIRONMENTAL WORKS
- PB-1 2020 SCS ENGINEERS

100 0 100 200

SCALE FEET

REV.	DATE	CK. BY
1	-	-
2	-	-
3	-	-
4	-	-
5	-	-
6	-	-
7	-	-

SHEET TITLE
FIGURE 12-B - PREVIOUS AND CURRENT SOIL RESULTS FOR METALS

PROJECT TITLE
CITY OF LEAVENWORTH

CLIENT
FORMER CITY OF LEAVENWORTH GARAGE
2109 S. 3RD STREET
LEAVENWORTH, KANSAS 66048
KDHE PROJECT CODE C4-052-73682

SCS ENGINEERS
8575 W. 110th St, Ste. 100
Overland Park, Kansas 66210
PH. (913) 681-0030 FAX: (913) 681-0012

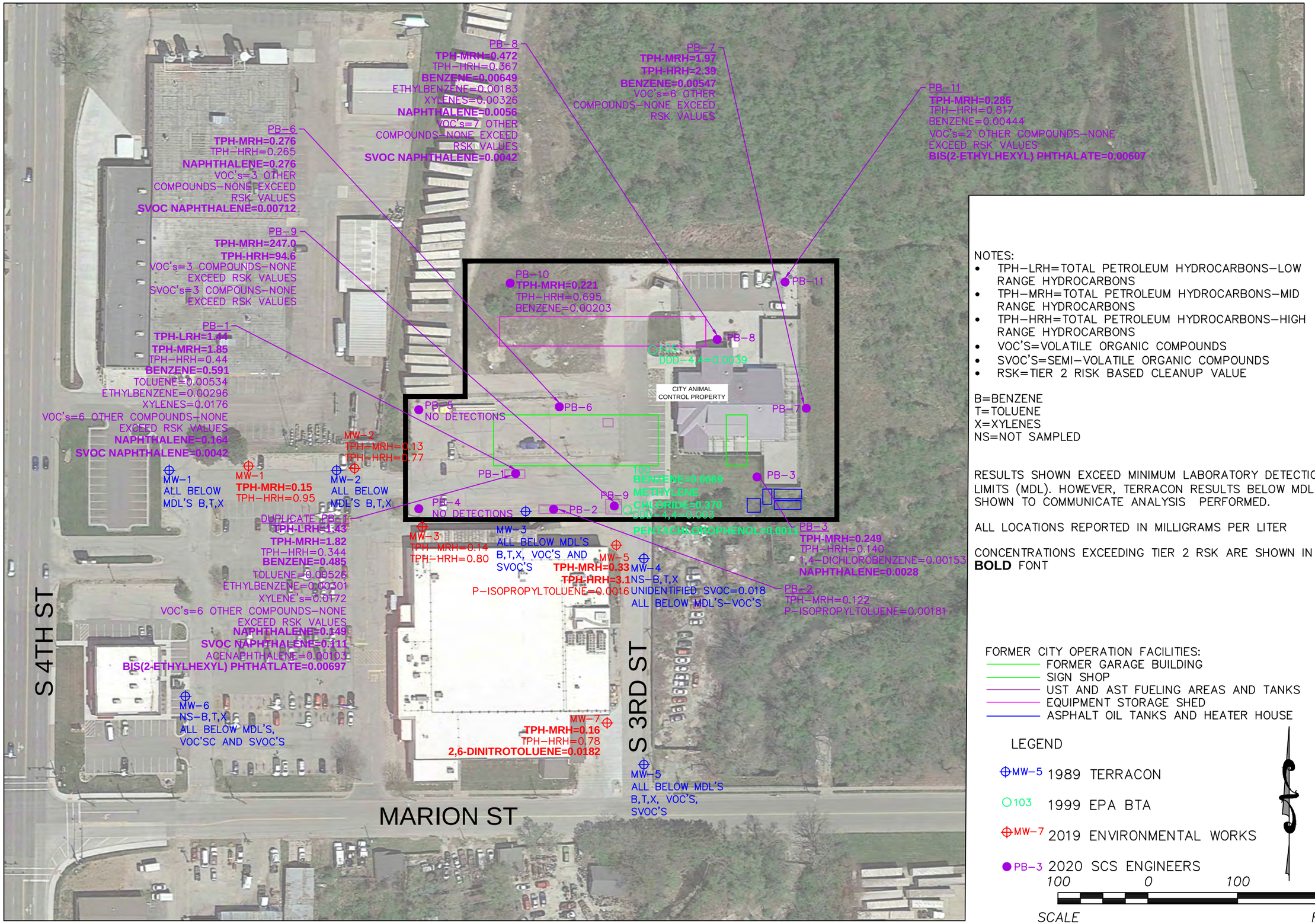
PROJ. NO.	DSN. BY:	DWN. BY:	CHK. BY:	QA/QC BY:	PROJ. MGR.
27220109.01	DND	DAW	DND	DND	DND

CADD FILE:
FIGURE 12B - PREVIOUS AND CURRENT SOIL RESULTS FOR METALS.DWG

DATE:
11/2/20

DRAWING NO.
12-B

T:\27220109.00\Data and Calculations\DWG\October Drawings\20201028 - Renumbered\Figure 12B - Previous and Current Soil Results for Metals.dwg Nov 02, 2020 - 9:33am Layout Name: A By: 4470daw



NOTES:

- TPH-LRH=TOTAL PETROLEUM HYDROCARBONS-LOW RANGE HYDROCARBONS
- TPH-MRH=TOTAL PETROLEUM HYDROCARBONS-MID RANGE HYDROCARBONS
- TPH-HRH=TOTAL PETROLEUM HYDROCARBONS-HIGH RANGE HYDROCARBONS
- VOC'S=VOLATILE ORGANIC COMPOUNDS
- SVOC'S=SEMI-VOLATILE ORGANIC COMPOUNDS
- RSK=TIER 2 RISK BASED CLEANUP VALUE

B=BENZENE
T=TOLUENE
X=XYLENES
NS=NOT SAMPLED

RESULTS SHOWN EXCEED MINIMUM LABORATORY DETECTION LIMITS (MDL). HOWEVER, TERRACON RESULTS BELOW MDL SHOWN TO COMMUNICATE ANALYSIS PERFORMED.

ALL LOCATIONS REPORTED IN MILLIGRAMS PER LITER

CONCENTRATIONS EXCEEDING TIER 2 RSK ARE SHOWN IN **BOLD** FONT

FORMER CITY OPERATION FACILITIES:
- FORMER GARAGE BUILDING
- SIGN SHOP
- UST AND AST FUELING AREAS AND TANKS
- EQUIPMENT STORAGE SHED
- ASPHALT OIL TANKS AND HEATER HOUSE

LEGEND
- MW-5 1989 TERRACON
- 103 1999 EPA BTA
- MW-7 2019 ENVIRONMENTAL WORKS
- PB-3 2020 SCS ENGINEERS

100 0 100 200
SCALE FEET

REV.	DATE	CK. BY
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4	-	-
5	-	-
6	-	-

SHEET TITLE
FIGURE 13-A - COMBINED GROUNDWATER RESULTS FOR VOC's, TPH & SVOC's

PROJECT TITLE
CITY OF LEAVENWORTH

CLIENT
FORMER CITY OF LEAVENWORTH GARAGE
2109 S. 3RD STREET
LEAVENWORTH, KANSAS 66048
KDHE PROJECT CODE C4-052-73682

SCS ENGINEERS
8575 W. 110th St, Ste. 100
Overland Park, Kansas 66210
PH. (913) 681-0030 FAX. (913) 681-0012

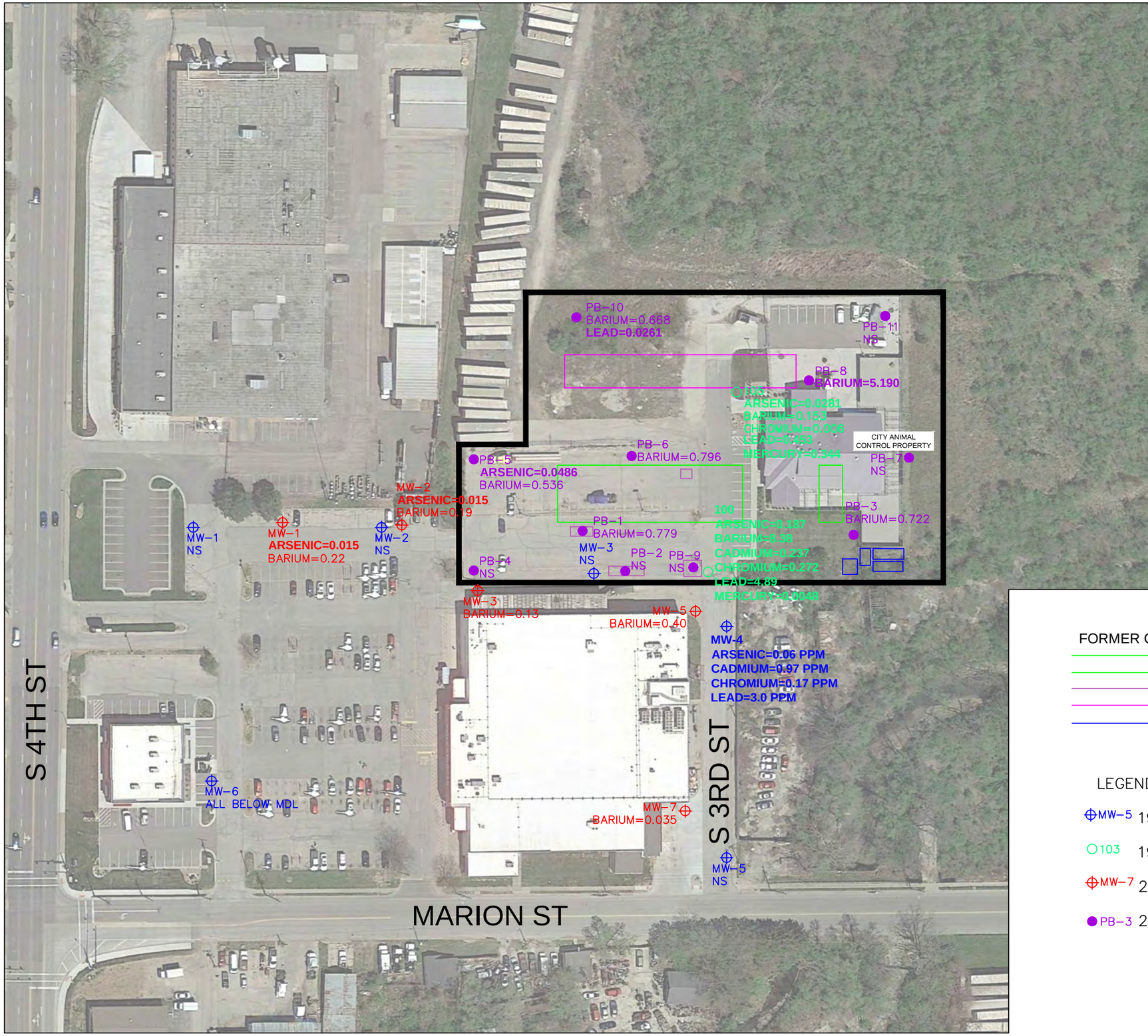
PROJ. NO. 27220109.10
DSN. BY: DND
DWN. BY: DAW
CHK. BY: DND
QA/QC BY: DND
PROJ. MGR: DND

CADD FILE:
FIGURE 13A - COMBINED GROUNDWATER RESULTS FOR VOC'S, TPH AND SVOC'S.DWG

DATE:
10/28/20

DRAWING NO.
13-A

T:\27220109.00\Data and Calculations\DWG\October Drawings\20201028 - Renumbered\Figure 13A - Combined Groundwater Results for VOC's, TPH and SVOC's.dwg Oct 28, 2020 - 9:57am Layout Name: A By: 4470daw



NOTES:

- NS = NOT SAMPLED
- PPM = PARTS PER MILLION
- MDL = METHOD DETECTION LIMIT

ALL 2019 ENVIRONMENTAL WORKS AND 2020 SCS LOCATIONS REPORTED IN MILLIGRAMS PER LITER

RESULTS SHOWN EXCEED MINIMUM LABORATORY DETECTION LIMITS

CONCENTRATIONS EXCEEDING TIER 2 RSK's SHOWN IN **BOLD** FONT

FORMER CITY OPERATION FACILITIES:

- FORMER GARAGE BUILDING
- SIGN SHOP
- UST AND AST FUELING AREAS AND TANKS
- EQUIPMENT STORAGE SHED
- ASPHALT OIL TANKS AND HEATER HOUSE

LEGEND

- MW-5 1989 TERRACON
- 103 1999 EPA BTA
- MW-7 2019 ENVIRONMENTAL WORKS
- PB-3 2020 SCS ENGINEERS

100 0 100 200

SCALE FEET

REV.	DATE	CK. BY
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2	-	-
3	-	-
4	-	-
5	-	-
6	-	-

SHEET TITLE
FIGURE 13-B - COMBINED GROUNDWATER RESULTS - RCRA 8 METALS

PROJECT TITLE
CITY OF LEAVENWORTH

CLIENT
FORMER CITY OF LEAVENWORTH GARAGE
2109 S. 3RD STREET
LEAVENWORTH, KANSAS 66048
KDHE PROJECT CODE C4-052-73682

SCS ENGINEERS
8575 W. 110th St. Ste. 100
Overland Park, Kansas 66210
PH. (913) 681-0030 FAX. (913) 681-0012

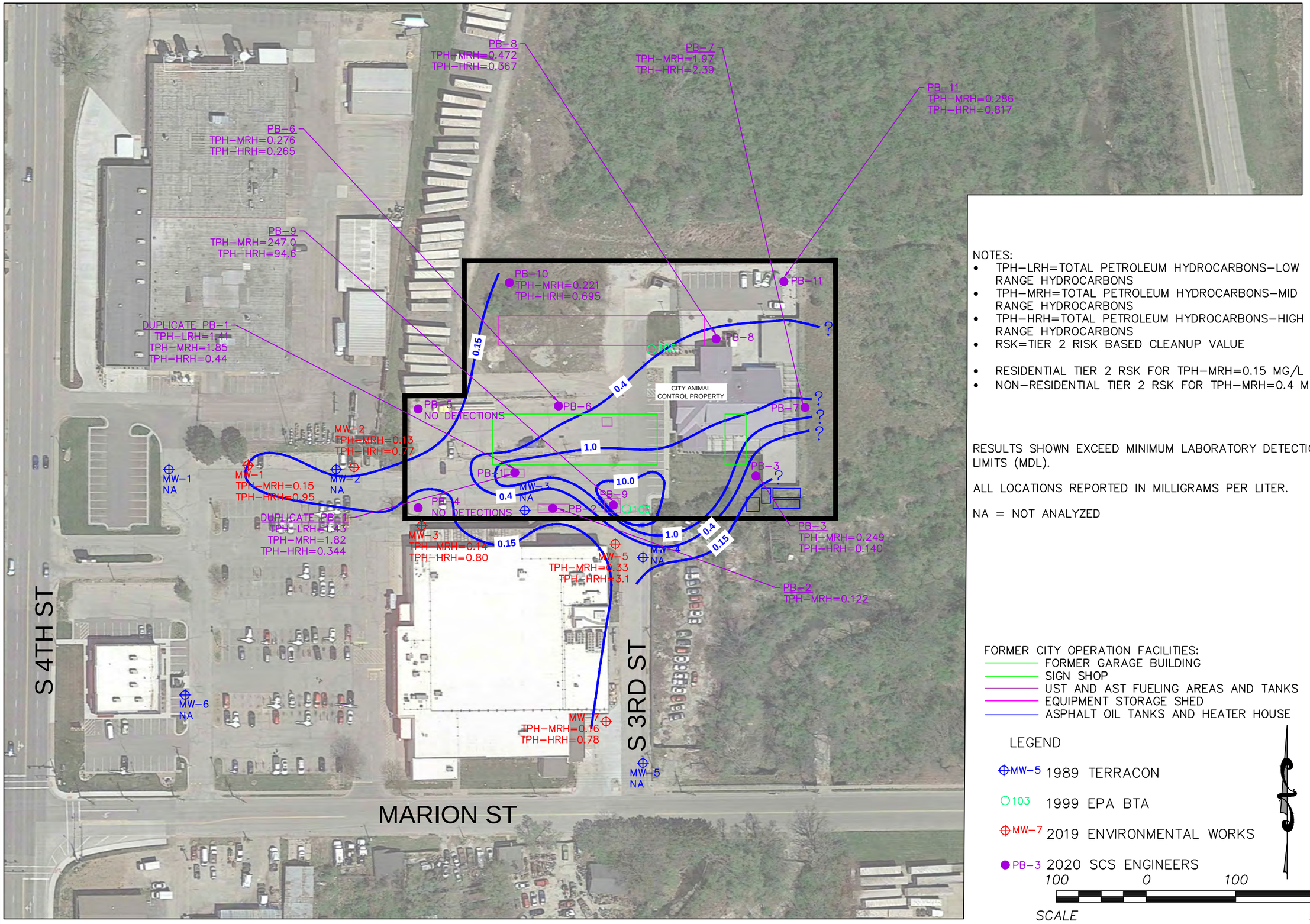
PROJ. NO.	DWN. BY:	Q/A RVW BY:
27220109.10	DAW	DND
DSN. BY:	CHK. BY:	PROJ. MGR.
DND	DND	DND

CADD FILE:
FIGURE 13B - GROUNDWATER RESULTS - RCRA 8 METALS.DWG

DATE:
10/28/20

DRAWING NO.
13-B

T:\27220109.00\Data and Calculations\DWG\October Drawings\20201028 - Renumbered\Figure 13B - Groundwater Results - RCRA 8 Metals.dwg Oct 28, 2020 - 10:00am Layout Name: A By: 4470daw



NOTES:

- TPH-LRH=TOTAL PETROLEUM HYDROCARBONS-LOW RANGE HYDROCARBONS
- TPH-MRH=TOTAL PETROLEUM HYDROCARBONS-MID RANGE HYDROCARBONS
- TPH-HRH=TOTAL PETROLEUM HYDROCARBONS-HIGH RANGE HYDROCARBONS
- RSK=TIER 2 RISK BASED CLEANUP VALUE

- RESIDENTIAL TIER 2 RSK FOR TPH-MRH=0.15 MG/L
- NON-RESIDENTIAL TIER 2 RSK FOR TPH-MRH=0.4 MG/L

RESULTS SHOWN EXCEED MINIMUM LABORATORY DETECTION LIMITS (MDL).

ALL LOCATIONS REPORTED IN MILLIGRAMS PER LITER.

NA = NOT ANALYZED

FORMER CITY OPERATION FACILITIES:
- FORMER GARAGE BUILDING
- SIGN SHOP
- UST AND AST FUELING AREAS AND TANKS
- EQUIPMENT STORAGE SHED
- ASPHALT OIL TANKS AND HEATER HOUSE

LEGEND
- MW-5 1989 TERRACON
- 103 1999 EPA BTA
- MW-7 2019 ENVIRONMENTAL WORKS
- PB-3 2020 SCS ENGINEERS

100 0 100 200
SCALE FEET

REV.	DATE	CK. BY
1	-	-
2	-	-
3	-	-
4	-	-
5	-	-
6	-	-

SHEET TITLE
FIGURE 14 - TPH CONCENTRATIONS IN GROUNDWATER AND TPH-MRH ISOCONCENTRATION MAP

PROJECT TITLE
CITY OF LEAVENWORTH

CLIENT
FORMER CITY OF LEAVENWORTH GARAGE
2109 S. 3RD STREET
LEAVENWORTH, KANSAS 66048
KDHE PROJECT CODE C4-052-73682

SCS ENGINEERS
8575 W. 110th St, Ste. 100
Overland Park, Kansas 66210
PH. (913) 681-0030 FAX. (913) 681-0012

PROJ. NO.	DWN. BY:	Q/A RVW BY:
27220109.10	DAW	DND
DSN. BY:	CHK. BY:	PROJ. MGR.
DND	DND	DND

CADD FILE:
FIGURE 14 - TPH CONCENTRATIONS IN GROUNDWATER AND TPH-MRH ISOCONCENTRATION MAP.DWG

DATE:
10/13/20

DRAWING NO.
14

T:\27220109.00\Data and Calculations\DWG\October Drawings\Figure 14 - TPH Concentrations in Groundwater and TPH-MRH Isoconcentration Map.dwg Oct 28, 2020 - 10:09am Layout Name: A By: 4470daw

SOURCE: PHASE I ENVIRONMENTAL SITE ASSESSMENT - EWI, SEPTEMBER 2019

250 0 250 500

SCALE FEET

SCS ENGINEERS
8575 W. 110th St, Ste. 100
Overland Park, Kansas 66210
PH. (913) 681-0030 FAX. (913) 681-0012

FIGURE 15 - APPROXIMATE LOCATION OF LAKE'S AUTO SALVAGE - 1985

FORMER CITY OF LEAVENWORTH GARAGE
2109 S. 3RD STREET
LEAVENWORTH, KANSAS 66048
KDHE PROJECT CODE C4-052-73682

CHK. BY: DND	DWN. BY: DAW	DSN. BY: DND	PROJ. NO. 27220109.01
PROJ. MGR: DND	DATE: 10/28/20	CADD FILE: FIGURE 15 – APPROXIMATE LOCATION OF LAKE'S AUTO SALVAGE 1985.DWG	DRAWING NO. 15

T:\27220109.00\Data and Calculations\DWG\October Drawings\20201028 - Renumbered\Figure 15 - Approximate Location of Lake's Auto Salvage 1985.dwg Oct 28, 2020 - 9:13am Layout Name: 8.5x11 By: 4470daw

11.0 REFERENCES

CFS Engineers, *Erosion Control Plan, Leavenworth Animal Control*, January 21, 2013.

City of Leavenworth GIS Department, City Zoning Information, obtained July 23, 2020.

City of Leavenworth Public Works Department, 1966 Topographic Map and 2020 Planimetric Overlay, 2020, August 2020.

Environmental Works, Inc., *Phase I Environmental Site Assessment, Price Chopper Property, 2107 South 4th Street, Leavenworth, Leavenworth County, Kansas*, September 9, 2019.

Environmental Works, Inc., *Limited Phase II Environmental Site Assessment, Price Chopper Property, 2107 South 4th Street, Leavenworth, Leavenworth County, Kansas*, November 6, 2019.

Kansas City Testing Laboratory, *Report of Testing – City Service Center, 2101 South 3rd Street, Leavenworth, Kansas*, December 18, 1991.

Kansas Department of Health & Environment – Bureau of Environmental Remediation, Voluntary Cleanup and Property Redevelopment Program Manual, January 2020.

Kansas Department of Health & Environment – Bureau of Environmental Remediation, Identified Sites List Information – Project Code C405273682, Downloaded June 29, 2020.

Kansas Department of Health & Environment, *UST Registration Renewal Form, City of Leavenworth, Facility I.D. 08286*, April 1990.

Kansas Department of Health & Environment – Northeast District Office, Written Correspondence – City of Leavenworth, 5th & Shawnee, December 21, 1990.

Kansas Department of Health & Environment, *Buried Tank Leak Assessment – Leavenworth Garage, Project Code U4-052-00868A*, February 22, 1991.

Kansas Department of Health & Environment, *Buried Tank Leak Assessment – Leavenworth Garage, Project Code U4-052-00868B*, November 10, 1992.

Kansas Department of Health & Environment – Bureau of Environmental Remediation, *Risk Based Standards for Kansas, RSK Manual – 5th Version* dated October 2010 (including subsequent updates).

Kansas Department of Health & Environment, Written Project Correspondence – Former City Garage/City of Leavenworth Old City Landfill, February 24, 2020.

Kansas Department of Health & Environment, Written Project Correspondence – 2109 S. 3rd Street Leavenworth, Kansas, May 28, 2020.

Kansas Geological Survey, WWC5 Well Database, Query performed July 23, 2020.

McKinzie Construction, Inc., *Brownfields Targeted Assessment Report- Leavenworth Landfill Site, Leavenworth, Kansas,* June 25, 1999

Polk's City Directories, Leavenworth, Kansas, 1954 and 1958.

Professional Service Industries, Inc., *Preliminary Geotechnical Engineering Services Report for the Proposed Animal Control Facility, Marion Street, Just East of 4th Street, Leavenworth, Kansas*, March 21, 2012

Terracon Consultants SE, Inc., *Subsurface Exploration Report, Proposed Supermarket, Fourth & Marion Streets, Leavenworth, Kansas, Job Number 02897029*, October 26, 1989.

Terracon Environmental, Inc., *Environmental Assessment – Phase II, Proposed Supermarket Site, Leavenworth, Kansas,* December 26, 1989.

United States Environmental Protection Agency – Region VII, Written Correspondence – Former Leavenworth Municipal Landfill BTA, August 13, 1999.

United States Fish and Wildlife Survey, Information for Planning and Consultation, Query performed July 22, 2020.

United States Geological Survey, National Map Advanced Viewer, Query performed July 22, 2020.

United States Fish and Wildlife Service (USFWS) National Wetlands Inventory Mapper, Query performed July 22, 2020.

Williams, Spurgeon, Kuhl and Freshnock Architects, Inc., Leavenworth Animal Control Field Report Number 002, June 24, 2013.

Williams, Spurgeon, Kuhl and Freshnock Architects, Inc., Leavenworth Animal Control Field Report Number 09, August 21, 2013.

Williams, Spurgeon, Kuhl and Freshnock Architects, Inc., Leavenworth Animal Control Field Report Number 012, September 12, 2013.

12.0 ATTACHMENTS

ATTACHMENT A

SCS Boring Logs

SCS ENGINEERS

LOG OF BORING NO.: **PB-1**

SHEET NUMBER 1 of 1

8575 W 110th Street, Overland Park, Kansas 66210

CLIENT:	City of Leavenworth
PROJECT NAME:	Former City Garage Operations
PROJECT NUMBER:	27220109.01
PROJECT LOCATION:	2109 South 3rd Street
BORING LOCATION:	
PROJECT NUMBER:	
GEOLOGIST:	Jeff Janzen
START DATE:	9/17/2020 FINISH DATE: 9/17/2020
START TIME:	1543 FINISH TIME: 1603

DRILLING CONTRACTOR:	SCS Engineers
DRILLER:	Whit Martin
DRILLING RIG:	54DT
DRILLING METHOD:	Direct-push
SAMPLING METHOD:	Macrocore
BORING DIAMETER:	2.5"
WELL DIAMETER:	
WELL COMPLETION:	
SURFACE ELEVATION:	
TOC ELEVATION:	
WATER LEVEL:	
WATER ELEVATION:	
DATE:	

WELL CONSTRUCTION DETAILS

MATERIAL:	
DIAMETER:	IN
WELL TOTAL DEPTH:	FT BGS
SCREEN LENGTH:	FT
RISER LENGTH:	FT
TOP OF SCREEN:	FT BGS
BOTTOM OF SCREEN:	FT BGS
SCREEN SLOT:	IN
TOP OF FILTER PACK:	FT BGS
TOP OF SEAL:	FT BGS
TYPE OF SEAL:	
TYPE OF FILTER PACK:	

SAMPLER TYPE	SAMPLE DEPTH	PID (PPM)	RECOVERY	DEPTH (FEET)	USCS CLASS	C I	SOIL DESCRIPTION AND DRILLING CONDITIONS	NOTES AND WELL CONSTRUCTION
				1			Fill material with gravel/brick/limestone to 1.5'	
				2			Fill material, damp, firm, medium brown, silty CLAY	
				3				
				4			No recovery	
				5			Fill material, damp, firm, medium brown, silty CLAY	
				6				
				7				
				8				
				9			Fill material, damp, firm, medium brown, silty CLAY	
				10			Refusal at 9' - Relocated boring 8 feet south as PB-1A	
				11				
				12				
				13				
				14				
				15				
				16				
				17				
				18				
				19				
				20				

LEGEND:

SS - Split Spoon
CS - 5 foot CME Sampler
ST - Shelby Tube
PID - Photoionization Detector
PP - Pocket Penetrometer
HSA - Hollow Stem Augers
DT - Dual Tube Sampler
HA - Hand Auger
WB - Wash Bore
RB - Rock Bit
NX - Rock Core

THE STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY LINES BETWEEN SOIL AND ROCK TYPES: ACTUAL TRANSITIONS MAY BE GRADUAL.

SCS ENGINEERS

LOG OF BORING NO.: **PB-1A**

SHEET NUMBER 1 of 1

8575 W 110th Street, Overland Park, Kansas 66210

CLIENT:	City of Leavenworth
PROJECT NAME:	Former City Garage Operations
PROJECT NUMBER:	27220109.01
PROJECT LOCATION:	2109 South 3rd Street
BORING LOCATION:	
PROJECT NUMBER:	
GEOLOGIST:	Jeff Janzen
START DATE:	9/17/2020 FINISH DATE: 9/17/2020
START TIME:	1621 FINISH TIME: 1657

DRILLING CONTRACTOR:	SCS Engineers
DRILLER:	Whit Martin
DRILLING RIG:	54DT
DRILLING METHOD:	Direct-push
SAMPLING METHOD:	Macrocore
BORING DIAMETER:	2.5"
WELL DIAMETER:	1"
WELL COMPLETION:	9/17/2020
SURFACE ELEVATION:	778.23
TOC ELEVATION:	778.19
WATER LEVEL:	6.55
WATER ELEVATION:	771.64
DATE:	9/21/2020

WELL CONSTRUCTION DETAILS

MATERIAL:	
DIAMETER:	IN
WELL TOTAL DEPTH:	FT BGS
SCREEN LENGTH:	FT
RISER LENGTH:	FT
TOP OF SCREEN:	FT BGS
BOTTOM OF SCREEN:	FT BGS
SCREEN SLOT:	IN
TOP OF FILTER PACK:	FT BGS
TOP OF SEAL:	FT BGS
TYPE OF SEAL:	
TYPE OF FILTER PACK:	

SAMPLER TYPE	SAMPLE DEPTH	PID (PPM)	RECOVERY	DEPTH (FEET)	USCS CLASS	CI	SOIL DESCRIPTION AND DRILLING CONDITIONS	NOTES AND WELL CONSTRUCTION
		0.2		1			Fill material, damp, firm, medium brown, silty CLAY	gravel in fill to 1.5' and at 2'
				2				sample PB-1 2'-4' collected at 1634
		0.0		3				
				4				
		0.5		5			Fill material, damp, firm, medium brown, silty CLAY	
				6				
		8.6		7			Fill material, damp, firm, dark brown, silty CLAY	
				8			trash fill, plastic/asphalt debris	
		17.2		9			Fill material, damp, firm, dark brown, silty CLAY	
							saturated, trash with asphalt	
				10			Fill material, damp, soft, medium brown, silty CLAY	sample PB-1 9.5'-11.5' collected at 1652
		13.9		11				
				12			No recovery	
		1.9		13			Fill material, very wet, trash/glass/brick	
				14			Fill material, wet, soft, medium brown, silty CLAY	
		NR		15			No recovery	
				16				
		3.6		17			Fill material, wet, soft, medium brown, silty CLAY	
				18				
		NR		19			No recovery	
				20				Total depth 20'

LEGEND:

SS - Split Spoon
CS - 5 foot CME Sampler
ST - Shelby Tube
PID - Photoionization Detector
PP - Pocket Penetrometer
HSA - Hollow Stem Augers
DT - Dual Tube Sampler
HA - Hand Auger
WB - Wash Bore
RB - Rock Bit
NX - Rock Core

THE STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY LINES BETWEEN SOIL AND ROCK TYPES: ACTUAL TRANSITIONS MAY BE GRADUAL.

SCS ENGINEERS

LOG OF BORING NO.: **PB-2**

SHEET NUMBER 1 of 1

8575 W 110th Street, Overland Park, Kansas 66210

CLIENT:	City of Leavenworth
PROJECT NAME:	Former City Garage Operations
PROJECT NUMBER:	27220109.01
PROJECT LOCATION:	2109 South 3rd Street
BORING LOCATION:	
PROJECT NUMBER:	
GEOLOGIST:	Jeff Janzen
START DATE:	9/17/2020 FINISH DATE: 9/17/2020
START TIME:	1423 FINISH TIME: 1522

DRILLING CONTRACTOR:	SCS Engineers
DRILLER:	Whit Martin
DRILLING RIG:	54DT
DRILLING METHOD:	Direct-push
SAMPLING METHOD:	Macrocore
BORING DIAMETER:	2.5"
WELL DIAMETER:	1"
WELL COMPLETION:	9/17/2020
SURFACE ELEVATION:	777.90
TOC ELEVATION:	777.38
WATER LEVEL:	6.39
WATER ELEVATION:	770.99
DATE:	9/21/2020

WELL CONSTRUCTION DETAILS

MATERIAL:	
DIAMETER:	IN
WELL TOTAL DEPTH:	FT BGS
SCREEN LENGTH:	FT
RISER LENGTH:	FT
TOP OF SCREEN:	FT BGS
BOTTOM OF SCREEN:	FT BGS
SCREEN SLOT:	IN
TOP OF FILTER PACK:	FT BGS
TOP OF SEAL:	FT BGS
TYPE OF SEAL:	
TYPE OF FILTER PACK:	

SAMPLER TYPE	SAMPLE DEPTH	PID (PPM)	RECOVERY	DEPTH (FEET)	USCS CLASS	C I	SOIL DESCRIPTION AND DRILLING CONDITIONS	NOTES AND WELL CONSTRUCTION
		0.0		1			Fill material, damp, firm, light gray, silty CLAY	gravel/rock/brick in fill to 1'
				2				sample PB-2 1'-3' collected at 1435
		0.0		3				
							Fill material, damp, firm, black, silty CLAY	
				4			No recovery	
		1.6		5			Fill material, damp, firm, medium brown, silty CLAY	
				6				
		8.3		7			Fill material, wet, firm, medium brown, silty CLAY	
				8			no recovery	
		0.0		9			Fill material, wet, soft, dark brown, silty CLAY	
				10			Fill material, wet, firm, dark brown, silty CLAY	
		0.3		11				
				12				
		0.0		13			Fill material, wet, firm, dark brown, silty CLAY	sample PB-2 12'-14' collected at 1520
							Fill material, wet, soft, dark brown, silty CLAY	
				14				
		NR		15			No recovery	
				16				
		NR		17			No recovery	
				18				
		NR		19				
				20				Total depth 20'

LEGEND:

SS - Split Spoon
CS - 5 foot CME Sampler
ST - Shelby Tube
PID - Photoionization Detector
PP - Pocket Penetrometer
HSA - Hollow Stem Augers
DT - Dual Tube Sampler
HA - Hand Auger
WB - Wash Bore
RB - Rock Bit
NX - Rock Core

THE STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY LINES BETWEEN SOIL AND ROCK TYPES: ACTUAL TRANSITIONS MAY BE GRADUAL.

SCS ENGINEERS

LOG OF BORING NO.: **PB-3**

SHEET NUMBER 1 of 1

8575 W 110th Street, Overland Park, Kansas 66210

CLIENT:	City of Leavenworth
PROJECT NAME:	Former City Garage Operations
PROJECT NUMBER:	27220109.01
PROJECT LOCATION:	2109 South 3rd Street
BORING LOCATION:	
PROJECT NUMBER:	
GEOLOGIST:	Jeff Janzen
START DATE:	9/18/2020 FINISH DATE: 9/18/1930
START TIME:	0853 FINISH TIME: 1007

DRILLING CONTRACTOR:	SCS Engineers
DRILLER:	Whit Martin
DRILLING RIG:	54DT
DRILLING METHOD:	Direct-push
SAMPLING METHOD:	Macrocore
BORING DIAMETER:	2.5"
WELL DIAMETER:	1"
WELL COMPLETION:	9/18/2020
SURFACE ELEVATION:	778.56
TOC ELEVATION:	778.39
WATER LEVEL:	9.45
WATER ELEVATION:	768.94
DATE:	9/21/2020

WELL CONSTRUCTION DETAILS

MATERIAL:	
DIAMETER:	IN
WELL TOTAL DEPTH:	FT BGS
SCREEN LENGTH:	FT
RISER LENGTH:	FT
TOP OF SCREEN:	FT BGS
BOTTOM OF SCREEN:	FT BGS
SCREEN SLOT:	IN
TOP OF FILTER PACK:	FT BGS
TOP OF SEAL:	FT BGS
TYPE OF SEAL:	
TYPE OF FILTER PACK:	

SAMPLER TYPE	SAMPLE DEPTH	PID (PPM)	RECOVERY	DEPTH (FEET)	USCS CLASS	C I	SOIL DESCRIPTION AND DRILLING CONDITIONS	NOTES AND WELL CONSTRUCTION
		0.0		1			Placed construction fill, damp, firm, medium brown, silty CLAY	topsoil/fill with brick/gravel to 1'
		0.8		2 3 4			Fill material, damp, firm, dark brown, silty CLAY	sample PB-3 1.5'-3.5' collected at 0939
		1.4		5			Fill material, damp, firm, light brown, silty CLAY	
		1.6		6 7			Fill material, damp, firm, medium brown, silty CLAY	
				8			Fill material, damp, firm, dark brown, silty CLAY	trash and debris present
		5.4		9			Fill material, damp, soft, medium brown, silty CLAY	
		0.7		10 11			Fill material, damp, firm, dark brown/black, silty CLAY	sample PB-3 9'-11' collected at 0957 trash and debris present
				12			No recovery	
		8.6		13 14			Fill material, damp, firm, medium brown, silty CLAY wet, soft, black, silty CLAY	trash and debris present
		NR		15 16			No recovery	
		2.4		17 18			Fill material, wet, soft, black, silty CLAY	rag/carpet trash and debris
		NR		19 20			No recovery	Total depth 20'

LEGEND:

SS - Split Spoon
CS - 5 foot CME Sampler
ST - Shelby Tube
PID - Photoionization Detector
PP - Pocket Penetrometer
HSA - Hollow Stem Augers
DT - Dual Tube Sampler
HA - Hand Auger
WB - Wash Bore
RB - Rock Bit
NX - Rock Core

THE STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY LINES BETWEEN SOIL AND ROCK TYPES: ACTUAL TRANSITIONS MAY BE GRADUAL.

SCS ENGINEERS

LOG OF BORING NO.: **PB-4**

SHEET NUMBER 1 of 1

8575 W 110th Street, Overland Park, Kansas 66210

CLIENT:	City of Leavenworth
PROJECT NAME:	Former City Garage Operations
PROJECT NUMBER:	27220109.01
PROJECT LOCATION:	2109 South 3rd Street
BORING LOCATION:	
PROJECT NUMBER:	
GEOLOGIST:	Jeff Janzen
START DATE:	9/17/2020 FINISH DATE: 9/17/2020
START TIME:	1132 FINISH TIME: 1154

DRILLING CONTRACTOR:	SCS Engineers
DRILLER:	Whit Martin
DRILLING RIG:	54DT
DRILLING METHOD:	Direct-push
SAMPLING METHOD:	Macrocore
BORING DIAMETER:	2.5"
WELL DIAMETER:	1"
WELL COMPLETION:	9/17/2020
SURFACE ELEVATION:	779.28
TOC ELEVATION:	779.16
WATER LEVEL:	17.74
WATER ELEVATION:	761.42
DATE:	9/21/2020

WELL CONSTRUCTION DETAILS

MATERIAL:	
DIAMETER:	IN
WELL TOTAL DEPTH:	FT BGS
SCREEN LENGTH:	FT
RISER LENGTH:	FT
TOP OF SCREEN:	FT BGS
BOTTOM OF SCREEN:	FT BGS
SCREEN SLOT:	IN
TOP OF FILTER PACK:	FT BGS
TOP OF SEAL:	FT BGS
TYPE OF SEAL:	
TYPE OF FILTER PACK:	

SAMPLER TYPE	SAMPLE DEPTH	PID (PPM)	RECOVERY	DEPTH (FEET)	USCS CLASS	C I	SOIL DESCRIPTION AND DRILLING CONDITIONS	NOTES AND WELL CONSTRUCTION
		0.0		1			SILT	
				2			Native, damp, firm, dark gray/black, CLAY	
		0.0		3 4			No recovery	
		0.0		5 6			Native, damp, firm, medium brown/olive, CLAY	
		0.0		7 8				
		0.0		9 10			Native, damp, firm, medium brown/olive, CLAY	
		0.0		11				
				12			Native, wet, soft, medium brown/olive, CLAY	
		0.0		13 14			Native, wet, soft, medium brown/olive, CLAY	
		0.0		15 16			Native, wet, soft, light gray/olive, CLAY	
		0.0		17			Native, wet, soft, light brown, CLAY	
				18			Native, wet, soft, light gray/olive, CLAY	
		0.0		19 20				Total depth 20'

LEGEND:

SS - Split Spoon
CS - 5 foot CME Sampler
ST - Shelby Tube
PID - Photoionization Detector
PP - Pocket Penetrometer
HSA - Hollow Stem Augers
DT - Dual Tube Sampler
HA - Hand Auger
WB - Wash Bore
RB - Rock Bit
NX - Rock Core

THE STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY LINES BETWEEN SOIL AND ROCK TYPES: ACTUAL TRANSITIONS MAY BE GRADUAL.

SCS ENGINEERS

LOG OF BORING NO.: **PB-5**

SHEET NUMBER 1 of 1

8575 W 110th Street, Overland Park, Kansas 66210

CLIENT:	City of Leavenworth
PROJECT NAME:	Former City Garage Operations
PROJECT NUMBER:	27220109.01
PROJECT LOCATION:	2109 South 3rd Street
BORING LOCATION:	
PROJECT NUMBER:	
GEOLOGIST:	Jeff Janzen
START DATE:	9/17/2020 FINISH DATE: 9/17/2020
START TIME:	1033 FINISH TIME: 1116

DRILLING CONTRACTOR:	SCS Engineers
DRILLER:	Whit Martin
DRILLING RIG:	54DT
DRILLING METHOD:	Direct-push
SAMPLING METHOD:	Macrocore
BORING DIAMETER:	2.5"
WELL DIAMETER:	1"
WELL COMPLETION:	9/17/2020
SURFACE ELEVATION:	779.66
TOC ELEVATION:	779.63
WATER LEVEL:	17.35
WATER ELEVATION:	762.28
DATE:	9/21/2020

WELL CONSTRUCTION DETAILS

MATERIAL:	
DIAMETER:	IN
WELL TOTAL DEPTH:	FT BGS
SCREEN LENGTH:	FT
RISER LENGTH:	FT
TOP OF SCREEN:	FT BGS
BOTTOM OF SCREEN:	FT BGS
SCREEN SLOT:	IN
TOP OF FILTER PACK:	FT BGS
TOP OF SEAL:	FT BGS
TYPE OF SEAL:	
TYPE OF FILTER PACK:	

SAMPLER TYPE	SAMPLE DEPTH	PID (PPM)	RECOVERY	DEPTH (FEET)	USCS CLASS	CI	SOIL DESCRIPTION AND DRILLING CONDITIONS	NOTES AND WELL CONSTRUCTION
		0.0		1			Fill material, damp, firm, medium brown/gray, silt/clayey SILT	gravel present
				2			Fill material, damp, firm, dark gray/black, CLAY	aspalt present
		0.0		3				
				4	X		No recovery	
		0.0		5			Native, damp, firm, dark gray/black, CLAY	
				6				
		0.0		7			Native, damp, firm, medium brown/olive, CLAY	
				8				
		0.0		9			Native, damp, firm, medium brown/olive, CLAY	
				10				
		0.0		11				
				12			Native, wet, slightly firm, medium brown/gray, CLAY	
					X		No recovery	
		0.0		13			Native, wet, firm, medium brown/gray, CLAY	
				14				
		0.0		15				
				16			Native, wet, soft, medium brown/gray, CLAY	
		0.0		17			Native, wet, soft, medium gray, slightly silty CLAY	
				18				
		0.2		19				
				20			Native, wet, soft, medium brown slightly silty CLAY	Total depth 20'

LEGEND:

SS - Split Spoon
CS - 5 foot CME Sampler
ST - Shelby Tube
PID - Photoionization Detector
PP - Pocket Penetrometer
HSA - Hollow Stem Augers
DT - Dual Tube Sampler
HA - Hand Auger
WB - Wash Bore
RB - Rock Bit
NX - Rock Core

THE STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY LINES BETWEEN SOIL AND ROCK TYPES: ACTUAL TRANSITIONS MAY BE GRADUAL.

SCS ENGINEERS

LOG OF BORING NO.: **PB-6**

SHEET NUMBER 1 of 1

8575 W 110th Street, Overland Park, Kansas 66210

CLIENT:	City of Leavenworth
PROJECT NAME:	Former City Garage Operations
PROJECT NUMBER:	27220109.01
PROJECT LOCATION:	2109 South 3rd Street
BORING LOCATION:	
PROJECT NUMBER:	
GEOLOGIST:	Jeff Janzen
START DATE:	9/17/2020 FINISH DATE: 9/17/2020
START TIME:	0940 FINISH TIME: 1010

DRILLING CONTRACTOR:	SCS Engineers
DRILLER:	Whit Martin
DRILLING RIG:	54DT
DRILLING METHOD:	Direct-push
SAMPLING METHOD:	Macrocore
BORING DIAMETER:	2.5"
WELL DIAMETER:	1"
WELL COMPLETION:	9/17/2020
SURFACE ELEVATION:	777.87
TOC ELEVATION:	777.52
WATER LEVEL:	5.92
WATER ELEVATION:	771.60
DATE:	9/21/2020

WELL CONSTRUCTION DETAILS

MATERIAL:	
DIAMETER:	IN
WELL TOTAL DEPTH:	FT BGS
SCREEN LENGTH:	FT
RISER LENGTH:	FT
TOP OF SCREEN:	FT BGS
BOTTOM OF SCREEN:	FT BGS
SCREEN SLOT:	IN
TOP OF FILTER PACK:	FT BGS
TOP OF SEAL:	FT BGS
TYPE OF SEAL:	
TYPE OF FILTER PACK:	

SAMPLER TYPE	SAMPLE DEPTH	PID (PPM)	RECOVERY	DEPTH (FEET)	USCS CLASS	C I	SOIL DESCRIPTION AND DRILLING CONDITIONS	NOTES AND WELL CONSTRUCTION
		25.1		1			Fill material, damp, soft, medium gray, slightly silty CLAY	topsoil/fill brick/gravel to 1'
				2				
		10.7		3				
				4				
		3.5		5			Fill material, damp, soft, medium gray, slightly silty CLAY	
				6				limestone fragments at 6.5'
		5.4		7				
				8				1.5' thick asphalt layer at 7.5' possible boring sluff, PID reading 11.8
		5.0		9			Fill material, damp, soft, medium brown/gray, slightly silty CLAY	
				10			Fill material, wet, soft, medium brown/gray, slightly silty CLAY	trash debris in fill from 10'-11'
		10.7		11				
				12			No recovery	
		NR		13			No recovery	
				14				
		NR		15				
				16				
				17			Refusal at 16'	
				18				
				19				
				20				

LEGEND:

SS - Split Spoon
CS - 5 foot CME Sampler
ST - Shelby Tube
PID - Photoionization Detector
PP - Pocket Penetrometer
HSA - Hollow Stem Augers
DT - Dual Tube Sampler
HA - Hand Auger
WB - Wash Bore
RB - Rock Bit
NX - Rock Core

THE STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY LINES BETWEEN SOIL AND ROCK TYPES: ACTUAL TRANSITIONS MAY BE GRADUAL.

SCS ENGINEERS

LOG OF BORING NO.: **PB-7**

SHEET NUMBER 1 of 1

8575 W 110th Street, Overland Park, Kansas 66210

CLIENT:	City of Leavenworth
PROJECT NAME:	Former City Garage Operations
PROJECT NUMBER:	27220109.01
PROJECT LOCATION:	2109 South 3rd Street
BORING LOCATION:	
PROJECT NUMBER:	
GEOLOGIST:	Jeff Janzen
START DATE:	9/18/2020 FINISH DATE: 9/18/2020
START TIME:	1028 FINISH TIME: 1053

DRILLING CONTRACTOR:	SCS Engineers
DRILLER:	Whit Martin
DRILLING RIG:	54DT
DRILLING METHOD:	Direct-push
SAMPLING METHOD:	Macrocore
BORING DIAMETER:	2.5"
WELL DIAMETER:	1"
WELL COMPLETION:	9/18/2020
SURFACE ELEVATION:	778.79
TOC ELEVATION:	778.71
WATER LEVEL:	10.03
WATER ELEVATION:	768.68
DATE:	9/21/2020

WELL CONSTRUCTION DETAILS

MATERIAL:	
DIAMETER:	IN
WELL TOTAL DEPTH:	FT BGS
SCREEN LENGTH:	FT
RISER LENGTH:	FT
TOP OF SCREEN:	FT BGS
BOTTOM OF SCREEN:	FT BGS
SCREEN SLOT:	IN
TOP OF FILTER PACK:	FT BGS
TOP OF SEAL:	FT BGS
TYPE OF SEAL:	
TYPE OF FILTER PACK:	

SAMPLER TYPE	SAMPLE DEPTH	PID (PPM)	RECOVERY	DEPTH (FEET)	USCS CLASS	C I	SOIL DESCRIPTION AND DRILLING CONDITIONS	NOTES AND WELL CONSTRUCTION
		0.5		1			Fill material, damp, firm, medium brown, silty CLAY	topsoil
		14.8		2 3 4			Fill material, damp, firm, dark brown/black, silty CLAY	gravel/asphalt present
		5.2		5			Fill material, damp, firm, medium brown, silty CLAY	
		3.5		6 7			Fill material, damp, firm, olive, silty CLAY	limestone (2") glass/plastic/wood debris at 7'
				8			No recovery	
		2.1		9			Fill material, damp, firm, medium brown, silty CLAY	
		2.7		10 11 12			Fill material, damp, firm, dark brown/gray, silty CLAY No recovery	metal/glass/plastic debris at 10'
		9.2		13			Fill material, wet, soft, black, silty CLAY	plastic/paper/glass debris at 13.5'
		NR		14 15 16			No recovery	
		1.9		17 18			Fill material, wet, soft, dark brown, silty CLAY	brick/plastic/wood debris at 18'
		2.5		19 20			No recovery	Total depth 20'

LEGEND:

SS - Split Spoon
CS - 5 foot CME Sampler
ST - Shelby Tube
PID - Photoionization Detector
PP - Pocket Penetrometer
HSA - Hollow Stem Augers
DT - Dual Tube Sampler
HA - Hand Auger
WB - Wash Bore
RB - Rock Bit
NX - Rock Core

THE STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY LINES BETWEEN SOIL AND ROCK TYPES: ACTUAL TRANSITIONS MAY BE GRADUAL.

SCS ENGINEERS

LOG OF BORING NO.: **PB-8**

SHEET NUMBER 1 of 1

8575 W 110th Street, Overland Park, Kansas 66210

CLIENT:	City of Leavenworth
PROJECT NAME:	Former City Garage Operations
PROJECT NUMBER:	27220109.01
PROJECT LOCATION:	2109 South 3rd Street
BORING LOCATION:	
PROJECT NUMBER:	
GEOLOGIST:	Jeff Janzen
START DATE:	9/18/2020 FINISH DATE: 9/18/2020
START TIME:	1251 FINISH TIME: 1332

DRILLING CONTRACTOR:	SCS Engineers
DRILLER:	Whit Martin
DRILLING RIG:	54DT
DRILLING METHOD:	Direct-push
SAMPLING METHOD:	Macrocore
BORING DIAMETER:	2.5"
WELL DIAMETER:	1"
WELL COMPLETION:	9/18/2020
SURFACE ELEVATION:	778.89
TOC ELEVATION:	779.39
WATER LEVEL:	9.23
WATER ELEVATION:	770.16
DATE:	9/21/2020

WELL CONSTRUCTION DETAILS

MATERIAL:	
DIAMETER:	IN
WELL TOTAL DEPTH:	FT BGS
SCREEN LENGTH:	FT
RISER LENGTH:	FT
TOP OF SCREEN:	FT BGS
BOTTOM OF SCREEN:	FT BGS
SCREEN SLOT:	IN
TOP OF FILTER PACK:	FT BGS
TOP OF SEAL:	FT BGS
TYPE OF SEAL:	
TYPE OF FILTER PACK:	

SAMPLER TYPE	SAMPLE DEPTH	PID (PPM)	RECOVERY	DEPTH (FEET)	USCS CLASS	C I	SOIL DESCRIPTION AND DRILLING CONDITIONS	NOTES AND WELL CONSTRUCTION
		63.0		1			Fill material, damp, firm, medium brown, silty CLAY	coarse gravel
				2			Fill material, sand layer	
		58.0		3			Fill material, damp, firm, dark brown, silty CLAY	brick debris at 2.5'
				4			No recovery	
		45.0		5			Fill material, damp, firm, light brown, silty CLAY	
				6				brick/gravel debris at 5.5'
		20.0		7			Fill material, damp, hard, dark brown/olive, silty CLAY	
				8				
		12.0		9			Fill material, wet, soft, gray, silty CLAY	sand mixed in soil core
				10				wood/gravel/brick debris at 10'
		6.7		11			Fill material, wet, firm, black,silty CLAY	
				12			No recovery	
		1.1		13			Fill material, wet, soft, black, silty CLAY	
				14			Fill material, wet, firm, black, silty CLAY	
		1.2		15				
				16				plastic/brick/wood/glass debris at 15'
		1.4		17			Fill material, wet, soft, black, silty CLAY	petroleum odor
				18				plastic/glass debris at 17.5'
		NR		19			No recovery	
				20				Total depth 20'

LEGEND:

SS - Split Spoon
CS - 5 foot CME Sampler
ST - Shelby Tube
PID - Photoionization Detector
PP - Pocket Penetrometer
HSA - Hollow Stem Augers
DT - Dual Tube Sampler
HA - Hand Auger
WB - Wash Bore
RB - Rock Bit
NX - Rock Core

THE STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY LINES BETWEEN SOIL AND ROCK TYPES: ACTUAL TRANSITIONS MAY BE GRADUAL.

SCS ENGINEERS

LOG OF BORING NO.: **PB-9**

SHEET NUMBER 1 of 1

8575 W 110th Street, Overland Park, Kansas 66210

CLIENT:	City of Leavenworth
PROJECT NAME:	Former City Garage Operations
PROJECT NUMBER:	27220109.01
PROJECT LOCATION:	2109 South 3rd Street
BORING LOCATION:	
PROJECT NUMBER:	
GEOLOGIST:	Jeff Janzen
START DATE:	9/17/2020 FINISH DATE: 9/17/2020
START TIME:	1234 FINISH TIME: 1348

DRILLING CONTRACTOR:	SCS Engineers
DRILLER:	Whit Martin
DRILLING RIG:	54DT
DRILLING METHOD:	Direct-push
SAMPLING METHOD:	Macrocore
BORING DIAMETER:	2.5"
WELL DIAMETER:	1"
WELL COMPLETION:	9/17/2020
SURFACE ELEVATION:	777.60
TOC ELEVATION:	777.57
WATER LEVEL:	10.49
WATER ELEVATION:	767.08
DATE:	9/21/2020

WELL CONSTRUCTION DETAILS

MATERIAL:	
DIAMETER:	IN
WELL TOTAL DEPTH:	FT BGS
SCREEN LENGTH:	FT
RISER LENGTH:	FT
TOP OF SCREEN:	FT BGS
BOTTOM OF SCREEN:	FT BGS
SCREEN SLOT:	IN
TOP OF FILTER PACK:	FT BGS
TOP OF SEAL:	FT BGS
TYPE OF SEAL:	
TYPE OF FILTER PACK:	

SAMPLER TYPE	SAMPLE DEPTH	PID (PPM)	RECOVERY	DEPTH (FEET)	USCS CLASS	C I	SOIL DESCRIPTION AND DRILLING CONDITIONS	NOTES AND WELL CONSTRUCTION
		NA		1			Fill material with brick/gravel/limestone pieces	
		12.1		2			Fill material, moist, firm, olive, silty CLAY	sample PB-9 2'-4' collected at 1306
				3			Fill material, moist, firm, black, silty CLAY	
				4			No recovery	
		19.6		5			Fill material, moist, firm, black, silty CLAY	mostly brick/gravel/limestone fill 4'-7.5'
		19.1		6				
				7				
				8			Fill material, damp, firm, medium brown, silty CLAY	
		14.1		9			Fill material, damp, firm, medium brown, silty CLAY	brick/gravel/limestone fill 8'-10.5'
				10				sample PB-9 9'-11' collected at 1332
		38.5		11			Fill material, wet, soft, medium brown/gray, silty CLAY	
				12				
		61.8		13			Fill material, wet, soft, gray, silty CLAY	
				14				
		202.8		15				
				16			Fill material, wet, very soft, gray, silty CLAY	
		NR		17			No recovery	
				18				
		NR		19				
				20				Total depth 20'

LEGEND:

SS - Split Spoon
CS - 5 foot CME Sampler
ST - Shelby Tube
PID - Photoionization Detector
PP - Pocket Penetrometer
HSA - Hollow Stem Augers
DT - Dual Tube Sampler
HA - Hand Auger
WB - Wash Bore
RB - Rock Bit
NX - Rock Core

THE STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY LINES BETWEEN SOIL AND ROCK TYPES: ACTUAL TRANSITIONS MAY BE GRADUAL.

SCS ENGINEERS

LOG OF BORING NO.: **PB-10**

SHEET NUMBER 1 of 1

8575 W 110th Street, Overland Park, Kansas 66210

CLIENT:	City of Leavenworth
PROJECT NAME:	Former City Garage Operations
PROJECT NUMBER:	27220109.01
PROJECT LOCATION:	2109 South 3rd Street
BORING LOCATION:	
PROJECT NUMBER:	
GEOLOGIST:	Jeff Janzen
START DATE:	9/18/2020 FINISH DATE: 9/18/2020
START TIME:	1200 FINISH TIME: 1224

DRILLING CONTRACTOR:	SCS Engineers
DRILLER:	Whit Martin
DRILLING RIG:	54DT
DRILLING METHOD:	Direct-push
SAMPLING METHOD:	Macrocore
BORING DIAMETER:	2.5"
WELL DIAMETER:	1"
WELL COMPLETION:	9/18/2020
SURFACE ELEVATION:	777.74
TOC ELEVATION:	777.61
WATER LEVEL:	5.84
WATER ELEVATION:	771.77
DATE:	9/21/2020

WELL CONSTRUCTION DETAILS

MATERIAL:	
DIAMETER:	IN
WELL TOTAL DEPTH:	FT BGS
SCREEN LENGTH:	FT
RISER LENGTH:	FT
TOP OF SCREEN:	FT BGS
BOTTOM OF SCREEN:	FT BGS
SCREEN SLOT:	IN
TOP OF FILTER PACK:	FT BGS
TOP OF SEAL:	FT BGS
TYPE OF SEAL:	
TYPE OF FILTER PACK:	

SAMPLER TYPE	SAMPLE DEPTH	PID (PPM)	RECOVERY	DEPTH (FEET)	USCS CLASS	CI	SOIL DESCRIPTION AND DRILLING CONDITIONS	NOTES AND WELL CONSTRUCTION
							Fill material, damp, soft, medium brown, silty CLAY	topsoil with brick
		205.2		1			Fill material, damp, firm, black, silty CLAY	gravel in fill
				2				
		30.4		3				
				4			Fill material, damp, firm, olive, silty CLAY	
		114.8		5			Fill material, damp, firm, olive, silty CLAY	
				6				
		1.0		7			Fill material, damp, firm, dark brown/gray, silty CLAY	gravel/brick/paper/plastic debris 5.5'-8'
				8			Fill material, wet, soft, gray, silty CLAY	
		171.3		9			Fill material, wet, soft, gray, silty CLAY	metal/wood/paper debris 8'-11'
				10			Fill material, wet, firm, gray, silty CLAY	
		184.3		11				
				12			No recovery	
		155.7		13			Fill material, wet, firm, gray, silty CLAY	metal/plastic debris 12'-14'
				14				
		NR		15			No recovery	
				16				
		109.2		17			Fill material, wet, firm, gray, silty CLAY	
				18			No recovery	
		NR		19				
				20				Total depth 20'

LEGEND:

SS - Split Spoon
CS - 5 foot CME Sampler
ST - Shelby Tube
PID - Photoionization Detector
PP - Pocket Penetrometer
HSA - Hollow Stem Augers
DT - Dual Tube Sampler
HA - Hand Auger
WB - Wash Bore
RB - Rock Bit
NX - Rock Core

THE STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY LINES BETWEEN SOIL AND ROCK TYPES: ACTUAL TRANSITIONS MAY BE GRADUAL.

SCS ENGINEERS

LOG OF BORING NO.: **PB-11**

SHEET NUMBER 1 of 1

8575 W 110th Street, Overland Park, Kansas 66210

CLIENT:	City of Leavenworth	DRILLING CONTRACTOR:	SCS Engineers
PROJECT NAME:	Former City Garage Operations	DRILLER:	Whit Martin
PROJECT NUMBER:	27220109.01	DRILLING RIG:	54DT
PROJECT LOCATION:	2109 South 3rd Street	DRILLING METHOD:	Direct-push
BORING LOCATION:		SAMPLING METHOD:	Macrocore
PROJECT NUMBER:		BORING DIAMETER:	2.5"
GEOLOGIST:	Jeff Janzen	WELL DIAMETER:	1"
START DATE:	9/18/2020 FINISH DATE: 9/18/2020	WELL COMPLETION:	9/18/2020
START TIME:	1350 FINISH TIME: 1407	SURFACE ELEVATION:	776.98
		TOC ELEVATION:	777.05
		WATER LEVEL:	8.14
		WATER ELEVATION:	768.91
		DATE:	9/21/2020

WELL CONSTRUCTION DETAILS

MATERIAL:	
DIAMETER:	IN
WELL TOTAL DEPTH:	FT BGS
SCREEN LENGTH:	FT
RISER LENGTH:	FT
TOP OF SCREEN:	FT BGS
BOTTOM OF SCREEN:	FT BGS
SCREEN SLOT:	IN
TOP OF FILTER PACK:	FT BGS
TOP OF SEAL:	FT BGS
TYPE OF SEAL:	
TYPE OF FILTER PACK:	

SAMPLER TYPE	SAMPLE DEPTH	PID (PPM)	RECOVERY	DEPTH (FEET)	USCS CLASS	C I	SOIL DESCRIPTION AND DRILLING CONDITIONS	NOTES AND WELL CONSTRUCTION
		1.2		1			Fill material, gravel/sand backfill	
		1.7		2–3			Fill material, damp, firm, black, silty CLAY	wood/brick debris 1.5'-3.5'
				4			No recovery	
		8.9		5–6			Fill material, damp, firm, olive, silty CLAY	
		0.4		7			Fill material, damp, firm, dark brown, silty CLAY	brick debris at 6.5'
				8			No recovery	
		1.4		9			Fill material, damp, soft, mottled gray/medium brown/black, sandy silty CLAY	
		0.7		10–12			Fill material, damp, firm, gray, silty CLAY	glass/gravel/wood debris 9.5'-12'
		6.7		13			Fill material, damp, firm, black, silty CLAY	
				14			No recovery	
				15–20			Refusal at 14'	

LEGEND:

SS - Split Spoon
CS - 5 foot CME Sampler
ST - Shelby Tube
PID - Photoionization Detector
PP - Pocket Penetrometer
HSA - Hollow Stem Augers
DT - Dual Tube Sampler
HA - Hand Auger
WB - Wash Bore
RB - Rock Bit
NX - Rock Core

THE STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY LINES BETWEEN SOIL AND ROCK TYPES: ACTUAL TRANSITIONS MAY BE GRADUAL.

ATTACHMENT B

Photographic Log of Borings

Former City Garage Operations
2109 South 3rd Street, Leavenworth, Kansas
SCS Engineers Project #27220109.01

Photo 1: Installation of Boring PB-1A southwest of the Leavenworth Animal Control Building; view to north.

Photographer: Jeff Janzen

Date: 9/17/20

Photo 2: Abandoned Boring PB-1A; view to southwest.

Photographer: Jeff Janzen

Date: 9/21/20

Former City Garage Operations
2109 South 3rd Street, Leavenworth, Kansas
SCS Engineers Project #27220109.01

Photo 3: Installation of Boring PB-2 along south boundary of the Subject Site; view to east.

Photographer: Jeff Janzen

Date: 9/17/20

Photo 4: Abandoned Boring PB-2; view to northeast.

Photographer: Whit Martin

Date: 9/23/20

Former City Garage Operations
2109 South 3rd Street, Leavenworth, Kansas
SCS Engineers Project #27220109.01

Photo 5: Installation of Boring PB-3 south of the Leavenworth Animal Control Building; view to southeast.

Photographer: Jeff Janzen

Date: 9/18/20

Photo 6: Abandoned Boring PB-3; view to southeast.

Photographer: Jeff Janzen

Date: 9/21/20

Former City Garage Operations
2109 South 3rd Street, Leavenworth, Kansas
SCS Engineers Project #27220109.01

Photo 7: Installation of Boring PB-4 in southwest corner of the Subject Site; view to southwest.

Photographer: Jeff Janzen

Date: 9/17/20

Photo 8: Abandoned Boring PB-4; view to west.

Photographer: Jeff Janzen

Date: 9/21/20

Former City Garage Operations
2109 South 3rd Street, Leavenworth, Kansas
SCS Engineers Project #27220109.01

Photo 9: Installation of Boring PB-5 on west boundary of the Subject Site; view to north.

Photographer: Jeff Janzen

Date: 9/17/20

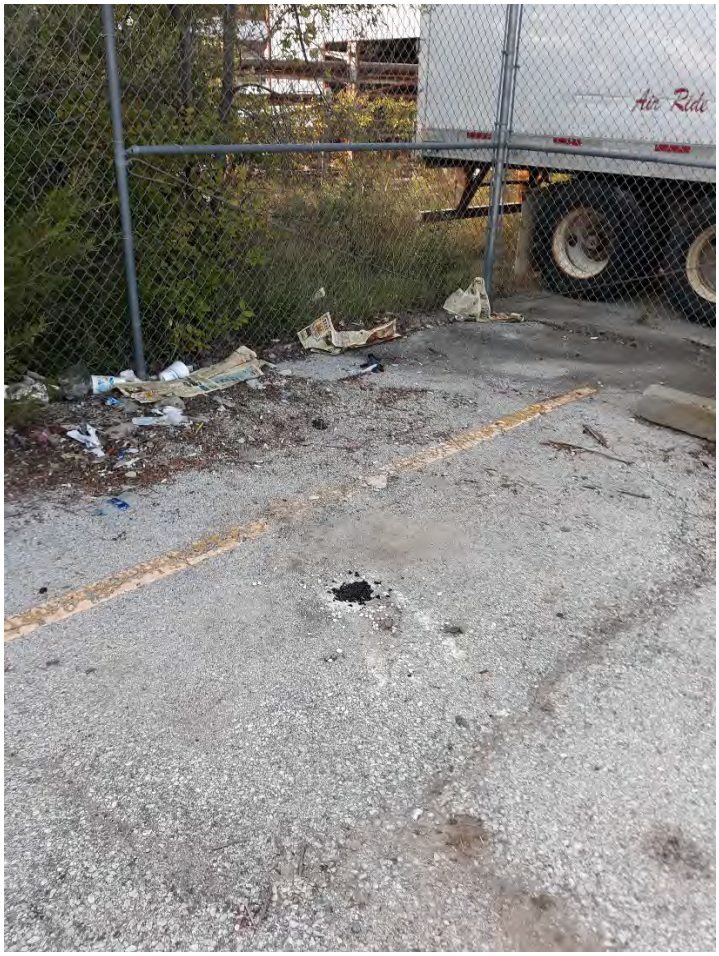


Photo 10: Abandoned Boring PB-5; view to northwest.

Photographer: Jeff Janzen

Date: 9/21/20

Former City Garage Operations
2109 South 3rd Street, Leavenworth, Kansas
SCS Engineers Project #27220109.01

Photo 11: Installation of Boring PB-6 west of Leavenworth Animal Control Building; view to northwest.

Photographer: Jeff Janzen

Date: 9/17/20

Photo 12: Installation of Boring PB-7 east of dog runs; view to southwest.

Photographer: Jeff Janzen

Date: 9/18/20

Former City Garage Operations
2109 South 3rd Street, Leavenworth, Kansas
SCS Engineers Project #27220109.01

Photo 13: Abandoned Boring PB-7; view to west.

Photographer: Jeff Janzen

Date: 9/21/20

Photo 14: Installation of Boring PB-8 north of Leavenworth Animal Control Building; view to southeast.

Photographer: Jeff Janzen

Date: 9/18/20

Former City Garage Operations
2109 South 3rd Street, Leavenworth, Kansas
SCS Engineers Project #27220109.01

Photo 15: Abandoned Boring PB-8; view to south.

Photographer: Jeff Janzen

Date: 9/21/20

Photo 16: Installation of Boring PB-9 west of South 3rd Street along southern boundary of the Subject Site; view to southeast.

Photographer: Jeff Janzen

Date: 9/17/20

Former City Garage Operations
2109 South 3rd Street, Leavenworth, Kansas
SCS Engineers Project #27220109.01

Photo 17: Abandoned Boring PB-9; view to southeast.

Photographer: Jeff Janzen

Date: 9/21/20

Photo 18: Installation of Boring PB-10 in northwest corner of the Subject Site; view to east.

Photographer: Jeff Janzen

Date: 9/18/20

Former City Garage Operations
2109 South 3rd Street, Leavenworth, Kansas
SCS Engineers Project #27220109.01

Photo 19: Abandoned Boring PB-10; view to south.

Photographer: Jeff Janzen

Date: 9/21/20

Photo 20: Installation of Boring PB-11 in northeast corner of the Subject Site; view to west.

Photographer: Jeff Janzen

Date: 9/18/20

Former City Garage Operations
2109 South 3rd Street, Leavenworth, Kansas
SCS Engineers Project #27220109.01

Photo 21: Abandoned Boring PB-11; view to southwest.

Photographer: Jeff Janzen

Date: 9/21/20

Photo 22: Abandoned Boring PB-1 north of Boring PB-1A; view to northwest.

Photographer: Jeff Janzen

Date: 9/21/20

Former City Garage Operations
2109 South 3rd Street, Leavenworth, Kansas
SCS Engineers Project #27220109.01

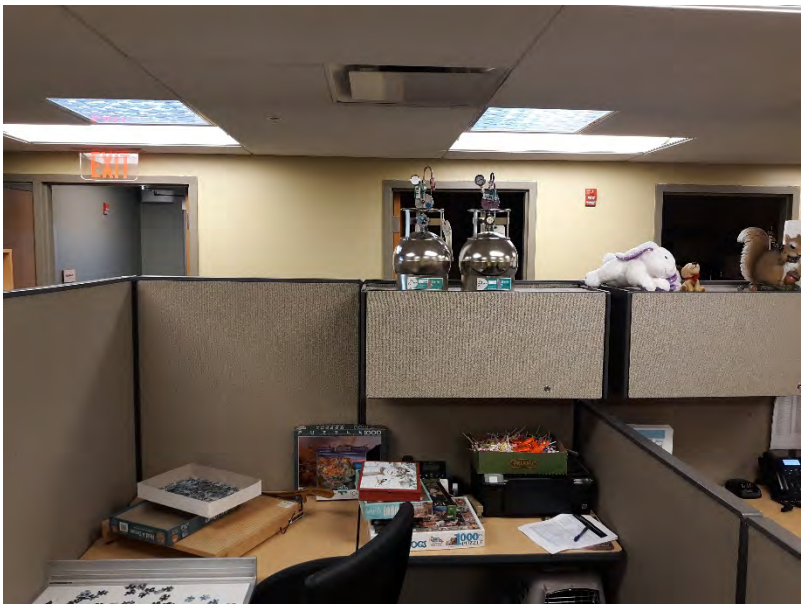


Photo 23: Indoor air samples AS-1 and DUP collected in the employee cubicle area; view to north.

Photographer: Jeff Janzen

Date: 9/21/20

Photo 24: Indoor air sample AS-2 collected in storage hallway west of the kitchen; view to northwest.

Photographer: Jeff Janzen

Date: 9/21/20

Former City Garage Operations
2109 South 3rd Street, Leavenworth, Kansas
SCS Engineers Project #27220109.01

Photo 25: Ambient air sample AS-AMB collected upwind to the south of the Leavenworth Animal Control Building; view to northeast.

Photographer: Jeff Janzen

Date: 9/21/20

ATTACHMENT C

KDHE Air Sampling Form – LAC Building

Kansas Department of Health and Environment

Bureau of Environmental Remediation
Indoor Air Sampling Form

Project Name: Former City Garage	Sample Date: 9/21/20
Property ID:	Sampler: Jeff Jones

Sample Information

	Sample Location:	Sample ID:	Canister Number:
(1)	Outside Ambient	AS-AMB	012317
(2)	office Area	AS-1	006305
(3)	office Area	Dup	008535
(4)	Kitchen Hallway	AS-2	009218

Environmental Conditions

Outdoor Temperature: 56 JJ	Barometric Pressure: 30.26	Relative Humidity: 93 JJ %
Wind Speed: 3 mph	Wind Direction: South - Southeast	

Preliminary Screening

Instrumentation:	Calibration Date:	Calibration Time:
Location 1:	Reading 1:	
Location 2:	Reading 2:	
Location 3:	Reading 3:	
Location 4:	Reading 4:	

Air Sample Detail

	Start Time:	Initial Vacuum:	End Time:	Final Vacuum:	Flow Controller Number:
(1)	0823	-28 mm/hg	1650 1614	-2 mm/hg	010048
(2)	0819	-27 mm/hg	1610	-2 mm/hg	010059
(3)	0819	-27 mm/hg	1610	-2 mm/hg	005857
(4)	0822	-29 mm/hg	1612	-4 mm/hg	010054

Note: This form is to be completed for each residence involved in indoor air sampling activities. Page 3 of the form provides space for additional notes or comments.

ATTACHMENT D

Pace National – Analytical Laboratory Reports

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

September 30, 2020

SCS Engineers - KS

Sample Delivery Group:	L1264151
Samples Received:	09/19/2020
Project Number:	C4-052-73682
Description:	Former City Garage Operations
Site:	27220109.00
Report To:	Doug Dreiling 8575 W. 110th Street Overland Park, KS 66210

Entire Report Reviewed By:

Jeff Carr
Project Manager

PB-1 2-4' L1264151-01 Solid

Collected by	Collected date/time	Received date/time
	09/17/20 16:34	09/19/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1549365	1	09/27/20 03:16	09/27/20 03:40	KDW	Mt. Juliet, TN
Mercury by Method 7471B	WG1547742	1	09/23/20 09:42	09/23/20 12:50	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1547617	1	09/23/20 06:27	09/24/20 12:54	TRB	Mt. Juliet, TN
Volatile Petroleum Hydrocarbons by Method KS LRH	WG1548508	1	09/17/20 16:34	09/24/20 12:07	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1549420	1	09/17/20 16:34	09/29/20 00:47	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1550931	1	09/17/20 16:34	09/29/20 13:00	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method KS MRH/HRH	WG1548722	1	09/27/20 08:26	09/28/20 01:02	DMG	Mt. Juliet, TN
Pesticides (GC) by Method 8081B	WG1547939	1	09/23/20 21:44	09/24/20 03:27	TAB	Mt. Juliet, TN

PB-1 9.5-11' L1264151-02 Solid

Collected by	Collected date/time	Received date/time
	09/17/20 16:52	09/19/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1549365	1	09/27/20 03:16	09/27/20 03:40	KDW	Mt. Juliet, TN
Mercury by Method 7471B	WG1547742	1	09/23/20 09:42	09/23/20 12:52	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1547617	1	09/23/20 06:27	09/24/20 12:57	TRB	Mt. Juliet, TN
Volatile Petroleum Hydrocarbons by Method KS LRH	WG1548508	1	09/17/20 16:52	09/24/20 12:40	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1549420	1	09/17/20 16:52	09/29/20 01:06	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1550931	1	09/17/20 16:52	09/29/20 13:19	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method KS MRH/HRH	WG1548722	1	09/27/20 08:26	09/29/20 10:21	JDG	Mt. Juliet, TN
Pesticides (GC) by Method 8081B	WG1547939	1	09/23/20 21:44	09/24/20 04:07	TAB	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1550290	2	09/28/20 18:38	09/29/20 16:33	AO	Mt. Juliet, TN

PB-2 1-3' L1264151-03 Solid

Collected by	Collected date/time	Received date/time
	09/17/20 14:35	09/19/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1549365	1	09/27/20 03:16	09/27/20 03:40	KDW	Mt. Juliet, TN
Mercury by Method 7471B	WG1547742	1	09/23/20 09:42	09/23/20 12:42	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1547617	1	09/23/20 06:27	09/24/20 13:00	TRB	Mt. Juliet, TN
Volatile Petroleum Hydrocarbons by Method KS LRH	WG1548508	1	09/17/20 14:35	09/24/20 13:13	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1549420	1	09/17/20 14:35	09/29/20 01:25	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1550931	1	09/17/20 14:35	09/29/20 13:39	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method KS MRH/HRH	WG1548722	1	09/27/20 08:26	09/28/20 02:10	DMG	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1548725	1	09/27/20 16:23	09/28/20 11:12	LEL	Mt. Juliet, TN
Polychlorinated Biphenyls (GC) by Method 8082	WG1548725	1	09/27/20 16:23	09/28/20 13:11	MTJ	Mt. Juliet, TN

PB-2 12-14' L1264151-04 Solid

Collected by	Collected date/time	Received date/time
	09/17/20 15:20	09/19/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1549365	1	09/27/20 03:16	09/27/20 03:40	KDW	Mt. Juliet, TN
Mercury by Method 7471B	WG1547742	1	09/23/20 09:42	09/23/20 12:55	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1547617	1	09/23/20 06:27	09/24/20 13:02	TRB	Mt. Juliet, TN
Volatile Petroleum Hydrocarbons by Method KS LRH	WG1548508	1	09/17/20 15:20	09/24/20 13:46	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1549420	1	09/17/20 15:20	09/29/20 01:44	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1550931	1	09/17/20 15:20	09/29/20 13:58	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method KS MRH/HRH	WG1548722	1	09/27/20 08:26	09/28/20 01:25	DMG	Mt. Juliet, TN
Pesticides (GC) by Method 8081B	WG1547939	1	09/23/20 21:44	09/24/20 04:20	TAB	Mt. Juliet, TN

PB-9 2-4' L1264151-05 Solid

Collected by | Collected date/time 09/17/20 13:06 | Received date/time 09/19/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1549365	1	09/27/20 03:16	09/27/20 03:40	KDW	Mt. Juliet, TN
Mercury by Method 7471B	WG1547742	1	09/23/20 09:42	09/23/20 12:57	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1547617	1	09/23/20 06:27	09/24/20 13:05	TRB	Mt. Juliet, TN
Volatile Petroleum Hydrocarbons by Method KS LRH	WG1548508	1	09/17/20 13:06	09/24/20 14:18	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1549420	1	09/17/20 13:06	09/29/20 02:03	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1550931	1	09/17/20 13:06	09/29/20 14:36	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method KS MRH/HRH	WG1548722	1	09/27/20 08:26	09/29/20 10:44	JDG	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1548725	1	09/27/20 16:23	09/28/20 11:25	LEL	Mt. Juliet, TN
Polychlorinated Biphenyls (GC) by Method 8082	WG1548725	1	09/27/20 16:23	09/28/20 13:22	MTJ	Mt. Juliet, TN

PB-9 9-11' L1264151-06 Solid

Collected by | Collected date/time 09/17/20 13:32 | Received date/time 09/19/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1549366	1	09/27/20 03:57	09/27/20 04:11	KDW	Mt. Juliet, TN
Mercury by Method 7471B	WG1547742	1	09/23/20 09:42	09/23/20 13:00	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1547617	1	09/23/20 06:27	09/24/20 13:07	TRB	Mt. Juliet, TN
Volatile Petroleum Hydrocarbons by Method KS LRH	WG1548508	1	09/17/20 13:32	09/24/20 14:51	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1549420	1	09/17/20 13:32	09/29/20 02:22	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method KS MRH/HRH	WG1548722	1	09/27/20 08:26	09/29/20 11:06	JDG	Mt. Juliet, TN
Pesticides (GC) by Method 8081B	WG1547939	1	09/23/20 21:44	09/24/20 04:33	TAB	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1550290	1	09/28/20 18:38	09/29/20 15:51	AO	Mt. Juliet, TN

PB-3 1.5-3.5' L1264151-07 Solid

Collected by | Collected date/time 09/18/20 09:39 | Received date/time 09/19/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1549366	1	09/27/20 03:57	09/27/20 04:11	KDW	Mt. Juliet, TN
Mercury by Method 7471B	WG1547742	1	09/23/20 09:42	09/23/20 13:07	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1547617	1	09/23/20 06:27	09/24/20 13:16	TRB	Mt. Juliet, TN
Volatile Petroleum Hydrocarbons by Method KS LRH	WG1548508	1	09/18/20 09:39	09/24/20 15:24	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1549420	1	09/18/20 09:39	09/29/20 02:41	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method KS MRH/HRH	WG1548722	1	09/27/20 08:26	09/29/20 13:23	JDG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method KS MRH/HRH	WG1548722	2	09/27/20 08:26	09/29/20 14:32	JDG	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1548725	1	09/27/20 16:23	09/28/20 11:37	LEL	Mt. Juliet, TN
Polychlorinated Biphenyls (GC) by Method 8082	WG1548725	1	09/27/20 16:23	09/28/20 13:32	MTJ	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1550290	2	09/28/20 18:38	09/29/20 17:36	AO	Mt. Juliet, TN

PB-3 9-11' L1264151-08 Solid

Collected by | Collected date/time 09/18/20 09:57 | Received date/time 09/19/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1549366	1	09/27/20 03:57	09/27/20 04:11	KDW	Mt. Juliet, TN
Mercury by Method 7471B	WG1547742	1	09/23/20 09:42	09/23/20 13:10	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1547617	1	09/23/20 06:27	09/24/20 13:18	TRB	Mt. Juliet, TN
Volatile Petroleum Hydrocarbons by Method KS LRH	WG1548508	1	09/18/20 09:57	09/24/20 15:57	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1549420	1	09/18/20 09:57	09/29/20 03:00	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1550931	1	09/18/20 09:57	09/29/20 14:55	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method KS MRH/HRH	WG1548722	1	09/27/20 08:26	09/29/20 11:29	JDG	Mt. Juliet, TN
Pesticides (GC) by Method 8081B	WG1547939	1	09/23/20 21:44	09/24/20 04:46	TAB	Mt. Juliet, TN

SOIL DUP L1264151-09 Solid

Collected by	Collected date/time	Received date/time
	09/17/20 00:00	09/19/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1549366	1	09/27/20 03:57	09/27/20 04:11	KDW	Mt. Juliet, TN
Mercury by Method 7471B	WG1547742	1	09/23/20 09:42	09/23/20 13:12	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1547617	1	09/23/20 06:27	09/24/20 13:21	TRB	Mt. Juliet, TN
Volatile Petroleum Hydrocarbons by Method KS LRH	WG1548508	1	09/17/20 00:00	09/24/20 16:30	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1549420	1	09/17/20 00:00	09/29/20 03:19	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1550931	1	09/17/20 00:00	09/29/20 15:14	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method KS MRH/HRH	WG1548722	1	09/27/20 08:26	09/29/20 09:58	JDG	Mt. Juliet, TN
Pesticides (GC) by Method 8081B	WG1547939	1	09/23/20 21:44	09/24/20 05:00	TAB	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1550290	1	09/28/20 18:38	09/29/20 15:30	AO	Mt. Juliet, TN

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Collected by	Collected date/time	Received date/time
	09/18/20 09:39	09/19/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Mercury by Method 7470A	WG1546149	1	09/21/20 08:13	09/21/20 20:49	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1547544	1	09/27/20 23:47	09/28/20 18:31	EL	Mt. Juliet, TN
Volatile Petroleum Hydrocarbons by Method KS LRH	WG1547271	1	09/22/20 21:07	09/22/20 21:07	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1549772	1	09/26/20 18:07	09/26/20 18:07	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method KS MRH/HRH	WG1546384	1	09/22/20 00:49	09/23/20 00:34	CAG	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1547970	1	09/25/20 05:49	09/25/20 19:02	HMH	Mt. Juliet, TN
Polychlorinated Biphenyls (GC) by Method 8082	WG1547970	1	09/25/20 05:49	09/25/20 12:49	MTJ	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1548358	1	09/24/20 09:05	09/24/20 18:18	SHG	Mt. Juliet, TN

EQUIP BLANK L1264151-11 GW

Collected by	Collected date/time	Received date/time
	09/18/20 09:57	09/19/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Mercury by Method 7470A	WG1546149	1	09/21/20 08:13	09/21/20 20:51	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1547544	1	09/27/20 23:47	09/28/20 18:34	EL	Mt. Juliet, TN
Volatile Petroleum Hydrocarbons by Method KS LRH	WG1547271	1	09/22/20 21:44	09/22/20 21:44	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1549772	1	09/26/20 18:27	09/26/20 18:27	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method KS MRH/HRH	WG1546384	1	09/22/20 00:49	09/23/20 00:57	CAG	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1547970	1	09/25/20 05:49	09/25/20 19:15	HMH	Mt. Juliet, TN
Polychlorinated Biphenyls (GC) by Method 8082	WG1547970	1	09/25/20 05:49	09/25/20 13:03	MTJ	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1548605	1	09/24/20 22:29	09/25/20 16:43	AO	Mt. Juliet, TN

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Collected by	Collected date/time	Received date/time
	09/17/20 00:00	09/19/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1549772	1	09/26/20 18:46	09/26/20 18:46	ADM	Mt. Juliet, TN

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Jeff Carr
Project Manager

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	82.1		1	09/27/2020 03:40	WG1549365

Mercury by Method 7471B

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	ND		0.0487	1	09/23/2020 12:50	WG1547742

Metals (ICP) by Method 6010D

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Arsenic	ND		2.44	1	09/24/2020 12:54	WG1547617
Barium	141		0.609	1	09/24/2020 12:54	WG1547617
Cadmium	ND		0.609	1	09/24/2020 12:54	WG1547617
Chromium	23.2		1.22	1	09/24/2020 12:54	WG1547617
Lead	15.7		0.609	1	09/24/2020 12:54	WG1547617
Selenium	ND		2.44	1	09/24/2020 12:54	WG1547617
Silver	ND		1.22	1	09/24/2020 12:54	WG1547617

Volatile Petroleum Hydrocarbons by Method KS LRH

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
LRH (C5-C8)	ND		7.41	1	09/24/2020 12:07	WG1548508
(S) 2,5-Dibromotoluene(FID)	*82.8*		*70.0-130*		*09/24/2020 12:07*	WG1548508

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND	J0	0.0758	1	09/29/2020 00:47	WG1549420
Acrylonitrile	ND		0.0189	1	09/29/2020 00:47	WG1549420
Benzene	ND		0.00152	1	09/29/2020 00:47	WG1549420
Bromobenzene	ND		0.0189	1	09/29/2020 00:47	WG1549420
Bromodichloromethane	ND		0.00379	1	09/29/2020 00:47	WG1549420
Bromoform	ND		0.0379	1	09/29/2020 00:47	WG1549420
Bromomethane	ND		0.0189	1	09/29/2020 00:47	WG1549420
n-Butylbenzene	ND		0.0189	1	09/29/2020 00:47	WG1549420
sec-Butylbenzene	ND		0.0189	1	09/29/2020 00:47	WG1549420
tert-Butylbenzene	ND		0.00758	1	09/29/2020 00:47	WG1549420
Carbon tetrachloride	ND		0.00758	1	09/29/2020 00:47	WG1549420
Chlorobenzene	ND		0.00379	1	09/29/2020 00:47	WG1549420
Chlorodibromomethane	ND		0.00379	1	09/29/2020 00:47	WG1549420
Chloroethane	ND		0.00758	1	09/29/2020 00:47	WG1549420
Chloroform	ND		0.00379	1	09/29/2020 00:47	WG1549420
Chloromethane	ND		0.0189	1	09/29/2020 00:47	WG1549420
2-Chlorotoluene	ND		0.00379	1	09/29/2020 00:47	WG1549420
4-Chlorotoluene	ND		0.00758	1	09/29/2020 00:47	WG1549420
1,2-Dibromo-3-Chloropropane	ND		0.0379	1	09/29/2020 00:47	WG1549420
1,2-Dibromoethane	ND		0.00379	1	09/29/2020 00:47	WG1549420
Dibromomethane	ND		0.00758	1	09/29/2020 00:47	WG1549420
1,2-Dichlorobenzene	ND		0.00758	1	09/29/2020 00:47	WG1549420
1,3-Dichlorobenzene	ND		0.00758	1	09/29/2020 00:47	WG1549420
1,4-Dichlorobenzene	ND		0.00758	1	09/29/2020 00:47	WG1549420
Dichlorodifluoromethane	ND		0.00379	1	09/29/2020 00:47	WG1549420
1,1-Dichloroethane	ND		0.00379	1	09/29/2020 00:47	WG1549420
1,2-Dichloroethane	ND		0.00379	1	09/29/2020 00:47	WG1549420

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	ND		0.00379	1	09/29/2020 00:47	WG1549420
cis-1,2-Dichloroethene	ND		0.00379	1	09/29/2020 00:47	WG1549420
trans-1,2-Dichloroethene	ND		0.00758	1	09/29/2020 00:47	WG1549420
1,2-Dichloropropane	ND		0.00758	1	09/29/2020 00:47	WG1549420
1,1-Dichloropropene	ND		0.00379	1	09/29/2020 00:47	WG1549420
1,3-Dichloropropane	ND		0.00758	1	09/29/2020 00:47	WG1549420
cis-1,3-Dichloropropene	ND		0.00379	1	09/29/2020 00:47	WG1549420
trans-1,3-Dichloropropene	ND		0.00758	1	09/29/2020 00:47	WG1549420
2,2-Dichloropropane	ND		0.00379	1	09/29/2020 00:47	WG1549420
Di-isopropyl ether	ND		0.00152	1	09/29/2020 00:47	WG1549420
Ethylbenzene	ND		0.00379	1	09/29/2020 00:47	WG1549420
Hexachloro-1,3-butadiene	ND		0.0379	1	09/29/2020 00:47	WG1549420
Isopropylbenzene	ND		0.00379	1	09/29/2020 00:47	WG1549420
p-Isopropyltoluene	ND		0.00758	1	09/29/2020 00:47	WG1549420
2-Butanone (MEK)	ND		0.152	1	09/29/2020 13:00	WG1550931
Methylene Chloride	ND		0.0379	1	09/29/2020 00:47	WG1549420
4-Methyl-2-pentanone (MIBK)	ND		0.0379	1	09/29/2020 00:47	WG1549420
Methyl tert-butyl ether	ND		0.00152	1	09/29/2020 00:47	WG1549420
Naphthalene	ND		0.0189	1	09/29/2020 00:47	WG1549420
n-Propylbenzene	ND		0.00758	1	09/29/2020 00:47	WG1549420
Styrene	ND		0.0189	1	09/29/2020 00:47	WG1549420
1,1,1,2-Tetrachloroethane	ND		0.00379	1	09/29/2020 00:47	WG1549420
1,1,2,2-Tetrachloroethane	ND		0.00379	1	09/29/2020 00:47	WG1549420
1,1,2-Trichlorotrifluoroethane	ND		0.00379	1	09/29/2020 00:47	WG1549420
Tetrachloroethene	ND		0.00379	1	09/29/2020 00:47	WG1549420
Toluene	ND		0.00758	1	09/29/2020 00:47	WG1549420
1,2,3-Trichlorobenzene	ND	J0	0.0189	1	09/29/2020 00:47	WG1549420
1,2,4-Trichlorobenzene	ND		0.0189	1	09/29/2020 00:47	WG1549420
1,1,1-Trichloroethane	ND		0.00379	1	09/29/2020 00:47	WG1549420
1,1,2-Trichloroethane	ND		0.00379	1	09/29/2020 00:47	WG1549420
Trichloroethene	ND		0.00152	1	09/29/2020 00:47	WG1549420
Trichlorofluoromethane	ND		0.00379	1	09/29/2020 00:47	WG1549420
1,2,3-Trichloropropane	ND		0.0189	1	09/29/2020 00:47	WG1549420
1,2,4-Trimethylbenzene	ND		0.00758	1	09/29/2020 00:47	WG1549420
1,2,3-Trimethylbenzene	ND		0.00758	1	09/29/2020 00:47	WG1549420
1,3,5-Trimethylbenzene	ND		0.00758	1	09/29/2020 00:47	WG1549420
Vinyl chloride	ND		0.00379	1	09/29/2020 00:47	WG1549420
Xylenes, Total	ND		0.00985	1	09/29/2020 00:47	WG1549420
(S) Toluene-d8	*110*		*75.0-131*		*09/29/2020 00:47*	WG1549420
(S) Toluene-d8	*100*		*75.0-131*		*09/29/2020 13:00*	WG1550931
(S) 4-Bromofluorobenzene	*104*		*67.0-138*		*09/29/2020 00:47*	WG1549420
(S) 4-Bromofluorobenzene	*110*		*67.0-138*		*09/29/2020 13:00*	WG1550931
(S) 1,2-Dichloroethane-d4	*93.2*		*70.0-130*		*09/29/2020 00:47*	WG1549420
(S) 1,2-Dichloroethane-d4	*104*		*70.0-130*		*09/29/2020 13:00*	WG1550931

Semi-Volatile Organic Compounds (GC) by Method KS MRH/HRH

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
MRH (C9-C18)	ND		12.2	1	09/28/2020 01:02	WG1548722
HRH (C19-C35)	ND		12.2	1	09/28/2020 01:02	WG1548722
(S) 1-Chloro-octadecane	*81.6*		*40.0-140*		*09/28/2020 01:02*	WG1548722

Pesticides (GC) by Method 8081B

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	ND		0.0244	1	09/24/2020 03:27	WG1547939
Alpha BHC	ND		0.0244	1	09/24/2020 03:27	WG1547939
Beta BHC	ND		0.0244	1	09/24/2020 03:27	WG1547939
Delta BHC	ND		0.0244	1	09/24/2020 03:27	WG1547939
Gamma BHC	ND		0.0244	1	09/24/2020 03:27	WG1547939
Chlordane	ND		0.365	1	09/24/2020 03:27	WG1547939
4,4-DDD	ND		0.0244	1	09/24/2020 03:27	WG1547939
4,4-DDE	ND		0.0244	1	09/24/2020 03:27	WG1547939
4,4-DDT	ND		0.0244	1	09/24/2020 03:27	WG1547939
Dieldrin	ND		0.0244	1	09/24/2020 03:27	WG1547939
Endosulfan I	ND		0.0244	1	09/24/2020 03:27	WG1547939
Endosulfan II	ND		0.0244	1	09/24/2020 03:27	WG1547939
Endosulfan sulfate	ND		0.0244	1	09/24/2020 03:27	WG1547939
Endrin	ND		0.0244	1	09/24/2020 03:27	WG1547939
Endrin aldehyde	ND		0.0244	1	09/24/2020 03:27	WG1547939
Endrin ketone	ND		0.0244	1	09/24/2020 03:27	WG1547939
Hexachlorobenzene	ND		0.0244	1	09/24/2020 03:27	WG1547939
Heptachlor	ND		0.0244	1	09/24/2020 03:27	WG1547939
Heptachlor epoxide	ND		0.0244	1	09/24/2020 03:27	WG1547939
Methoxychlor	ND		0.0244	1	09/24/2020 03:27	WG1547939
Toxaphene	ND		0.487	1	09/24/2020 03:27	WG1547939
(S) Decachlorobiphenyl	*67.1*		*10.0-135*		*09/24/2020 03:27*	WG1547939
(S) Tetrachloro-m-xylene	*71.8*		*10.0-139*		*09/24/2020 03:27*	WG1547939

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	80.6		1	09/27/2020 03:40	WG1549365

Mercury by Method 7471B

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	ND		0.0496	1	09/23/2020 12:52	WG1547742

Metals (ICP) by Method 6010D

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Arsenic	ND		2.48	1	09/24/2020 12:57	WG1547617
Barium	108		0.620	1	09/24/2020 12:57	WG1547617
Cadmium	ND		0.620	1	09/24/2020 12:57	WG1547617
Chromium	19.2		1.24	1	09/24/2020 12:57	WG1547617
Lead	31.2		0.620	1	09/24/2020 12:57	WG1547617
Selenium	ND		2.48	1	09/24/2020 12:57	WG1547617
Silver	ND		1.24	1	09/24/2020 12:57	WG1547617

Volatile Petroleum Hydrocarbons by Method KS LRH

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
LRH (C5-C8)	ND		7.70	1	09/24/2020 12:40	WG1548508
(S) 2,5-Dibromotoluene(FID)	*85.9*		*70.0-130*		*09/24/2020 12:40*	WG1548508

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND	J0	0.0768	1	09/29/2020 01:06	WG1549420
Acrylonitrile	ND		0.0192	1	09/29/2020 01:06	WG1549420
Benzene	0.0111		0.00154	1	09/29/2020 01:06	WG1549420
Bromobenzene	ND		0.0192	1	09/29/2020 01:06	WG1549420
Bromodichloromethane	ND		0.00384	1	09/29/2020 01:06	WG1549420
Bromoform	ND		0.0384	1	09/29/2020 01:06	WG1549420
Bromomethane	ND		0.0192	1	09/29/2020 01:06	WG1549420
n-Butylbenzene	ND		0.0192	1	09/29/2020 01:06	WG1549420
sec-Butylbenzene	ND		0.0192	1	09/29/2020 01:06	WG1549420
tert-Butylbenzene	ND		0.00768	1	09/29/2020 01:06	WG1549420
Carbon tetrachloride	ND		0.00768	1	09/29/2020 01:06	WG1549420
Chlorobenzene	ND		0.00384	1	09/29/2020 01:06	WG1549420
Chlorodibromomethane	ND		0.00384	1	09/29/2020 01:06	WG1549420
Chloroethane	ND		0.00768	1	09/29/2020 01:06	WG1549420
Chloroform	ND		0.00384	1	09/29/2020 01:06	WG1549420
Chloromethane	ND		0.0192	1	09/29/2020 01:06	WG1549420
2-Chlorotoluene	ND		0.00384	1	09/29/2020 01:06	WG1549420
4-Chlorotoluene	ND		0.00768	1	09/29/2020 01:06	WG1549420
1,2-Dibromo-3-Chloropropane	ND		0.0384	1	09/29/2020 01:06	WG1549420
1,2-Dibromoethane	ND		0.00384	1	09/29/2020 01:06	WG1549420
Dibromomethane	ND		0.00768	1	09/29/2020 01:06	WG1549420
1,2-Dichlorobenzene	ND		0.00768	1	09/29/2020 01:06	WG1549420
1,3-Dichlorobenzene	ND		0.00768	1	09/29/2020 01:06	WG1549420
1,4-Dichlorobenzene	ND		0.00768	1	09/29/2020 01:06	WG1549420
Dichlorodifluoromethane	ND		0.00384	1	09/29/2020 01:06	WG1549420
1,1-Dichloroethane	ND		0.00384	1	09/29/2020 01:06	WG1549420
1,2-Dichloroethane	ND		0.00384	1	09/29/2020 01:06	WG1549420

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	ND		0.00384	1	09/29/2020 01:06	WG1549420
cis-1,2-Dichloroethene	ND		0.00384	1	09/29/2020 01:06	WG1549420
trans-1,2-Dichloroethene	ND		0.00768	1	09/29/2020 01:06	WG1549420
1,2-Dichloropropane	ND		0.00768	1	09/29/2020 01:06	WG1549420
1,1-Dichloropropene	ND		0.00384	1	09/29/2020 01:06	WG1549420
1,3-Dichloropropane	ND		0.00768	1	09/29/2020 01:06	WG1549420
cis-1,3-Dichloropropene	ND		0.00384	1	09/29/2020 01:06	WG1549420
trans-1,3-Dichloropropene	ND		0.00768	1	09/29/2020 01:06	WG1549420
2,2-Dichloropropane	ND		0.00384	1	09/29/2020 01:06	WG1549420
Di-isopropyl ether	ND		0.00154	1	09/29/2020 01:06	WG1549420
Ethylbenzene	ND		0.00384	1	09/29/2020 01:06	WG1549420
Hexachloro-1,3-butadiene	ND		0.0384	1	09/29/2020 01:06	WG1549420
Isopropylbenzene	0.00489		0.00384	1	09/29/2020 01:06	WG1549420
p-Isopropyltoluene	ND		0.00768	1	09/29/2020 01:06	WG1549420
2-Butanone (MEK)	ND		0.154	1	09/29/2020 13:19	WG1550931
Methylene Chloride	ND		0.0384	1	09/29/2020 01:06	WG1549420
4-Methyl-2-pentanone (MIBK)	ND		0.0384	1	09/29/2020 01:06	WG1549420
Methyl tert-butyl ether	ND		0.00154	1	09/29/2020 01:06	WG1549420
Naphthalene	0.0254		0.0192	1	09/29/2020 01:06	WG1549420
n-Propylbenzene	0.00911		0.00768	1	09/29/2020 01:06	WG1549420
Styrene	ND		0.0192	1	09/29/2020 01:06	WG1549420
1,1,1,2-Tetrachloroethane	ND		0.00384	1	09/29/2020 01:06	WG1549420
1,1,2,2-Tetrachloroethane	ND		0.00384	1	09/29/2020 01:06	WG1549420
1,1,2-Trichlorotrifluoroethane	ND		0.00384	1	09/29/2020 01:06	WG1549420
Tetrachloroethene	ND		0.00384	1	09/29/2020 01:06	WG1549420
Toluene	ND		0.00768	1	09/29/2020 01:06	WG1549420
1,2,3-Trichlorobenzene	ND	J0	0.0192	1	09/29/2020 01:06	WG1549420
1,2,4-Trichlorobenzene	ND		0.0192	1	09/29/2020 01:06	WG1549420
1,1,1-Trichloroethane	ND		0.00384	1	09/29/2020 01:06	WG1549420
1,1,2-Trichloroethane	ND		0.00384	1	09/29/2020 01:06	WG1549420
Trichloroethene	ND		0.00154	1	09/29/2020 01:06	WG1549420
Trichlorofluoromethane	ND		0.00384	1	09/29/2020 01:06	WG1549420
1,2,3-Trichloropropane	ND		0.0192	1	09/29/2020 01:06	WG1549420
1,2,4-Trimethylbenzene	ND		0.00768	1	09/29/2020 01:06	WG1549420
1,2,3-Trimethylbenzene	ND		0.00768	1	09/29/2020 01:06	WG1549420
1,3,5-Trimethylbenzene	ND		0.00768	1	09/29/2020 01:06	WG1549420
Vinyl chloride	ND		0.00384	1	09/29/2020 01:06	WG1549420
Xylenes, Total	ND		0.00999	1	09/29/2020 01:06	WG1549420
(S) Toluene-d8	*99.3*		*75.0-131*		*09/29/2020 01:06*	WG1549420
(S) Toluene-d8	*99.2*		*75.0-131*		*09/29/2020 13:19*	WG1550931
(S) 4-Bromofluorobenzene	*98.1*		*67.0-138*		*09/29/2020 01:06*	WG1549420
(S) 4-Bromofluorobenzene	*106*		*67.0-138*		*09/29/2020 13:19*	WG1550931
(S) 1,2-Dichloroethane-d4	*92.6*		*70.0-130*		*09/29/2020 01:06*	WG1549420
(S) 1,2-Dichloroethane-d4	*97.8*		*70.0-130*		*09/29/2020 13:19*	WG1550931

Semi-Volatile Organic Compounds (GC) by Method KS MRH/HRH

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
MRH (C9-C18)	ND		12.4	1	09/29/2020 10:21	WG1548722
HRH (C19-C35)	18.6	B	12.4	1	09/29/2020 10:21	WG1548722
(S) 1-Chloro-octadecane	*93.1*		*40.0-140*		*09/29/2020 10:21*	WG1548722

Pesticides (GC) by Method 8081B

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	ND		0.0248	1	09/24/2020 04:07	WG1547939
Alpha BHC	ND		0.0248	1	09/24/2020 04:07	WG1547939
Beta BHC	ND		0.0248	1	09/24/2020 04:07	WG1547939
Delta BHC	ND		0.0248	1	09/24/2020 04:07	WG1547939
Gamma BHC	ND		0.0248	1	09/24/2020 04:07	WG1547939
Chlordane	ND		0.372	1	09/24/2020 04:07	WG1547939
4,4-DDD	ND		0.0248	1	09/24/2020 04:07	WG1547939
4,4-DDE	ND		0.0248	1	09/24/2020 04:07	WG1547939
4,4-DDT	ND		0.0248	1	09/24/2020 04:07	WG1547939
Dieldrin	ND		0.0248	1	09/24/2020 04:07	WG1547939
Endosulfan I	ND		0.0248	1	09/24/2020 04:07	WG1547939
Endosulfan II	ND		0.0248	1	09/24/2020 04:07	WG1547939
Endosulfan sulfate	ND		0.0248	1	09/24/2020 04:07	WG1547939
Endrin	ND		0.0248	1	09/24/2020 04:07	WG1547939
Endrin aldehyde	ND		0.0248	1	09/24/2020 04:07	WG1547939
Endrin ketone	ND		0.0248	1	09/24/2020 04:07	WG1547939
Hexachlorobenzene	ND		0.0248	1	09/24/2020 04:07	WG1547939
Heptachlor	ND		0.0248	1	09/24/2020 04:07	WG1547939
Heptachlor epoxide	ND		0.0248	1	09/24/2020 04:07	WG1547939
Methoxychlor	ND		0.0248	1	09/24/2020 04:07	WG1547939
Toxaphene	ND		0.496	1	09/24/2020 04:07	WG1547939
(S) Decachlorobiphenyl	*41.7*		*10.0-135*		*09/24/2020 04:07*	WG1547939
(S) Tetrachloro-m-xylene	*42.6*		*10.0-139*		*09/24/2020 04:07*	WG1547939

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	0.274	J5	0.0826	2	09/29/2020 16:33	WG1550290
Acenaphthylene	ND		0.0826	2	09/29/2020 16:33	WG1550290
Anthracene	0.133	J3	0.0826	2	09/29/2020 16:33	WG1550290
Benzidine	ND		4.14	2	09/29/2020 16:33	WG1550290
Benzo(a)anthracene	0.133	J3 J5	0.0826	2	09/29/2020 16:33	WG1550290
Benzo(b)fluoranthene	0.148	J3 J5	0.0826	2	09/29/2020 16:33	WG1550290
Benzo(k)fluoranthene	ND		0.0826	2	09/29/2020 16:33	WG1550290
Benzo(g,h,i)perylene	ND		0.0826	2	09/29/2020 16:33	WG1550290
Benzo(a)pyrene	0.108	J3 J5	0.0826	2	09/29/2020 16:33	WG1550290
Bis(2-chlorethoxy)methane	ND		0.826	2	09/29/2020 16:33	WG1550290
Bis(2-chloroethyl)ether	ND		0.826	2	09/29/2020 16:33	WG1550290
2,2-Oxybis(1-Chloropropane)	ND		0.826	2	09/29/2020 16:33	WG1550290
4-Bromophenyl-phenylether	ND		0.826	2	09/29/2020 16:33	WG1550290
2-Chloronaphthalene	ND		0.0826	2	09/29/2020 16:33	WG1550290
4-Chlorophenyl-phenylether	ND		0.826	2	09/29/2020 16:33	WG1550290
Chrysene	0.141	J3 J5	0.0826	2	09/29/2020 16:33	WG1550290
Dibenz(a,h)anthracene	ND		0.0826	2	09/29/2020 16:33	WG1550290
3,3-Dichlorobenzidine	ND		0.826	2	09/29/2020 16:33	WG1550290
2,4-Dinitrotoluene	ND		0.826	2	09/29/2020 16:33	WG1550290
2,6-Dinitrotoluene	ND		0.826	2	09/29/2020 16:33	WG1550290
Fluoranthene	0.401	J3 J5	0.0826	2	09/29/2020 16:33	WG1550290
Fluorene	0.243	J5	0.0826	2	09/29/2020 16:33	WG1550290
Hexachlorobenzene	ND		0.826	2	09/29/2020 16:33	WG1550290
Hexachloro-1,3-butadiene	ND		0.826	2	09/29/2020 16:33	WG1550290
Hexachlorocyclopentadiene	ND	J6	0.826	2	09/29/2020 16:33	WG1550290
Hexachloroethane	ND		0.826	2	09/29/2020 16:33	WG1550290
Indeno(1,2,3-cd)pyrene	ND		0.0826	2	09/29/2020 16:33	WG1550290
Isophorone	ND		0.826	2	09/29/2020 16:33	WG1550290
Naphthalene	0.135		0.0826	2	09/29/2020 16:33	WG1550290

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Nitrobenzene	ND		0.826	2	09/29/2020 16:33	WG1550290
n-Nitrosodimethylamine	ND		0.826	2	09/29/2020 16:33	WG1550290
n-Nitrosodiphenylamine	ND		0.826	2	09/29/2020 16:33	WG1550290
n-Nitrosodi-n-propylamine	ND		0.826	2	09/29/2020 16:33	WG1550290
Phenanthrene	0.581	J3 J5	0.0826	2	09/29/2020 16:33	WG1550290
Benzylbutyl phthalate	ND		0.826	2	09/29/2020 16:33	WG1550290
Bis(2-ethylhexyl)phthalate	ND	J3 J5	0.826	2	09/29/2020 16:33	WG1550290
Di-n-butyl phthalate	ND		0.826	2	09/29/2020 16:33	WG1550290
Diethyl phthalate	ND		0.826	2	09/29/2020 16:33	WG1550290
Dimethyl phthalate	ND		0.826	2	09/29/2020 16:33	WG1550290
Di-n-octyl phthalate	ND		0.826	2	09/29/2020 16:33	WG1550290
Pyrene	0.304	J3 J5	0.0826	2	09/29/2020 16:33	WG1550290
1,2,4-Trichlorobenzene	ND		0.826	2	09/29/2020 16:33	WG1550290
4-Chloro-3-methylphenol	ND		0.826	2	09/29/2020 16:33	WG1550290
2-Chlorophenol	ND		0.826	2	09/29/2020 16:33	WG1550290
2,4-Dichlorophenol	ND		0.826	2	09/29/2020 16:33	WG1550290
2,4-Dimethylphenol	ND		0.826	2	09/29/2020 16:33	WG1550290
4,6-Dinitro-2-methylphenol	ND		0.826	2	09/29/2020 16:33	WG1550290
2,4-Dinitrophenol	ND	J6	0.826	2	09/29/2020 16:33	WG1550290
2-Nitrophenol	ND		0.826	2	09/29/2020 16:33	WG1550290
4-Nitrophenol	ND		0.826	2	09/29/2020 16:33	WG1550290
Pentachlorophenol	ND		0.826	2	09/29/2020 16:33	WG1550290
Phenol	ND		0.826	2	09/29/2020 16:33	WG1550290
2,4,6-Trichlorophenol	ND		0.826	2	09/29/2020 16:33	WG1550290
(S) Nitrobenzene-d5	*46.6*		*10.0-122*		*09/29/2020 16:33*	WG1550290
(S) 2-Fluorobiphenyl	*58.1*		*15.0-120*		*09/29/2020 16:33*	WG1550290
(S) p-Terphenyl-d14	*73.9*		*10.0-120*		*09/29/2020 16:33*	WG1550290
(S) Phenol-d5	*51.9*		*10.0-120*		*09/29/2020 16:33*	WG1550290
(S) 2-Fluorophenol	*55.4*		*12.0-120*		*09/29/2020 16:33*	WG1550290
(S) 2,4,6-Tribromophenol	*82.5*		*10.0-127*		*09/29/2020 16:33*	WG1550290

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	79.7		1	09/27/2020 03:40	WG1549365

Mercury by Method 7471B

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	ND		0.0502	1	09/23/2020 12:42	WG1547742

Metals (ICP) by Method 6010D

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Arsenic	ND		2.51	1	09/24/2020 13:00	WG1547617
Barium	195		0.627	1	09/24/2020 13:00	WG1547617
Cadmium	ND		0.627	1	09/24/2020 13:00	WG1547617
Chromium	24.2		1.25	1	09/24/2020 13:00	WG1547617
Lead	21.4		0.627	1	09/24/2020 13:00	WG1547617
Selenium	ND		2.51	1	09/24/2020 13:00	WG1547617
Silver	ND		1.25	1	09/24/2020 13:00	WG1547617

Volatile Petroleum Hydrocarbons by Method KS LRH

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
LRH (C5-C8)	ND		7.88	1	09/24/2020 13:13	WG1548508
(S) 2,5-Dibromotoluene(FID)	*84.1*		*70.0-130*		*09/24/2020 13:13*	WG1548508

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND	J0	0.0791	1	09/29/2020 01:25	WG1549420
Acrylonitrile	ND		0.0198	1	09/29/2020 01:25	WG1549420
Benzene	ND		0.00158	1	09/29/2020 01:25	WG1549420
Bromobenzene	ND		0.0198	1	09/29/2020 01:25	WG1549420
Bromodichloromethane	ND		0.00395	1	09/29/2020 01:25	WG1549420
Bromoform	ND		0.0395	1	09/29/2020 01:25	WG1549420
Bromomethane	ND		0.0198	1	09/29/2020 01:25	WG1549420
n-Butylbenzene	ND		0.0198	1	09/29/2020 01:25	WG1549420
sec-Butylbenzene	ND		0.0198	1	09/29/2020 01:25	WG1549420
tert-Butylbenzene	ND		0.00791	1	09/29/2020 01:25	WG1549420
Carbon tetrachloride	ND		0.00791	1	09/29/2020 01:25	WG1549420
Chlorobenzene	ND		0.00395	1	09/29/2020 01:25	WG1549420
Chlorodibromomethane	ND		0.00395	1	09/29/2020 01:25	WG1549420
Chloroethane	ND		0.00791	1	09/29/2020 01:25	WG1549420
Chloroform	ND		0.00395	1	09/29/2020 01:25	WG1549420
Chloromethane	ND		0.0198	1	09/29/2020 01:25	WG1549420
2-Chlorotoluene	ND		0.00395	1	09/29/2020 01:25	WG1549420
4-Chlorotoluene	ND		0.00791	1	09/29/2020 01:25	WG1549420
1,2-Dibromo-3-Chloropropane	ND		0.0395	1	09/29/2020 01:25	WG1549420
1,2-Dibromoethane	ND		0.00395	1	09/29/2020 01:25	WG1549420
Dibromomethane	ND		0.00791	1	09/29/2020 01:25	WG1549420
1,2-Dichlorobenzene	ND		0.00791	1	09/29/2020 01:25	WG1549420
1,3-Dichlorobenzene	ND		0.00791	1	09/29/2020 01:25	WG1549420
1,4-Dichlorobenzene	ND		0.00791	1	09/29/2020 01:25	WG1549420
Dichlorodifluoromethane	ND		0.00395	1	09/29/2020 01:25	WG1549420
1,1-Dichloroethane	ND		0.00395	1	09/29/2020 01:25	WG1549420
1,2-Dichloroethane	ND		0.00395	1	09/29/2020 01:25	WG1549420

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	ND		0.00395	1	09/29/2020 01:25	WG1549420
cis-1,2-Dichloroethene	ND		0.00395	1	09/29/2020 01:25	WG1549420
trans-1,2-Dichloroethene	ND		0.00791	1	09/29/2020 01:25	WG1549420
1,2-Dichloropropane	ND		0.00791	1	09/29/2020 01:25	WG1549420
1,1-Dichloropropene	ND		0.00395	1	09/29/2020 01:25	WG1549420
1,3-Dichloropropane	ND		0.00791	1	09/29/2020 01:25	WG1549420
cis-1,3-Dichloropropene	ND		0.00395	1	09/29/2020 01:25	WG1549420
trans-1,3-Dichloropropene	ND		0.00791	1	09/29/2020 01:25	WG1549420
2,2-Dichloropropane	ND		0.00395	1	09/29/2020 01:25	WG1549420
Di-isopropyl ether	ND		0.00158	1	09/29/2020 01:25	WG1549420
Ethylbenzene	ND		0.00395	1	09/29/2020 01:25	WG1549420
Hexachloro-1,3-butadiene	ND		0.0395	1	09/29/2020 01:25	WG1549420
Isopropylbenzene	ND		0.00395	1	09/29/2020 01:25	WG1549420
p-Isopropyltoluene	ND		0.00791	1	09/29/2020 01:25	WG1549420
2-Butanone (MEK)	ND		0.158	1	09/29/2020 13:39	WG1550931
Methylene Chloride	ND		0.0395	1	09/29/2020 01:25	WG1549420
4-Methyl-2-pentanone (MIBK)	ND		0.0395	1	09/29/2020 01:25	WG1549420
Methyl tert-butyl ether	ND		0.00158	1	09/29/2020 01:25	WG1549420
Naphthalene	ND		0.0198	1	09/29/2020 01:25	WG1549420
n-Propylbenzene	ND		0.00791	1	09/29/2020 01:25	WG1549420
Styrene	ND		0.0198	1	09/29/2020 01:25	WG1549420
1,1,1,2-Tetrachloroethane	ND		0.00395	1	09/29/2020 01:25	WG1549420
1,1,2,2-Tetrachloroethane	ND		0.00395	1	09/29/2020 01:25	WG1549420
1,1,2-Trichlorotrifluoroethane	ND		0.00395	1	09/29/2020 01:25	WG1549420
Tetrachloroethene	ND		0.00395	1	09/29/2020 01:25	WG1549420
Toluene	ND		0.00791	1	09/29/2020 01:25	WG1549420
1,2,3-Trichlorobenzene	ND	J0	0.0198	1	09/29/2020 01:25	WG1549420
1,2,4-Trichlorobenzene	ND		0.0198	1	09/29/2020 01:25	WG1549420
1,1,1-Trichloroethane	ND		0.00395	1	09/29/2020 01:25	WG1549420
1,1,2-Trichloroethane	ND		0.00395	1	09/29/2020 01:25	WG1549420
Trichloroethene	ND		0.00158	1	09/29/2020 01:25	WG1549420
Trichlorofluoromethane	ND		0.00395	1	09/29/2020 01:25	WG1549420
1,2,3-Trichloropropane	ND		0.0198	1	09/29/2020 01:25	WG1549420
1,2,4-Trimethylbenzene	ND		0.00791	1	09/29/2020 01:25	WG1549420
1,2,3-Trimethylbenzene	ND		0.00791	1	09/29/2020 01:25	WG1549420
1,3,5-Trimethylbenzene	ND		0.00791	1	09/29/2020 01:25	WG1549420
Vinyl chloride	ND		0.00395	1	09/29/2020 01:25	WG1549420
Xylenes, Total	ND		0.0103	1	09/29/2020 01:25	WG1549420
(S) Toluene-d8	*109*		*75.0-131*		*09/29/2020 01:25*	WG1549420
(S) Toluene-d8	*97.9*		*75.0-131*		*09/29/2020 13:39*	WG1550931
(S) 4-Bromofluorobenzene	*102*		*67.0-138*		*09/29/2020 01:25*	WG1549420
(S) 4-Bromofluorobenzene	*106*		*67.0-138*		*09/29/2020 13:39*	WG1550931
(S) 1,2-Dichloroethane-d4	*87.1*		*70.0-130*		*09/29/2020 01:25*	WG1549420
(S) 1,2-Dichloroethane-d4	*102*		*70.0-130*		*09/29/2020 13:39*	WG1550931

Semi-Volatile Organic Compounds (GC) by Method KS MRH/HRH

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
MRH (C9-C18)	ND		12.5	1	09/28/2020 02:10	WG1548722
HRH (C19-C35)	ND		12.5	1	09/28/2020 02:10	WG1548722
(S) 1-Chloro-octadecane	*86.1*		*40.0-140*		*09/28/2020 02:10*	WG1548722

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	ND		0.0251	1	09/28/2020 11:12	WG1548725
Alpha BHC	ND		0.0251	1	09/28/2020 11:12	WG1548725
Beta BHC	ND		0.0251	1	09/28/2020 11:12	WG1548725
Delta BHC	ND		0.0251	1	09/28/2020 11:12	WG1548725
Gamma BHC	ND		0.0251	1	09/28/2020 11:12	WG1548725
Chlordane	ND		0.376	1	09/28/2020 11:12	WG1548725
4,4-DDD	ND		0.0251	1	09/28/2020 11:12	WG1548725
4,4-DDE	ND		0.0251	1	09/28/2020 11:12	WG1548725
4,4-DDT	ND		0.0251	1	09/28/2020 11:12	WG1548725
Dieldrin	ND		0.0251	1	09/28/2020 11:12	WG1548725
Endosulfan I	ND		0.0251	1	09/28/2020 11:12	WG1548725
Endosulfan II	ND		0.0251	1	09/28/2020 11:12	WG1548725
Endosulfan sulfate	ND		0.0251	1	09/28/2020 11:12	WG1548725
Endrin	ND		0.0251	1	09/28/2020 11:12	WG1548725
Endrin aldehyde	ND		0.0251	1	09/28/2020 11:12	WG1548725
Endrin ketone	ND		0.0251	1	09/28/2020 11:12	WG1548725
Heptachlor	ND		0.0251	1	09/28/2020 11:12	WG1548725
Heptachlor epoxide	ND		0.0251	1	09/28/2020 11:12	WG1548725
Hexachlorobenzene	ND		0.0251	1	09/28/2020 11:12	WG1548725
Methoxychlor	ND		0.0251	1	09/28/2020 11:12	WG1548725
Toxaphene	ND		0.502	1	09/28/2020 11:12	WG1548725
(S) Decachlorobiphenyl	*85.5*		*10.0-135*		*09/28/2020 11:12*	WG1548725
(S) Tetrachloro-m-xylene	*84.4*		*10.0-139*		*09/28/2020 11:12*	WG1548725

Polychlorinated Biphenyls (GC) by Method 8082

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
PCB 1016	ND		0.0427	1	09/28/2020 13:11	WG1548725
PCB 1221	ND		0.0427	1	09/28/2020 13:11	WG1548725
PCB 1232	ND		0.0427	1	09/28/2020 13:11	WG1548725
PCB 1242	ND		0.0427	1	09/28/2020 13:11	WG1548725
PCB 1248	ND		0.0213	1	09/28/2020 13:11	WG1548725
PCB 1254	ND		0.0213	1	09/28/2020 13:11	WG1548725
PCB 1260	ND		0.0213	1	09/28/2020 13:11	WG1548725
(S) Decachlorobiphenyl	*92.5*		*10.0-135*		*09/28/2020 13:11*	WG1548725
(S) Tetrachloro-m-xylene	*101*		*10.0-139*		*09/28/2020 13:11*	WG1548725

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	82.8		1	09/27/2020 03:40	WG1549365

Mercury by Method 7471B

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	ND		0.0483	1	09/23/2020 12:55	WG1547742

Metals (ICP) by Method 6010D

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Arsenic	ND		2.42	1	09/24/2020 13:02	WG1547617
Barium	168		0.604	1	09/24/2020 13:02	WG1547617
Cadmium	ND		0.604	1	09/24/2020 13:02	WG1547617
Chromium	20.2		1.21	1	09/24/2020 13:02	WG1547617
Lead	18.1		0.604	1	09/24/2020 13:02	WG1547617
Selenium	ND		2.42	1	09/24/2020 13:02	WG1547617
Silver	ND		1.21	1	09/24/2020 13:02	WG1547617

Volatile Petroleum Hydrocarbons by Method KS LRH

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
LRH (C5-C8)	ND		7.36	1	09/24/2020 13:46	WG1548508
(S) 2,5-Dibromotoluene(FID)	*86.7*		*70.0-130*		*09/24/2020 13:46*	WG1548508

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND	J0	0.0740	1	09/29/2020 01:44	WG1549420
Acrylonitrile	ND		0.0185	1	09/29/2020 01:44	WG1549420
Benzene	ND		0.00148	1	09/29/2020 01:44	WG1549420
Bromobenzene	ND		0.0185	1	09/29/2020 01:44	WG1549420
Bromodichloromethane	ND		0.00370	1	09/29/2020 01:44	WG1549420
Bromoform	ND		0.0370	1	09/29/2020 01:44	WG1549420
Bromomethane	ND		0.0185	1	09/29/2020 01:44	WG1549420
n-Butylbenzene	ND		0.0185	1	09/29/2020 01:44	WG1549420
sec-Butylbenzene	ND		0.0185	1	09/29/2020 01:44	WG1549420
tert-Butylbenzene	ND		0.00740	1	09/29/2020 01:44	WG1549420
Carbon tetrachloride	ND		0.00740	1	09/29/2020 01:44	WG1549420
Chlorobenzene	ND		0.00370	1	09/29/2020 01:44	WG1549420
Chlorodibromomethane	ND		0.00370	1	09/29/2020 01:44	WG1549420
Chloroethane	ND		0.00740	1	09/29/2020 01:44	WG1549420
Chloroform	ND		0.00370	1	09/29/2020 01:44	WG1549420
Chloromethane	ND		0.0185	1	09/29/2020 01:44	WG1549420
2-Chlorotoluene	ND		0.00370	1	09/29/2020 01:44	WG1549420
4-Chlorotoluene	ND		0.00740	1	09/29/2020 01:44	WG1549420
1,2-Dibromo-3-Chloropropane	ND		0.0370	1	09/29/2020 01:44	WG1549420
1,2-Dibromoethane	ND		0.00370	1	09/29/2020 01:44	WG1549420
Dibromomethane	ND		0.00740	1	09/29/2020 01:44	WG1549420
1,2-Dichlorobenzene	ND		0.00740	1	09/29/2020 01:44	WG1549420
1,3-Dichlorobenzene	ND		0.00740	1	09/29/2020 01:44	WG1549420
1,4-Dichlorobenzene	ND		0.00740	1	09/29/2020 01:44	WG1549420
Dichlorodifluoromethane	ND		0.00370	1	09/29/2020 01:44	WG1549420
1,1-Dichloroethane	ND		0.00370	1	09/29/2020 01:44	WG1549420
1,2-Dichloroethane	ND		0.00370	1	09/29/2020 01:44	WG1549420

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	ND		0.00370	1	09/29/2020 01:44	WG1549420
cis-1,2-Dichloroethene	ND		0.00370	1	09/29/2020 01:44	WG1549420
trans-1,2-Dichloroethene	ND		0.00740	1	09/29/2020 01:44	WG1549420
1,2-Dichloropropane	ND		0.00740	1	09/29/2020 01:44	WG1549420
1,1-Dichloropropene	ND		0.00370	1	09/29/2020 01:44	WG1549420
1,3-Dichloropropane	ND		0.00740	1	09/29/2020 01:44	WG1549420
cis-1,3-Dichloropropene	ND		0.00370	1	09/29/2020 01:44	WG1549420
trans-1,3-Dichloropropene	ND		0.00740	1	09/29/2020 01:44	WG1549420
2,2-Dichloropropane	ND		0.00370	1	09/29/2020 01:44	WG1549420
Di-isopropyl ether	ND		0.00148	1	09/29/2020 01:44	WG1549420
Ethylbenzene	ND		0.00370	1	09/29/2020 01:44	WG1549420
Hexachloro-1,3-butadiene	ND		0.0370	1	09/29/2020 01:44	WG1549420
Isopropylbenzene	ND		0.00370	1	09/29/2020 01:44	WG1549420
p-Isopropyltoluene	ND		0.00740	1	09/29/2020 01:44	WG1549420
2-Butanone (MEK)	ND		0.148	1	09/29/2020 13:58	WG1550931
Methylene Chloride	ND		0.0370	1	09/29/2020 01:44	WG1549420
4-Methyl-2-pentanone (MIBK)	ND		0.0370	1	09/29/2020 01:44	WG1549420
Methyl tert-butyl ether	ND		0.00148	1	09/29/2020 01:44	WG1549420
Naphthalene	ND		0.0185	1	09/29/2020 01:44	WG1549420
n-Propylbenzene	ND		0.00740	1	09/29/2020 01:44	WG1549420
Styrene	ND		0.0185	1	09/29/2020 01:44	WG1549420
1,1,1,2-Tetrachloroethane	ND		0.00370	1	09/29/2020 01:44	WG1549420
1,1,2,2-Tetrachloroethane	ND		0.00370	1	09/29/2020 01:44	WG1549420
1,1,2-Trichlorotrifluoroethane	ND		0.00370	1	09/29/2020 01:44	WG1549420
Tetrachloroethene	ND		0.00370	1	09/29/2020 01:44	WG1549420
Toluene	ND		0.00740	1	09/29/2020 01:44	WG1549420
1,2,3-Trichlorobenzene	ND	J0	0.0185	1	09/29/2020 01:44	WG1549420
1,2,4-Trichlorobenzene	ND		0.0185	1	09/29/2020 01:44	WG1549420
1,1,1-Trichloroethane	ND		0.00370	1	09/29/2020 01:44	WG1549420
1,1,2-Trichloroethane	ND		0.00370	1	09/29/2020 01:44	WG1549420
Trichloroethene	ND		0.00148	1	09/29/2020 01:44	WG1549420
Trichlorofluoromethane	ND		0.00370	1	09/29/2020 01:44	WG1549420
1,2,3-Trichloropropane	ND		0.0185	1	09/29/2020 01:44	WG1549420
1,2,4-Trimethylbenzene	ND		0.00740	1	09/29/2020 01:44	WG1549420
1,2,3-Trimethylbenzene	ND		0.00740	1	09/29/2020 01:44	WG1549420
1,3,5-Trimethylbenzene	ND		0.00740	1	09/29/2020 01:44	WG1549420
Vinyl chloride	ND		0.00370	1	09/29/2020 01:44	WG1549420
Xylenes, Total	ND		0.00962	1	09/29/2020 01:44	WG1549420
(S) Toluene-d8	*98.9*		*75.0-131*		*09/29/2020 01:44*	WG1549420
(S) Toluene-d8	*99.1*		*75.0-131*		*09/29/2020 13:58*	WG1550931
(S) 4-Bromofluorobenzene	*96.3*		*67.0-138*		*09/29/2020 01:44*	WG1549420
(S) 4-Bromofluorobenzene	*107*		*67.0-138*		*09/29/2020 13:58*	WG1550931
(S) 1,2-Dichloroethane-d4	*89.3*		*70.0-130*		*09/29/2020 01:44*	WG1549420
(S) 1,2-Dichloroethane-d4	*98.3*		*70.0-130*		*09/29/2020 13:58*	WG1550931

Semi-Volatile Organic Compounds (GC) by Method KS MRH/HRH

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
MRH (C9-C18)	ND		12.1	1	09/28/2020 01:25	WG1548722
HRH (C19-C35)	ND		12.1	1	09/28/2020 01:25	WG1548722
(S) 1-Chloro-octadecane	*82.3*		*40.0-140*		*09/28/2020 01:25*	WG1548722

Pesticides (GC) by Method 8081B

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	ND		0.0242	1	09/24/2020 04:20	WG1547939
Alpha BHC	ND		0.0242	1	09/24/2020 04:20	WG1547939
Beta BHC	ND		0.0242	1	09/24/2020 04:20	WG1547939
Delta BHC	ND		0.0242	1	09/24/2020 04:20	WG1547939
Gamma BHC	ND		0.0242	1	09/24/2020 04:20	WG1547939
Chlordane	ND		0.362	1	09/24/2020 04:20	WG1547939
4,4-DDD	ND		0.0242	1	09/24/2020 04:20	WG1547939
4,4-DDE	ND		0.0242	1	09/24/2020 04:20	WG1547939
4,4-DDT	ND		0.0242	1	09/24/2020 04:20	WG1547939
Dieldrin	ND		0.0242	1	09/24/2020 04:20	WG1547939
Endosulfan I	ND		0.0242	1	09/24/2020 04:20	WG1547939
Endosulfan II	ND		0.0242	1	09/24/2020 04:20	WG1547939
Endosulfan sulfate	ND		0.0242	1	09/24/2020 04:20	WG1547939
Endrin	ND		0.0242	1	09/24/2020 04:20	WG1547939
Endrin aldehyde	ND		0.0242	1	09/24/2020 04:20	WG1547939
Endrin ketone	ND		0.0242	1	09/24/2020 04:20	WG1547939
Hexachlorobenzene	ND		0.0242	1	09/24/2020 04:20	WG1547939
Heptachlor	ND		0.0242	1	09/24/2020 04:20	WG1547939
Heptachlor epoxide	ND		0.0242	1	09/24/2020 04:20	WG1547939
Methoxychlor	ND		0.0242	1	09/24/2020 04:20	WG1547939
Toxaphene	ND		0.483	1	09/24/2020 04:20	WG1547939
(S) Decachlorobiphenyl	*56.9*		*10.0-135*		*09/24/2020 04:20*	WG1547939
(S) Tetrachloro-m-xylene	*60.8*		*10.0-139*		*09/24/2020 04:20*	WG1547939

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	83.1		1	09/27/2020 03:40	WG1549365

Mercury by Method 7471B

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	0.0513		0.0481	1	09/23/2020 12:57	WG1547742

Metals (ICP) by Method 6010D

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Arsenic	4.01		2.41	1	09/24/2020 13:05	WG1547617
Barium	232		0.602	1	09/24/2020 13:05	WG1547617
Cadmium	ND		0.602	1	09/24/2020 13:05	WG1547617
Chromium	18.9		1.20	1	09/24/2020 13:05	WG1547617
Lead	38.2		0.602	1	09/24/2020 13:05	WG1547617
Selenium	ND		2.41	1	09/24/2020 13:05	WG1547617
Silver	ND		1.20	1	09/24/2020 13:05	WG1547617

Volatile Petroleum Hydrocarbons by Method KS LRH

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
LRH (C5-C8)	ND		7.32	1	09/24/2020 14:18	WG1548508
(S) 2,5-Dibromotoluene(FID)	*84.8*		*70.0-130*		*09/24/2020 14:18*	WG1548508

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND	J0	0.0739	1	09/29/2020 02:03	WG1549420
Acrylonitrile	ND		0.0185	1	09/29/2020 02:03	WG1549420
Benzene	ND		0.00148	1	09/29/2020 02:03	WG1549420
Bromobenzene	ND		0.0185	1	09/29/2020 02:03	WG1549420
Bromodichloromethane	ND		0.00369	1	09/29/2020 02:03	WG1549420
Bromoform	ND		0.0369	1	09/29/2020 02:03	WG1549420
Bromomethane	ND		0.0185	1	09/29/2020 02:03	WG1549420
n-Butylbenzene	ND		0.0185	1	09/29/2020 02:03	WG1549420
sec-Butylbenzene	ND		0.0185	1	09/29/2020 02:03	WG1549420
tert-Butylbenzene	ND		0.00739	1	09/29/2020 02:03	WG1549420
Carbon tetrachloride	ND		0.00739	1	09/29/2020 02:03	WG1549420
Chlorobenzene	ND		0.00369	1	09/29/2020 02:03	WG1549420
Chlorodibromomethane	ND		0.00369	1	09/29/2020 02:03	WG1549420
Chloroethane	ND		0.00739	1	09/29/2020 02:03	WG1549420
Chloroform	ND		0.00369	1	09/29/2020 02:03	WG1549420
Chloromethane	ND		0.0185	1	09/29/2020 02:03	WG1549420
2-Chlorotoluene	ND		0.00369	1	09/29/2020 02:03	WG1549420
4-Chlorotoluene	ND		0.00739	1	09/29/2020 02:03	WG1549420
1,2-Dibromo-3-Chloropropane	ND		0.0369	1	09/29/2020 02:03	WG1549420
1,2-Dibromoethane	ND		0.00369	1	09/29/2020 02:03	WG1549420
Dibromomethane	ND		0.00739	1	09/29/2020 02:03	WG1549420
1,2-Dichlorobenzene	ND		0.00739	1	09/29/2020 02:03	WG1549420
1,3-Dichlorobenzene	ND		0.00739	1	09/29/2020 02:03	WG1549420
1,4-Dichlorobenzene	ND		0.00739	1	09/29/2020 02:03	WG1549420
Dichlorodifluoromethane	ND		0.00369	1	09/29/2020 02:03	WG1549420
1,1-Dichloroethane	ND		0.00369	1	09/29/2020 02:03	WG1549420
1,2-Dichloroethane	ND		0.00369	1	09/29/2020 02:03	WG1549420

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	ND		0.00369	1	09/29/2020 02:03	WG1549420
cis-1,2-Dichloroethene	ND		0.00369	1	09/29/2020 02:03	WG1549420
trans-1,2-Dichloroethene	ND		0.00739	1	09/29/2020 02:03	WG1549420
1,2-Dichloropropane	ND		0.00739	1	09/29/2020 02:03	WG1549420
1,1-Dichloropropene	ND		0.00369	1	09/29/2020 02:03	WG1549420
1,3-Dichloropropane	ND		0.00739	1	09/29/2020 02:03	WG1549420
cis-1,3-Dichloropropene	ND		0.00369	1	09/29/2020 02:03	WG1549420
trans-1,3-Dichloropropene	ND		0.00739	1	09/29/2020 02:03	WG1549420
2,2-Dichloropropane	ND		0.00369	1	09/29/2020 02:03	WG1549420
Di-isopropyl ether	ND		0.00148	1	09/29/2020 02:03	WG1549420
Ethylbenzene	ND		0.00369	1	09/29/2020 02:03	WG1549420
Hexachloro-1,3-butadiene	ND		0.0369	1	09/29/2020 02:03	WG1549420
Isopropylbenzene	ND		0.00369	1	09/29/2020 02:03	WG1549420
p-Isopropyltoluene	ND		0.00739	1	09/29/2020 02:03	WG1549420
2-Butanone (MEK)	ND		0.148	1	09/29/2020 14:36	WG1550931
Methylene Chloride	ND		0.0369	1	09/29/2020 02:03	WG1549420
4-Methyl-2-pentanone (MIBK)	ND		0.0369	1	09/29/2020 02:03	WG1549420
Methyl tert-butyl ether	ND		0.00148	1	09/29/2020 02:03	WG1549420
Naphthalene	ND		0.0185	1	09/29/2020 02:03	WG1549420
n-Propylbenzene	ND		0.00739	1	09/29/2020 02:03	WG1549420
Styrene	ND		0.0185	1	09/29/2020 02:03	WG1549420
1,1,1,2-Tetrachloroethane	ND		0.00369	1	09/29/2020 02:03	WG1549420
1,1,2,2-Tetrachloroethane	ND		0.00369	1	09/29/2020 02:03	WG1549420
1,1,2-Trichlorotrifluoroethane	ND		0.00369	1	09/29/2020 02:03	WG1549420
Tetrachloroethene	ND		0.00369	1	09/29/2020 02:03	WG1549420
Toluene	ND		0.00739	1	09/29/2020 02:03	WG1549420
1,2,3-Trichlorobenzene	ND	J0	0.0185	1	09/29/2020 02:03	WG1549420
1,2,4-Trichlorobenzene	ND		0.0185	1	09/29/2020 02:03	WG1549420
1,1,1-Trichloroethane	ND		0.00369	1	09/29/2020 02:03	WG1549420
1,1,2-Trichloroethane	ND		0.00369	1	09/29/2020 02:03	WG1549420
Trichloroethene	ND		0.00148	1	09/29/2020 02:03	WG1549420
Trichlorofluoromethane	ND		0.00369	1	09/29/2020 02:03	WG1549420
1,2,3-Trichloropropane	ND		0.0185	1	09/29/2020 02:03	WG1549420
1,2,4-Trimethylbenzene	ND		0.00739	1	09/29/2020 02:03	WG1549420
1,2,3-Trimethylbenzene	ND		0.00739	1	09/29/2020 02:03	WG1549420
1,3,5-Trimethylbenzene	ND		0.00739	1	09/29/2020 02:03	WG1549420
Vinyl chloride	ND		0.00369	1	09/29/2020 02:03	WG1549420
Xylenes, Total	ND		0.00961	1	09/29/2020 02:03	WG1549420
(S) Toluene-d8	*108*		*75.0-131*		*09/29/2020 02:03*	WG1549420
(S) Toluene-d8	*98.3*		*75.0-131*		*09/29/2020 14:36*	WG1550931
(S) 4-Bromofluorobenzene	*102*		*67.0-138*		*09/29/2020 02:03*	WG1549420
(S) 4-Bromofluorobenzene	*108*		*67.0-138*		*09/29/2020 14:36*	WG1550931
(S) 1,2-Dichloroethane-d4	*94.3*		*70.0-130*		*09/29/2020 02:03*	WG1549420
(S) 1,2-Dichloroethane-d4	*101*		*70.0-130*		*09/29/2020 14:36*	WG1550931

Semi-Volatile Organic Compounds (GC) by Method KS MRH/HRH

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
MRH (C9-C18)	ND		12.0	1	09/29/2020 10:44	WG1548722
HRH (C19-C35)	57.5		12.0	1	09/29/2020 10:44	WG1548722
(S) 1-Chloro-octadecane	*93.9*		*40.0-140*		*09/29/2020 10:44*	WG1548722

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	ND		0.0241	1	09/28/2020 11:25	WG1548725
Alpha BHC	ND		0.0241	1	09/28/2020 11:25	WG1548725
Beta BHC	ND		0.0241	1	09/28/2020 11:25	WG1548725
Delta BHC	ND		0.0241	1	09/28/2020 11:25	WG1548725
Gamma BHC	ND		0.0241	1	09/28/2020 11:25	WG1548725
Chlordane	ND		0.361	1	09/28/2020 11:25	WG1548725
4,4-DDD	ND		0.0241	1	09/28/2020 11:25	WG1548725
4,4-DDE	ND		0.0241	1	09/28/2020 11:25	WG1548725
4,4-DDT	ND		0.0241	1	09/28/2020 11:25	WG1548725
Dieldrin	ND		0.0241	1	09/28/2020 11:25	WG1548725
Endosulfan I	ND		0.0241	1	09/28/2020 11:25	WG1548725
Endosulfan II	ND		0.0241	1	09/28/2020 11:25	WG1548725
Endosulfan sulfate	ND		0.0241	1	09/28/2020 11:25	WG1548725
Endrin	ND		0.0241	1	09/28/2020 11:25	WG1548725
Endrin aldehyde	ND		0.0241	1	09/28/2020 11:25	WG1548725
Endrin ketone	ND		0.0241	1	09/28/2020 11:25	WG1548725
Heptachlor	ND		0.0241	1	09/28/2020 11:25	WG1548725
Heptachlor epoxide	ND		0.0241	1	09/28/2020 11:25	WG1548725
Hexachlorobenzene	ND		0.0241	1	09/28/2020 11:25	WG1548725
Methoxychlor	ND		0.0241	1	09/28/2020 11:25	WG1548725
Toxaphene	ND		0.481	1	09/28/2020 11:25	WG1548725
(S) Decachlorobiphenyl	*75.9*		*10.0-135*		*09/28/2020 11:25*	WG1548725
(S) Tetrachloro-m-xylene	*87.9*		*10.0-139*		*09/28/2020 11:25*	WG1548725

Polychlorinated Biphenyls (GC) by Method 8082

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
PCB 1016	ND		0.0409	1	09/28/2020 13:22	WG1548725
PCB 1221	ND		0.0409	1	09/28/2020 13:22	WG1548725
PCB 1232	ND		0.0409	1	09/28/2020 13:22	WG1548725
PCB 1242	ND		0.0409	1	09/28/2020 13:22	WG1548725
PCB 1248	ND		0.0205	1	09/28/2020 13:22	WG1548725
PCB 1254	ND		0.0205	1	09/28/2020 13:22	WG1548725
PCB 1260	ND		0.0205	1	09/28/2020 13:22	WG1548725
(S) Decachlorobiphenyl	*79.6*		*10.0-135*		*09/28/2020 13:22*	WG1548725
(S) Tetrachloro-m-xylene	*93.4*		*10.0-139*		*09/28/2020 13:22*	WG1548725

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	84.5		1	09/27/2020 04:11	WG1549366

Mercury by Method 7471B

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	0.112		0.0473	1	09/23/2020 13:00	WG1547742

Metals (ICP) by Method 6010D

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Arsenic	ND		2.37	1	09/24/2020 13:07	WG1547617
Barium	180		0.591	1	09/24/2020 13:07	WG1547617
Cadmium	ND		0.591	1	09/24/2020 13:07	WG1547617
Chromium	18.2		1.18	1	09/24/2020 13:07	WG1547617
Lead	33.3		0.591	1	09/24/2020 13:07	WG1547617
Selenium	ND		2.37	1	09/24/2020 13:07	WG1547617
Silver	ND		1.18	1	09/24/2020 13:07	WG1547617

Volatile Petroleum Hydrocarbons by Method KS LRH

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
LRH (C5-C8)	ND		7.05	1	09/24/2020 14:51	WG1548508
(S) 2,5-Dibromotoluene(FID)	*82.7*		*70.0-130*		*09/24/2020 14:51*	WG1548508

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND	J0	0.0719	1	09/29/2020 02:22	WG1549420
Acrylonitrile	ND		0.0180	1	09/29/2020 02:22	WG1549420
Benzene	ND		0.00144	1	09/29/2020 02:22	WG1549420
Bromobenzene	ND		0.0180	1	09/29/2020 02:22	WG1549420
Bromodichloromethane	ND		0.00360	1	09/29/2020 02:22	WG1549420
Bromoform	ND		0.0360	1	09/29/2020 02:22	WG1549420
Bromomethane	ND		0.0180	1	09/29/2020 02:22	WG1549420
n-Butylbenzene	ND		0.0180	1	09/29/2020 02:22	WG1549420
sec-Butylbenzene	ND		0.0180	1	09/29/2020 02:22	WG1549420
tert-Butylbenzene	ND		0.00719	1	09/29/2020 02:22	WG1549420
Carbon tetrachloride	ND		0.00719	1	09/29/2020 02:22	WG1549420
Chlorobenzene	ND		0.00360	1	09/29/2020 02:22	WG1549420
Chlorodibromomethane	ND		0.00360	1	09/29/2020 02:22	WG1549420
Chloroethane	ND		0.00719	1	09/29/2020 02:22	WG1549420
Chloroform	ND		0.00360	1	09/29/2020 02:22	WG1549420
Chloromethane	ND		0.0180	1	09/29/2020 02:22	WG1549420
2-Chlorotoluene	ND		0.00360	1	09/29/2020 02:22	WG1549420
4-Chlorotoluene	ND		0.00719	1	09/29/2020 02:22	WG1549420
1,2-Dibromo-3-Chloropropane	ND		0.0360	1	09/29/2020 02:22	WG1549420
1,2-Dibromoethane	ND		0.00360	1	09/29/2020 02:22	WG1549420
Dibromomethane	ND		0.00719	1	09/29/2020 02:22	WG1549420
1,2-Dichlorobenzene	ND		0.00719	1	09/29/2020 02:22	WG1549420
1,3-Dichlorobenzene	ND		0.00719	1	09/29/2020 02:22	WG1549420
1,4-Dichlorobenzene	ND		0.00719	1	09/29/2020 02:22	WG1549420
Dichlorodifluoromethane	ND		0.00360	1	09/29/2020 02:22	WG1549420
1,1-Dichloroethane	ND		0.00360	1	09/29/2020 02:22	WG1549420
1,2-Dichloroethane	ND		0.00360	1	09/29/2020 02:22	WG1549420

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	ND		0.00360	1	09/29/2020 02:22	WG1549420
cis-1,2-Dichloroethene	ND		0.00360	1	09/29/2020 02:22	WG1549420
trans-1,2-Dichloroethene	ND		0.00719	1	09/29/2020 02:22	WG1549420
1,2-Dichloropropane	ND		0.00719	1	09/29/2020 02:22	WG1549420
1,1-Dichloropropene	ND		0.00360	1	09/29/2020 02:22	WG1549420
1,3-Dichloropropane	ND		0.00719	1	09/29/2020 02:22	WG1549420
cis-1,3-Dichloropropene	ND		0.00360	1	09/29/2020 02:22	WG1549420
trans-1,3-Dichloropropene	ND		0.00719	1	09/29/2020 02:22	WG1549420
2,2-Dichloropropane	ND		0.00360	1	09/29/2020 02:22	WG1549420
Di-isopropyl ether	ND		0.00144	1	09/29/2020 02:22	WG1549420
Ethylbenzene	ND		0.00360	1	09/29/2020 02:22	WG1549420
Hexachloro-1,3-butadiene	ND		0.0360	1	09/29/2020 02:22	WG1549420
Isopropylbenzene	ND		0.00360	1	09/29/2020 02:22	WG1549420
p-Isopropyltoluene	ND		0.00719	1	09/29/2020 02:22	WG1549420
2-Butanone (MEK)	ND		0.144	1	09/29/2020 02:22	WG1549420
Methylene Chloride	ND		0.0360	1	09/29/2020 02:22	WG1549420
4-Methyl-2-pentanone (MIBK)	ND		0.0360	1	09/29/2020 02:22	WG1549420
Methyl tert-butyl ether	ND		0.00144	1	09/29/2020 02:22	WG1549420
Naphthalene	ND		0.0180	1	09/29/2020 02:22	WG1549420
n-Propylbenzene	ND		0.00719	1	09/29/2020 02:22	WG1549420
Styrene	ND		0.0180	1	09/29/2020 02:22	WG1549420
1,1,1,2-Tetrachloroethane	ND		0.00360	1	09/29/2020 02:22	WG1549420
1,1,2,2-Tetrachloroethane	ND		0.00360	1	09/29/2020 02:22	WG1549420
1,1,2-Trichlorotrifluoroethane	ND		0.00360	1	09/29/2020 02:22	WG1549420
Tetrachloroethene	ND		0.00360	1	09/29/2020 02:22	WG1549420
Toluene	ND		0.00719	1	09/29/2020 02:22	WG1549420
1,2,3-Trichlorobenzene	ND	J0	0.0180	1	09/29/2020 02:22	WG1549420
1,2,4-Trichlorobenzene	ND		0.0180	1	09/29/2020 02:22	WG1549420
1,1,1-Trichloroethane	ND		0.00360	1	09/29/2020 02:22	WG1549420
1,1,2-Trichloroethane	ND		0.00360	1	09/29/2020 02:22	WG1549420
Trichloroethene	ND		0.00144	1	09/29/2020 02:22	WG1549420
Trichlorofluoromethane	ND		0.00360	1	09/29/2020 02:22	WG1549420
1,2,3-Trichloropropane	ND		0.0180	1	09/29/2020 02:22	WG1549420
1,2,4-Trimethylbenzene	ND		0.00719	1	09/29/2020 02:22	WG1549420
1,2,3-Trimethylbenzene	ND		0.00719	1	09/29/2020 02:22	WG1549420
1,3,5-Trimethylbenzene	ND		0.00719	1	09/29/2020 02:22	WG1549420
Vinyl chloride	ND		0.00360	1	09/29/2020 02:22	WG1549420
Xylenes, Total	ND		0.00935	1	09/29/2020 02:22	WG1549420
(S) Toluene-d8	*110*		*75.0-131*		*09/29/2020 02:22*	WG1549420
(S) 4-Bromofluorobenzene	*104*		*67.0-138*		*09/29/2020 02:22*	WG1549420
(S) 1,2-Dichloroethane-d4	*93.1*		*70.0-130*		*09/29/2020 02:22*	WG1549420

Semi-Volatile Organic Compounds (GC) by Method KS MRH/HRH

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
MRH (C9-C18)	15.8	B	11.8	1	09/29/2020 11:06	WG1548722
HRH (C19-C35)	69.0		11.8	1	09/29/2020 11:06	WG1548722
(S) 1-Chloro-octadecane	*101*		*40.0-140*		*09/29/2020 11:06*	WG1548722

Pesticides (GC) by Method 8081B

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	ND		0.0237	1	09/24/2020 04:33	WG1547939
Alpha BHC	ND		0.0237	1	09/24/2020 04:33	WG1547939
Beta BHC	ND		0.0237	1	09/24/2020 04:33	WG1547939
Delta BHC	ND		0.0237	1	09/24/2020 04:33	WG1547939
Gamma BHC	ND		0.0237	1	09/24/2020 04:33	WG1547939
Chlordane	ND		0.355	1	09/24/2020 04:33	WG1547939
4,4-DDD	ND		0.0237	1	09/24/2020 04:33	WG1547939
4,4-DDE	ND		0.0237	1	09/24/2020 04:33	WG1547939
4,4-DDT	ND		0.0237	1	09/24/2020 04:33	WG1547939
Dieldrin	ND		0.0237	1	09/24/2020 04:33	WG1547939
Endosulfan I	ND		0.0237	1	09/24/2020 04:33	WG1547939
Endosulfan II	ND		0.0237	1	09/24/2020 04:33	WG1547939
Endosulfan sulfate	ND		0.0237	1	09/24/2020 04:33	WG1547939
Endrin	ND		0.0237	1	09/24/2020 04:33	WG1547939
Endrin aldehyde	ND		0.0237	1	09/24/2020 04:33	WG1547939
Endrin ketone	ND		0.0237	1	09/24/2020 04:33	WG1547939
Hexachlorobenzene	ND		0.0237	1	09/24/2020 04:33	WG1547939
Heptachlor	ND		0.0237	1	09/24/2020 04:33	WG1547939
Heptachlor epoxide	ND		0.0237	1	09/24/2020 04:33	WG1547939
Methoxychlor	ND		0.0237	1	09/24/2020 04:33	WG1547939
Toxaphene	ND		0.473	1	09/24/2020 04:33	WG1547939
(S) Decachlorobiphenyl	*53.4*		*10.0-135*		*09/24/2020 04:33*	WG1547939
(S) Tetrachloro-m-xylene	*57.0*		*10.0-139*		*09/24/2020 04:33*	WG1547939

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.0394	1	09/29/2020 15:51	WG1550290
Acenaphthylene	ND		0.0394	1	09/29/2020 15:51	WG1550290
Anthracene	0.0401		0.0394	1	09/29/2020 15:51	WG1550290
Benzidine	ND		1.98	1	09/29/2020 15:51	WG1550290
Benzo(a)anthracene	0.0895		0.0394	1	09/29/2020 15:51	WG1550290
Benzo(b)fluoranthene	0.106		0.0394	1	09/29/2020 15:51	WG1550290
Benzo(k)fluoranthene	ND		0.0394	1	09/29/2020 15:51	WG1550290
Benzo(g,h,i)perylene	0.0512		0.0394	1	09/29/2020 15:51	WG1550290
Benzo(a)pyrene	0.0822		0.0394	1	09/29/2020 15:51	WG1550290
Bis(2-chlorethoxy)methane	ND		0.394	1	09/29/2020 15:51	WG1550290
Bis(2-chloroethyl)ether	ND		0.394	1	09/29/2020 15:51	WG1550290
2,2-Oxybis(1-Chloropropane)	ND		0.394	1	09/29/2020 15:51	WG1550290
4-Bromophenyl-phenylether	ND		0.394	1	09/29/2020 15:51	WG1550290
2-Chloronaphthalene	ND		0.0394	1	09/29/2020 15:51	WG1550290
4-Chlorophenyl-phenylether	ND		0.394	1	09/29/2020 15:51	WG1550290
Chrysene	0.0872		0.0394	1	09/29/2020 15:51	WG1550290
Dibenz(a,h)anthracene	ND		0.0394	1	09/29/2020 15:51	WG1550290
3,3-Dichlorobenzidine	ND		0.394	1	09/29/2020 15:51	WG1550290
2,4-Dinitrotoluene	ND		0.394	1	09/29/2020 15:51	WG1550290
2,6-Dinitrotoluene	ND		0.394	1	09/29/2020 15:51	WG1550290
Fluoranthene	0.219		0.0394	1	09/29/2020 15:51	WG1550290
Fluorene	ND		0.0394	1	09/29/2020 15:51	WG1550290
Hexachlorobenzene	ND		0.394	1	09/29/2020 15:51	WG1550290
Hexachloro-1,3-butadiene	ND		0.394	1	09/29/2020 15:51	WG1550290
Hexachlorocyclopentadiene	ND		0.394	1	09/29/2020 15:51	WG1550290
Hexachloroethane	ND		0.394	1	09/29/2020 15:51	WG1550290
Indeno(1,2,3-cd)pyrene	0.0561		0.0394	1	09/29/2020 15:51	WG1550290
Isophorone	ND		0.394	1	09/29/2020 15:51	WG1550290
Naphthalene	0.0511		0.0394	1	09/29/2020 15:51	WG1550290

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Nitrobenzene	ND		0.394	1	09/29/2020 15:51	WG1550290
n-Nitrosodimethylamine	ND		0.394	1	09/29/2020 15:51	WG1550290
n-Nitrosodiphenylamine	ND		0.394	1	09/29/2020 15:51	WG1550290
n-Nitrosodi-n-propylamine	ND		0.394	1	09/29/2020 15:51	WG1550290
Phenanthrene	0.198		0.0394	1	09/29/2020 15:51	WG1550290
Benzylbutyl phthalate	ND		0.394	1	09/29/2020 15:51	WG1550290
Bis(2-ethylhexyl)phthalate	ND		0.394	1	09/29/2020 15:51	WG1550290
Di-n-butyl phthalate	ND		0.394	1	09/29/2020 15:51	WG1550290
Diethyl phthalate	ND		0.394	1	09/29/2020 15:51	WG1550290
Dimethyl phthalate	ND		0.394	1	09/29/2020 15:51	WG1550290
Di-n-octyl phthalate	ND		0.394	1	09/29/2020 15:51	WG1550290
Pyrene	0.187		0.0394	1	09/29/2020 15:51	WG1550290
1,2,4-Trichlorobenzene	ND		0.394	1	09/29/2020 15:51	WG1550290
4-Chloro-3-methylphenol	ND		0.394	1	09/29/2020 15:51	WG1550290
2-Chlorophenol	ND		0.394	1	09/29/2020 15:51	WG1550290
2,4-Dichlorophenol	ND		0.394	1	09/29/2020 15:51	WG1550290
2,4-Dimethylphenol	ND		0.394	1	09/29/2020 15:51	WG1550290
4,6-Dinitro-2-methylphenol	ND		0.394	1	09/29/2020 15:51	WG1550290
2,4-Dinitrophenol	ND		0.394	1	09/29/2020 15:51	WG1550290
2-Nitrophenol	ND		0.394	1	09/29/2020 15:51	WG1550290
4-Nitrophenol	ND		0.394	1	09/29/2020 15:51	WG1550290
Pentachlorophenol	ND		0.394	1	09/29/2020 15:51	WG1550290
Phenol	ND		0.394	1	09/29/2020 15:51	WG1550290
2,4,6-Trichlorophenol	ND		0.394	1	09/29/2020 15:51	WG1550290
(S) Nitrobenzene-d5	*49.2*		*10.0-122*		*09/29/2020 15:51*	WG1550290
(S) 2-Fluorobiphenyl	*60.1*		*15.0-120*		*09/29/2020 15:51*	WG1550290
(S) p-Terphenyl-d14	*68.6*		*10.0-120*		*09/29/2020 15:51*	WG1550290
(S) Phenol-d5	*55.6*		*10.0-120*		*09/29/2020 15:51*	WG1550290
(S) 2-Fluorophenol	*63.9*		*12.0-120*		*09/29/2020 15:51*	WG1550290
(S) 2,4,6-Tribromophenol	*71.8*		*10.0-127*		*09/29/2020 15:51*	WG1550290

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	89.1		1	09/27/2020 04:11	WG1549366

Mercury by Method 7471B

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	ND		0.0449	1	09/23/2020 13:07	WG1547742

Metals (ICP) by Method 6010D

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Arsenic	8.36		2.24	1	09/24/2020 13:16	WG1547617
Barium	48.4		0.561	1	09/24/2020 13:16	WG1547617
Cadmium	ND		0.561	1	09/24/2020 13:16	WG1547617
Chromium	17.4		1.12	1	09/24/2020 13:16	WG1547617
Lead	24.0		0.561	1	09/24/2020 13:16	WG1547617
Selenium	ND		2.24	1	09/24/2020 13:16	WG1547617
Silver	ND		1.12	1	09/24/2020 13:16	WG1547617

Volatile Petroleum Hydrocarbons by Method KS LRH

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
LRH (C5-C8)	ND		6.39	1	09/24/2020 15:24	WG1548508
(S) 2,5-Dibromotoluene(FID)	*85.8*		*70.0-130*		*09/24/2020 15:24*	WG1548508

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND	J0	0.0650	1	09/29/2020 02:41	WG1549420
Acrylonitrile	ND		0.0162	1	09/29/2020 02:41	WG1549420
Benzene	0.0199		0.00130	1	09/29/2020 02:41	WG1549420
Bromobenzene	ND		0.0162	1	09/29/2020 02:41	WG1549420
Bromodichloromethane	ND		0.00325	1	09/29/2020 02:41	WG1549420
Bromoform	ND		0.0325	1	09/29/2020 02:41	WG1549420
Bromomethane	ND		0.0162	1	09/29/2020 02:41	WG1549420
n-Butylbenzene	ND		0.0162	1	09/29/2020 02:41	WG1549420
sec-Butylbenzene	ND		0.0162	1	09/29/2020 02:41	WG1549420
tert-Butylbenzene	ND		0.00650	1	09/29/2020 02:41	WG1549420
Carbon tetrachloride	ND		0.00650	1	09/29/2020 02:41	WG1549420
Chlorobenzene	0.00724		0.00325	1	09/29/2020 02:41	WG1549420
Chlorodibromomethane	ND		0.00325	1	09/29/2020 02:41	WG1549420
Chloroethane	ND		0.00650	1	09/29/2020 02:41	WG1549420
Chloroform	ND		0.00325	1	09/29/2020 02:41	WG1549420
Chloromethane	ND		0.0162	1	09/29/2020 02:41	WG1549420
2-Chlorotoluene	ND		0.00325	1	09/29/2020 02:41	WG1549420
4-Chlorotoluene	ND		0.00650	1	09/29/2020 02:41	WG1549420
1,2-Dibromo-3-Chloropropane	ND		0.0325	1	09/29/2020 02:41	WG1549420
1,2-Dibromoethane	ND		0.00325	1	09/29/2020 02:41	WG1549420
Dibromomethane	ND		0.00650	1	09/29/2020 02:41	WG1549420
1,2-Dichlorobenzene	ND		0.00650	1	09/29/2020 02:41	WG1549420
1,3-Dichlorobenzene	ND		0.00650	1	09/29/2020 02:41	WG1549420
1,4-Dichlorobenzene	ND		0.00650	1	09/29/2020 02:41	WG1549420
Dichlorodifluoromethane	ND		0.00325	1	09/29/2020 02:41	WG1549420
1,1-Dichloroethane	ND		0.00325	1	09/29/2020 02:41	WG1549420
1,2-Dichloroethane	ND		0.00325	1	09/29/2020 02:41	WG1549420

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	ND		0.00325	1	09/29/2020 02:41	WG1549420
cis-1,2-Dichloroethene	0.175		0.00325	1	09/29/2020 02:41	WG1549420
trans-1,2-Dichloroethene	0.00823		0.00650	1	09/29/2020 02:41	WG1549420
1,2-Dichloropropane	ND		0.00650	1	09/29/2020 02:41	WG1549420
1,1-Dichloropropene	ND		0.00325	1	09/29/2020 02:41	WG1549420
1,3-Dichloropropane	ND		0.00650	1	09/29/2020 02:41	WG1549420
cis-1,3-Dichloropropene	ND		0.00325	1	09/29/2020 02:41	WG1549420
trans-1,3-Dichloropropene	ND		0.00650	1	09/29/2020 02:41	WG1549420
2,2-Dichloropropane	ND		0.00325	1	09/29/2020 02:41	WG1549420
Di-isopropyl ether	ND		0.00130	1	09/29/2020 02:41	WG1549420
Ethylbenzene	ND		0.00325	1	09/29/2020 02:41	WG1549420
Hexachloro-1,3-butadiene	ND		0.0325	1	09/29/2020 02:41	WG1549420
Isopropylbenzene	ND		0.00325	1	09/29/2020 02:41	WG1549420
p-Isopropyltoluene	ND		0.00650	1	09/29/2020 02:41	WG1549420
2-Butanone (MEK)	ND		0.130	1	09/29/2020 02:41	WG1549420
Methylene Chloride	ND		0.0325	1	09/29/2020 02:41	WG1549420
4-Methyl-2-pentanone (MIBK)	ND		0.0325	1	09/29/2020 02:41	WG1549420
Methyl tert-butyl ether	ND		0.00130	1	09/29/2020 02:41	WG1549420
Naphthalene	ND		0.0162	1	09/29/2020 02:41	WG1549420
n-Propylbenzene	ND		0.00650	1	09/29/2020 02:41	WG1549420
Styrene	ND		0.0162	1	09/29/2020 02:41	WG1549420
1,1,1,2-Tetrachloroethane	ND		0.00325	1	09/29/2020 02:41	WG1549420
1,1,2,2-Tetrachloroethane	ND		0.00325	1	09/29/2020 02:41	WG1549420
1,1,2-Trichlorotrifluoroethane	ND		0.00325	1	09/29/2020 02:41	WG1549420
Tetrachloroethene	0.0788		0.00325	1	09/29/2020 02:41	WG1549420
Toluene	ND		0.00650	1	09/29/2020 02:41	WG1549420
1,2,3-Trichlorobenzene	ND	J0	0.0162	1	09/29/2020 02:41	WG1549420
1,2,4-Trichlorobenzene	ND		0.0162	1	09/29/2020 02:41	WG1549420
1,1,1-Trichloroethane	ND		0.00325	1	09/29/2020 02:41	WG1549420
1,1,2-Trichloroethane	ND		0.00325	1	09/29/2020 02:41	WG1549420
Trichloroethene	0.0572		0.00130	1	09/29/2020 02:41	WG1549420
Trichlorofluoromethane	ND		0.00325	1	09/29/2020 02:41	WG1549420
1,2,3-Trichloropropane	ND		0.0162	1	09/29/2020 02:41	WG1549420
1,2,4-Trimethylbenzene	0.00866		0.00650	1	09/29/2020 02:41	WG1549420
1,2,3-Trimethylbenzene	0.00789		0.00650	1	09/29/2020 02:41	WG1549420
1,3,5-Trimethylbenzene	ND		0.00650	1	09/29/2020 02:41	WG1549420
Vinyl chloride	ND		0.00325	1	09/29/2020 02:41	WG1549420
Xylenes, Total	0.0128		0.00845	1	09/29/2020 02:41	WG1549420
(S) Toluene-d8	*103*		*75.0-131*		*09/29/2020 02:41*	WG1549420
(S) 4-Bromofluorobenzene	*103*		*67.0-138*		*09/29/2020 02:41*	WG1549420
(S) 1,2-Dichloroethane-d4	*94.9*		*70.0-130*		*09/29/2020 02:41*	WG1549420

Semi-Volatile Organic Compounds (GC) by Method KS MRH/HRH

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
MRH (C9-C18)	321		22.4	2	09/29/2020 14:32	WG1548722
HRH (C19-C35)	209		11.2	1	09/29/2020 13:23	WG1548722
(S) 1-Chloro-octadecane	*104*		*40.0-140*		*09/29/2020 13:23*	WG1548722
(S) 1-Chloro-octadecane	*111*		*40.0-140*		*09/29/2020 14:32*	WG1548722

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	ND		0.0224	1	09/28/2020 11:37	WG1548725
Alpha BHC	ND		0.0224	1	09/28/2020 11:37	WG1548725
Beta BHC	ND		0.0224	1	09/28/2020 11:37	WG1548725
Delta BHC	ND		0.0224	1	09/28/2020 11:37	WG1548725
Gamma BHC	ND		0.0224	1	09/28/2020 11:37	WG1548725
Chlordane	ND		0.337	1	09/28/2020 11:37	WG1548725
4,4-DDD	ND		0.0224	1	09/28/2020 11:37	WG1548725
4,4-DDE	ND		0.0224	1	09/28/2020 11:37	WG1548725
4,4-DDT	ND		0.0224	1	09/28/2020 11:37	WG1548725
Dieldrin	ND		0.0224	1	09/28/2020 11:37	WG1548725
Endosulfan I	ND		0.0224	1	09/28/2020 11:37	WG1548725
Endosulfan II	ND		0.0224	1	09/28/2020 11:37	WG1548725
Endosulfan sulfate	ND		0.0224	1	09/28/2020 11:37	WG1548725
Endrin	ND		0.0224	1	09/28/2020 11:37	WG1548725
Endrin aldehyde	ND		0.0224	1	09/28/2020 11:37	WG1548725
Endrin ketone	ND		0.0224	1	09/28/2020 11:37	WG1548725
Heptachlor	ND		0.0224	1	09/28/2020 11:37	WG1548725
Heptachlor epoxide	ND		0.0224	1	09/28/2020 11:37	WG1548725
Hexachlorobenzene	ND		0.0224	1	09/28/2020 11:37	WG1548725
Methoxychlor	ND		0.0224	1	09/28/2020 11:37	WG1548725
Toxaphene	ND		0.449	1	09/28/2020 11:37	WG1548725
(S) Decachlorobiphenyl	*86.1*		*10.0-135*		*09/28/2020 11:37*	WG1548725
(S) Tetrachloro-m-xylene	*86.6*		*10.0-139*		*09/28/2020 11:37*	WG1548725

Polychlorinated Biphenyls (GC) by Method 8082

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
PCB 1016	ND		0.0381	1	09/28/2020 13:32	WG1548725
PCB 1221	ND		0.0381	1	09/28/2020 13:32	WG1548725
PCB 1232	ND		0.0381	1	09/28/2020 13:32	WG1548725
PCB 1242	ND		0.0381	1	09/28/2020 13:32	WG1548725
PCB 1248	ND		0.0191	1	09/28/2020 13:32	WG1548725
PCB 1254	ND		0.0191	1	09/28/2020 13:32	WG1548725
PCB 1260	ND		0.0191	1	09/28/2020 13:32	WG1548725
(S) Decachlorobiphenyl	*88.7*		*10.0-135*		*09/28/2020 13:32*	WG1548725
(S) Tetrachloro-m-xylene	*94.7*		*10.0-139*		*09/28/2020 13:32*	WG1548725

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.0747	2	09/29/2020 17:36	WG1550290
Acenaphthylene	ND		0.0747	2	09/29/2020 17:36	WG1550290
Anthracene	ND		0.0747	2	09/29/2020 17:36	WG1550290
Benzidine	ND		3.75	2	09/29/2020 17:36	WG1550290
Benzo(a)anthracene	ND		0.0747	2	09/29/2020 17:36	WG1550290
Benzo(b)fluoranthene	ND		0.0747	2	09/29/2020 17:36	WG1550290
Benzo(k)fluoranthene	ND		0.0747	2	09/29/2020 17:36	WG1550290
Benzo(g,h,i)perylene	ND		0.0747	2	09/29/2020 17:36	WG1550290
Benzo(a)pyrene	ND		0.0747	2	09/29/2020 17:36	WG1550290
Bis(2-chlorethoxy)methane	ND		0.747	2	09/29/2020 17:36	WG1550290
Bis(2-chloroethyl)ether	ND		0.747	2	09/29/2020 17:36	WG1550290
2,2-Oxybis(1-Chloropropane)	ND		0.747	2	09/29/2020 17:36	WG1550290
4-Bromophenyl-phenylether	ND		0.747	2	09/29/2020 17:36	WG1550290
2-Chloronaphthalene	ND		0.0747	2	09/29/2020 17:36	WG1550290
4-Chlorophenyl-phenylether	ND		0.747	2	09/29/2020 17:36	WG1550290

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chrysene	ND		0.0747	2	09/29/2020 17:36	WG1550290
Dibenz(a,h)anthracene	ND		0.0747	2	09/29/2020 17:36	WG1550290
3,3-Dichlorobenzidine	ND		0.747	2	09/29/2020 17:36	WG1550290
2,4-Dinitrotoluene	ND		0.747	2	09/29/2020 17:36	WG1550290
2,6-Dinitrotoluene	ND		0.747	2	09/29/2020 17:36	WG1550290
Fluoranthene	ND		0.0747	2	09/29/2020 17:36	WG1550290
Fluorene	ND		0.0747	2	09/29/2020 17:36	WG1550290
Hexachlorobenzene	ND		0.747	2	09/29/2020 17:36	WG1550290
Hexachloro-1,3-butadiene	ND		0.747	2	09/29/2020 17:36	WG1550290
Hexachlorocyclopentadiene	ND		0.747	2	09/29/2020 17:36	WG1550290
Hexachloroethane	ND		0.747	2	09/29/2020 17:36	WG1550290
Indeno(1,2,3-cd)pyrene	ND		0.0747	2	09/29/2020 17:36	WG1550290
Isophorone	ND		0.747	2	09/29/2020 17:36	WG1550290
Naphthalene	0.0876		0.0747	2	09/29/2020 17:36	WG1550290
Nitrobenzene	ND		0.747	2	09/29/2020 17:36	WG1550290
n-Nitrosodimethylamine	ND		0.747	2	09/29/2020 17:36	WG1550290
n-Nitrosodiphenylamine	ND		0.747	2	09/29/2020 17:36	WG1550290
n-Nitrosodi-n-propylamine	ND		0.747	2	09/29/2020 17:36	WG1550290
Phenanthrene	0.137		0.0747	2	09/29/2020 17:36	WG1550290
Benzylbutyl phthalate	ND		0.747	2	09/29/2020 17:36	WG1550290
Bis(2-ethylhexyl)phthalate	ND		0.747	2	09/29/2020 17:36	WG1550290
Di-n-butyl phthalate	ND		0.747	2	09/29/2020 17:36	WG1550290
Diethyl phthalate	ND		0.747	2	09/29/2020 17:36	WG1550290
Dimethyl phthalate	ND		0.747	2	09/29/2020 17:36	WG1550290
Di-n-octyl phthalate	ND		0.747	2	09/29/2020 17:36	WG1550290
Pyrene	0.0802		0.0747	2	09/29/2020 17:36	WG1550290
1,2,4-Trichlorobenzene	ND		0.747	2	09/29/2020 17:36	WG1550290
4-Chloro-3-methylphenol	ND		0.747	2	09/29/2020 17:36	WG1550290
2-Chlorophenol	ND		0.747	2	09/29/2020 17:36	WG1550290
2,4-Dichlorophenol	ND		0.747	2	09/29/2020 17:36	WG1550290
2,4-Dimethylphenol	ND		0.747	2	09/29/2020 17:36	WG1550290
4,6-Dinitro-2-methylphenol	ND		0.747	2	09/29/2020 17:36	WG1550290
2,4-Dinitrophenol	ND		0.747	2	09/29/2020 17:36	WG1550290
2-Nitrophenol	ND		0.747	2	09/29/2020 17:36	WG1550290
4-Nitrophenol	ND		0.747	2	09/29/2020 17:36	WG1550290
Pentachlorophenol	ND		0.747	2	09/29/2020 17:36	WG1550290
Phenol	ND		0.747	2	09/29/2020 17:36	WG1550290
2,4,6-Trichlorophenol	ND		0.747	2	09/29/2020 17:36	WG1550290
(S) Nitrobenzene-d5	*67.4*		*10.0-122*		*09/29/2020 17:36*	WG1550290
(S) 2-Fluorobiphenyl	*70.7*		*15.0-120*		*09/29/2020 17:36*	WG1550290
(S) p-Terphenyl-d14	*68.9*		*10.0-120*		*09/29/2020 17:36*	WG1550290
(S) Phenol-d5	*58.5*		*10.0-120*		*09/29/2020 17:36*	WG1550290
(S) 2-Fluorophenol	*66.7*		*12.0-120*		*09/29/2020 17:36*	WG1550290
(S) 2,4,6-Tribromophenol	*83.2*		*10.0-127*		*09/29/2020 17:36*	WG1550290

Sample Narrative:

L1264151-07 WG1550290: Dilution due to matrix impact during extract concentration procedure

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	82.1		1	09/27/2020 04:11	WG1549366

Mercury by Method 7471B

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	0.0544		0.0487	1	09/23/2020 13:10	WG1547742

Metals (ICP) by Method 6010D

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Arsenic	5.04		2.44	1	09/24/2020 13:18	WG1547617
Barium	152		0.609	1	09/24/2020 13:18	WG1547617
Cadmium	0.764		0.609	1	09/24/2020 13:18	WG1547617
Chromium	21.0		1.22	1	09/24/2020 13:18	WG1547617
Lead	4770		0.609	1	09/24/2020 13:18	WG1547617
Selenium	ND		2.44	1	09/24/2020 13:18	WG1547617
Silver	ND		1.22	1	09/24/2020 13:18	WG1547617

Volatile Petroleum Hydrocarbons by Method KS LRH

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
LRH (C5-C8)	ND		7.50	1	09/24/2020 15:57	WG1548508
(S) 2,5-Dibromotoluene(FID)	*83.8*		*70.0-130*		*09/24/2020 15:57*	WG1548508

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND	J0	0.0754	1	09/29/2020 03:00	WG1549420
Acrylonitrile	ND		0.0189	1	09/29/2020 03:00	WG1549420
Benzene	0.0297		0.00151	1	09/29/2020 03:00	WG1549420
Bromobenzene	ND		0.0189	1	09/29/2020 03:00	WG1549420
Bromodichloromethane	ND		0.00377	1	09/29/2020 03:00	WG1549420
Bromoform	ND		0.0377	1	09/29/2020 03:00	WG1549420
Bromomethane	ND		0.0189	1	09/29/2020 03:00	WG1549420
n-Butylbenzene	ND		0.0189	1	09/29/2020 03:00	WG1549420
sec-Butylbenzene	ND		0.0189	1	09/29/2020 03:00	WG1549420
tert-Butylbenzene	ND		0.00754	1	09/29/2020 03:00	WG1549420
Carbon tetrachloride	ND		0.00754	1	09/29/2020 03:00	WG1549420
Chlorobenzene	0.181		0.00377	1	09/29/2020 03:00	WG1549420
Chlorodibromomethane	ND		0.00377	1	09/29/2020 03:00	WG1549420
Chloroethane	ND		0.00754	1	09/29/2020 03:00	WG1549420
Chloroform	ND		0.00377	1	09/29/2020 03:00	WG1549420
Chloromethane	ND		0.0189	1	09/29/2020 03:00	WG1549420
2-Chlorotoluene	ND		0.00377	1	09/29/2020 03:00	WG1549420
4-Chlorotoluene	ND		0.00754	1	09/29/2020 03:00	WG1549420
1,2-Dibromo-3-Chloropropane	ND		0.0377	1	09/29/2020 03:00	WG1549420
1,2-Dibromoethane	ND		0.00377	1	09/29/2020 03:00	WG1549420
Dibromomethane	ND		0.00754	1	09/29/2020 03:00	WG1549420
1,2-Dichlorobenzene	0.100		0.00754	1	09/29/2020 03:00	WG1549420
1,3-Dichlorobenzene	ND		0.00754	1	09/29/2020 03:00	WG1549420
1,4-Dichlorobenzene	0.0139	B	0.00754	1	09/29/2020 03:00	WG1549420
Dichlorodifluoromethane	ND		0.00377	1	09/29/2020 03:00	WG1549420
1,1-Dichloroethane	ND		0.00377	1	09/29/2020 03:00	WG1549420
1,2-Dichloroethane	ND		0.00377	1	09/29/2020 03:00	WG1549420

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	ND		0.00377	1	09/29/2020 03:00	WG1549420
cis-1,2-Dichloroethene	ND		0.00377	1	09/29/2020 03:00	WG1549420
trans-1,2-Dichloroethene	ND		0.00754	1	09/29/2020 03:00	WG1549420
1,2-Dichloropropane	ND		0.00754	1	09/29/2020 03:00	WG1549420
1,1-Dichloropropene	ND		0.00377	1	09/29/2020 03:00	WG1549420
1,3-Dichloropropane	ND		0.00754	1	09/29/2020 03:00	WG1549420
cis-1,3-Dichloropropene	ND		0.00377	1	09/29/2020 03:00	WG1549420
trans-1,3-Dichloropropene	ND		0.00754	1	09/29/2020 03:00	WG1549420
2,2-Dichloropropane	ND		0.00377	1	09/29/2020 03:00	WG1549420
Di-isopropyl ether	ND		0.00151	1	09/29/2020 03:00	WG1549420
Ethylbenzene	0.0477		0.00377	1	09/29/2020 03:00	WG1549420
Hexachloro-1,3-butadiene	ND		0.0377	1	09/29/2020 03:00	WG1549420
Isopropylbenzene	0.0370		0.00377	1	09/29/2020 03:00	WG1549420
p-Isopropyltoluene	0.112		0.00754	1	09/29/2020 03:00	WG1549420
2-Butanone (MEK)	ND		0.151	1	09/29/2020 14:55	WG1550931
Methylene Chloride	ND		0.0377	1	09/29/2020 03:00	WG1549420
4-Methyl-2-pentanone (MIBK)	ND		0.0377	1	09/29/2020 03:00	WG1549420
Methyl tert-butyl ether	ND		0.00151	1	09/29/2020 03:00	WG1549420
Naphthalene	0.128		0.0189	1	09/29/2020 03:00	WG1549420
n-Propylbenzene	0.0367		0.00754	1	09/29/2020 03:00	WG1549420
Styrene	ND		0.0189	1	09/29/2020 03:00	WG1549420
1,1,1,2-Tetrachloroethane	ND		0.00377	1	09/29/2020 03:00	WG1549420
1,1,2,2-Tetrachloroethane	ND		0.00377	1	09/29/2020 03:00	WG1549420
1,1,2-Trichlorotrifluoroethane	ND		0.00377	1	09/29/2020 03:00	WG1549420
Tetrachloroethene	ND		0.00377	1	09/29/2020 03:00	WG1549420
Toluene	0.0350		0.00754	1	09/29/2020 03:00	WG1549420
1,2,3-Trichlorobenzene	ND	J0	0.0189	1	09/29/2020 03:00	WG1549420
1,2,4-Trichlorobenzene	ND		0.0189	1	09/29/2020 03:00	WG1549420
1,1,1-Trichloroethane	ND		0.00377	1	09/29/2020 03:00	WG1549420
1,1,2-Trichloroethane	ND		0.00377	1	09/29/2020 03:00	WG1549420
Trichloroethene	ND		0.00151	1	09/29/2020 03:00	WG1549420
Trichlorofluoromethane	ND		0.00377	1	09/29/2020 03:00	WG1549420
1,2,3-Trichloropropane	ND		0.0189	1	09/29/2020 03:00	WG1549420
1,2,4-Trimethylbenzene	0.0472		0.00754	1	09/29/2020 03:00	WG1549420
1,2,3-Trimethylbenzene	0.0276		0.00754	1	09/29/2020 03:00	WG1549420
1,3,5-Trimethylbenzene	0.0137		0.00754	1	09/29/2020 03:00	WG1549420
Vinyl chloride	ND		0.00377	1	09/29/2020 03:00	WG1549420
Xylenes, Total	0.152		0.00981	1	09/29/2020 03:00	WG1549420
(S) Toluene-d8	*106*		*75.0-131*		*09/29/2020 03:00*	WG1549420
(S) Toluene-d8	*99.2*		*75.0-131*		*09/29/2020 14:55*	WG1550931
(S) 4-Bromofluorobenzene	*107*		*67.0-138*		*09/29/2020 03:00*	WG1549420
(S) 4-Bromofluorobenzene	*107*		*67.0-138*		*09/29/2020 14:55*	WG1550931
(S) 1,2-Dichloroethane-d4	*89.4*		*70.0-130*		*09/29/2020 03:00*	WG1549420
(S) 1,2-Dichloroethane-d4	*101*		*70.0-130*		*09/29/2020 14:55*	WG1550931

Semi-Volatile Organic Compounds (GC) by Method KS MRH/HRH

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
MRH (C9-C18)	43.4		12.2	1	09/29/2020 11:29	WG1548722
HRH (C19-C35)	301		12.2	1	09/29/2020 11:29	WG1548722
(S) 1-Chloro-octadecane	*83.4*		*40.0-140*		*09/29/2020 11:29*	WG1548722

Pesticides (GC) by Method 8081B

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	ND		0.0244	1	09/24/2020 04:46	WG1547939
Alpha BHC	ND		0.0244	1	09/24/2020 04:46	WG1547939
Beta BHC	ND		0.0244	1	09/24/2020 04:46	WG1547939
Delta BHC	ND		0.0244	1	09/24/2020 04:46	WG1547939
Gamma BHC	ND		0.0244	1	09/24/2020 04:46	WG1547939
Chlordane	ND		0.365	1	09/24/2020 04:46	WG1547939
4,4-DDD	ND		0.0244	1	09/24/2020 04:46	WG1547939
4,4-DDE	ND		0.0244	1	09/24/2020 04:46	WG1547939
4,4-DDT	ND		0.0244	1	09/24/2020 04:46	WG1547939
Dieldrin	ND		0.0244	1	09/24/2020 04:46	WG1547939
Endosulfan I	ND		0.0244	1	09/24/2020 04:46	WG1547939
Endosulfan II	ND		0.0244	1	09/24/2020 04:46	WG1547939
Endosulfan sulfate	ND		0.0244	1	09/24/2020 04:46	WG1547939
Endrin	ND		0.0244	1	09/24/2020 04:46	WG1547939
Endrin aldehyde	ND		0.0244	1	09/24/2020 04:46	WG1547939
Endrin ketone	ND		0.0244	1	09/24/2020 04:46	WG1547939
Hexachlorobenzene	ND		0.0244	1	09/24/2020 04:46	WG1547939
Heptachlor	ND		0.0244	1	09/24/2020 04:46	WG1547939
Heptachlor epoxide	ND		0.0244	1	09/24/2020 04:46	WG1547939
Methoxychlor	ND		0.0244	1	09/24/2020 04:46	WG1547939
Toxaphene	ND		0.487	1	09/24/2020 04:46	WG1547939
(S) Decachlorobiphenyl	*37.9*		*10.0-135*		*09/24/2020 04:46*	WG1547939
(S) Tetrachloro-m-xylene	*40.1*		*10.0-139*		*09/24/2020 04:46*	WG1547939

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	79.7		1	09/27/2020 04:11	WG1549366

Mercury by Method 7471B

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	ND		0.0502	1	09/23/2020 13:12	WG1547742

Metals (ICP) by Method 6010D

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Arsenic	ND		2.51	1	09/24/2020 13:21	WG1547617
Barium	169		0.628	1	09/24/2020 13:21	WG1547617
Cadmium	0.840		0.628	1	09/24/2020 13:21	WG1547617
Chromium	17.5		1.26	1	09/24/2020 13:21	WG1547617
Lead	21.9		0.628	1	09/24/2020 13:21	WG1547617
Selenium	ND		2.51	1	09/24/2020 13:21	WG1547617
Silver	ND		1.26	1	09/24/2020 13:21	WG1547617

Volatile Petroleum Hydrocarbons by Method KS LRH

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
LRH (C5-C8)	ND		7.82	1	09/24/2020 16:30	WG1548508
(S) 2,5-Dibromotoluene(FID)	*87.1*		*70.0-130*		*09/24/2020 16:30*	WG1548508

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND	J0	0.0781	1	09/29/2020 03:19	WG1549420
Acrylonitrile	ND		0.0195	1	09/29/2020 03:19	WG1549420
Benzene	0.0192		0.00156	1	09/29/2020 03:19	WG1549420
Bromobenzene	ND		0.0195	1	09/29/2020 03:19	WG1549420
Bromodichloromethane	ND		0.00390	1	09/29/2020 03:19	WG1549420
Bromoform	ND		0.0390	1	09/29/2020 03:19	WG1549420
Bromomethane	ND		0.0195	1	09/29/2020 03:19	WG1549420
n-Butylbenzene	ND		0.0195	1	09/29/2020 03:19	WG1549420
sec-Butylbenzene	ND		0.0195	1	09/29/2020 03:19	WG1549420
tert-Butylbenzene	ND		0.00781	1	09/29/2020 03:19	WG1549420
Carbon tetrachloride	ND		0.00781	1	09/29/2020 03:19	WG1549420
Chlorobenzene	ND		0.00390	1	09/29/2020 03:19	WG1549420
Chlorodibromomethane	ND		0.00390	1	09/29/2020 03:19	WG1549420
Chloroethane	ND		0.00781	1	09/29/2020 03:19	WG1549420
Chloroform	ND		0.00390	1	09/29/2020 03:19	WG1549420
Chloromethane	ND		0.0195	1	09/29/2020 03:19	WG1549420
2-Chlorotoluene	ND		0.00390	1	09/29/2020 03:19	WG1549420
4-Chlorotoluene	ND		0.00781	1	09/29/2020 03:19	WG1549420
1,2-Dibromo-3-Chloropropane	ND		0.0390	1	09/29/2020 03:19	WG1549420
1,2-Dibromoethane	ND		0.00390	1	09/29/2020 03:19	WG1549420
Dibromomethane	ND		0.00781	1	09/29/2020 03:19	WG1549420
1,2-Dichlorobenzene	ND		0.00781	1	09/29/2020 03:19	WG1549420
1,3-Dichlorobenzene	ND		0.00781	1	09/29/2020 03:19	WG1549420
1,4-Dichlorobenzene	ND		0.00781	1	09/29/2020 03:19	WG1549420
Dichlorodifluoromethane	ND		0.00390	1	09/29/2020 03:19	WG1549420
1,1-Dichloroethane	ND		0.00390	1	09/29/2020 03:19	WG1549420
1,2-Dichloroethane	ND		0.00390	1	09/29/2020 03:19	WG1549420

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	ND		0.00390	1	09/29/2020 03:19	WG1549420
cis-1,2-Dichloroethene	ND		0.00390	1	09/29/2020 03:19	WG1549420
trans-1,2-Dichloroethene	ND		0.00781	1	09/29/2020 03:19	WG1549420
1,2-Dichloropropane	ND		0.00781	1	09/29/2020 03:19	WG1549420
1,1-Dichloropropene	ND		0.00390	1	09/29/2020 03:19	WG1549420
1,3-Dichloropropane	ND		0.00781	1	09/29/2020 03:19	WG1549420
cis-1,3-Dichloropropene	ND		0.00390	1	09/29/2020 03:19	WG1549420
trans-1,3-Dichloropropene	ND		0.00781	1	09/29/2020 03:19	WG1549420
2,2-Dichloropropane	ND		0.00390	1	09/29/2020 03:19	WG1549420
Di-isopropyl ether	ND		0.00156	1	09/29/2020 03:19	WG1549420
Ethylbenzene	0.00726		0.00390	1	09/29/2020 03:19	WG1549420
Hexachloro-1,3-butadiene	ND		0.0390	1	09/29/2020 03:19	WG1549420
Isopropylbenzene	0.00506		0.00390	1	09/29/2020 03:19	WG1549420
p-Isopropyltoluene	ND		0.00781	1	09/29/2020 03:19	WG1549420
2-Butanone (MEK)	ND		0.156	1	09/29/2020 15:14	WG1550931
Methylene Chloride	ND		0.0390	1	09/29/2020 03:19	WG1549420
4-Methyl-2-pentanone (MIBK)	ND		0.0390	1	09/29/2020 03:19	WG1549420
Methyl tert-butyl ether	0.00286		0.00156	1	09/29/2020 03:19	WG1549420
Naphthalene	0.0464		0.0195	1	09/29/2020 03:19	WG1549420
n-Propylbenzene	0.00796		0.00781	1	09/29/2020 03:19	WG1549420
Styrene	ND		0.0195	1	09/29/2020 03:19	WG1549420
1,1,1,2-Tetrachloroethane	ND		0.00390	1	09/29/2020 03:19	WG1549420
1,1,2,2-Tetrachloroethane	ND		0.00390	1	09/29/2020 03:19	WG1549420
1,1,2-Trichlorotrifluoroethane	ND		0.00390	1	09/29/2020 03:19	WG1549420
Tetrachloroethene	ND		0.00390	1	09/29/2020 03:19	WG1549420
Toluene	ND		0.00781	1	09/29/2020 03:19	WG1549420
1,2,3-Trichlorobenzene	ND	J0	0.0195	1	09/29/2020 03:19	WG1549420
1,2,4-Trichlorobenzene	ND		0.0195	1	09/29/2020 03:19	WG1549420
1,1,1-Trichloroethane	ND		0.00390	1	09/29/2020 03:19	WG1549420
1,1,2-Trichloroethane	ND		0.00390	1	09/29/2020 03:19	WG1549420
Trichloroethene	ND		0.00156	1	09/29/2020 03:19	WG1549420
Trichlorofluoromethane	ND		0.00390	1	09/29/2020 03:19	WG1549420
1,2,3-Trichloropropane	ND		0.0195	1	09/29/2020 03:19	WG1549420
1,2,4-Trimethylbenzene	0.0145		0.00781	1	09/29/2020 03:19	WG1549420
1,2,3-Trimethylbenzene	0.00810		0.00781	1	09/29/2020 03:19	WG1549420
1,3,5-Trimethylbenzene	ND		0.00781	1	09/29/2020 03:19	WG1549420
Vinyl chloride	ND		0.00390	1	09/29/2020 03:19	WG1549420
Xylenes, Total	0.0311		0.0101	1	09/29/2020 03:19	WG1549420
(S) Toluene-d8	*105*		*75.0-131*		*09/29/2020 03:19*	WG1549420
(S) Toluene-d8	*100*		*75.0-131*		*09/29/2020 15:14*	WG1550931
(S) 4-Bromofluorobenzene	*106*		*67.0-138*		*09/29/2020 03:19*	WG1549420
(S) 4-Bromofluorobenzene	*110*		*67.0-138*		*09/29/2020 15:14*	WG1550931
(S) 1,2-Dichloroethane-d4	*94.6*		*70.0-130*		*09/29/2020 03:19*	WG1549420
(S) 1,2-Dichloroethane-d4	*105*		*70.0-130*		*09/29/2020 15:14*	WG1550931

Semi-Volatile Organic Compounds (GC) by Method KS MRH/HRH

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
MRH (C9-C18)	ND		12.6	1	09/29/2020 09:58	WG1548722
HRH (C19-C35)	18.7	B	12.6	1	09/29/2020 09:58	WG1548722
(S) 1-Chloro-octadecane	*103*		*40.0-140*		*09/29/2020 09:58*	WG1548722

Pesticides (GC) by Method 8081B

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	ND		0.0251	1	09/24/2020 05:00	WG1547939
Alpha BHC	ND		0.0251	1	09/24/2020 05:00	WG1547939
Beta BHC	ND		0.0251	1	09/24/2020 05:00	WG1547939
Delta BHC	ND		0.0251	1	09/24/2020 05:00	WG1547939
Gamma BHC	ND		0.0251	1	09/24/2020 05:00	WG1547939
Chlordane	ND		0.377	1	09/24/2020 05:00	WG1547939
4,4-DDD	ND		0.0251	1	09/24/2020 05:00	WG1547939
4,4-DDE	ND		0.0251	1	09/24/2020 05:00	WG1547939
4,4-DDT	ND		0.0251	1	09/24/2020 05:00	WG1547939
Dieldrin	ND		0.0251	1	09/24/2020 05:00	WG1547939
Endosulfan I	ND		0.0251	1	09/24/2020 05:00	WG1547939
Endosulfan II	ND		0.0251	1	09/24/2020 05:00	WG1547939
Endosulfan sulfate	ND		0.0251	1	09/24/2020 05:00	WG1547939
Endrin	ND		0.0251	1	09/24/2020 05:00	WG1547939
Endrin aldehyde	ND		0.0251	1	09/24/2020 05:00	WG1547939
Endrin ketone	ND		0.0251	1	09/24/2020 05:00	WG1547939
Hexachlorobenzene	ND		0.0251	1	09/24/2020 05:00	WG1547939
Heptachlor	ND		0.0251	1	09/24/2020 05:00	WG1547939
Heptachlor epoxide	ND		0.0251	1	09/24/2020 05:00	WG1547939
Methoxychlor	ND		0.0251	1	09/24/2020 05:00	WG1547939
Toxaphene	ND		0.502	1	09/24/2020 05:00	WG1547939
(S) Decachlorobiphenyl	*48.7*		*10.0-135*		*09/24/2020 05:00*	WG1547939
(S) Tetrachloro-m-xylene	*51.6*		*10.0-139*		*09/24/2020 05:00*	WG1547939

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.0418	1	09/29/2020 15:30	WG1550290
Acenaphthylene	ND		0.0418	1	09/29/2020 15:30	WG1550290
Anthracene	ND		0.0418	1	09/29/2020 15:30	WG1550290
Benzidine	ND		2.10	1	09/29/2020 15:30	WG1550290
Benzo(a)anthracene	ND		0.0418	1	09/29/2020 15:30	WG1550290
Benzo(b)fluoranthene	ND		0.0418	1	09/29/2020 15:30	WG1550290
Benzo(k)fluoranthene	ND		0.0418	1	09/29/2020 15:30	WG1550290
Benzo(g,h,i)perylene	ND		0.0418	1	09/29/2020 15:30	WG1550290
Benzo(a)pyrene	ND		0.0418	1	09/29/2020 15:30	WG1550290
Bis(2-chlorethoxy)methane	ND		0.418	1	09/29/2020 15:30	WG1550290
Bis(2-chloroethyl)ether	ND		0.418	1	09/29/2020 15:30	WG1550290
2,2-Oxybis(1-Chloropropane)	ND		0.418	1	09/29/2020 15:30	WG1550290
4-Bromophenyl-phenylether	ND		0.418	1	09/29/2020 15:30	WG1550290
2-Chloronaphthalene	ND		0.0418	1	09/29/2020 15:30	WG1550290
4-Chlorophenyl-phenylether	ND		0.418	1	09/29/2020 15:30	WG1550290
Chrysene	ND		0.0418	1	09/29/2020 15:30	WG1550290
Dibenz(a,h)anthracene	ND		0.0418	1	09/29/2020 15:30	WG1550290
3,3-Dichlorobenzidine	ND		0.418	1	09/29/2020 15:30	WG1550290
2,4-Dinitrotoluene	ND		0.418	1	09/29/2020 15:30	WG1550290
2,6-Dinitrotoluene	ND		0.418	1	09/29/2020 15:30	WG1550290
Fluoranthene	ND		0.0418	1	09/29/2020 15:30	WG1550290
Fluorene	ND		0.0418	1	09/29/2020 15:30	WG1550290
Hexachlorobenzene	ND		0.418	1	09/29/2020 15:30	WG1550290
Hexachloro-1,3-butadiene	ND		0.418	1	09/29/2020 15:30	WG1550290
Hexachlorocyclopentadiene	ND		0.418	1	09/29/2020 15:30	WG1550290
Hexachloroethane	ND		0.418	1	09/29/2020 15:30	WG1550290
Indeno(1,2,3-cd)pyrene	ND		0.0418	1	09/29/2020 15:30	WG1550290
Isophorone	ND		0.418	1	09/29/2020 15:30	WG1550290
Naphthalene	ND		0.0418	1	09/29/2020 15:30	WG1550290

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Nitrobenzene	ND		0.418	1	09/29/2020 15:30	WG1550290
n-Nitrosodimethylamine	ND		0.418	1	09/29/2020 15:30	WG1550290
n-Nitrosodiphenylamine	ND		0.418	1	09/29/2020 15:30	WG1550290
n-Nitrosodi-n-propylamine	ND		0.418	1	09/29/2020 15:30	WG1550290
Phenanthrene	ND		0.0418	1	09/29/2020 15:30	WG1550290
Benzylbutyl phthalate	ND		0.418	1	09/29/2020 15:30	WG1550290
Bis(2-ethylhexyl)phthalate	ND		0.418	1	09/29/2020 15:30	WG1550290
Di-n-butyl phthalate	ND		0.418	1	09/29/2020 15:30	WG1550290
Diethyl phthalate	ND		0.418	1	09/29/2020 15:30	WG1550290
Dimethyl phthalate	ND		0.418	1	09/29/2020 15:30	WG1550290
Di-n-octyl phthalate	ND		0.418	1	09/29/2020 15:30	WG1550290
Pyrene	ND		0.0418	1	09/29/2020 15:30	WG1550290
1,2,4-Trichlorobenzene	ND		0.418	1	09/29/2020 15:30	WG1550290
4-Chloro-3-methylphenol	ND		0.418	1	09/29/2020 15:30	WG1550290
2-Chlorophenol	ND		0.418	1	09/29/2020 15:30	WG1550290
2,4-Dichlorophenol	ND		0.418	1	09/29/2020 15:30	WG1550290
2,4-Dimethylphenol	ND		0.418	1	09/29/2020 15:30	WG1550290
4,6-Dinitro-2-methylphenol	ND		0.418	1	09/29/2020 15:30	WG1550290
2,4-Dinitrophenol	ND		0.418	1	09/29/2020 15:30	WG1550290
2-Nitrophenol	ND		0.418	1	09/29/2020 15:30	WG1550290
4-Nitrophenol	ND		0.418	1	09/29/2020 15:30	WG1550290
Pentachlorophenol	ND		0.418	1	09/29/2020 15:30	WG1550290
Phenol	ND		0.418	1	09/29/2020 15:30	WG1550290
2,4,6-Trichlorophenol	ND		0.418	1	09/29/2020 15:30	WG1550290
(S) Nitrobenzene-d5	*45.7*		*10.0-122*		*09/29/2020 15:30*	WG1550290
(S) 2-Fluorobiphenyl	*54.6*		*15.0-120*		*09/29/2020 15:30*	WG1550290
(S) p-Terphenyl-d14	*62.2*		*10.0-120*		*09/29/2020 15:30*	WG1550290
(S) Phenol-d5	*52.4*		*10.0-120*		*09/29/2020 15:30*	WG1550290
(S) 2-Fluorophenol	*60.5*		*12.0-120*		*09/29/2020 15:30*	WG1550290
(S) 2,4,6-Tribromophenol	*68.9*		*10.0-127*		*09/29/2020 15:30*	WG1550290

Mercury by Method 7470A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Mercury	ND		0.200	1	09/21/2020 20:49	WG1546149

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Arsenic	ND		10.0	1	09/28/2020 18:31	WG1547544
Barium	ND		5.00	1	09/28/2020 18:31	WG1547544
Cadmium	ND		2.00	1	09/28/2020 18:31	WG1547544
Chromium	ND		10.0	1	09/28/2020 18:31	WG1547544
Lead	ND		6.00	1	09/28/2020 18:31	WG1547544
Selenium	15.4		10.0	1	09/28/2020 18:31	WG1547544
Silver	ND		5.00	1	09/28/2020 18:31	WG1547544

Volatile Petroleum Hydrocarbons by Method KS LRH

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
LRH (C5-C8)	ND		100	1	09/22/2020 21:07	WG1547271
(S) 2,5-Dibromotoluene(FID)	*89.8*		*70.0-130*		*09/22/2020 21:07*	WG1547271

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		50.0	1	09/26/2020 18:07	WG1549772
Acrolein	ND		50.0	1	09/26/2020 18:07	WG1549772
Acrylonitrile	ND		10.0	1	09/26/2020 18:07	WG1549772
Benzene	ND		1.00	1	09/26/2020 18:07	WG1549772
Bromobenzene	ND		1.00	1	09/26/2020 18:07	WG1549772
Bromodichloromethane	ND		1.00	1	09/26/2020 18:07	WG1549772
Bromoform	ND		1.00	1	09/26/2020 18:07	WG1549772
Bromomethane	ND		5.00	1	09/26/2020 18:07	WG1549772
n-Butylbenzene	ND		1.00	1	09/26/2020 18:07	WG1549772
sec-Butylbenzene	ND		1.00	1	09/26/2020 18:07	WG1549772
tert-Butylbenzene	ND		1.00	1	09/26/2020 18:07	WG1549772
Carbon tetrachloride	ND		1.00	1	09/26/2020 18:07	WG1549772
Chlorobenzene	ND		1.00	1	09/26/2020 18:07	WG1549772
Chlorodibromomethane	ND		1.00	1	09/26/2020 18:07	WG1549772
Chloroethane	ND		5.00	1	09/26/2020 18:07	WG1549772
Chloroform	ND		5.00	1	09/26/2020 18:07	WG1549772
Chloromethane	ND	J3	2.50	1	09/26/2020 18:07	WG1549772
2-Chlorotoluene	ND	J3	1.00	1	09/26/2020 18:07	WG1549772
4-Chlorotoluene	ND	J3	1.00	1	09/26/2020 18:07	WG1549772
1,2-Dibromo-3-Chloropropane	ND		5.00	1	09/26/2020 18:07	WG1549772
1,2-Dibromoethane	ND		1.00	1	09/26/2020 18:07	WG1549772
Dibromomethane	ND		1.00	1	09/26/2020 18:07	WG1549772
1,2-Dichlorobenzene	ND		1.00	1	09/26/2020 18:07	WG1549772
1,3-Dichlorobenzene	ND		1.00	1	09/26/2020 18:07	WG1549772
1,4-Dichlorobenzene	ND		1.00	1	09/26/2020 18:07	WG1549772
Dichlorodifluoromethane	ND		5.00	1	09/26/2020 18:07	WG1549772
1,1-Dichloroethane	ND		1.00	1	09/26/2020 18:07	WG1549772
1,2-Dichloroethane	ND		1.00	1	09/26/2020 18:07	WG1549772
1,1-Dichloroethene	ND	J3	1.00	1	09/26/2020 18:07	WG1549772
cis-1,2-Dichloroethene	ND	J3	1.00	1	09/26/2020 18:07	WG1549772
trans-1,2-Dichloroethene	ND	J3	1.00	1	09/26/2020 18:07	WG1549772
1,2-Dichloropropane	ND		1.00	1	09/26/2020 18:07	WG1549772

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	ND		1.00	1	09/26/2020 18:07	WG1549772
1,3-Dichloropropane	ND		1.00	1	09/26/2020 18:07	WG1549772
cis-1,3-Dichloropropene	ND	J3	1.00	1	09/26/2020 18:07	WG1549772
trans-1,3-Dichloropropene	ND		1.00	1	09/26/2020 18:07	WG1549772
2,2-Dichloropropane	ND		1.00	1	09/26/2020 18:07	WG1549772
Di-isopropyl ether	ND		1.00	1	09/26/2020 18:07	WG1549772
Ethylbenzene	ND		1.00	1	09/26/2020 18:07	WG1549772
Hexachloro-1,3-butadiene	ND		1.00	1	09/26/2020 18:07	WG1549772
Isopropylbenzene	ND		1.00	1	09/26/2020 18:07	WG1549772
p-Isopropyltoluene	ND		1.00	1	09/26/2020 18:07	WG1549772
2-Butanone (MEK)	ND		10.0	1	09/26/2020 18:07	WG1549772
Methylene Chloride	ND	J3	5.00	1	09/26/2020 18:07	WG1549772
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	09/26/2020 18:07	WG1549772
Methyl tert-butyl ether	ND		1.00	1	09/26/2020 18:07	WG1549772
Naphthalene	ND	J3	5.00	1	09/26/2020 18:07	WG1549772
n-Propylbenzene	ND	J3	1.00	1	09/26/2020 18:07	WG1549772
Styrene	ND		1.00	1	09/26/2020 18:07	WG1549772
1,1,1,2-Tetrachloroethane	ND		1.00	1	09/26/2020 18:07	WG1549772
1,1,2,2-Tetrachloroethane	ND	J3	1.00	1	09/26/2020 18:07	WG1549772
1,1,2-Trichlorotrifluoroethane	ND	J3	1.00	1	09/26/2020 18:07	WG1549772
Tetrachloroethene	ND		1.00	1	09/26/2020 18:07	WG1549772
Toluene	ND		1.00	1	09/26/2020 18:07	WG1549772
1,2,3-Trichlorobenzene	ND		1.00	1	09/26/2020 18:07	WG1549772
1,2,4-Trichlorobenzene	ND		1.00	1	09/26/2020 18:07	WG1549772
1,1,1-Trichloroethane	ND		1.00	1	09/26/2020 18:07	WG1549772
1,1,2-Trichloroethane	ND		1.00	1	09/26/2020 18:07	WG1549772
Trichloroethene	ND		1.00	1	09/26/2020 18:07	WG1549772
Trichlorofluoromethane	ND		5.00	1	09/26/2020 18:07	WG1549772
1,2,3-Trichloropropane	ND	J3	2.50	1	09/26/2020 18:07	WG1549772
1,2,4-Trimethylbenzene	ND		1.00	1	09/26/2020 18:07	WG1549772
1,2,3-Trimethylbenzene	ND		1.00	1	09/26/2020 18:07	WG1549772
1,3,5-Trimethylbenzene	ND	J3	1.00	1	09/26/2020 18:07	WG1549772
Vinyl chloride	ND	J3 J4	1.00	1	09/26/2020 18:07	WG1549772
Xylenes, Total	ND		3.00	1	09/26/2020 18:07	WG1549772
(S) Toluene-d8	*100*		*80.0-120*		*09/26/2020 18:07*	WG1549772
(S) 4-Bromofluorobenzene	*94.6*		*77.0-126*		*09/26/2020 18:07*	WG1549772
(S) 1,2-Dichloroethane-d4	*122*		*70.0-130*		*09/26/2020 18:07*	WG1549772

Semi-Volatile Organic Compounds (GC) by Method KS MRH/HRH

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
MRH (C9-C18)	ND		100	1	09/23/2020 00:34	WG1546384
HRH (C19-C35)	ND		100	1	09/23/2020 00:34	WG1546384
(S) 1-Chloro-octadecane	*94.5*		*40.0-140*		*09/23/2020 00:34*	WG1546384

Pesticides (GC) by Method 8081

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Aldrin	ND		0.0500	1	09/25/2020 19:02	WG1547970
Alpha BHC	ND		0.0500	1	09/25/2020 19:02	WG1547970
Beta BHC	ND		0.0500	1	09/25/2020 19:02	WG1547970
Delta BHC	ND		0.0500	1	09/25/2020 19:02	WG1547970
Gamma BHC	ND		0.0500	1	09/25/2020 19:02	WG1547970
Chlordane	ND		5.00	1	09/25/2020 19:02	WG1547970
4,4-DDD	ND		0.0500	1	09/25/2020 19:02	WG1547970

Pesticides (GC) by Method 8081

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
4,4-DDE	ND		0.0500	1	09/25/2020 19:02	WG1547970
4,4-DDT	ND		0.0500	1	09/25/2020 19:02	WG1547970
Dieldrin	ND		0.0500	1	09/25/2020 19:02	WG1547970
Endosulfan I	ND		0.0500	1	09/25/2020 19:02	WG1547970
Endosulfan II	ND		0.0500	1	09/25/2020 19:02	WG1547970
Endosulfan sulfate	ND		0.0500	1	09/25/2020 19:02	WG1547970
Endrin	ND		0.0500	1	09/25/2020 19:02	WG1547970
Endrin aldehyde	ND		0.0500	1	09/25/2020 19:02	WG1547970
Endrin ketone	ND		0.0500	1	09/25/2020 19:02	WG1547970
Heptachlor	ND		0.0500	1	09/25/2020 19:02	WG1547970
Heptachlor epoxide	ND		0.0500	1	09/25/2020 19:02	WG1547970
Hexachlorobenzene	ND		0.0500	1	09/25/2020 19:02	WG1547970
Methoxychlor	ND		0.0500	1	09/25/2020 19:02	WG1547970
Toxaphene	ND		0.500	1	09/25/2020 19:02	WG1547970
(S) Decachlorobiphenyl	*75.8*		*10.0-128*		*09/25/2020 19:02*	WG1547970
(S) Tetrachloro-m-xylene	*66.9*		*10.0-127*		*09/25/2020 19:02*	WG1547970

Polychlorinated Biphenyls (GC) by Method 8082

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
PCB 1016	ND		0.500	1	09/25/2020 12:49	WG1547970
PCB 1221	ND		0.500	1	09/25/2020 12:49	WG1547970
PCB 1232	ND		0.500	1	09/25/2020 12:49	WG1547970
PCB 1242	ND		0.500	1	09/25/2020 12:49	WG1547970
PCB 1248	ND		0.500	1	09/25/2020 12:49	WG1547970
PCB 1254	ND		0.500	1	09/25/2020 12:49	WG1547970
PCB 1260	ND		0.500	1	09/25/2020 12:49	WG1547970
(S) Decachlorobiphenyl	*69.6*		*10.0-128*		*09/25/2020 12:49*	WG1547970
(S) Tetrachloro-m-xylene	*63.3*		*10.0-127*		*09/25/2020 12:49*	WG1547970

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acenaphthene	ND		1.00	1	09/24/2020 18:18	WG1548358
Acenaphthylene	ND		1.00	1	09/24/2020 18:18	WG1548358
Anthracene	ND		1.00	1	09/24/2020 18:18	WG1548358
Benzidine	ND		10.0	1	09/24/2020 18:18	WG1548358
Benzo(a)anthracene	ND		1.00	1	09/24/2020 18:18	WG1548358
Benzo(b)fluoranthene	ND		1.00	1	09/24/2020 18:18	WG1548358
Benzo(k)fluoranthene	ND		1.00	1	09/24/2020 18:18	WG1548358
Benzo(g,h,i)perylene	ND		1.00	1	09/24/2020 18:18	WG1548358
Benzo(a)pyrene	ND		1.00	1	09/24/2020 18:18	WG1548358
Bis(2-chlorethoxy)methane	ND		10.0	1	09/24/2020 18:18	WG1548358
Bis(2-chloroethyl)ether	ND		10.0	1	09/24/2020 18:18	WG1548358
2,2-Oxybis(1-Chloropropane)	ND		10.0	1	09/24/2020 18:18	WG1548358
4-Bromophenyl-phenylether	ND		10.0	1	09/24/2020 18:18	WG1548358
2-Chloronaphthalene	ND		1.00	1	09/24/2020 18:18	WG1548358
4-Chlorophenyl-phenylether	ND		10.0	1	09/24/2020 18:18	WG1548358
Chrysene	ND		1.00	1	09/24/2020 18:18	WG1548358
Dibenz(a,h)anthracene	ND		1.00	1	09/24/2020 18:18	WG1548358
1,2-Dichlorobenzene	ND		10.0	1	09/24/2020 18:18	WG1548358
1,3-Dichlorobenzene	ND		10.0	1	09/24/2020 18:18	WG1548358
1,4-Dichlorobenzene	ND		10.0	1	09/24/2020 18:18	WG1548358
3,3-Dichlorobenzidine	ND		10.0	1	09/24/2020 18:18	WG1548358
2,4-Dinitrotoluene	ND		10.0	1	09/24/2020 18:18	WG1548358

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
2,6-Dinitrotoluene	ND		10.0	1	09/24/2020 18:18	WG1548358
Fluoranthene	ND		1.00	1	09/24/2020 18:18	WG1548358
Fluorene	ND		1.00	1	09/24/2020 18:18	WG1548358
Hexachlorobenzene	ND		1.00	1	09/24/2020 18:18	WG1548358
Hexachloro-1,3-butadiene	ND		10.0	1	09/24/2020 18:18	WG1548358
Hexachlorocyclopentadiene	ND		10.0	1	09/24/2020 18:18	WG1548358
Hexachloroethane	ND		10.0	1	09/24/2020 18:18	WG1548358
Indeno(1,2,3-cd)pyrene	ND		1.00	1	09/24/2020 18:18	WG1548358
Isophorone	ND		10.0	1	09/24/2020 18:18	WG1548358
Naphthalene	ND		1.00	1	09/24/2020 18:18	WG1548358
Nitrobenzene	ND		10.0	1	09/24/2020 18:18	WG1548358
n-Nitrosodimethylamine	ND		10.0	1	09/24/2020 18:18	WG1548358
n-Nitrosodiphenylamine	ND		10.0	1	09/24/2020 18:18	WG1548358
n-Nitrosodi-n-propylamine	ND		10.0	1	09/24/2020 18:18	WG1548358
Phenanthrene	ND		1.00	1	09/24/2020 18:18	WG1548358
Benzylbutyl phthalate	ND		3.00	1	09/24/2020 18:18	WG1548358
Bis(2-ethylhexyl)phthalate	ND		3.00	1	09/24/2020 18:18	WG1548358
Di-n-butyl phthalate	ND		3.00	1	09/24/2020 18:18	WG1548358
Diethyl phthalate	ND		3.00	1	09/24/2020 18:18	WG1548358
Dimethyl phthalate	ND		3.00	1	09/24/2020 18:18	WG1548358
Di-n-octyl phthalate	ND		3.00	1	09/24/2020 18:18	WG1548358
Pyrene	ND		1.00	1	09/24/2020 18:18	WG1548358
1,2,4-Trichlorobenzene	ND		10.0	1	09/24/2020 18:18	WG1548358
4-Chloro-3-methylphenol	ND		10.0	1	09/24/2020 18:18	WG1548358
2-Chlorophenol	ND		10.0	1	09/24/2020 18:18	WG1548358
2,4-Dichlorophenol	ND		10.0	1	09/24/2020 18:18	WG1548358
2,4-Dimethylphenol	ND		10.0	1	09/24/2020 18:18	WG1548358
4,6-Dinitro-2-methylphenol	ND		10.0	1	09/24/2020 18:18	WG1548358
2,4-Dinitrophenol	ND		10.0	1	09/24/2020 18:18	WG1548358
2-Nitrophenol	ND		10.0	1	09/24/2020 18:18	WG1548358
4-Nitrophenol	ND		10.0	1	09/24/2020 18:18	WG1548358
Pentachlorophenol	ND		10.0	1	09/24/2020 18:18	WG1548358
Phenol	ND		10.0	1	09/24/2020 18:18	WG1548358
2,4,6-Trichlorophenol	ND		10.0	1	09/24/2020 18:18	WG1548358
(S) 2-Fluorophenol	*24.9*		*10.0-120*		*09/24/2020 18:18*	WG1548358
(S) Phenol-d5	*16.3*		*10.0-120*		*09/24/2020 18:18*	WG1548358
(S) Nitrobenzene-d5	*48.4*		*10.0-127*		*09/24/2020 18:18*	WG1548358
(S) 2-Fluorobiphenyl	*54.5*		*10.0-130*		*09/24/2020 18:18*	WG1548358
(S) 2,4,6-Tribromophenol	*60.0*		*10.0-155*		*09/24/2020 18:18*	WG1548358
(S) p-Terphenyl-d14	*76.7*		*10.0-128*		*09/24/2020 18:18*	WG1548358

Mercury by Method 7470A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Mercury	ND		0.200	1	09/21/2020 20:51	WG1546149

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Arsenic	ND		10.0	1	09/28/2020 18:34	WG1547544
Barium	ND		5.00	1	09/28/2020 18:34	WG1547544
Cadmium	ND		2.00	1	09/28/2020 18:34	WG1547544
Chromium	ND		10.0	1	09/28/2020 18:34	WG1547544
Lead	ND		6.00	1	09/28/2020 18:34	WG1547544
Selenium	ND		10.0	1	09/28/2020 18:34	WG1547544
Silver	ND		5.00	1	09/28/2020 18:34	WG1547544

Volatile Petroleum Hydrocarbons by Method KS LRH

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
LRH (C5-C8)	ND		100	1	09/22/2020 21:44	WG1547271
(S) 2,5-Dibromotoluene(FID)	*91.2*		*70.0-130*		*09/22/2020 21:44*	WG1547271

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		50.0	1	09/26/2020 18:27	WG1549772
Acrolein	ND		50.0	1	09/26/2020 18:27	WG1549772
Acrylonitrile	ND		10.0	1	09/26/2020 18:27	WG1549772
Benzene	ND		1.00	1	09/26/2020 18:27	WG1549772
Bromobenzene	ND		1.00	1	09/26/2020 18:27	WG1549772
Bromodichloromethane	ND		1.00	1	09/26/2020 18:27	WG1549772
Bromoform	ND		1.00	1	09/26/2020 18:27	WG1549772
Bromomethane	ND		5.00	1	09/26/2020 18:27	WG1549772
n-Butylbenzene	ND		1.00	1	09/26/2020 18:27	WG1549772
sec-Butylbenzene	ND		1.00	1	09/26/2020 18:27	WG1549772
tert-Butylbenzene	ND		1.00	1	09/26/2020 18:27	WG1549772
Carbon tetrachloride	ND		1.00	1	09/26/2020 18:27	WG1549772
Chlorobenzene	ND		1.00	1	09/26/2020 18:27	WG1549772
Chlorodibromomethane	ND		1.00	1	09/26/2020 18:27	WG1549772
Chloroethane	ND		5.00	1	09/26/2020 18:27	WG1549772
Chloroform	ND		5.00	1	09/26/2020 18:27	WG1549772
Chloromethane	ND	J3	2.50	1	09/26/2020 18:27	WG1549772
2-Chlorotoluene	ND	J3	1.00	1	09/26/2020 18:27	WG1549772
4-Chlorotoluene	ND	J3	1.00	1	09/26/2020 18:27	WG1549772
1,2-Dibromo-3-Chloropropane	ND		5.00	1	09/26/2020 18:27	WG1549772
1,2-Dibromoethane	ND		1.00	1	09/26/2020 18:27	WG1549772
Dibromomethane	ND		1.00	1	09/26/2020 18:27	WG1549772
1,2-Dichlorobenzene	ND		1.00	1	09/26/2020 18:27	WG1549772
1,3-Dichlorobenzene	ND		1.00	1	09/26/2020 18:27	WG1549772
1,4-Dichlorobenzene	ND		1.00	1	09/26/2020 18:27	WG1549772
Dichlorodifluoromethane	ND		5.00	1	09/26/2020 18:27	WG1549772
1,1-Dichloroethane	ND		1.00	1	09/26/2020 18:27	WG1549772
1,2-Dichloroethane	ND		1.00	1	09/26/2020 18:27	WG1549772
1,1-Dichloroethene	ND	J3	1.00	1	09/26/2020 18:27	WG1549772
cis-1,2-Dichloroethene	ND	J3	1.00	1	09/26/2020 18:27	WG1549772
trans-1,2-Dichloroethene	ND	J3	1.00	1	09/26/2020 18:27	WG1549772
1,2-Dichloropropane	ND		1.00	1	09/26/2020 18:27	WG1549772

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	ND		1.00	1	09/26/2020 18:27	WG1549772
1,3-Dichloropropane	ND		1.00	1	09/26/2020 18:27	WG1549772
cis-1,3-Dichloropropene	ND	J3	1.00	1	09/26/2020 18:27	WG1549772
trans-1,3-Dichloropropene	ND		1.00	1	09/26/2020 18:27	WG1549772
2,2-Dichloropropane	ND		1.00	1	09/26/2020 18:27	WG1549772
Di-isopropyl ether	ND		1.00	1	09/26/2020 18:27	WG1549772
Ethylbenzene	ND		1.00	1	09/26/2020 18:27	WG1549772
Hexachloro-1,3-butadiene	ND		1.00	1	09/26/2020 18:27	WG1549772
Isopropylbenzene	ND		1.00	1	09/26/2020 18:27	WG1549772
p-Isopropyltoluene	ND		1.00	1	09/26/2020 18:27	WG1549772
2-Butanone (MEK)	ND		10.0	1	09/26/2020 18:27	WG1549772
Methylene Chloride	ND	J3	5.00	1	09/26/2020 18:27	WG1549772
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	09/26/2020 18:27	WG1549772
Methyl tert-butyl ether	ND		1.00	1	09/26/2020 18:27	WG1549772
Naphthalene	ND	J3	5.00	1	09/26/2020 18:27	WG1549772
n-Propylbenzene	ND	J3	1.00	1	09/26/2020 18:27	WG1549772
Styrene	ND		1.00	1	09/26/2020 18:27	WG1549772
1,1,1,2-Tetrachloroethane	ND		1.00	1	09/26/2020 18:27	WG1549772
1,1,2,2-Tetrachloroethane	ND	J3	1.00	1	09/26/2020 18:27	WG1549772
1,1,2-Trichlorotrifluoroethane	ND	J3	1.00	1	09/26/2020 18:27	WG1549772
Tetrachloroethene	ND		1.00	1	09/26/2020 18:27	WG1549772
Toluene	ND		1.00	1	09/26/2020 18:27	WG1549772
1,2,3-Trichlorobenzene	ND		1.00	1	09/26/2020 18:27	WG1549772
1,2,4-Trichlorobenzene	ND		1.00	1	09/26/2020 18:27	WG1549772
1,1,1-Trichloroethane	ND		1.00	1	09/26/2020 18:27	WG1549772
1,1,2-Trichloroethane	ND		1.00	1	09/26/2020 18:27	WG1549772
Trichloroethene	ND		1.00	1	09/26/2020 18:27	WG1549772
Trichlorofluoromethane	ND		5.00	1	09/26/2020 18:27	WG1549772
1,2,3-Trichloropropane	ND	J3	2.50	1	09/26/2020 18:27	WG1549772
1,2,4-Trimethylbenzene	ND		1.00	1	09/26/2020 18:27	WG1549772
1,2,3-Trimethylbenzene	ND		1.00	1	09/26/2020 18:27	WG1549772
1,3,5-Trimethylbenzene	ND	J3	1.00	1	09/26/2020 18:27	WG1549772
Vinyl chloride	ND	J3 J4	1.00	1	09/26/2020 18:27	WG1549772
Xylenes, Total	ND		3.00	1	09/26/2020 18:27	WG1549772
(S) Toluene-d8	*93.9*		*80.0-120*		*09/26/2020 18:27*	WG1549772
(S) 4-Bromofluorobenzene	*97.4*		*77.0-126*		*09/26/2020 18:27*	WG1549772
(S) 1,2-Dichloroethane-d4	*124*		*70.0-130*		*09/26/2020 18:27*	WG1549772

Semi-Volatile Organic Compounds (GC) by Method KS MRH/HRH

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
MRH (C9-C18)	ND		100	1	09/23/2020 00:57	WG1546384
HRH (C19-C35)	ND		100	1	09/23/2020 00:57	WG1546384
(S) 1-Chloro-octadecane	*97.1*		*40.0-140*		*09/23/2020 00:57*	WG1546384

Pesticides (GC) by Method 8081

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Aldrin	ND		0.0500	1	09/25/2020 19:15	WG1547970
Alpha BHC	ND		0.0500	1	09/25/2020 19:15	WG1547970
Beta BHC	ND		0.0500	1	09/25/2020 19:15	WG1547970
Delta BHC	ND		0.0500	1	09/25/2020 19:15	WG1547970
Gamma BHC	ND		0.0500	1	09/25/2020 19:15	WG1547970
Chlordane	ND		5.00	1	09/25/2020 19:15	WG1547970
4,4-DDD	ND		0.0500	1	09/25/2020 19:15	WG1547970

Pesticides (GC) by Method 8081

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
4,4-DDE	ND		0.0500	1	09/25/2020 19:15	WG1547970
4,4-DDT	ND		0.0500	1	09/25/2020 19:15	WG1547970
Dieldrin	ND		0.0500	1	09/25/2020 19:15	WG1547970
Endosulfan I	ND		0.0500	1	09/25/2020 19:15	WG1547970
Endosulfan II	ND		0.0500	1	09/25/2020 19:15	WG1547970
Endosulfan sulfate	ND		0.0500	1	09/25/2020 19:15	WG1547970
Endrin	ND		0.0500	1	09/25/2020 19:15	WG1547970
Endrin aldehyde	ND		0.0500	1	09/25/2020 19:15	WG1547970
Endrin ketone	ND		0.0500	1	09/25/2020 19:15	WG1547970
Heptachlor	ND		0.0500	1	09/25/2020 19:15	WG1547970
Heptachlor epoxide	ND		0.0500	1	09/25/2020 19:15	WG1547970
Hexachlorobenzene	ND		0.0500	1	09/25/2020 19:15	WG1547970
Methoxychlor	ND		0.0500	1	09/25/2020 19:15	WG1547970
Toxaphene	ND		0.500	1	09/25/2020 19:15	WG1547970
(S) Decachlorobiphenyl	*82.7*		*10.0-128*		*09/25/2020 19:15*	WG1547970
(S) Tetrachloro-m-xylene	*65.8*		*10.0-127*		*09/25/2020 19:15*	WG1547970

Polychlorinated Biphenyls (GC) by Method 8082

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
PCB 1016	ND		0.500	1	09/25/2020 13:03	WG1547970
PCB 1221	ND		0.500	1	09/25/2020 13:03	WG1547970
PCB 1232	ND		0.500	1	09/25/2020 13:03	WG1547970
PCB 1242	ND		0.500	1	09/25/2020 13:03	WG1547970
PCB 1248	ND		0.500	1	09/25/2020 13:03	WG1547970
PCB 1254	ND		0.500	1	09/25/2020 13:03	WG1547970
PCB 1260	ND		0.500	1	09/25/2020 13:03	WG1547970
(S) Decachlorobiphenyl	*76.3*		*10.0-128*		*09/25/2020 13:03*	WG1547970
(S) Tetrachloro-m-xylene	*69.0*		*10.0-127*		*09/25/2020 13:03*	WG1547970

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acenaphthene	ND		1.00	1	09/25/2020 16:43	WG1548605
Acenaphthylene	ND		1.00	1	09/25/2020 16:43	WG1548605
Anthracene	ND		1.00	1	09/25/2020 16:43	WG1548605
Benzidine	ND		10.0	1	09/25/2020 16:43	WG1548605
Benzo(a)anthracene	ND		1.00	1	09/25/2020 16:43	WG1548605
Benzo(b)fluoranthene	ND		1.00	1	09/25/2020 16:43	WG1548605
Benzo(k)fluoranthene	ND		1.00	1	09/25/2020 16:43	WG1548605
Benzo(g,h,i)perylene	ND		1.00	1	09/25/2020 16:43	WG1548605
Benzo(a)pyrene	ND		1.00	1	09/25/2020 16:43	WG1548605
Bis(2-chlorethoxy)methane	ND		10.0	1	09/25/2020 16:43	WG1548605
Bis(2-chloroethyl)ether	ND		10.0	1	09/25/2020 16:43	WG1548605
2,2-Oxybis(1-Chloropropane)	ND		10.0	1	09/25/2020 16:43	WG1548605
4-Bromophenyl-phenylether	ND		10.0	1	09/25/2020 16:43	WG1548605
2-Chloronaphthalene	ND		1.00	1	09/25/2020 16:43	WG1548605
4-Chlorophenyl-phenylether	ND		10.0	1	09/25/2020 16:43	WG1548605
Chrysene	ND		1.00	1	09/25/2020 16:43	WG1548605
Dibenz(a,h)anthracene	ND		1.00	1	09/25/2020 16:43	WG1548605
1,2-Dichlorobenzene	ND		10.0	1	09/25/2020 16:43	WG1548605
1,3-Dichlorobenzene	ND		10.0	1	09/25/2020 16:43	WG1548605
1,4-Dichlorobenzene	ND		10.0	1	09/25/2020 16:43	WG1548605
3,3-Dichlorobenzidine	ND		10.0	1	09/25/2020 16:43	WG1548605
2,4-Dinitrotoluene	ND		10.0	1	09/25/2020 16:43	WG1548605

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
2,6-Dinitrotoluene	ND		10.0	1	09/25/2020 16:43	WG1548605
Fluoranthene	ND		1.00	1	09/25/2020 16:43	WG1548605
Fluorene	ND		1.00	1	09/25/2020 16:43	WG1548605
Hexachlorobenzene	ND		1.00	1	09/25/2020 16:43	WG1548605
Hexachloro-1,3-butadiene	ND		10.0	1	09/25/2020 16:43	WG1548605
Hexachlorocyclopentadiene	ND		10.0	1	09/25/2020 16:43	WG1548605
Hexachloroethane	ND		10.0	1	09/25/2020 16:43	WG1548605
Indeno(1,2,3-cd)pyrene	ND		1.00	1	09/25/2020 16:43	WG1548605
Isophorone	ND		10.0	1	09/25/2020 16:43	WG1548605
Naphthalene	ND		1.00	1	09/25/2020 16:43	WG1548605
Nitrobenzene	ND		10.0	1	09/25/2020 16:43	WG1548605
n-Nitrosodimethylamine	ND		10.0	1	09/25/2020 16:43	WG1548605
n-Nitrosodiphenylamine	ND		10.0	1	09/25/2020 16:43	WG1548605
n-Nitrosodi-n-propylamine	ND		10.0	1	09/25/2020 16:43	WG1548605
Phenanthrene	ND		1.00	1	09/25/2020 16:43	WG1548605
Benzylbutyl phthalate	ND		3.00	1	09/25/2020 16:43	WG1548605
Bis(2-ethylhexyl)phthalate	ND		3.00	1	09/25/2020 16:43	WG1548605
Di-n-butyl phthalate	ND		3.00	1	09/25/2020 16:43	WG1548605
Diethyl phthalate	ND		3.00	1	09/25/2020 16:43	WG1548605
Dimethyl phthalate	ND		3.00	1	09/25/2020 16:43	WG1548605
Di-n-octyl phthalate	ND		3.00	1	09/25/2020 16:43	WG1548605
Pyrene	ND		1.00	1	09/25/2020 16:43	WG1548605
1,2,4-Trichlorobenzene	ND		10.0	1	09/25/2020 16:43	WG1548605
4-Chloro-3-methylphenol	ND		10.0	1	09/25/2020 16:43	WG1548605
2-Chlorophenol	ND		10.0	1	09/25/2020 16:43	WG1548605
2,4-Dichlorophenol	ND		10.0	1	09/25/2020 16:43	WG1548605
2,4-Dimethylphenol	ND		10.0	1	09/25/2020 16:43	WG1548605
4,6-Dinitro-2-methylphenol	ND		10.0	1	09/25/2020 16:43	WG1548605
2,4-Dinitrophenol	ND		10.0	1	09/25/2020 16:43	WG1548605
2-Nitrophenol	ND		10.0	1	09/25/2020 16:43	WG1548605
4-Nitrophenol	ND		10.0	1	09/25/2020 16:43	WG1548605
Pentachlorophenol	ND		10.0	1	09/25/2020 16:43	WG1548605
Phenol	ND		10.0	1	09/25/2020 16:43	WG1548605
2,4,6-Trichlorophenol	ND		10.0	1	09/25/2020 16:43	WG1548605
(S) 2-Fluorophenol	*29.7*		*10.0-120*		*09/25/2020 16:43*	WG1548605
(S) Phenol-d5	*19.5*		*10.0-120*		*09/25/2020 16:43*	WG1548605
(S) Nitrobenzene-d5	*54.5*		*10.0-127*		*09/25/2020 16:43*	WG1548605
(S) 2-Fluorobiphenyl	*58.6*		*10.0-130*		*09/25/2020 16:43*	WG1548605
(S) 2,4,6-Tribromophenol	*47.6*		*10.0-155*		*09/25/2020 16:43*	WG1548605
(S) p-Terphenyl-d14	*63.5*		*10.0-128*		*09/25/2020 16:43*	WG1548605

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		50.0	1	09/26/2020 18:46	WG1549772
Acrolein	ND		50.0	1	09/26/2020 18:46	WG1549772
Acrylonitrile	ND		10.0	1	09/26/2020 18:46	WG1549772
Benzene	ND		1.00	1	09/26/2020 18:46	WG1549772
Bromobenzene	ND		1.00	1	09/26/2020 18:46	WG1549772
Bromodichloromethane	ND		1.00	1	09/26/2020 18:46	WG1549772
Bromoform	ND		1.00	1	09/26/2020 18:46	WG1549772
Bromomethane	ND		5.00	1	09/26/2020 18:46	WG1549772
n-Butylbenzene	ND		1.00	1	09/26/2020 18:46	WG1549772
sec-Butylbenzene	ND		1.00	1	09/26/2020 18:46	WG1549772
tert-Butylbenzene	ND		1.00	1	09/26/2020 18:46	WG1549772
Carbon tetrachloride	ND		1.00	1	09/26/2020 18:46	WG1549772
Chlorobenzene	ND		1.00	1	09/26/2020 18:46	WG1549772
Chlorodibromomethane	ND		1.00	1	09/26/2020 18:46	WG1549772
Chloroethane	ND		5.00	1	09/26/2020 18:46	WG1549772
Chloroform	ND		5.00	1	09/26/2020 18:46	WG1549772
Chloromethane	ND	J3	2.50	1	09/26/2020 18:46	WG1549772
2-Chlorotoluene	ND	J3	1.00	1	09/26/2020 18:46	WG1549772
4-Chlorotoluene	ND	J3	1.00	1	09/26/2020 18:46	WG1549772
1,2-Dibromo-3-Chloropropane	ND		5.00	1	09/26/2020 18:46	WG1549772
1,2-Dibromoethane	ND		1.00	1	09/26/2020 18:46	WG1549772
Dibromomethane	ND		1.00	1	09/26/2020 18:46	WG1549772
1,2-Dichlorobenzene	ND		1.00	1	09/26/2020 18:46	WG1549772
1,3-Dichlorobenzene	ND		1.00	1	09/26/2020 18:46	WG1549772
1,4-Dichlorobenzene	ND		1.00	1	09/26/2020 18:46	WG1549772
Dichlorodifluoromethane	ND		5.00	1	09/26/2020 18:46	WG1549772
1,1-Dichloroethane	ND		1.00	1	09/26/2020 18:46	WG1549772
1,2-Dichloroethane	ND		1.00	1	09/26/2020 18:46	WG1549772
1,1-Dichloroethene	ND	J3	1.00	1	09/26/2020 18:46	WG1549772
cis-1,2-Dichloroethene	ND	J3	1.00	1	09/26/2020 18:46	WG1549772
trans-1,2-Dichloroethene	ND	J3	1.00	1	09/26/2020 18:46	WG1549772
1,2-Dichloropropane	ND		1.00	1	09/26/2020 18:46	WG1549772
1,1-Dichloropropene	ND		1.00	1	09/26/2020 18:46	WG1549772
1,3-Dichloropropane	ND		1.00	1	09/26/2020 18:46	WG1549772
cis-1,3-Dichloropropene	ND	J3	1.00	1	09/26/2020 18:46	WG1549772
trans-1,3-Dichloropropene	ND		1.00	1	09/26/2020 18:46	WG1549772
2,2-Dichloropropane	ND		1.00	1	09/26/2020 18:46	WG1549772
Di-isopropyl ether	ND		1.00	1	09/26/2020 18:46	WG1549772
Ethylbenzene	ND		1.00	1	09/26/2020 18:46	WG1549772
Hexachloro-1,3-butadiene	ND		1.00	1	09/26/2020 18:46	WG1549772
Isopropylbenzene	ND		1.00	1	09/26/2020 18:46	WG1549772
p-Isopropyltoluene	ND		1.00	1	09/26/2020 18:46	WG1549772
2-Butanone (MEK)	ND		10.0	1	09/26/2020 18:46	WG1549772
Methylene Chloride	ND	J3	5.00	1	09/26/2020 18:46	WG1549772
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	09/26/2020 18:46	WG1549772
Methyl tert-butyl ether	ND		1.00	1	09/26/2020 18:46	WG1549772
Naphthalene	ND	J3	5.00	1	09/26/2020 18:46	WG1549772
n-Propylbenzene	ND	J3	1.00	1	09/26/2020 18:46	WG1549772
Styrene	ND		1.00	1	09/26/2020 18:46	WG1549772
1,1,1,2-Tetrachloroethane	ND		1.00	1	09/26/2020 18:46	WG1549772
1,1,2,2-Tetrachloroethane	ND	J3	1.00	1	09/26/2020 18:46	WG1549772
1,1,2-Trichlorotrifluoroethane	ND	J3	1.00	1	09/26/2020 18:46	WG1549772
Tetrachloroethene	ND		1.00	1	09/26/2020 18:46	WG1549772
Toluene	ND		1.00	1	09/26/2020 18:46	WG1549772
1,2,3-Trichlorobenzene	ND		1.00	1	09/26/2020 18:46	WG1549772
1,2,4-Trichlorobenzene	ND		1.00	1	09/26/2020 18:46	WG1549772

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,1-Trichloroethane	ND		1.00	1	09/26/2020 18:46	WG1549772
1,1,2-Trichloroethane	ND		1.00	1	09/26/2020 18:46	WG1549772
Trichloroethene	ND		1.00	1	09/26/2020 18:46	WG1549772
Trichlorofluoromethane	ND		5.00	1	09/26/2020 18:46	WG1549772
1,2,3-Trichloropropane	ND	J3	2.50	1	09/26/2020 18:46	WG1549772
1,2,4-Trimethylbenzene	ND		1.00	1	09/26/2020 18:46	WG1549772
1,2,3-Trimethylbenzene	ND		1.00	1	09/26/2020 18:46	WG1549772
1,3,5-Trimethylbenzene	ND	J3	1.00	1	09/26/2020 18:46	WG1549772
Vinyl chloride	ND	J3 J4	1.00	1	09/26/2020 18:46	WG1549772
Xylenes, Total	ND		3.00	1	09/26/2020 18:46	WG1549772
(S) Toluene-d8	*103*		*80.0-120*		*09/26/2020 18:46*	WG1549772
(S) 4-Bromofluorobenzene	*96.4*		*77.0-126*		*09/26/2020 18:46*	WG1549772
(S) 1,2-Dichloroethane-d4	*119*		*70.0-130*		*09/26/2020 18:46*	WG1549772

Method Blank (MB)

(MB) R3575036-1 09/27/20 03:40

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1264151-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1264151-04 09/27/20 03:40 • (DUP) R3575036-3 09/27/20 03:40

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	82.8	82.5	1	0.343		10

Laboratory Control Sample (LCS)

(LCS) R3575036-2 09/27/20 03:40

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	99.9	85.0-115	

Method Blank (MB)

(MB) R3575038-1 09/27/20 04:11

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00100			

L1264151-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1264151-08 09/27/20 04:11 • (DUP) R3575038-3 09/27/20 04:11

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	82.1	81.7	1	0.522		10

Laboratory Control Sample (LCS)

(LCS) R3575038-2 09/27/20 04:11

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	

Method Blank (MB)

(MB) R3572881-1 09/21/20 19:59

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Mercury	U		0.100	0.200

Laboratory Control Sample (LCS)

(LCS) R3572881-2 09/21/20 20:01

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Mercury	3.00	3.02	101	80.0-120	

L1264123-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1264123-01 09/21/20 21:19 • (MS) R3572881-5 09/21/20 21:21 • (MSD) R3572881-6 09/21/20 21:23

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury	0.300	61.0	56.5	74.3	0.000	446	10	75.0-125	V	J3 V	27.2	20

Method Blank (MB)

(MB) R3573588-1 09/23/20 12:37

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Mercury	U		0.0180	0.0400

Laboratory Control Sample (LCS)

(LCS) R3573588-2 09/23/20 12:40

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Mercury	0.500	0.498	99.7	80.0-120	

L1264151-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1264151-03 09/23/20 12:42 • (MS) R3573588-3 09/23/20 12:45 • (MSD) R3573588-4 09/23/20 12:47

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury	0.627	ND	0.617	0.584	93.4	88.1	1	75.0-125			5.51	20

Method Blank (MB)

(MB) R3575465-1 09/28/20 18:14

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Arsenic	U		4.40	10.0
Barium	U		0.895	5.00
Cadmium	U		0.563	2.00
Chromium	U		5.00	10.0
Lead	U		2.95	6.00
Selenium	U		7.35	10.0
Silver	U		1.91	5.00

Laboratory Control Sample (LCS)

(LCS) R3575465-2 09/28/20 18:17

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	1000	961	96.1	80.0-120	
Barium	1000	983	98.3	80.0-120	
Cadmium	1000	959	95.9	80.0-120	
Chromium	1000	977	97.7	80.0-120	
Lead	1000	966	96.6	80.0-120	
Selenium	1000	959	95.9	80.0-120	
Silver	200	182	91.1	80.0-120	

L1264242-15 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1264242-15 09/28/20 18:20 • (MS) R3575465-4 09/28/20 18:25 • (MSD) R3575465-5 09/28/20 18:28

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	1000	15.5	1030	1020	102	101	1	75.0-125			1.10	20
Barium	1000	34.8	1000	1010	97.0	97.2	1	75.0-125			0.239	20
Cadmium	1000	ND	992	992	99.2	99.2	1	75.0-125			0.0198	20
Chromium	1000	ND	950	958	94.9	95.6	1	75.0-125			0.785	20
Lead	1000	ND	982	971	97.8	96.7	1	75.0-125			1.14	20
Selenium	1000	ND	1020	1010	102	101	1	75.0-125			0.896	20
Silver	200	ND	190	188	94.8	94.2	1	75.0-125			0.581	20

Method Blank (MB)

(MB) R3574267-1 09/24/20 12:13

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	U		0.460	2.00
Barium	U		0.240	0.500
Cadmium	U		0.0810	0.500
Chromium	U		0.250	1.00
Lead	U		0.208	0.500
Selenium	U		0.617	2.00
Silver	U		0.228	1.00

Laboratory Control Sample (LCS)

(LCS) R3574267-2 09/24/20 12:15

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	95.0	95.0	80.0-120	
Barium	100	99.2	99.2	80.0-120	
Cadmium	100	95.9	95.9	80.0-120	
Chromium	100	98.7	98.7	80.0-120	
Lead	100	97.4	97.4	80.0-120	
Selenium	100	97.4	97.4	80.0-120	
Silver	20.0	17.8	88.9	80.0-120	

L1264134-19 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1264134-19 09/24/20 12:18 • (MS) R3574267-5 09/24/20 12:25 • (MSD) R3574267-6 09/24/20 12:28

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	111	9.62	113	111	92.8	90.8	1	75.0-125			1.93	20
Barium	111	3.92	113	108	98.2	94.1	1	75.0-125			4.19	20
Cadmium	111	ND	106	100	95.3	90.4	1	75.0-125			5.27	20
Chromium	111	10.3	119	117	98.1	96.1	1	75.0-125			1.89	20
Lead	111	5.34	114	111	97.9	94.8	1	75.0-125			3.09	20
Selenium	111	ND	107	102	96.4	91.7	1	75.0-125			5.04	20
Silver	22.2	ND	19.5	18.7	87.7	84.0	1	75.0-125			4.33	20

Method Blank (MB)

(MB) R3575799-3 09/22/20 20:35

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
LRH (C5-C8)	U		41.0	100
(S) 2,5-Dibromotoluene(FID)	*83.7*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3575799-1 09/22/20 16:02 • (LCSD) R3575799-2 09/22/20 16:35

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
LRH (C5-C8)	1200	952	955	79.3	79.6	70.0-130			0.315	25
(S) 2,5-Dibromotoluene(FID)				*95.6*	*95.4*	*70.0-130*				

Method Blank (MB)

(MB) R3574216-3 09/23/20 22:58

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
LRH (C5-C8)	U		2.55	5.00
(S) 2,5-Dibromotoluene(FID)	*89.6*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3574216-1 09/23/20 20:45 • (LCSD) R3574216-2 09/23/20 21:18

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
LRH (C5-C8)	60.0	63.2	55.0	105	91.7	70.0-130			13.9	25
(S) 2,5-Dibromotoluene(FID)				*99.2*	*101*	*70.0-130*				

Method Blank (MB)

(MB) R3575493-3 09/28/20 20:37

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0365	0.0500
Acrylonitrile	U		0.00361	0.0125
Benzene	U		0.000467	0.00100
Bromobenzene	U		0.000900	0.0125
Bromodichloromethane	U		0.000725	0.00250
Bromoform	U		0.00117	0.0250
Bromomethane	U		0.00197	0.0125
n-Butylbenzene	U		0.00525	0.0125
sec-Butylbenzene	U		0.00288	0.0125
tert-Butylbenzene	U		0.00195	0.00500
Carbon tetrachloride	U		0.000898	0.00500
Chlorobenzene	U		0.000210	0.00250
Chlorodibromomethane	U		0.000612	0.00250
Chloroethane	U		0.00170	0.00500
Chloroform	U		0.00103	0.00250
Chloromethane	U		0.00435	0.0125
2-Chlorotoluene	U		0.000865	0.00250
4-Chlorotoluene	U		0.000450	0.00500
1,2-Dibromo-3-Chloropropane	U		0.00390	0.0250
1,2-Dibromoethane	U		0.000648	0.00250
Dibromomethane	U		0.000750	0.00500
1,2-Dichlorobenzene	U		0.000425	0.00500
1,3-Dichlorobenzene	U		0.000600	0.00500
1,4-Dichlorobenzene	0.000950	J	0.000700	0.00500
Dichlorodifluoromethane	U		0.00161	0.00250
1,1-Dichloroethane	U		0.000491	0.00250
1,2-Dichloroethane	U		0.000649	0.00250
1,1-Dichloroethene	U		0.000606	0.00250
cis-1,2-Dichloroethene	U		0.000734	0.00250
trans-1,2-Dichloroethene	U		0.00104	0.00500
1,2-Dichloropropane	U		0.00142	0.00500
1,1-Dichloropropene	U		0.000809	0.00250
1,3-Dichloropropane	U		0.000501	0.00500
cis-1,3-Dichloropropene	U		0.000757	0.00250
trans-1,3-Dichloropropene	U		0.00114	0.00500
2,2-Dichloropropane	U		0.00138	0.00250
Di-isopropyl ether	U		0.000410	0.00100
Ethylbenzene	U		0.000737	0.00250
Hexachloro-1,3-butadiene	U		0.00600	0.0250
Isopropylbenzene	U		0.000425	0.00250

Method Blank (MB)

(MB) R3575493-3 09/28/20 20:37

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
p-Isopropyltoluene	U		0.00255	0.00500
2-Butanone (MEK)	0.0882	J	0.0635	0.100
Methylene Chloride	U		0.00664	0.0250
4-Methyl-2-pentanone (MIBK)	U		0.00228	0.0250
Methyl tert-butyl ether	U		0.000350	0.00100
Naphthalene	U		0.00488	0.0125
n-Propylbenzene	U		0.000950	0.00500
Styrene	U		0.000229	0.0125
1,1,1,2-Tetrachloroethane	U		0.000948	0.00250
1,1,2,2-Tetrachloroethane	U		0.000695	0.00250
Tetrachloroethene	U		0.000896	0.00250
Toluene	U		0.00130	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000754	0.00250
1,2,3-Trichlorobenzene	U		0.00733	0.0125
1,2,4-Trichlorobenzene	U		0.00440	0.0125
1,1,1-Trichloroethane	U		0.000923	0.00250
1,1,2-Trichloroethane	U		0.000597	0.00250
Trichloroethene	U		0.000584	0.00100
Trichlorofluoromethane	U		0.000827	0.00250
1,2,3-Trichloropropane	U		0.00162	0.0125
1,2,3-Trimethylbenzene	U		0.00158	0.00500
1,2,4-Trimethylbenzene	U		0.00158	0.00500
1,3,5-Trimethylbenzene	U		0.00200	0.00500
Vinyl chloride	U		0.00116	0.00250
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	*96.8*			*75.0-131*
(S) 4-Bromofluorobenzene	*97.1*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*91.5*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3575493-1 09/28/20 19:22 • (LCSD) R3575493-2 09/28/20 19:40

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.625	0.440	0.355	70.4	56.8	10.0-160			21.4	31
Acrylonitrile	0.625	0.519	0.475	83.0	76.0	45.0-153			8.85	22
Benzene	0.125	0.116	0.122	92.8	97.6	70.0-123			5.04	20
Bromobenzene	0.125	0.128	0.118	102	94.4	73.0-121			8.13	20
Bromodichloromethane	0.125	0.119	0.124	95.2	99.2	73.0-121			4.12	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3575493-1 09/28/20 19:22 • (LCSD) R3575493-2 09/28/20 19:40

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromoform	0.125	0.120	0.117	96.0	93.6	64.0-132			2.53	20
Bromomethane	0.125	0.113	0.116	90.4	92.8	56.0-147			2.62	20
n-Butylbenzene	0.125	0.121	0.125	96.8	100	68.0-135			3.25	20
sec-Butylbenzene	0.125	0.120	0.115	96.0	92.0	74.0-130			4.26	20
tert-Butylbenzene	0.125	0.115	0.114	92.0	91.2	75.0-127			0.873	20
Carbon tetrachloride	0.125	0.135	0.129	108	103	66.0-128			4.55	20
Chlorobenzene	0.125	0.118	0.111	94.4	88.8	76.0-128			6.11	20
Chlorodibromomethane	0.125	0.126	0.110	101	88.0	74.0-127			13.6	20
Chloroethane	0.125	0.139	0.118	111	94.4	61.0-134			16.3	20
Chloroform	0.125	0.136	0.135	109	108	72.0-123			0.738	20
Chloromethane	0.125	0.128	0.132	102	106	51.0-138			3.08	20
2-Chlorotoluene	0.125	0.124	0.129	99.2	103	75.0-124			3.95	20
4-Chlorotoluene	0.125	0.131	0.126	105	101	75.0-124			3.89	20
1,2-Dibromo-3-Chloropropane	0.125	0.135	0.134	108	107	59.0-130			0.743	20
1,2-Dibromoethane	0.125	0.128	0.114	102	91.2	74.0-128			11.6	20
Dibromomethane	0.125	0.147	0.134	118	107	75.0-122			9.25	20
1,2-Dichlorobenzene	0.125	0.124	0.128	99.2	102	76.0-124			3.17	20
1,3-Dichlorobenzene	0.125	0.126	0.126	101	101	76.0-125			0.000	20
1,4-Dichlorobenzene	0.125	0.111	0.107	88.8	85.6	77.0-121			3.67	20
Dichlorodifluoromethane	0.125	0.144	0.126	115	101	43.0-156			13.3	20
1,1-Dichloroethane	0.125	0.140	0.135	112	108	70.0-127			3.64	20
1,2-Dichloroethane	0.125	0.132	0.133	106	106	65.0-131			0.755	20
1,1-Dichloroethene	0.125	0.131	0.124	105	99.2	65.0-131			5.49	20
cis-1,2-Dichloroethene	0.125	0.128	0.124	102	99.2	73.0-125			3.17	20
trans-1,2-Dichloroethene	0.125	0.122	0.120	97.6	96.0	71.0-125			1.65	20
1,2-Dichloropropane	0.125	0.117	0.127	93.6	102	74.0-125			8.20	20
1,1-Dichloropropene	0.125	0.118	0.115	94.4	92.0	73.0-125			2.58	20
1,3-Dichloropropane	0.125	0.110	0.100	88.0	80.0	80.0-125			9.52	20
cis-1,3-Dichloropropene	0.125	0.118	0.115	94.4	92.0	76.0-127			2.58	20
trans-1,3-Dichloropropene	0.125	0.119	0.111	95.2	88.8	73.0-127			6.96	20
2,2-Dichloropropane	0.125	0.117	0.135	93.6	108	59.0-135			14.3	20
Di-isopropyl ether	0.125	0.129	0.139	103	111	60.0-136			7.46	20
Ethylbenzene	0.125	0.126	0.130	101	104	74.0-126			3.12	20
Hexachloro-1,3-butadiene	0.125	0.115	0.116	92.0	92.8	57.0-150			0.866	20
Isopropylbenzene	0.125	0.123	0.120	98.4	96.0	72.0-127			2.47	20
p-Isopropyltoluene	0.125	0.121	0.117	96.8	93.6	72.0-133			3.36	20
2-Butanone (MEK)	0.625	0.576	0.495	92.2	79.2	30.0-160			15.1	24
Methylene Chloride	0.125	0.117	0.107	93.6	85.6	68.0-123			8.93	20
4-Methyl-2-pentanone (MIBK)	0.625	0.575	0.629	92.0	101	56.0-143			8.97	20
Methyl tert-butyl ether	0.125	0.122	0.127	97.6	102	66.0-132			4.02	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3575493-1 09/28/20 19:22 • (LCSD) R3575493-2 09/28/20 19:40

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Naphthalene	0.125	0.113	0.127	90.4	102	59.0-130			11.7	20
n-Propylbenzene	0.125	0.121	0.118	96.8	94.4	74.0-126			2.51	20
Styrene	0.125	0.126	0.123	101	98.4	72.0-127			2.41	20
1,1,1,2-Tetrachloroethane	0.125	0.142	0.124	114	99.2	74.0-129			13.5	20
1,1,2,2-Tetrachloroethane	0.125	0.136	0.129	109	103	68.0-128			5.28	20
Tetrachloroethene	0.125	0.126	0.128	101	102	70.0-136			1.57	20
Toluene	0.125	0.127	0.120	102	96.0	75.0-121			5.67	20
1,1,2-Trichlorotrifluoroethane	0.125	0.111	0.107	88.8	85.6	61.0-139			3.67	20
1,2,3-Trichlorobenzene	0.125	0.0989	0.106	79.1	84.8	59.0-139			6.93	20
1,2,4-Trichlorobenzene	0.125	0.103	0.111	82.4	88.8	62.0-137			7.48	20
1,1,1-Trichloroethane	0.125	0.109	0.118	87.2	94.4	69.0-126			7.93	20
1,1,2-Trichloroethane	0.125	0.125	0.128	100	102	78.0-123			2.37	20
Trichloroethene	0.125	0.121	0.112	96.8	89.6	76.0-126			7.73	20
Trichlorofluoromethane	0.125	0.122	0.113	97.6	90.4	61.0-142			7.66	20
1,2,3-Trichloropropane	0.125	0.117	0.121	93.6	96.8	67.0-129			3.36	20
1,2,3-Trimethylbenzene	0.125	0.124	0.119	99.2	95.2	74.0-124			4.12	20
1,2,4-Trimethylbenzene	0.125	0.119	0.119	95.2	95.2	70.0-126			0.000	20
1,3,5-Trimethylbenzene	0.125	0.127	0.121	102	96.8	73.0-127			4.84	20
Vinyl chloride	0.125	0.133	0.138	106	110	63.0-134			3.69	20
Xylenes, Total	0.375	0.363	0.355	96.8	94.7	72.0-127			2.23	20
(S) Toluene-d8				*102*	*97.8*	*75.0-131*				
(S) 4-Bromofluorobenzene				*106*	*105*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*99.9*	*100*	*70.0-130*				

Method Blank (MB)

(MB) R3575729-3 09/29/20 10:08

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
2-Butanone (MEK)	U		0.0635	0.100
(S) Toluene-d8	*99.9*			*75.0-131*
(S) 4-Bromofluorobenzene	*109*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*100*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3575729-1 09/29/20 08:52 • (LCSD) R3575729-2 09/29/20 09:11

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
2-Butanone (MEK)	0.625	0.617	0.607	98.7	97.1	30.0-160			1.63	24
(S) Toluene-d8				*97.2*	*98.2*	*75.0-131*				
(S) 4-Bromofluorobenzene				*107*	*105*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*101*	*106*	*70.0-130*				

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Method Blank (MB)

(MB) R3575391-3 09/26/20 17:29

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		11.3	50.0
Acrolein	U		2.54	50.0
Acrylonitrile	U		0.671	10.0
Benzene	U		0.0941	1.00
Bromobenzene	U		0.118	1.00
Bromodichloromethane	U		0.136	1.00
Bromoform	U		0.129	1.00
Bromomethane	U		0.605	5.00
n-Butylbenzene	U		0.157	1.00
sec-Butylbenzene	U		0.125	1.00
tert-Butylbenzene	U		0.127	1.00
Carbon tetrachloride	U		0.128	1.00
Chlorobenzene	U		0.116	1.00
Chlorodibromomethane	U		0.140	1.00
Chloroethane	U		0.192	5.00
Chloroform	U		0.111	5.00
Chloromethane	U		0.960	2.50
2-Chlorotoluene	U		0.106	1.00
4-Chlorotoluene	U		0.114	1.00
1,2-Dibromo-3-Chloropropane	U		0.276	5.00
1,2-Dibromoethane	U		0.126	1.00
Dibromomethane	U		0.122	1.00
1,2-Dichlorobenzene	U		0.107	1.00
1,3-Dichlorobenzene	U		0.110	1.00
1,4-Dichlorobenzene	U		0.120	1.00
Dichlorodifluoromethane	U		0.374	5.00
1,1-Dichloroethane	U		0.100	1.00
1,2-Dichloroethane	U		0.0819	1.00
1,1-Dichloroethene	U		0.188	1.00
cis-1,2-Dichloroethene	U		0.126	1.00
trans-1,2-Dichloroethene	U		0.149	1.00
1,2-Dichloropropane	U		0.149	1.00
1,1-Dichloropropene	U		0.142	1.00
1,3-Dichloropropane	U		0.110	1.00
cis-1,3-Dichloropropene	U		0.111	1.00
trans-1,3-Dichloropropene	U		0.118	1.00
2,2-Dichloropropane	U		0.161	1.00
Di-isopropyl ether	U		0.105	1.00
Ethylbenzene	U		0.137	1.00
Hexachloro-1,3-butadiene	U		0.337	1.00

Method Blank (MB)

(MB) R3575391-3 09/26/20 17:29

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Isopropylbenzene	U		0.105	1.00
p-Isopropyltoluene	U		0.120	1.00
2-Butanone (MEK)	U		1.19	10.0
Methylene Chloride	U		0.430	5.00
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0
Methyl tert-butyl ether	U		0.101	1.00
Naphthalene	U		1.00	5.00
n-Propylbenzene	U		0.0993	1.00
Styrene	U		0.118	1.00
1,1,1,2-Tetrachloroethane	U		0.147	1.00
1,1,2,2-Tetrachloroethane	U		0.133	1.00
Tetrachloroethene	U		0.300	1.00
Toluene	U		0.278	1.00
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00
1,2,3-Trichlorobenzene	U		0.230	1.00
1,2,4-Trichlorobenzene	U		0.481	1.00
1,1,1-Trichloroethane	U		0.149	1.00
1,1,2-Trichloroethane	U		0.158	1.00
Trichloroethene	U		0.190	1.00
Trichlorofluoromethane	U		0.160	5.00
1,2,3-Trichloropropane	U		0.237	2.50
1,2,3-Trimethylbenzene	U		0.104	1.00
1,2,4-Trimethylbenzene	U		0.322	1.00
1,3,5-Trimethylbenzene	U		0.104	1.00
Vinyl chloride	U		0.234	1.00
Xylenes, Total	U		0.174	3.00
(S) Toluene-d8	*97.2*			*80.0-120*
(S) 4-Bromofluorobenzene	*93.9*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*127*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3575391-2 09/26/20 16:50 • (LCSD) R3575391-6 09/27/20 01:12

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	25.0	27.5	28.8	110	115	19.0-160			4.62	27
Acrolein	25.0	25.0	24.3	100	97.2	10.0-160			2.84	26
Acrylonitrile	25.0	20.2	20.9	80.8	83.6	55.0-149			3.41	20
Benzene	5.00	4.44	5.19	88.8	104	70.0-123			15.6	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3575391-2 09/26/20 16:50 • (LCSD) R3575391-6 09/27/20 01:12

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromobenzene	5.00	4.52	5.52	90.4	110	73.0-121			19.9	20
Bromodichloromethane	5.00	4.78	5.05	95.6	101	75.0-120			5.49	20
Bromoform	5.00	4.83	5.00	96.6	100	68.0-132			3.46	20
Bromomethane	5.00	4.50	5.72	90.0	114	10.0-160			23.9	25
n-Butylbenzene	5.00	4.43	4.85	88.6	97.0	73.0-125			9.05	20
sec-Butylbenzene	5.00	4.95	5.65	99.0	113	75.0-125			13.2	20
tert-Butylbenzene	5.00	4.76	5.49	95.2	110	76.0-124			14.2	20
Carbon tetrachloride	5.00	4.74	5.04	94.8	101	68.0-126			6.13	20
Chlorobenzene	5.00	4.76	5.15	95.2	103	80.0-121			7.87	20
Chlorodibromomethane	5.00	5.06	5.17	101	103	77.0-125			2.15	20
Chloroethane	5.00	5.32	6.08	106	122	47.0-150			13.3	20
Chloroform	5.00	4.80	5.40	96.0	108	73.0-120			11.8	20
Chloromethane	5.00	5.40	6.97	108	139	41.0-142		J3	25.4	20
2-Chlorotoluene	5.00	4.37	5.65	87.4	113	76.0-123		J3	25.5	20
4-Chlorotoluene	5.00	4.32	5.55	86.4	111	75.0-122		J3	24.9	20
1,2-Dibromo-3-Chloropropane	5.00	4.08	4.64	81.6	92.8	58.0-134			12.8	20
1,2-Dibromoethane	5.00	4.64	5.03	92.8	101	80.0-122			8.07	20
Dibromomethane	5.00	4.93	5.53	98.6	111	80.0-120			11.5	20
1,2-Dichlorobenzene	5.00	4.50	4.94	90.0	98.8	79.0-121			9.32	20
1,3-Dichlorobenzene	5.00	4.92	5.29	98.4	106	79.0-120			7.25	20
1,4-Dichlorobenzene	5.00	4.75	5.12	95.0	102	79.0-120			7.50	20
Dichlorodifluoromethane	5.00	4.71	5.63	94.2	113	51.0-149			17.8	20
1,1-Dichloroethane	5.00	5.14	6.10	103	122	70.0-126			17.1	20
1,2-Dichloroethane	5.00	5.45	6.12	109	122	70.0-128			11.6	20
1,1-Dichloroethene	5.00	4.54	6.05	90.8	121	71.0-124		J3	28.5	20
cis-1,2-Dichloroethene	5.00	4.48	5.55	89.6	111	73.0-120		J3	21.3	20
trans-1,2-Dichloroethene	5.00	4.29	5.64	85.8	113	73.0-120		J3	27.2	20
1,2-Dichloropropane	5.00	4.83	5.71	96.6	114	77.0-125			16.7	20
1,1-Dichloropropene	5.00	4.54	5.07	90.8	101	74.0-126			11.0	20
1,3-Dichloropropane	5.00	4.48	5.14	89.6	103	80.0-120			13.7	20
cis-1,3-Dichloropropene	5.00	4.09	5.30	81.8	106	80.0-123		J3	25.8	20
trans-1,3-Dichloropropene	5.00	4.80	5.13	96.0	103	78.0-124			6.65	20
2,2-Dichloropropane	5.00	5.14	5.08	103	102	58.0-130			1.17	20
Di-isopropyl ether	5.00	5.53	6.15	111	123	58.0-138			10.6	20
Ethylbenzene	5.00	4.68	5.13	93.6	103	79.0-123			9.17	20
Hexachloro-1,3-butadiene	5.00	6.17	5.29	123	106	54.0-138			15.4	20
Isopropylbenzene	5.00	4.47	5.03	89.4	101	76.0-127			11.8	20
p-Isopropyltoluene	5.00	4.61	5.41	92.2	108	76.0-125			16.0	20
2-Butanone (MEK)	25.0	26.6	25.5	106	102	44.0-160			4.22	20
Methylene Chloride	5.00	4.30	5.27	86.0	105	67.0-120		J3	20.3	20

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3575391-2 09/26/20 16:50 • (LCSD) R3575391-6 09/27/20 01:12

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
4-Methyl-2-pentanone (MIBK)	25.0	25.1	28.9	100	116	68.0-142			14.1	20
Methyl tert-butyl ether	5.00	4.41	5.02	88.2	100	68.0-125			12.9	20
Naphthalene	5.00	5.65	3.90	113	78.0	54.0-135		J3	36.6	20
n-Propylbenzene	5.00	4.23	5.50	84.6	110	77.0-124		J3	26.1	20
Styrene	5.00	4.59	4.91	91.8	98.2	73.0-130			6.74	20
1,1,1,2-Tetrachloroethane	5.00	5.30	5.17	106	103	75.0-125			2.48	20
1,1,2,2-Tetrachloroethane	5.00	4.39	5.69	87.8	114	65.0-130		J3	25.8	20
Tetrachloroethene	5.00	5.02	5.79	100	116	72.0-132			14.2	20
Toluene	5.00	4.30	5.12	86.0	102	79.0-120			17.4	20
1,1,2-Trichlorotrifluoroethane	5.00	4.73	5.92	94.6	118	69.0-132		J3	22.3	20
1,2,3-Trichlorobenzene	5.00	4.20	4.68	84.0	93.6	50.0-138			10.8	20
1,2,4-Trichlorobenzene	5.00	4.31	4.39	86.2	87.8	57.0-137			1.84	20
1,1,1-Trichloroethane	5.00	4.77	5.69	95.4	114	73.0-124			17.6	20
1,1,2-Trichloroethane	5.00	4.64	5.22	92.8	104	80.0-120			11.8	20
Trichloroethene	5.00	4.53	5.36	90.6	107	78.0-124			16.8	20
Trichlorofluoromethane	5.00	5.03	5.09	101	102	59.0-147			1.19	20
1,2,3-Trichloropropane	5.00	4.53	5.89	90.6	118	73.0-130		J3	26.1	20
1,2,3-Trimethylbenzene	5.00	4.39	5.07	87.8	101	77.0-120			14.4	20
1,2,4-Trimethylbenzene	5.00	4.83	5.45	96.6	109	76.0-121			12.1	20
1,3,5-Trimethylbenzene	5.00	4.45	5.78	89.0	116	76.0-122		J3	26.0	20
Vinyl chloride	5.00	5.16	6.68	103	134	67.0-131		J3 J4	25.7	20
Xylenes, Total	15.0	13.9	15.4	92.7	103	79.0-123			10.2	20
(S) Toluene-d8				*101*	*102*	*80.0-120*				
(S) 4-Bromofluorobenzene				*99.2*	*96.8*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*120*	*113*	*70.0-130*				

L1264254-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1264254-04 09/26/20 23:16 • (MS) R3575391-4 09/27/20 00:14 • (MSD) R3575391-5 09/27/20 00:34

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acrolein	25.0	ND	ND	ND	152	187	1	10.0-160		J5	20.3	39
Acetone	25.0	ND	ND	ND	175	199	1	10.0-160	J5	J5	12.8	35
Acrylonitrile	25.0	ND	19.5	27.9	78.0	112	1	21.0-160		J3	35.4	32
Benzene	5.00	1.97	6.35	6.62	87.6	93.0	1	17.0-158			4.16	27
Bromobenzene	5.00	ND	6.57	6.78	131	136	1	30.0-149			3.15	28
Bromodichloromethane	5.00	ND	4.70	5.36	94.0	107	1	31.0-150			13.1	27
Bromoform	5.00	ND	4.22	4.52	84.4	90.4	1	29.0-150			6.86	29
Bromomethane	5.00	ND	ND	ND	86.8	94.4	1	10.0-160			8.39	38

L1264254-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1264254-04 09/26/20 23:16 • (MS) R3575391-4 09/27/20 00:14 • (MSD) R3575391-5 09/27/20 00:34

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
n-Butylbenzene	5.00	3.91	8.36	8.78	89.0	97.4	1	31.0-150			4.90	30
sec-Butylbenzene	5.00	3.09	7.73	8.12	92.8	101	1	33.0-155			4.92	29
tert-Butylbenzene	5.00	ND	5.04	5.10	96.5	97.7	1	34.0-153			1.18	28
Carbon tetrachloride	5.00	ND	4.22	4.61	84.4	92.2	1	23.0-159			8.83	28
Chlorobenzene	5.00	ND	4.39	4.71	87.8	94.2	1	33.0-152			7.03	27
Chlorodibromomethane	5.00	ND	4.59	5.30	91.8	106	1	37.0-149			14.4	27
Chloroethane	5.00	ND	5.21	5.04	104	101	1	10.0-160			3.32	30
Chloroform	5.00	ND	5.46	5.66	109	113	1	29.0-154			3.60	28
Chloromethane	5.00	ND	5.44	5.61	109	112	1	10.0-160			3.08	29
2-Chlorotoluene	5.00	ND	5.13	5.40	103	108	1	32.0-153			5.13	28
4-Chlorotoluene	5.00	ND	4.51	4.83	90.2	96.6	1	32.0-150			6.85	28
1,2-Dibromo-3-Chloropropane	5.00	ND	ND	ND	87.4	95.8	1	22.0-151			9.17	34
1,2-Dibromoethane	5.00	ND	4.85	5.56	97.0	111	1	34.0-147			13.6	27
Dibromomethane	5.00	ND	5.07	5.49	101	110	1	30.0-151			7.95	27
1,2-Dichlorobenzene	5.00	ND	4.50	4.69	90.0	93.8	1	34.0-149			4.13	28
1,3-Dichlorobenzene	5.00	ND	4.46	4.73	89.2	94.6	1	36.0-146			5.88	27
1,4-Dichlorobenzene	5.00	ND	4.66	4.87	93.2	97.4	1	35.0-142			4.41	27
Dichlorodifluoromethane	5.00	ND	ND	ND	88.6	94.6	1	10.0-160			6.55	29
1,1-Dichloroethane	5.00	ND	5.01	5.80	100	116	1	25.0-158			14.6	27
1,2-Dichloroethane	5.00	ND	5.28	5.65	106	113	1	29.0-151			6.77	27
1,1-Dichloroethene	5.00	ND	4.98	4.95	99.6	99.0	1	11.0-160			0.604	29
cis-1,2-Dichloroethene	5.00	ND	4.51	5.15	90.2	103	1	10.0-160			13.3	27
trans-1,2-Dichloroethene	5.00	ND	4.53	4.80	90.6	96.0	1	17.0-153			5.79	27
1,2-Dichloropropane	5.00	ND	4.90	5.57	98.0	111	1	30.0-156			12.8	27
1,1-Dichloropropene	5.00	ND	5.17	5.08	103	102	1	25.0-158			1.76	27
1,3-Dichloropropane	5.00	ND	4.71	5.32	94.2	106	1	38.0-147			12.2	27
cis-1,3-Dichloropropene	5.00	ND	4.03	4.82	80.6	96.4	1	34.0-149			17.9	28
trans-1,3-Dichloropropene	5.00	ND	4.51	5.14	90.2	103	1	32.0-149			13.1	28
2,2-Dichloropropane	5.00	ND	4.50	4.95	90.0	99.0	1	24.0-152			9.52	29
Di-isopropyl ether	5.00	ND	5.40	6.39	108	128	1	21.0-160			16.8	28
Ethylbenzene	5.00	2.68	7.10	7.44	88.4	95.2	1	30.0-155			4.68	27
Hexachloro-1,3-butadiene	5.00	ND	5.76	5.90	115	118	1	20.0-154			2.40	34
Isopropylbenzene	5.00	5.27	9.43	9.80	83.2	90.6	1	28.0-157			3.85	27
p-Isopropyltoluene	5.00	ND	7.81	5.57	139	93.8	1	30.0-154		J3	33.5	29
2-Butanone (MEK)	25.0	ND	34.6	40.9	138	164	1	10.0-160		J5	16.7	32
Methylene Chloride	5.00	ND	ND	ND	87.4	95.6	1	23.0-144			8.96	28
4-Methyl-2-pentanone (MIBK)	25.0	ND	24.2	33.2	96.8	133	1	29.0-160		J3	31.4	29
Methyl tert-butyl ether	5.00	ND	4.75	5.18	95.0	104	1	28.0-150			8.66	29
Naphthalene	5.00	ND	7.37	7.89	88.0	98.4	1	12.0-156			6.82	35
n-Propylbenzene	5.00	19.4	23.3	24.5	78.0	102	1	31.0-154			5.02	28

L1264254-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1264254-04 09/26/20 23:16 • (MS) R3575391-4 09/27/20 00:14 • (MSD) R3575391-5 09/27/20 00:34

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Styrene	5.00	ND	4.17	4.29	83.4	85.8	1	33.0-155			2.84	28
1,1,1,2-Tetrachloroethane	5.00	ND	4.52	5.10	90.4	102	1	36.0-151			12.1	29
1,1,2,2-Tetrachloroethane	5.00	ND	5.01	5.41	100	108	1	33.0-150			7.68	28
Tetrachloroethene	5.00	ND	4.69	5.09	93.8	102	1	10.0-160			8.18	27
Toluene	5.00	ND	4.59	5.00	91.8	100	1	26.0-154			8.55	28
1,1,2-Trichlorotrifluoroethane	5.00	ND	5.11	5.40	102	108	1	23.0-160			5.52	30
1,2,3-Trichlorobenzene	5.00	ND	4.37	4.97	87.4	99.4	1	17.0-150			12.8	36
1,2,4-Trichlorobenzene	5.00	ND	4.34	4.81	86.8	96.2	1	24.0-150			10.3	33
1,1,1-Trichloroethane	5.00	ND	4.68	5.24	93.6	105	1	23.0-160			11.3	28
1,1,2-Trichloroethane	5.00	ND	5.82	7.17	116	143	1	35.0-147			20.8	27
Trichloroethene	5.00	ND	4.34	4.85	86.8	97.0	1	10.0-160			11.1	25
Trichlorofluoromethane	5.00	ND	ND	ND	93.6	94.0	1	17.0-160			0.426	31
1,2,3-Trichloropropane	5.00	ND	5.13	5.53	103	111	1	34.0-151			7.50	29
1,2,3-Trimethylbenzene	5.00	1.88	6.37	6.58	89.8	94.0	1	32.0-149			3.24	28
1,2,4-Trimethylbenzene	5.00	28.0	32.9	33.9	98.0	118	1	26.0-154			2.99	27
1,3,5-Trimethylbenzene	5.00	6.40	11.1	11.3	94.0	98.0	1	28.0-153			1.79	27
Vinyl chloride	5.00	ND	5.28	5.55	106	111	1	10.0-160			4.99	27
Xylenes, Total	15.0	7.96	20.5	22.1	83.6	94.3	1	29.0-154			7.51	28
(S) Toluene-d8					*107*	*110*		*80.0-120*				
(S) 4-Bromofluorobenzene					*95.4*	*89.6*		*77.0-126*				
(S) 1,2-Dichloroethane-d4					*113*	*111*		*70.0-130*				

Method Blank (MB)

(MB) R3573169-1 09/22/20 08:25

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
MRH (C9-C18)	U		7.54	100
HRH (C19-C35)	U		8.05	100
(S) 1-Chloro-octadecane	*92.2*			*40.0-140*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3573169-2 09/22/20 08:47 • (LCSD) R3573169-3 09/22/20 09:10

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
MRH (C9-C18)	1200	1170	1160	97.5	96.7	40.0-140			0.858	25
HRH (C19-C35)	1600	1330	1330	83.1	83.1	40.0-140			0.000	25
(S) 1-Chloro-octadecane				*96.4*	*96.8*	*40.0-140*				

Method Blank (MB)

(MB) R3575219-1 09/27/20 17:49

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
MRH (C9-C18)	2.46	J	0.586	10.0
HRH (C19-C35)	2.73	J	0.691	10.0
(S) 1-Chloro-octadecane	*80.2*			*40.0-140*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3575219-2 09/27/20 18:12 • (LCSD) R3575219-3 09/27/20 18:34

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
MRH (C9-C18)	40.0	35.3	34.7	88.3	86.8	40.0-140			1.71	25
HRH (C19-C35)	53.4	53.1	48.0	99.4	89.9	40.0-140			10.1	25
(S) 1-Chloro-octadecane				*96.4*	*91.0*	*40.0-140*				

L1263861-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1263861-02 09/27/20 19:43 • (MS) R3575219-4 09/27/20 20:05 • (MSD) R3575219-5 09/27/20 20:28

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
MRH (C9-C18)	50.0	ND	41.9	37.6	83.8	74.4	1	40.0-140			10.9	50
HRH (C19-C35)	66.8	ND	83.0	72.6	124	108	1	40.0-140			13.4	50
(S) 1-Chloro-octadecane					*92.1*	*88.6*		*40.0-140*				

Method Blank (MB)

(MB) R3574630-1 09/25/20 14:53

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Aldrin	U		0.0198	0.0500
Alpha BHC	U		0.0172	0.0500
Beta BHC	U		0.0208	0.0500
Delta BHC	U		0.0150	0.0500
Gamma BHC	U		0.0209	0.0500
4,4-DDD	U		0.0177	0.0500
4,4-DDE	U		0.0154	0.0500
4,4-DDT	U		0.0198	0.0500
Dieldrin	U		0.0162	0.0500
Endosulfan I	U		0.0160	0.0500
Endosulfan II	U		0.0164	0.0500
Endosulfan sulfate	U		0.0217	0.0500
Endrin	U		0.0161	0.0500
Endrin aldehyde	U		0.0237	0.0500
Endrin ketone	U		0.0219	0.0500
Heptachlor	U		0.0148	0.0500
Heptachlor epoxide	U		0.0183	0.0500
Hexachlorobenzene	U		0.0176	0.0500
Methoxychlor	U		0.0193	0.0500
Chlordane	U		0.0198	5.00
Toxaphene	U		0.168	0.500
(S) Decachlorobiphenyl	*71.2*			*10.0-128*
(S) Tetrachloro-m-xylene	*56.6*			*10.0-127*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3574630-2 09/25/20 18:12 • (LCSD) R3574630-3 09/25/20 18:25

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Aldrin	1.00	0.596	0.649	59.6	64.9	22.0-124			8.51	34
Alpha BHC	1.00	0.715	0.698	71.5	69.8	54.0-130			2.41	23
Beta BHC	1.00	0.838	0.836	83.8	83.6	53.0-136			0.239	20
Delta BHC	1.00	0.765	0.755	76.5	75.5	54.0-133			1.32	20
Gamma BHC	1.00	0.710	0.690	71.0	69.0	55.0-129			2.86	20
4,4-DDD	1.00	0.795	0.791	79.5	79.1	56.0-140			0.504	22
4,4-DDE	1.00	0.711	0.707	71.1	70.7	52.0-128			0.564	22
4,4-DDT	1.00	0.772	0.770	77.2	77.0	50.0-141			0.259	23
Dieldrin	1.00	0.795	0.739	79.5	73.9	59.0-133			7.30	20
Endosulfan I	1.00	0.824	0.793	82.4	79.3	57.0-131			3.83	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3574630-2 09/25/20 18:12 • (LCSD) R3574630-3 09/25/20 18:25

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Endosulfan II	1.00	0.821	0.815	82.1	81.5	58.0-133			0.734	20
Endosulfan sulfate	1.00	0.852	0.880	85.2	88.0	58.0-133			3.23	21
Endrin	1.00	0.852	0.829	85.2	82.9	57.0-134			2.74	21
Endrin aldehyde	1.00	0.822	0.827	82.2	82.7	53.0-129			0.606	20
Endrin ketone	1.00	0.797	0.848	79.7	84.8	60.0-145			6.20	20
Heptachlor	1.00	0.624	0.650	62.4	65.0	27.0-132			4.08	31
Heptachlor epoxide	1.00	0.788	0.776	78.8	77.6	57.0-130			1.53	20
Hexachlorobenzene	1.00	0.680	0.684	68.0	68.4	30.0-114			0.587	30
Methoxychlor	1.00	0.937	1.07	93.7	107	54.0-155			13.3	24
(S) Decachlorobiphenyl				*80.2*	*86.9*	*10.0-128*				
(S) Tetrachloro-m-xylene				*60.9*	*59.0*	*10.0-127*				

Method Blank (MB)

(MB) R3575170-1 09/28/20 08:30

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Aldrin	U		0.00376	0.0200
Alpha BHC	U		0.00368	0.0200
Beta BHC	U		0.00379	0.0200
Delta BHC	U		0.00346	0.0200
Gamma BHC	U		0.00344	0.0200
4,4-DDD	U		0.00370	0.0200
4,4-DDE	U		0.00366	0.0200
4,4-DDT	U		0.00627	0.0200
Dieldrin	U		0.00344	0.0200
Endosulfan I	U		0.00363	0.0200
Endosulfan II	U		0.00335	0.0200
Endosulfan sulfate	U		0.00364	0.0200
Endrin	U		0.00350	0.0200
Endrin aldehyde	U		0.00339	0.0200
Endrin ketone	U		0.00711	0.0200
Heptachlor	U		0.00428	0.0200
Heptachlor epoxide	U		0.00339	0.0200
Hexachlorobenzene	U		0.00346	0.0200
Methoxychlor	U		0.00484	0.0200
Chlordane	U		0.103	0.300
Toxaphene	U		0.124	0.400
(S) Decachlorobiphenyl	*71.5*			*10.0-135*
(S) Tetrachloro-m-xylene	*73.4*			*10.0-139*

Laboratory Control Sample (LCS)

(LCS) R3575170-2 09/28/20 08:43

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Aldrin	0.0666	0.0594	89.2	34.0-136	
Alpha BHC	0.0666	0.0556	83.5	34.0-139	
Beta BHC	0.0666	0.0624	93.7	34.0-133	
Delta BHC	0.0666	0.0574	86.2	34.0-135	
Gamma BHC	0.0666	0.0548	82.3	34.0-136	
4,4-DDD	0.0666	0.0542	81.4	33.0-141	
4,4-DDE	0.0666	0.0547	82.1	34.0-134	
4,4-DDT	0.0666	0.0551	82.7	30.0-143	
Dieldrin	0.0666	0.0609	91.4	35.0-137	
Endosulfan I	0.0666	0.0624	93.7	34.0-134	

Laboratory Control Sample (LCS)

(LCS) R3575170-2 09/28/20 08:43

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Endosulfan II	0.0666	0.0600	90.1	35.0-132	
Endosulfan sulfate	0.0666	0.0577	86.6	35.0-132	
Endrin	0.0666	0.0622	93.4	34.0-137	
Endrin aldehyde	0.0666	0.0562	84.4	23.0-121	
Endrin ketone	0.0666	0.0596	89.5	35.0-144	
Heptachlor	0.0666	0.0568	85.3	36.0-141	
Heptachlor epoxide	0.0666	0.0605	90.8	36.0-134	
Hexachlorobenzene	0.0666	0.0590	88.6	33.0-129	
Methoxychlor	0.0666	0.0591	88.7	28.0-150	
(S) Decachlorobiphenyl			*92.2*	*10.0-135*	
(S) Tetrachloro-m-xylene			*92.5*	*10.0-139*	

L1263944-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1263944-05 09/28/20 09:45 • (MS) R3575170-3 09/28/20 09:57 • (MSD) R3575170-4 09/28/20 10:10

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Aldrin	0.0656	ND	0.0541	0.0530	82.5	80.8	1	20.0-135			2.05	37
Alpha BHC	0.0656	ND	0.0517	0.0503	78.8	76.7	1	27.0-140			2.75	35
Beta BHC	0.0656	ND	0.0573	0.0559	87.3	85.2	1	23.0-141			2.47	37
Delta BHC	0.0656	ND	0.0521	0.0510	79.4	77.7	1	21.0-138			2.13	35
Gamma BHC	0.0656	ND	0.0506	0.0494	77.1	75.3	1	27.0-137			2.40	36
4,4-DDD	0.0656	ND	0.0521	0.0514	79.4	78.4	1	15.0-152			1.35	39
4,4-DDE	0.0656	ND	0.0503	0.0496	76.7	75.6	1	10.0-152			1.40	40
4,4-DDT	0.0656	ND	0.0520	0.0512	79.3	78.0	1	10.0-151			1.55	40
Dieldrin	0.0656	ND	0.0561	0.0547	85.5	83.4	1	17.0-145			2.53	37
Endosulfan I	0.0656	ND	0.0567	0.0539	86.4	82.2	1	20.0-137			5.06	36
Endosulfan II	0.0656	ND	0.0542	0.0532	82.6	81.1	1	15.0-141			1.86	37
Endosulfan sulfate	0.0656	ND	0.0549	0.0535	83.7	81.6	1	15.0-143			2.58	38
Endrin	0.0656	ND	0.0591	0.0561	90.1	85.5	1	19.0-143			5.21	37
Endrin aldehyde	0.0656	ND	0.0528	0.0502	80.5	76.5	1	10.0-139			5.05	40
Endrin ketone	0.0656	ND	0.0550	0.0537	83.8	81.9	1	17.0-149			2.39	38
Heptachlor	0.0656	ND	0.0522	0.0503	79.6	76.7	1	22.0-138			3.71	37
Heptachlor epoxide	0.0656	ND	0.0555	0.0545	84.6	83.1	1	22.0-138			1.82	36
Hexachlorobenzene	0.0656	ND	0.0546	0.0530	83.2	80.8	1	25.0-126			2.97	35
Methoxychlor	0.0656	ND	0.0572	0.0560	87.2	85.4	1	10.0-159			2.12	40
(S) Decachlorobiphenyl					*92.2*	*87.3*		*10.0-135*				
(S) Tetrachloro-m-xylene					*84.0*	*82.8*		*10.0-139*				

Method Blank (MB)

(MB) R3573910-1 09/24/20 01:54

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Aldrin	U		0.00376	0.0200
Alpha BHC	U		0.00368	0.0200
Beta BHC	U		0.00379	0.0200
Delta BHC	U		0.00346	0.0200
Gamma BHC	U		0.00344	0.0200
4,4-DDD	U		0.00370	0.0200
4,4-DDE	U		0.00366	0.0200
4,4-DDT	U		0.00627	0.0200
Dieldrin	U		0.00344	0.0200
Endosulfan I	U		0.00363	0.0200
Endosulfan II	U		0.00335	0.0200
Endosulfan sulfate	U		0.00364	0.0200
Endrin	U		0.00350	0.0200
Endrin aldehyde	U		0.00339	0.0200
Endrin ketone	U		0.00711	0.0200
Heptachlor	U		0.00428	0.0200
Heptachlor epoxide	U		0.00339	0.0200
Hexachlorobenzene	U		0.00346	0.0200
Methoxychlor	U		0.00484	0.0200
Chlordane	U		0.103	0.300
Toxaphene	U		0.124	0.400
(S) Decachlorobiphenyl	*82.4*			*10.0-135*
(S) Tetrachloro-m-xylene	*79.3*			*10.0-139*

Laboratory Control Sample (LCS)

(LCS) R3573910-2 09/24/20 02:21

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Aldrin	0.0666	0.0566	85.0	34.0-136	
Alpha BHC	0.0666	0.0562	84.4	34.0-139	
Beta BHC	0.0666	0.0559	83.9	34.0-133	
Delta BHC	0.0666	0.0563	84.5	34.0-135	
Gamma BHC	0.0666	0.0567	85.1	34.0-136	
4,4-DDD	0.0666	0.0629	94.4	33.0-141	
4,4-DDE	0.0666	0.0571	85.7	34.0-134	
4,4-DDT	0.0666	0.0690	104	30.0-143	
Dieldrin	0.0666	0.0591	88.7	35.0-137	
Endosulfan I	0.0666	0.0564	84.7	34.0-134	

Laboratory Control Sample (LCS)

(LCS) R3573910-2 09/24/20 02:21

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Endosulfan II	0.0666	0.0563	84.5	35.0-132	
Endosulfan sulfate	0.0666	0.0580	87.1	35.0-132	
Endrin	0.0666	0.0612	91.9	34.0-137	
Endrin aldehyde	0.0666	0.0538	80.8	23.0-121	
Endrin ketone	0.0666	0.0604	90.7	35.0-144	
Heptachlor	0.0666	0.0602	90.4	36.0-141	
Heptachlor epoxide	0.0666	0.0571	85.7	36.0-134	
Hexachlorobenzene	0.0666	0.0554	83.2	33.0-129	
Methoxychlor	0.0666	0.0654	98.2	28.0-150	
(S) Decachlorobiphenyl			*85.6*	*10.0-135*	
(S) Tetrachloro-m-xylene			*80.8*	*10.0-139*	

L1264151-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1264151-01 09/24/20 03:27 • (MS) R3573910-3 09/24/20 03:40 • (MSD) R3573910-4 09/24/20 03:53

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Aldrin	0.0811	ND	0.0439	0.0566	54.1	69.8	1	20.0-135			25.5	37
Alpha BHC	0.0811	ND	0.0469	0.0616	57.8	76.0	1	27.0-140			27.2	35
Beta BHC	0.0811	ND	0.0452	0.0585	55.7	72.1	1	23.0-141			25.6	37
Delta BHC	0.0811	ND	0.0474	0.0625	58.4	77.0	1	21.0-138			27.5	35
Gamma BHC	0.0811	ND	0.0480	0.0630	59.2	77.6	1	27.0-137			27.0	36
4,4-DDD	0.0811	ND	0.0486	0.0637	59.9	78.5	1	15.0-152			26.9	39
4,4-DDE	0.0811	ND	0.0435	0.0560	53.6	69.1	1	10.0-152			25.2	40
4,4-DDT	0.0811	ND	0.0518	0.0680	63.8	83.8	1	10.0-151			27.1	40
Dieldrin	0.0811	ND	0.0471	0.0616	58.1	76.0	1	17.0-145			26.7	37
Endosulfan I	0.0811	ND	0.0457	0.0594	56.3	73.3	1	20.0-137			26.2	36
Endosulfan II	0.0811	ND	0.0463	0.0607	57.1	74.8	1	15.0-141			26.9	37
Endosulfan sulfate	0.0811	ND	0.0485	0.0636	59.8	78.4	1	15.0-143			27.0	38
Endrin	0.0811	ND	0.0499	0.0653	61.6	80.5	1	19.0-143			26.6	37
Endrin aldehyde	0.0811	ND	0.0467	0.0616	57.5	76.0	1	10.0-139			27.7	40
Endrin ketone	0.0811	ND	0.0510	0.0665	62.9	82.0	1	17.0-149			26.3	38
Heptachlor	0.0811	ND	0.0480	0.0619	59.2	76.3	1	22.0-138			25.3	37
Heptachlor epoxide	0.0811	ND	0.0462	0.0601	56.9	74.0	1	22.0-138			26.1	36
Hexachlorobenzene	0.0811	ND	0.0452	0.0581	55.7	71.6	1	25.0-126			25.0	35
Methoxychlor	0.0811	ND	0.0502	0.0654	61.9	80.6	1	10.0-159			26.3	40
(S) Decachlorobiphenyl					*55.0*	*66.7*		*10.0-135*				
(S) Tetrachloro-m-xylene					*53.5*	*67.7*		*10.0-139*				

Method Blank (MB)

(MB) R3574484-1 09/25/20 11:00

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
PCB 1260	U		0.173	0.500
PCB 1016	U		0.270	0.500
PCB 1221	U		0.270	0.500
PCB 1232	U		0.270	0.500
PCB 1242	U		0.270	0.500
PCB 1248	U		0.173	0.500
PCB 1254	U		0.173	0.500
(S) Decachlorobiphenyl	*78.2*			*10.0-128*
(S) Tetrachloro-m-xylene	*61.6*			*10.0-127*

Laboratory Control Sample (LCS)

(LCS) R3574484-2 09/25/20 11:13

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
PCB 1260	2.50	2.08	83.2	42.0-131	
PCB 1016	2.50	2.02	80.8	36.0-135	
(S) Decachlorobiphenyl			*84.0*	*10.0-128*	
(S) Tetrachloro-m-xylene			*58.1*	*10.0-127*	

L1264389-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1264389-01 09/25/20 14:39 • (MS) R3574484-3 09/25/20 14:53 • (MSD) R3574484-4 09/25/20 15:06

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
PCB 1260	2.50	ND	2.34	2.48	93.6	99.2	1	20.0-142			5.81	27
PCB 1016	2.50	ND	2.16	2.30	86.4	92.0	1	11.0-160			6.28	38
(S) Decachlorobiphenyl					*51.5*	*41.4*		*10.0-128*				
(S) Tetrachloro-m-xylene					*66.8*	*72.5*		*10.0-127*				

Method Blank (MB)

(MB) R3575212-1 09/28/20 09:10

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
PCB 1016	U		0.0118	0.0340
PCB 1221	U		0.0118	0.0340
PCB 1232	U		0.0118	0.0340
PCB 1242	U		0.0118	0.0340
PCB 1248	U		0.00738	0.0170
PCB 1254	U		0.00738	0.0170
PCB 1260	U		0.00738	0.0170
(S) Decachlorobiphenyl	*70.0*			*10.0-135*
(S) Tetrachloro-m-xylene	*74.5*			*10.0-139*

Laboratory Control Sample (LCS)

(LCS) R3575212-2 09/28/20 09:21

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
PCB 1260	0.167	0.145	86.8	37.0-145	
PCB 1016	0.167	0.153	91.6	36.0-141	
(S) Decachlorobiphenyl			*82.4*	*10.0-135*	
(S) Tetrachloro-m-xylene			*88.4*	*10.0-139*	

L1263868-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1263868-08 09/28/20 09:32 • (MS) R3575212-3 09/28/20 09:42 • (MSD) R3575212-4 09/28/20 09:53

Analyte	Spike Amount (dry) mg/kg	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
PCB 1260	0.166	ND	0.170	0.146	101	85.6	1	10.0-160			15.5	38
PCB 1016	0.166	ND	0.193	0.177	114	104	1	10.0-160			8.84	37
(S) Decachlorobiphenyl					*91.0*	*91.9*		*10.0-135*				
(S) Tetrachloro-m-xylene					*106*	*97.6*		*10.0-139*				

Method Blank (MB)

(MB) R3574443-2 09/24/20 16:09

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acenaphthene	U		0.0886	1.00
Acenaphthylene	U		0.0921	1.00
Anthracene	U		0.0804	1.00
Benzidine	U		3.74	10.0
Benzo(a)anthracene	U		0.199	1.00
Benzo(b)fluoranthene	U		0.130	1.00
Benzo(k)fluoranthene	U		0.120	1.00
Benzo(g,h,i)perylene	U		0.121	1.00
Benzo(a)pyrene	U		0.0381	1.00
Bis(2-chlorethoxy)methane	U		0.116	10.0
Bis(2-chloroethyl)ether	U		0.137	10.0
2,2-oxybis(1-chloropropane)	U		0.210	10.0
4-Bromophenyl-phenylether	U		0.0877	10.0
2-Chloronaphthalene	U		0.0648	1.00
4-Chlorophenyl-phenylether	U		0.0926	10.0
Chrysene	U		0.130	1.00
Dibenz(a,h)anthracene	U		0.0644	1.00
1,2-Dichlorobenzene	U		0.0713	10.0
1,3-Dichlorobenzene	U		0.132	10.0
1,4-Dichlorobenzene	U		0.0942	10.0
3,3-Dichlorobenzidine	U		0.212	10.0
2,4-Dinitrotoluene	U		0.0983	10.0
2,6-Dinitrotoluene	U		0.250	10.0
Fluoranthene	U		0.102	1.00
Fluorene	U		0.0844	1.00
Hexachlorobenzene	U		0.0755	1.00
Hexachloro-1,3-butadiene	U		0.0968	10.0
Hexachlorocyclopentadiene	U		0.0598	10.0
Hexachloroethane	U		0.127	10.0
Indeno(1,2,3-cd)pyrene	U		0.279	1.00
Isophorone	U		0.143	10.0
Naphthalene	U		0.159	1.00
Nitrobenzene	U		0.297	10.0
n-Nitrosodimethylamine	U		0.998	10.0
n-Nitrosodiphenylamine	U		2.37	10.0
n-Nitrosodi-n-propylamine	U		0.261	10.0
Phenanthrene	U		0.112	1.00
Benzylbutyl phthalate	U		0.765	3.00
Bis(2-ethylhexyl)phthalate	U		0.895	3.00
Di-n-butyl phthalate	U		0.453	3.00

Method Blank (MB)

(MB) R3574443-2 09/24/20 16:09

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Diethyl phthalate	U		0.287	3.00
Dimethyl phthalate	U		0.260	3.00
Di-n-octyl phthalate	U		0.932	3.00
Pyrene	U		0.107	1.00
1,2,4-Trichlorobenzene	U		0.0698	10.0
4-Chloro-3-methylphenol	U		0.131	10.0
2-Chlorophenol	U		0.133	10.0
2-Nitrophenol	U		0.117	10.0
4-Nitrophenol	U		0.143	10.0
Pentachlorophenol	U		0.313	10.0
Phenol	U		4.33	10.0
2,4,6-Trichlorophenol	U		0.100	10.0
2,4-Dichlorophenol	U		0.102	10.0
2,4-Dimethylphenol	U		0.0636	10.0
4,6-Dinitro-2-methylphenol	U		1.12	10.0
2,4-Dinitrophenol	U		5.93	10.0
(S) Nitrobenzene-d5	*48.4*			*10.0-127*
(S) 2-Fluorobiphenyl	*51.4*			*10.0-130*
(S) p-Terphenyl-d14	*72.9*			*10.0-128*
(S) Phenol-d5	*13.2*			*10.0-120*
(S) 2-Fluorophenol	*21.5*			*10.0-120*
(S) 2,4,6-Tribromophenol	*51.0*			*10.0-155*

Laboratory Control Sample (LCS)

(LCS) R3574443-1 09/24/20 15:48

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acenaphthene	50.0	21.2	42.4	41.0-120	
Acenaphthylene	50.0	23.2	46.4	43.0-120	
Anthracene	50.0	30.5	61.0	45.0-120	
Benzidine	100	27.5	27.5	10.0-120	
Benzo(a)anthracene	50.0	37.0	74.0	47.0-120	
Benzo(b)fluoranthene	50.0	34.0	68.0	46.0-120	
Benzo(k)fluoranthene	50.0	34.2	68.4	46.0-120	
Benzo(g,h,i)perylene	50.0	30.1	60.2	48.0-121	
Benzo(a)pyrene	50.0	34.7	69.4	47.0-120	
Bis(2-chlorethoxy)methane	50.0	20.6	41.2	33.0-120	
Bis(2-chloroethyl)ether	50.0	20.1	40.2	23.0-120	

Laboratory Control Sample (LCS)

(LCS) R3574443-1 09/24/20 15:48

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
2,2-oxybis(1-chloropropane)	50.0	18.4	36.8	28.0-120	
4-Bromophenyl-phenylether	50.0	29.9	59.8	45.0-120	
2-Chloronaphthalene	50.0	21.0	42.0	37.0-120	
4-Chlorophenyl-phenylether	50.0	26.4	52.8	44.0-120	
Chrysene	50.0	33.3	66.6	48.0-120	
Dibenz(a,h)anthracene	50.0	31.5	63.0	47.0-120	
3,3-Dichlorobenzidine	100	59.7	59.7	44.0-120	
2,4-Dinitrotoluene	50.0	34.0	68.0	49.0-124	
2,6-Dinitrotoluene	50.0	29.2	58.4	46.0-120	
Fluoranthene	50.0	33.7	67.4	51.0-120	
Fluorene	50.0	25.0	50.0	47.0-120	
Hexachlorobenzene	50.0	30.2	60.4	44.0-120	
Hexachloro-1,3-butadiene	50.0	19.9	39.8	19.0-120	
Hexachlorocyclopentadiene	50.0	11.2	22.4	15.0-120	
Hexachloroethane	50.0	18.2	36.4	15.0-120	
Indeno(1,2,3-cd)pyrene	50.0	31.9	63.8	49.0-122	
Isophorone	50.0	23.8	47.6	36.0-120	
Naphthalene	50.0	16.9	33.8	27.0-120	
Nitrobenzene	50.0	19.7	39.4	27.0-120	
n-Nitrosodimethylamine	50.0	12.1	24.2	10.0-120	
n-Nitrosodiphenylamine	50.0	25.8	51.6	47.0-120	
n-Nitrosodi-n-propylamine	50.0	24.6	49.2	31.0-120	
Phenanthrene	50.0	31.6	63.2	46.0-120	
Benzylbutyl phthalate	50.0	43.0	86.0	43.0-121	
Bis(2-ethylhexyl)phthalate	50.0	41.3	82.6	43.0-122	
Di-n-butyl phthalate	50.0	39.1	78.2	49.0-121	
Diethyl phthalate	50.0	35.2	70.4	48.0-122	
Dimethyl phthalate	50.0	31.4	62.8	48.0-120	
Di-n-octyl phthalate	50.0	38.8	77.6	42.0-125	
Pyrene	50.0	35.6	71.2	47.0-120	
1,2,4-Trichlorobenzene	50.0	18.4	36.8	24.0-120	
4-Chloro-3-methylphenol	50.0	23.8	47.6	40.0-120	
2-Chlorophenol	50.0	16.0	32.0	25.0-120	
2,4-Dichlorophenol	50.0	19.6	39.2	36.0-120	
2,4-Dimethylphenol	50.0	21.6	43.2	33.0-120	
4,6-Dinitro-2-methylphenol	50.0	36.4	72.8	38.0-138	
2,4-Dinitrophenol	50.0	31.1	62.2	10.0-120	
2-Nitrophenol	50.0	19.2	38.4	31.0-120	
4-Nitrophenol	50.0	10.2	20.4	10.0-120	
Pentachlorophenol	50.0	29.3	58.6	23.0-120	

Laboratory Control Sample (LCS)

(LCS) R3574443-1 09/24/20 15:48

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Phenol	50.0	5.88	11.8	10.0-120	
2,4,6-Trichlorophenol	50.0	24.7	49.4	42.0-120	
1,2-Dichlorobenzene	50.0	18.2	36.4	20.0-120	
1,3-Dichlorobenzene	50.0	17.9	35.8	17.0-120	
1,4-Dichlorobenzene	50.0	18.2	36.4	18.0-120	
(S) Nitrobenzene-d5			*34.4*	*10.0-127*	
(S) 2-Fluorobiphenyl			*43.9*	*10.0-130*	
(S) p-Terphenyl-d14			*75.2*	*10.0-128*	
(S) Phenol-d5			*11.6*	*10.0-120*	
(S) 2-Fluorophenol			*17.6*	*10.0-120*	
(S) 2,4,6-Tribromophenol			*64.5*	*10.0-155*	

L1264784-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1264784-06 09/24/20 19:44 • (MS) R3574443-3 09/24/20 20:06 • (MSD) R3574443-4 09/24/20 20:27

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acenaphthene	50.0	ND	23.7	21.6	47.4	43.2	1	28.0-120			9.27	25
Acenaphthylene	50.0	ND	26.8	24.1	53.6	48.2	1	31.0-121			10.6	25
Anthracene	50.0	ND	27.7	28.2	55.4	56.4	1	36.0-120			1.79	23
Benzidine	100	ND	55.6	27.9	55.6	27.9	1	10.0-120		J3	66.3	37
Benzo(a)anthracene	50.0	ND	35.4	35.0	70.8	70.0	1	39.0-120			1.14	23
Benzo(b)fluoranthene	50.0	ND	33.2	32.8	66.4	65.6	1	37.0-120			1.21	23
Benzo(k)fluoranthene	50.0	ND	32.2	31.9	64.4	63.8	1	37.0-120			0.936	26
Benzo(g,h,i)perylene	50.0	ND	28.5	28.0	57.0	56.0	1	37.0-123			1.77	25
Benzo(a)pyrene	50.0	ND	34.5	34.5	69.0	69.0	1	37.0-120			0.000	24
Bis(2-chlorethoxy)methane	50.0	ND	23.5	21.6	47.0	43.2	1	17.0-120			8.43	31
Bis(2-chloroethyl)ether	50.0	ND	23.3	20.4	46.6	40.8	1	14.0-120			13.3	33
2,2-oxybis(1-chloropropane)	50.0	ND	22.5	20.4	45.0	40.8	1	18.0-120			9.79	34
4-Bromophenyl-phenylether	50.0	ND	28.5	27.2	57.0	54.4	1	37.0-120			4.67	24
2-Chloronaphthalene	50.0	ND	24.9	22.2	49.8	44.4	1	29.0-120			11.5	28
4-Chlorophenyl-phenylether	50.0	ND	26.9	25.6	53.8	51.2	1	36.0-120			4.95	23
Chrysene	50.0	ND	32.1	31.6	64.2	63.2	1	38.0-120			1.57	23
Dibenz(a,h)anthracene	50.0	ND	30.0	29.5	60.0	59.0	1	36.0-121			1.68	24
3,3-Dichlorobenzidine	100	ND	64.6	62.3	64.6	62.3	1	10.0-134			3.62	30
2,4-Dinitrotoluene	50.0	ND	30.0	31.8	60.0	63.6	1	39.0-125			5.83	25
2,6-Dinitrotoluene	50.0	ND	26.6	28.2	53.2	56.4	1	36.0-120			5.84	27
Fluoranthene	50.0	ND	30.5	31.0	61.0	62.0	1	41.0-121			1.63	22
Fluorene	50.0	ND	25.6	24.4	51.2	48.8	1	37.0-120			4.80	24

L1264784-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1264784-06 09/24/20 19:44 • (MS) R3574443-3 09/24/20 20:06 • (MSD) R3574443-4 09/24/20 20:27

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Hexachlorobenzene	50.0	ND	27.3	26.8	54.6	53.6	1	35.0-122			1.85	24
Hexachloro-1,3-butadiene	50.0	ND	24.6	22.1	49.2	44.2	1	12.0-120			10.7	34
Hexachlorocyclopentadiene	50.0	ND	15.3	12.5	30.6	25.0	1	10.0-120			20.1	33
Hexachloroethane	50.0	ND	22.5	20.4	45.0	40.8	1	10.0-120			9.79	40
Indeno(1,2,3-cd)pyrene	50.0	ND	30.0	29.8	60.0	59.6	1	38.0-125			0.669	24
Isophorone	50.0	ND	26.0	24.3	52.0	48.6	1	21.0-120			6.76	27
Naphthalene	50.0	ND	21.8	19.4	43.6	38.8	1	10.0-120			11.7	31
Nitrobenzene	50.0	ND	24.2	21.5	48.4	43.0	1	12.0-120			11.8	30
n-Nitrosodimethylamine	50.0	ND	14.2	13.3	28.4	26.6	1	10.0-120			6.55	40
n-Nitrosodiphenylamine	50.0	ND	27.3	26.7	54.6	53.4	1	37.0-120			2.22	24
n-Nitrosodi-n-propylamine	50.0	ND	27.9	25.8	55.8	51.6	1	16.0-120			7.82	30
Phenanthrene	50.0	ND	28.4	28.5	56.8	57.0	1	33.0-120			0.351	22
Benzylbutyl phthalate	50.0	ND	40.3	41.2	80.6	82.4	1	34.0-126			2.21	24
Bis(2-ethylhexyl)phthalate	50.0	ND	39.8	39.5	79.6	79.0	1	33.0-126			0.757	25
Di-n-butyl phthalate	50.0	ND	36.6	37.1	73.2	74.2	1	35.0-128			1.36	23
Diethyl phthalate	50.0	ND	32.2	33.0	64.4	66.0	1	39.0-125			2.45	24
Dimethyl phthalate	50.0	ND	29.6	29.7	59.2	59.4	1	37.0-120			0.337	24
Di-n-octyl phthalate	50.0	ND	37.2	36.9	74.4	73.8	1	25.0-135			0.810	26
Pyrene	50.0	ND	32.7	33.1	65.4	66.2	1	39.0-120			1.22	22
1,2,4-Trichlorobenzene	50.0	ND	22.9	20.2	45.8	40.4	1	15.0-120			12.5	31
4-Chloro-3-methylphenol	50.0	ND	24.2	24.1	48.4	48.2	1	26.0-120			0.414	27
2-Chlorophenol	50.0	ND	20.3	18.0	40.6	36.0	1	18.0-120			12.0	34
2,4-Dichlorophenol	50.0	ND	22.7	21.2	45.4	42.4	1	19.0-120			6.83	27
2,4-Dimethylphenol	50.0	ND	25.1	23.6	50.2	47.2	1	15.0-120			6.16	28
4,6-Dinitro-2-methylphenol	50.0	ND	32.6	33.7	65.2	67.4	1	10.0-144			3.32	39
2,4-Dinitrophenol	50.0	ND	29.4	32.7	58.8	65.4	1	10.0-120			10.6	40
2-Nitrophenol	50.0	ND	23.0	20.5	46.0	41.0	1	20.0-120			11.5	30
4-Nitrophenol	50.0	ND	ND	10.4	18.3	20.8	1	10.0-120			13.0	40
Pentachlorophenol	50.0	ND	26.8	29.3	53.6	58.6	1	10.0-128			8.91	37
Phenol	50.0	ND	ND	ND	14.9	15.0	1	10.0-120			0.804	40
2,4,6-Trichlorophenol	50.0	ND	26.7	25.2	53.4	50.4	1	26.0-120			5.78	31
1,2-Dichlorobenzene	50.0	ND	22.8	20.7	45.6	41.4	1	18.0-120			9.66	40
1,3-Dichlorobenzene	50.0	ND	22.6	20.3	45.2	40.6	1	15.0-120			10.7	40
1,4-Dichlorobenzene	50.0	ND	22.4	20.4	44.8	40.8	1	17.0-120			9.35	40
(S) Nitrobenzene-d5					*42.2*	*37.1*		*10.0-127*				
(S) 2-Fluorobiphenyl					*51.8*	*45.6*		*10.0-130*				
(S) p-Terphenyl-d14					*71.6*	*71.1*		*10.0-128*				
(S) Phenol-d5					*14.5*	*14.0*		*10.0-120*				
(S) 2-Fluorophenol					*23.0*	*20.9*		*10.0-120*				
(S) 2,4,6-Tribromophenol					*56.0*	*58.0*		*10.0-155*				

Method Blank (MB)

(MB) R3575053-2 09/25/20 12:31

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acenaphthene	U		0.0886	1.00
Acenaphthylene	U		0.0921	1.00
Anthracene	U		0.0804	1.00
Benzidine	U		3.74	10.0
Benzo(a)anthracene	U		0.199	1.00
Benzo(b)fluoranthene	U		0.130	1.00
Benzo(k)fluoranthene	U		0.120	1.00
Benzo(g,h,i)perylene	U		0.121	1.00
Benzo(a)pyrene	U		0.0381	1.00
Bis(2-chlorethoxy)methane	U		0.116	10.0
Bis(2-chloroethyl)ether	U		0.137	10.0
2,2-Oxybis(1-Chloropropane)	U		0.210	10.0
4-Bromophenyl-phenylether	U		0.0877	10.0
2-Chloronaphthalene	U		0.0648	1.00
4-Chlorophenyl-phenylether	U		0.0926	10.0
Chrysene	U		0.130	1.00
Dibenz(a,h)anthracene	U		0.0644	1.00
1,2-Dichlorobenzene	U		0.0713	10.0
1,3-Dichlorobenzene	U		0.132	10.0
1,4-Dichlorobenzene	U		0.0942	10.0
3,3-Dichlorobenzidine	U		0.212	10.0
2,4-Dinitrotoluene	U		0.0983	10.0
2,6-Dinitrotoluene	U		0.250	10.0
Fluoranthene	U		0.102	1.00
Fluorene	U		0.0844	1.00
Hexachlorobenzene	U		0.0755	1.00
Hexachloro-1,3-butadiene	U		0.0968	10.0
Hexachlorocyclopentadiene	U		0.0598	10.0
Hexachloroethane	U		0.127	10.0
Indeno(1,2,3-cd)pyrene	U		0.279	1.00
Isophorone	U		0.143	10.0
Naphthalene	U		0.159	1.00
Nitrobenzene	U		0.297	10.0
n-Nitrosodimethylamine	U		0.998	10.0
n-Nitrosodiphenylamine	U		2.37	10.0
n-Nitrosodi-n-propylamine	U		0.261	10.0
Phenanthrene	U		0.112	1.00
Benzylbutyl phthalate	U		0.765	3.00
Bis(2-ethylhexyl)phthalate	U		0.895	3.00
Di-n-butyl phthalate	U		0.453	3.00

Method Blank (MB)

(MB) R3575053-2 09/25/20 12:31

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Diethyl phthalate	U		0.287	3.00
Dimethyl phthalate	U		0.260	3.00
Di-n-octyl phthalate	U		0.932	3.00
Pyrene	U		0.107	1.00
1,2,4-Trichlorobenzene	U		0.0698	10.0
4-Chloro-3-methylphenol	U		0.131	10.0
2-Chlorophenol	U		0.133	10.0
2,4-Dichlorophenol	U		0.102	10.0
2,4-Dimethylphenol	U		0.0636	10.0
4,6-Dinitro-2-methylphenol	U		1.12	10.0
2,4-Dinitrophenol	U		5.93	10.0
2-Nitrophenol	U		0.117	10.0
4-Nitrophenol	U		0.143	10.0
Pentachlorophenol	U		0.313	10.0
Phenol	U		4.33	10.0
2,4,6-Trichlorophenol	U		0.100	10.0
(S) 2-Fluorophenol	*33.3*			*10.0-120*
(S) Phenol-d5	*20.3*			*10.0-120*
(S) Nitrobenzene-d5	*51.5*			*10.0-127*
(S) 2-Fluorobiphenyl	*59.7*			*10.0-130*
(S) 2,4,6-Tribromophenol	*58.5*			*10.0-155*
(S) p-Terphenyl-d14	*61.4*			*10.0-128*

Laboratory Control Sample (LCS)

(LCS) R3575053-1 09/25/20 12:10

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acenaphthene	50.0	29.7	59.4	41.0-120	
Acenaphthylene	50.0	32.4	64.8	43.0-120	
Anthracene	50.0	31.8	63.6	45.0-120	
Benzidine	100	28.5	28.5	10.0-120	
Benzo(a)anthracene	50.0	33.0	66.0	47.0-120	
Benzo(b)fluoranthene	50.0	31.8	63.6	46.0-120	
Benzo(k)fluoranthene	50.0	31.5	63.0	46.0-120	
Benzo(g,h,i)perylene	50.0	34.8	69.6	48.0-121	
Benzo(a)pyrene	50.0	32.0	64.0	47.0-120	
Bis(2-chlorethoxy)methane	50.0	28.7	57.4	33.0-120	
Bis(2-chloroethyl)ether	50.0	35.4	70.8	23.0-120	

Laboratory Control Sample (LCS)

(LCS) R3575053-1 09/25/20 12:10

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
2,2-Oxybis(1-Chloropropane)	50.0	32.3	64.6	28.0-120	
4-Bromophenyl-phenylether	50.0	33.7	67.4	45.0-120	
2-Chloronaphthalene	50.0	31.2	62.4	37.0-120	
4-Chlorophenyl-phenylether	50.0	30.6	61.2	44.0-120	
Chrysene	50.0	30.3	60.6	48.0-120	
Dibenz(a,h)anthracene	50.0	34.6	69.2	47.0-120	
1,2-Dichlorobenzene	50.0	29.7	59.4	20.0-120	
1,3-Dichlorobenzene	50.0	28.7	57.4	17.0-120	
1,4-Dichlorobenzene	50.0	29.4	58.8	18.0-120	
3,3-Dichlorobenzidine	100	70.7	70.7	44.0-120	
2,4-Dinitrotoluene	50.0	34.1	68.2	49.0-124	
2,6-Dinitrotoluene	50.0	33.3	66.6	46.0-120	
Fluoranthene	50.0	31.6	63.2	51.0-120	
Fluorene	50.0	30.7	61.4	47.0-120	
Hexachlorobenzene	50.0	32.9	65.8	44.0-120	
Hexachloro-1,3-butadiene	50.0	29.4	58.8	19.0-120	
Hexachlorocyclopentadiene	50.0	12.5	25.0	15.0-120	
Hexachloroethane	50.0	29.4	58.8	15.0-120	
Indeno(1,2,3-cd)pyrene	50.0	34.9	69.8	49.0-122	
Isophorone	50.0	28.7	57.4	36.0-120	
Naphthalene	50.0	27.9	55.8	27.0-120	
Nitrobenzene	50.0	28.8	57.6	27.0-120	
n-Nitrosodimethylamine	50.0	21.1	42.2	10.0-120	
n-Nitrosodiphenylamine	50.0	32.7	65.4	47.0-120	
n-Nitrosodi-n-propylamine	50.0	33.9	67.8	31.0-120	
Phenanthrene	50.0	31.5	63.0	46.0-120	
Benzylbutyl phthalate	50.0	35.5	71.0	43.0-121	
Bis(2-ethylhexyl)phthalate	50.0	34.5	69.0	43.0-122	
Di-n-butyl phthalate	50.0	34.8	69.6	49.0-121	
Diethyl phthalate	50.0	33.6	67.2	48.0-122	
Dimethyl phthalate	50.0	33.0	66.0	48.0-120	
Di-n-octyl phthalate	50.0	32.9	65.8	42.0-125	
Pyrene	50.0	32.0	64.0	47.0-120	
1,2,4-Trichlorobenzene	50.0	26.5	53.0	24.0-120	
4-Chloro-3-methylphenol	50.0	27.7	55.4	40.0-120	
2-Chlorophenol	50.0	29.9	59.8	25.0-120	
2,4-Dichlorophenol	50.0	28.3	56.6	36.0-120	
2,4-Dimethylphenol	50.0	31.7	63.4	33.0-120	
4,6-Dinitro-2-methylphenol	50.0	32.1	64.2	38.0-138	
2,4-Dinitrophenol	50.0	29.2	58.4	10.0-120	

Laboratory Control Sample (LCS)

(LCS) R3575053-1 09/25/20 12:10

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
2-Nitrophenol	50.0	33.2	66.4	31.0-120	
4-Nitrophenol	50.0	15.4	30.8	10.0-120	
Pentachlorophenol	50.0	28.5	57.0	23.0-120	
Phenol	50.0	12.9	25.8	10.0-120	
2,4,6-Trichlorophenol	50.0	32.5	65.0	42.0-120	
(S) 2-Fluorophenol			*38.6*	*10.0-120*	
(S) Phenol-d5			*25.3*	*10.0-120*	
(S) Nitrobenzene-d5			*51.0*	*10.0-127*	
(S) 2-Fluorobiphenyl			*60.4*	*10.0-130*	
(S) 2,4,6-Tribromophenol			*72.0*	*10.0-155*	
(S) p-Terphenyl-d14			*65.1*	*10.0-128*	

L1265466-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1265466-01 09/25/20 18:14 • (MS) R3575053-3 09/25/20 18:36 • (MSD) R3575053-4 09/25/20 18:57

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acenaphthene	50.0	ND	29.5	28.2	59.0	56.4	1	28.0-120			4.51	25
Acenaphthylene	50.0	ND	32.1	31.3	64.2	62.6	1	31.0-121			2.52	25
Anthracene	50.0	ND	32.0	30.8	64.0	61.6	1	36.0-120			3.82	23
Benzidine	100	ND	ND	ND	0.000	0.000	1	10.0-120	J6	J6	0.000	37
Benzo(a)anthracene	50.0	ND	33.2	31.5	66.4	63.0	1	39.0-120			5.26	23
Benzo(b)fluoranthene	50.0	ND	31.2	30.2	62.4	60.4	1	37.0-120			3.26	23
Benzo(k)fluoranthene	50.0	ND	30.5	29.6	61.0	59.2	1	37.0-120			3.00	26
Benzo(g,h,i)perylene	50.0	ND	35.4	34.0	70.8	68.0	1	37.0-123			4.03	25
Benzo(a)pyrene	50.0	ND	31.8	31.1	63.6	62.2	1	37.0-120			2.23	24
Bis(2-chlorethoxy)methane	50.0	ND	27.9	27.6	55.8	55.2	1	17.0-120			1.08	31
Bis(2-chloroethyl)ether	50.0	ND	34.9	33.2	69.8	66.4	1	14.0-120			4.99	33
2,2-Oxybis(1-Chloropropane)	50.0	ND	32.4	34.0	64.8	68.0	1	18.0-120			4.82	34
4-Bromophenyl-phenylether	50.0	ND	34.5	33.1	69.0	66.2	1	37.0-120			4.14	24
2-Chloronaphthalene	50.0	ND	30.7	30.1	61.4	60.2	1	29.0-120			1.97	28
4-Chlorophenyl-phenylether	50.0	ND	31.0	30.0	62.0	60.0	1	36.0-120			3.28	23
Chrysene	50.0	ND	30.7	29.9	61.4	59.8	1	38.0-120			2.64	23
Dibenz(a,h)anthracene	50.0	ND	35.6	34.0	71.2	68.0	1	36.0-121			4.60	24
1,2-Dichlorobenzene	50.0	ND	30.0	28.3	60.0	56.6	1	18.0-120			5.83	40
1,3-Dichlorobenzene	50.0	ND	29.3	27.4	58.6	54.8	1	15.0-120			6.70	40
1,4-Dichlorobenzene	50.0	ND	29.1	27.7	58.2	55.4	1	17.0-120			4.93	40
3,3-Dichlorobenzidine	100	ND	48.6	26.7	48.6	26.7	1	10.0-134		J3	58.2	30
2,4-Dinitrotoluene	50.0	ND	34.8	32.7	69.6	65.4	1	39.0-125			6.22	25

L1265466-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1265466-01 09/25/20 18:14 • (MS) R3575053-3 09/25/20 18:36 • (MSD) R3575053-4 09/25/20 18:57

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
2,6-Dinitrotoluene	50.0	ND	33.6	32.2	67.2	64.4	1	36.0-120			4.26	27
Fluoranthene	50.0	ND	33.6	31.4	67.2	62.8	1	41.0-121			6.77	22
Fluorene	50.0	ND	30.9	30.2	61.8	60.4	1	37.0-120			2.29	24
Hexachlorobenzene	50.0	ND	34.1	32.1	68.2	64.2	1	35.0-122			6.04	24
Hexachloro-1,3-butadiene	50.0	ND	29.1	28.9	58.2	57.8	1	12.0-120			0.690	34
Hexachlorocyclopentadiene	50.0	ND	17.4	17.8	34.8	35.6	1	10.0-120			2.27	33
Hexachloroethane	50.0	ND	29.8	28.2	59.6	56.4	1	10.0-120			5.52	40
Indeno(1,2,3-cd)pyrene	50.0	ND	36.2	35.1	72.4	70.2	1	38.0-125			3.09	24
Isophorone	50.0	ND	29.1	28.2	58.2	56.4	1	21.0-120			3.14	27
Naphthalene	50.0	ND	27.7	26.5	55.4	53.0	1	10.0-120			4.43	31
Nitrobenzene	50.0	ND	28.3	27.6	56.6	55.2	1	12.0-120			2.50	30
n-Nitrosodimethylamine	50.0	ND	20.0	19.6	40.0	39.2	1	10.0-120			2.02	40
n-Nitrosodiphenylamine	50.0	ND	24.5	29.0	49.0	58.0	1	37.0-120			16.8	24
n-Nitrosodi-n-propylamine	50.0	ND	34.5	33.4	69.0	66.8	1	16.0-120			3.24	30
Phenanthrene	50.0	ND	32.1	30.9	64.2	61.8	1	33.0-120			3.81	22
Benzylbutyl phthalate	50.0	ND	37.0	35.2	74.0	70.4	1	34.0-126			4.99	24
Bis(2-ethylhexyl)phthalate	50.0	ND	34.9	34.7	69.8	69.4	1	33.0-126			0.575	25
Di-n-butyl phthalate	50.0	ND	36.2	33.8	72.4	67.6	1	35.0-128			6.86	23
Diethyl phthalate	50.0	ND	35.3	32.9	70.6	65.8	1	39.0-125			7.04	24
Dimethyl phthalate	50.0	ND	32.8	32.1	65.6	64.2	1	37.0-120			2.16	24
Di-n-octyl phthalate	50.0	ND	34.3	33.9	68.6	67.8	1	25.0-135			1.17	26
Pyrene	50.0	ND	31.6	30.7	63.2	61.4	1	39.0-120			2.89	22
1,2,4-Trichlorobenzene	50.0	ND	26.3	25.2	52.6	50.4	1	15.0-120			4.27	31
4-Chloro-3-methylphenol	50.0	ND	27.1	28.7	54.2	57.4	1	26.0-120			5.73	27
2-Chlorophenol	50.0	ND	29.5	30.4	59.0	60.8	1	18.0-120			3.01	34
2,4-Dichlorophenol	50.0	ND	28.3	28.2	56.6	56.4	1	19.0-120			0.354	27
2,4-Dimethylphenol	50.0	ND	30.8	31.5	61.6	63.0	1	15.0-120			2.25	28
4,6-Dinitro-2-methylphenol	50.0	ND	34.6	33.4	69.2	66.8	1	10.0-144			3.53	39
2,4-Dinitrophenol	50.0	ND	35.3	34.7	70.6	69.4	1	10.0-120			1.71	40
2-Nitrophenol	50.0	ND	31.7	29.5	63.4	59.0	1	20.0-120			7.19	30
4-Nitrophenol	50.0	ND	13.8	22.4	27.6	44.8	1	10.0-120		J3	47.5	40
Pentachlorophenol	50.0	ND	32.4	31.7	64.8	63.4	1	10.0-128			2.18	37
Phenol	50.0	69.6	16.1	27.7	0.000	0.000	1	10.0-120	J6	J3 J6	53.0	40
2,4,6-Trichlorophenol	50.0	ND	33.0	32.2	66.0	64.4	1	26.0-120			2.45	31
(S) 2-Fluorophenol					*34.4*	*48.5*		*10.0-120*				
(S) Phenol-d5					*22.8*	*37.2*		*10.0-120*				
(S) Nitrobenzene-d5					*50.0*	*49.9*		*10.0-127*				
(S) 2-Fluorobiphenyl					*62.1*	*61.8*		*10.0-130*				
(S) 2,4,6-Tribromophenol					*79.0*	*72.5*		*10.0-155*				
(S) p-Terphenyl-d14					*62.7*	*62.7*		*10.0-128*				

L1265466-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1265466-05 09/25/20 20:23 • (MS) R3575053-5 09/25/20 20:45 • (MSD) R3575053-6 09/25/20 21:06

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acenaphthene	50.0	ND	29.5	27.3	59.0	54.6	1	28.0-120			7.75	25
Acenaphthylene	50.0	ND	32.7	29.8	65.4	59.6	1	31.0-121			9.28	25
Anthracene	50.0	ND	32.2	28.8	64.4	57.6	1	36.0-120			11.1	23
Benzidine	100	ND	ND	ND	0.000	0.000	1	10.0-120	J6	J6	0.000	37
Benzo(a)anthracene	50.0	ND	33.0	29.8	66.0	59.6	1	39.0-120			10.2	23
Benzo(b)fluoranthene	50.0	ND	31.6	28.5	63.2	57.0	1	37.0-120			10.3	23
Benzo(k)fluoranthene	50.0	ND	30.9	27.8	61.8	55.6	1	37.0-120			10.6	26
Benzo(g,h,i)perylene	50.0	ND	35.8	32.0	71.6	64.0	1	37.0-123			11.2	25
Benzo(a)pyrene	50.0	ND	32.2	28.3	64.4	56.6	1	37.0-120			12.9	24
Bis(2-chlorethoxy)methane	50.0	ND	28.7	26.1	57.4	52.2	1	17.0-120			9.49	31
Bis(2-chloroethyl)ether	50.0	ND	35.7	32.7	71.4	65.4	1	14.0-120			8.77	33
2,2-Oxybis(1-Chloropropane)	50.0	ND	38.1	31.7	76.2	63.4	1	18.0-120			18.3	34
4-Bromophenyl-phenylether	50.0	ND	34.5	31.0	69.0	62.0	1	37.0-120			10.7	24
2-Chloronaphthalene	50.0	ND	31.4	29.0	62.8	58.0	1	29.0-120			7.95	28
4-Chlorophenyl-phenylether	50.0	ND	31.0	28.3	62.0	56.6	1	36.0-120			9.11	23
Chrysene	50.0	ND	30.2	27.4	60.4	54.8	1	38.0-120			9.72	23
Dibenz(a,h)anthracene	50.0	ND	36.0	32.5	72.0	65.0	1	36.0-121			10.2	24
1,2-Dichlorobenzene	50.0	ND	31.4	28.8	62.8	57.6	1	18.0-120			8.64	40
1,3-Dichlorobenzene	50.0	ND	31.0	27.7	62.0	55.4	1	15.0-120			11.2	40
1,4-Dichlorobenzene	50.0	ND	30.8	28.1	61.6	56.2	1	17.0-120			9.17	40
3,3-Dichlorobenzidine	100	ND	19.3	24.3	19.3	24.3	1	10.0-134			22.9	30
2,4-Dinitrotoluene	50.0	ND	35.3	31.9	70.6	63.8	1	39.0-125			10.1	25
2,6-Dinitrotoluene	50.0	ND	34.3	30.2	68.6	60.4	1	36.0-120			12.7	27
Fluoranthene	50.0	ND	32.6	29.4	65.2	58.8	1	41.0-121			10.3	22
Fluorene	50.0	ND	31.1	29.0	62.2	58.0	1	37.0-120			6.99	24
Hexachlorobenzene	50.0	ND	34.4	29.9	68.8	59.8	1	35.0-122			14.0	24
Hexachloro-1,3-butadiene	50.0	ND	30.6	28.4	61.2	56.8	1	12.0-120			7.46	34
Hexachlorocyclopentadiene	50.0	ND	15.8	13.4	31.6	26.8	1	10.0-120			16.4	33
Hexachloroethane	50.0	ND	30.8	28.3	61.6	56.6	1	10.0-120			8.46	40
Indeno(1,2,3-cd)pyrene	50.0	ND	36.9	32.8	73.8	65.6	1	38.0-125			11.8	24
Isophorone	50.0	ND	29.7	27.3	59.4	54.6	1	21.0-120			8.42	27
Naphthalene	50.0	ND	28.2	26.1	56.4	52.2	1	10.0-120			7.73	31
Nitrobenzene	50.0	ND	29.3	26.8	58.6	53.6	1	12.0-120			8.91	30
n-Nitrosodimethylamine	50.0	ND	22.4	19.9	44.8	39.8	1	10.0-120			11.8	40
n-Nitrosodiphenylamine	50.0	ND	33.5	29.8	67.0	59.6	1	37.0-120			11.7	24
n-Nitrosodi-n-propylamine	50.0	ND	35.4	32.2	70.8	64.4	1	16.0-120			9.47	30
Phenanthrene	50.0	ND	32.5	28.8	65.0	57.6	1	33.0-120			12.1	22
Benzylbutyl phthalate	50.0	ND	36.3	32.6	72.6	65.2	1	34.0-126			10.7	24
Bis(2-ethylhexyl)phthalate	50.0	ND	35.6	32.2	71.2	64.4	1	33.0-126			10.0	25
Di-n-butyl phthalate	50.0	ND	36.4	31.8	72.8	63.6	1	35.0-128			13.5	23

L1265466-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1265466-05 09/25/20 20:23 • (MS) R3575053-5 09/25/20 20:45 • (MSD) R3575053-6 09/25/20 21:06

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Diethyl phthalate	50.0	ND	35.3	31.3	70.6	62.6	1	39.0-125			12.0	24
Dimethyl phthalate	50.0	ND	33.7	30.8	67.4	61.6	1	37.0-120			8.99	24
Di-n-octyl phthalate	50.0	ND	35.2	31.4	70.4	62.8	1	25.0-135			11.4	26
Pyrene	50.0	ND	31.3	28.1	62.6	56.2	1	39.0-120			10.8	22
1,2,4-Trichlorobenzene	50.0	ND	27.8	25.4	55.6	50.8	1	15.0-120			9.02	31
4-Chloro-3-methylphenol	50.0	ND	30.1	26.7	60.2	53.4	1	26.0-120			12.0	27
2-Chlorophenol	50.0	ND	33.2	30.0	66.4	60.0	1	18.0-120			10.1	34
2,4-Dichlorophenol	50.0	ND	29.5	27.6	59.0	55.2	1	19.0-120			6.65	27
2,4-Dimethylphenol	50.0	ND	33.4	30.8	66.8	61.6	1	15.0-120			8.10	28
4,6-Dinitro-2-methylphenol	50.0	ND	35.7	31.6	71.4	63.2	1	10.0-144			12.2	39
2,4-Dinitrophenol	50.0	ND	37.4	33.2	74.8	66.4	1	10.0-120			11.9	40
2-Nitrophenol	50.0	ND	30.8	29.0	61.6	58.0	1	20.0-120			6.02	30
4-Nitrophenol	50.0	ND	23.4	21.6	46.8	43.2	1	10.0-120			8.00	40
Pentachlorophenol	50.0	ND	33.9	30.4	67.8	60.8	1	10.0-128			10.9	37
Phenol	50.0	ND	58.9	24.4	118	48.8	1	10.0-120		J3	82.8	40
2,4,6-Trichlorophenol	50.0	ND	34.5	31.2	69.0	62.4	1	26.0-120			10.0	31
(S) 2-Fluorophenol					*52.5*	*48.4*		*10.0-120*				
(S) Phenol-d5					*40.7*	*36.2*		*10.0-120*				
(S) Nitrobenzene-d5					*51.9*	*47.0*		*10.0-127*				
(S) 2-Fluorobiphenyl					*65.1*	*56.6*		*10.0-130*				
(S) 2,4,6-Tribromophenol					*78.0*	*70.5*		*10.0-155*				
(S) p-Terphenyl-d14					*65.6*	*58.3*		*10.0-128*				

Method Blank (MB)

(MB) R3575695-2 09/29/20 08:31

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acenaphthene	U		0.00539	0.0333
Acenaphthylene	U		0.00469	0.0333
Anthracene	U		0.00593	0.0333
Benzidine	U		0.0626	1.67
Benzo(a)anthracene	U		0.00587	0.0333
Benzo(b)fluoranthene	U		0.00621	0.0333
Benzo(k)fluoranthene	U		0.00592	0.0333
Benzo(g,h,i)perylene	U		0.00609	0.0333
Benzo(a)pyrene	U		0.00619	0.0333
Bis(2-chlorethoxy)methane	U		0.0100	0.333
Bis(2-chloroethyl)ether	U		0.0110	0.333
2,2-oxybis(1-chloropropane)	U		0.0144	0.333
4-Bromophenyl-phenylether	U		0.0117	0.333
2-Chloronaphthalene	U		0.00585	0.0333
4-Chlorophenyl-phenylether	U		0.0116	0.333
Chrysene	U		0.00662	0.0333
Dibenz(a,h)anthracene	U		0.00923	0.0333
3,3-Dichlorobenzidine	U		0.0123	0.333
2,4-Dinitrotoluene	U		0.00955	0.333
2,6-Dinitrotoluene	U		0.0109	0.333
Fluoranthene	U		0.00601	0.0333
Fluorene	U		0.00542	0.0333
Hexachlorobenzene	U		0.0118	0.333
Hexachloro-1,3-butadiene	U		0.0112	0.333
Hexachlorocyclopentadiene	U		0.0175	0.333
Hexachloroethane	U		0.0131	0.333
Indeno(1,2,3-cd)pyrene	U		0.00941	0.0333
Isophorone	U		0.0102	0.333
Naphthalene	U		0.00836	0.0333
Nitrobenzene	U		0.0116	0.333
n-Nitrosodimethylamine	U		0.0494	0.333
n-Nitrosodiphenylamine	U		0.0252	0.333
n-Nitrosodi-n-propylamine	U		0.0111	0.333
Phenanthrene	U		0.00661	0.0333
Benzylbutyl phthalate	U		0.0104	0.333
Bis(2-ethylhexyl)phthalate	U		0.0422	0.333
Di-n-butyl phthalate	U		0.0114	0.333
Diethyl phthalate	U		0.0110	0.333
Dimethyl phthalate	U		0.0706	0.333
Di-n-octyl phthalate	U		0.0225	0.333

Method Blank (MB)

(MB) R3575695-2 09/29/20 08:31

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Pyrene	U		0.00648	0.0333
1,2,4-Trichlorobenzene	U		0.0104	0.333
4-Chloro-3-methylphenol	U		0.0108	0.333
2-Chlorophenol	U		0.0110	0.333
2,4-Dichlorophenol	U		0.00970	0.333
2,4-Dimethylphenol	U		0.00870	0.333
4,6-Dinitro-2-methylphenol	U		0.0755	0.333
2,4-Dinitrophenol	U		0.0779	0.333
2-Nitrophenol	U		0.0119	0.333
4-Nitrophenol	U		0.0104	0.333
Pentachlorophenol	U		0.00896	0.333
Phenol	U		0.0134	0.333
2,4,6-Trichlorophenol	U		0.0107	0.333
(S) Nitrobenzene-d5	*43.8*			*10.0-122*
(S) 2-Fluorobiphenyl	*54.4*			*15.0-120*
(S) p-Terphenyl-d14	*64.9*			*10.0-120*
(S) Phenol-d5	*51.4*			*10.0-120*
(S) 2-Fluorophenol	*57.7*			*12.0-120*
(S) 2,4,6-Tribromophenol	*61.3*			*10.0-127*

Laboratory Control Sample (LCS)

(LCS) R3575695-1 09/29/20 08:10

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acenaphthene	0.666	0.422	63.4	38.0-120	
Acenaphthylene	0.666	0.447	67.1	40.0-120	
Anthracene	0.666	0.470	70.6	42.0-120	
Benzidine	1.33	0.349	26.2	10.0-120	
Benzo(a)anthracene	0.666	0.547	82.1	44.0-120	
Benzo(b)fluoranthene	0.666	0.516	77.5	43.0-120	
Benzo(k)fluoranthene	0.666	0.524	78.7	44.0-120	
Benzo(g,h,i)perylene	0.666	0.506	76.0	43.0-120	
Benzo(a)pyrene	0.666	0.564	84.7	45.0-120	
Bis(2-chlorethoxy)methane	0.666	0.334	50.2	20.0-120	
Bis(2-chloroethyl)ether	0.666	0.440	66.1	16.0-120	
2,2-Oxybis(1-Chloropropane)	0.666	0.407	61.1	23.0-120	
4-Bromophenyl-phenylether	0.666	0.488	73.3	40.0-120	
2-Chloronaphthalene	0.666	0.435	65.3	35.0-120	

Laboratory Control Sample (LCS)

(LCS) R3575695-1 09/29/20 08:10

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
4-Chlorophenyl-phenylether	0.666	0.476	71.5	40.0-120	
Chrysene	0.666	0.500	75.1	43.0-120	
Dibenz(a,h)anthracene	0.666	0.527	79.1	44.0-120	
3,3-Dichlorobenzidine	1.33	1.03	77.4	28.0-120	
2,4-Dinitrotoluene	0.666	0.568	85.3	45.0-120	
2,6-Dinitrotoluene	0.666	0.510	76.6	42.0-120	
Fluoranthene	0.666	0.500	75.1	44.0-120	
Fluorene	0.666	0.459	68.9	41.0-120	
Hexachlorobenzene	0.666	0.478	71.8	39.0-120	
Hexachloro-1,3-butadiene	0.666	0.393	59.0	15.0-120	
Hexachlorocyclopentadiene	0.666	0.296	44.4	15.0-120	
Hexachloroethane	0.666	0.417	62.6	17.0-120	
Indeno(1,2,3-cd)pyrene	0.666	0.530	79.6	45.0-120	
Isophorone	0.666	0.328	49.2	23.0-120	
Naphthalene	0.666	0.347	52.1	18.0-120	
Nitrobenzene	0.666	0.330	49.5	17.0-120	
n-Nitrosodimethylamine	0.666	0.424	63.7	10.0-125	
n-Nitrosodiphenylamine	0.666	0.448	67.3	40.0-120	
n-Nitrosodi-n-propylamine	0.666	0.366	55.0	26.0-120	
Phenanthrene	0.666	0.457	68.6	42.0-120	
Benzylbutyl phthalate	0.666	0.576	86.5	40.0-120	
Bis(2-ethylhexyl)phthalate	0.666	0.580	87.1	41.0-120	
Di-n-butyl phthalate	0.666	0.534	80.2	43.0-120	
Diethyl phthalate	0.666	0.510	76.6	43.0-120	
Dimethyl phthalate	0.666	0.483	72.5	43.0-120	
Di-n-octyl phthalate	0.666	0.586	88.0	40.0-120	
Pyrene	0.666	0.503	75.5	41.0-120	
1,2,4-Trichlorobenzene	0.666	0.369	55.4	17.0-120	
4-Chloro-3-methylphenol	0.666	0.353	53.0	28.0-120	
2-Chlorophenol	0.666	0.436	65.5	28.0-120	
2,4-Dichlorophenol	0.666	0.386	58.0	25.0-120	
2,4-Dimethylphenol	0.666	0.346	52.0	15.0-120	
4,6-Dinitro-2-methylphenol	0.666	0.553	83.0	16.0-120	
2,4-Dinitrophenol	0.666	0.486	73.0	10.0-120	
2-Nitrophenol	0.666	0.410	61.6	20.0-120	
4-Nitrophenol	0.666	0.518	77.8	27.0-120	
Pentachlorophenol	0.666	0.533	80.0	29.0-120	
Phenol	0.666	0.392	58.9	28.0-120	
2,4,6-Trichlorophenol	0.666	0.486	73.0	37.0-120	
(S) Nitrobenzene-d5			*45.0*	*10.0-122*	

Laboratory Control Sample (LCS)

(LCS) R3575695-1 09/29/20 08:10

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
(S) 2-Fluorobiphenyl			*67.6*	*15.0-120*	
(S) p-Terphenyl-d14			*79.6*	*10.0-120*	
(S) Phenol-d5			*63.7*	*10.0-120*	
(S) 2-Fluorophenol			*74.5*	*12.0-120*	
(S) 2,4,6-Tribromophenol			*90.1*	*10.0-127*	

L1264151-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1264151-02 09/29/20 16:33 • (MS) R3575695-3 09/29/20 16:54 • (MSD) R3575695-4 09/29/20 17:15

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acenaphthene	0.806	0.274	1.05	1.45	96.8	146	2	18.0-120		J5	31.7	32
Acenaphthylene	0.806	ND	0.546	0.453	67.7	56.2	2	25.0-120			18.6	32
Anthracene	0.806	0.133	0.779	1.08	80.2	118	2	22.0-120		J3	32.5	29
Benzidine	1.61	ND	ND	ND	10.3	10.5	2	10.0-120			1.48	40
Benzo(a)anthracene	0.806	0.133	1.06	1.53	115	173	2	25.0-120		J3 J5	35.9	29
Benzo(b)fluoranthene	0.806	0.148	1.06	1.51	113	169	2	19.0-122		J3 J5	35.5	31
Benzo(k)fluoranthene	0.806	ND	0.774	0.918	90.4	108	2	23.0-120			17.0	30
Benzo(g,h,i)perylene	0.806	ND	0.800	0.930	90.6	107	2	10.0-120			15.1	33
Benzo(a)pyrene	0.806	0.108	1.03	1.43	114	164	2	24.0-120		J3 J5	32.7	30
Bis(2-chlorethoxy)methane	0.806	ND	ND	ND	51.1	45.7	2	10.0-120			11.1	34
Bis(2-chloroethyl)ether	0.806	ND	ND	ND	48.9	43.8	2	10.0-120			10.9	40
2,2-Oxybis(1-Chloropropane)	0.806	ND	ND	ND	53.5	47.8	2	10.0-120			11.2	40
4-Bromophenyl-phenylether	0.806	ND	ND	ND	74.5	62.5	2	27.0-120			17.5	30
2-Chloronaphthalene	0.806	ND	0.505	0.429	62.6	53.2	2	20.0-120			16.2	32
4-Chlorophenyl-phenylether	0.806	ND	ND	ND	75.4	59.1	2	24.0-120			24.3	29
Chrysene	0.806	0.141	0.988	1.43	105	159	2	21.0-120		J3 J5	36.4	29
Dibenz(a,h)anthracene	0.806	ND	0.624	0.591	77.4	73.2	2	10.0-120			5.52	32
3,3-Dichlorobenzidine	1.61	ND	1.20	0.940	74.3	58.3	2	10.0-120			24.1	34
2,4-Dinitrotoluene	0.806	ND	ND	ND	90.5	79.8	2	30.0-120			12.5	31
2,6-Dinitrotoluene	0.806	ND	ND	ND	78.2	66.3	2	25.0-120			16.4	31
Fluoranthene	0.806	0.401	1.54	2.77	141	293	2	18.0-126	J5	J3 J5	57.1	32
Fluorene	0.806	0.243	0.955	1.23	88.3	122	2	25.0-120		J5	24.8	30
Hexachlorobenzene	0.806	ND	ND	ND	72.8	60.2	2	27.0-120			19.0	28
Hexachloro-1,3-butadiene	0.806	ND	ND	ND	61.7	52.5	2	10.0-120			16.2	38
Hexachlorocyclopentadiene	0.806	ND	ND	ND	0.000	0.000	2	10.0-120	J6	J6	0.000	40
Hexachloroethane	0.806	ND	ND	ND	60.9	48.8	2	10.0-120			22.2	40
Indeno(1,2,3-cd)pyrene	0.806	ND	0.870	1.01	98.6	117	2	10.0-120			15.4	32
Isophorone	0.806	ND	ND	ND	51.7	46.3	2	13.0-120			11.0	34

L1264151-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1264151-02 09/29/20 16:33 • (MS) R3575695-3 09/29/20 16:54 • (MSD) R3575695-4 09/29/20 17:15

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Naphthalene	0.806	0.135	0.705	0.600	70.6	57.7	2	10.0-120			16.0	35
Nitrobenzene	0.806	ND	ND	ND	48.9	42.6	2	10.0-120			13.8	36
n-Nitrosodimethylamine	0.806	ND	ND	ND	52.0	41.1	2	10.0-127			23.5	40
n-Nitrosodiphenylamine	0.806	ND	ND	ND	75.5	64.0	2	17.0-120			16.5	29
n-Nitrosodi-n-propylamine	0.806	ND	ND	ND	51.2	45.8	2	10.0-120			11.1	37
Phenanthrene	0.806	0.581	1.45	2.48	108	236	2	17.0-120		J3 J5	52.4	31
Benzylbutyl phthalate	0.806	ND	ND	ND	93.1	76.3	2	23.0-120			19.8	30
Bis(2-ethylhexyl)phthalate	0.806	ND	1.75	1.23	170	106	2	17.0-126	J5	J3	34.6	30
Di-n-butyl phthalate	0.806	ND	ND	ND	83.1	68.8	2	30.0-120			18.8	29
Diethyl phthalate	0.806	ND	ND	ND	79.5	65.7	2	26.0-120			19.1	28
Dimethyl phthalate	0.806	ND	ND	ND	73.8	61.5	2	25.0-120			18.2	29
Di-n-octyl phthalate	0.806	ND	ND	ND	102	83.4	2	21.0-123			19.8	29
Pyrene	0.806	0.304	1.38	2.27	133	244	2	16.0-121	J5	J3 J5	49.0	32
1,2,4-Trichlorobenzene	0.806	ND	ND	ND	55.2	47.7	2	12.0-120			14.6	37
4-Chloro-3-methylphenol	0.806	ND	ND	ND	66.9	55.7	2	15.0-120			18.3	30
2-Chlorophenol	0.806	ND	ND	ND	59.2	52.3	2	15.0-120			12.4	37
2,4-Dichlorophenol	0.806	ND	ND	ND	62.9	54.2	2	20.0-120			15.0	31
2,4-Dimethylphenol	0.806	ND	ND	ND	58.6	50.5	2	10.0-120			15.0	33
4,6-Dinitro-2-methylphenol	0.806	ND	ND	ND	36.0	32.0	2	10.0-120			11.8	39
2,4-Dinitrophenol	0.806	ND	ND	ND	0.000	0.000	2	10.0-121	J6	J6	0.000	40
2-Nitrophenol	0.806	ND	ND	ND	58.5	51.5	2	12.0-120			12.6	39
4-Nitrophenol	0.806	ND	ND	ND	88.6	70.6	2	10.0-137			22.6	32
Pentachlorophenol	0.806	ND	ND	ND	78.0	64.6	2	10.0-160			18.8	31
Phenol	0.806	ND	ND	ND	54.0	47.2	2	12.0-120			13.4	38
2,4,6-Trichlorophenol	0.806	ND	ND	ND	75.2	62.9	2	19.0-120			17.8	32
(S) Nitrobenzene-d5					*52.6*	*42.5*		*10.0-122*				
(S) 2-Fluorobiphenyl					*60.6*	*42.5*		*15.0-120*				
(S) p-Terphenyl-d14					*78.8*	*51.4*		*10.0-120*				
(S) Phenol-d5					*57.0*	*42.4*		*10.0-120*				
(S) 2-Fluorophenol					*62.2*	*46.4*		*12.0-120*				
(S) 2,4,6-Tribromophenol					*88.0*	*59.2*		*10.0-127*				

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
RDL (dry)	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: The identification of the analyte is acceptable, but the reported concentration is an estimate. The calibration met method criteria.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
V	The sample concentration is too high to evaluate accurate spike recoveries.

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

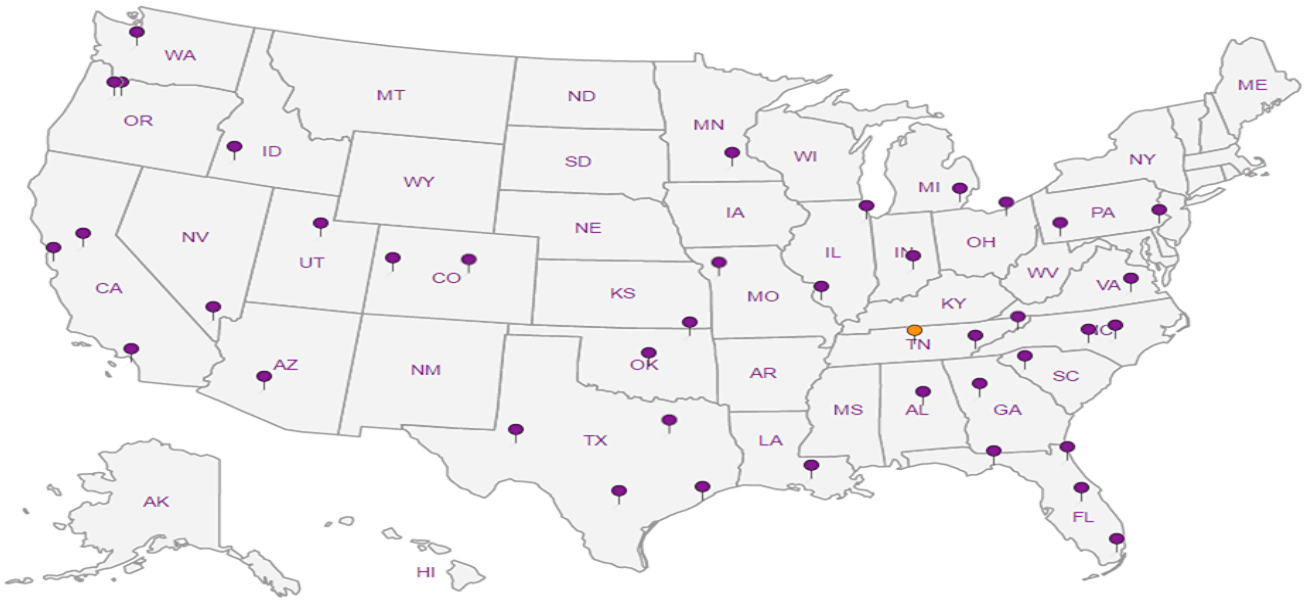
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



SCS Engineers - KS
8575 W. 110th Street
Overland Park, KS 66210

Billing Information:
Accounts Payable
8575 W. 110th Street
Overland Park, KS 66210

Report to: Doug Dreiling
Email To: ddreiling@scsengineers.com

Project Description: Former City Garage Operations
City/State Collected:
Please Circle: PT MT CT ET

Phone: 913-681-0030
Client Project # C4-052-73682
Lab Project # AQUAOPKS-C405273682

Collected by (print): Jeff Jansen
Site/Facility ID # 27220109.00
P.O. #

Collected by (signature):
Immediately Packed on Ice N ___ Y X
Rush? (Lab MUST Be Notified) ___ Same Day ___ Five Day ___ Next Day ___ 5 Day (Rad Only) ___ Two Day ___ 10 Day (Rad Only) ___ Three Day
Date Results Needed
Quote #

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

Pace Analytical® National Center for Testing & Innovation
12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

SDG # L1264151
Table # A074
Acctnum: AQUAOPKS
Template: T174203
Prelogin: P797673
PM: 206 - Jeff Carr
PB:
Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRH/HRH, TS 4ozAmb-NoPres	RCRA Metals 2ozClr-NoPres	SVOCs, Pest/PCBs 4ozClr-NoPres *	SVOCs, Pesticides 4ozClr-NoPres *	VOCs - 8260 40mlAmb/MeOH5ml/Syr	VPHKS - LRH 40mlAmb/MeOH15ml/Syr	Remarks	Sample # (lab only)
PB-1 2'-4'	G	SS	2'-4'	9/17/20	1634	5	X	X	X		X	X		-01
PB-1 9.5'-11'		SS	9.5-11.5	9/17/20	1652	5	X	X	X		X	X		-02
PB-2 1'-3'		SS	1'-3'	9/17/20	1435	5	X	X	X		X	X		-03
PB-2 12'-14'		SS	12'-14'	9/17/20	1520	5	X	X	X		X	X		-04
PB-9 2'-4'		SS	2'-4'	9/17/20	1306	5	X	X	X		X	X		-05
PB-9 9'-11'		SS	9'-11'	9/17/20	1332	5	X	X	X		X	X		-06
PB-3 1.5'-3.5'		SS	1.5'-3.5'	9/18/20	0939	5	X	X	X		X	X		-07
PB-3 9'-11'		SS	9'-11'	9/18/20	0957	5	X	X	X		X	X		-08
Soil Dup		SS	—	9/17/20	—	5	X	X	X		X	X		-09
Field Blank		SS GW	—	9/18/20	0939	3 3	X	X	X		X	X		-10

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: * - Complete List - Also Report 2,6-Dinitrotoluene.
SVOCs Full run for PB-1 9.5-11', PB-9 9-11', PB3 1.5-3.5'
PCBs run for PB-2 1-3', PB-3 1.5-3.5', PB-9 2-4'
pH ___ Temp ___ Flow ___ Other ___

Samples returned via: __ UPS __ FedEx __ Courier ___
Tracking # 1845 4330 3173

Sample Receipt Checklist
COC Seal Present/Intact: NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N
RAD Screen <0.5 mR/hr: Y N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	Temp: 1.3 °C Bottles Received: 10+2=12	If preservation required by Login: Date/Time
	9/18/20	1605	9-18-20 1606	2		
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)			
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) B. Barnes	Date: 9.19.20	Time: 0900	Hold: Condition: NCF / OK

SCS Engineers - KS

8575 W. 110th Street
Overland Park, KS 66210

Billing Information:
Accounts Payable
8575 W. 110th Street
Overland Park, KS 66210

Pres Chk

Report to: Doug Dreiling

Email To: ddreiling@scsengineers.com

Project Description: Former City Garage Operations

City/State Collected:

Please Circle: PT MT CT ET

Phone: 913-681-0030

Client Project # C4-052-73682

Lab Project # AQUAOPKS-C405273682

Collected by (print): Jeff Swan

Site/Facility ID # 27220109.00

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRH/HRH, TS 4ozAmb-NoPres	RCRA Metals 2ozClr-NoPres	SVOCs, Pest/PCBs 4ozClr-NoPres * 8270C	SVOCs, Pesticides 4ozClr-NoPres	VOCs - 8260 40mlAmb/MeOH5ml/Syr	VPHKS - LRH 40mlAmb/MeOH15ml/Syr					Remarks	Sample # (lab only)
Equip Blank	G	~~SSGW~~	—	9/18/20	0957	~~3~~ 6	X	X	X		X	X						-11
Trip Blank	—	~~SSGW~~	—	—	—	~~2~~	X	X		X	X	X						-12
		SS				~~5~~	X	X		X	X	X						

Chain of Custody Page ___ of ___

Pace Analytical
National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

SDG # L1264151

Table #

Acctnum: AQUAOPKS

Template: T174203

Prelogin: P797673

PM: 206 - Jeff Carr

PB:

Shipped Via:

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: ~~X~~ SVOCs - Complete Full List - Also report 2,-6, Dinitrotoluene.

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier

Tracking # 1845 4330 3113

Sample Receipt Checklist

COC Seal Present/Intact:	NP	Y N
COC Signed/Accurate:		Y N
Bottles arrive intact:		Y N
Correct bottles used:		Y N
Sufficient volume sent:		Y N
If Applicable		
VOA Zero Headspace:		Y N
Preservation Correct/Checked:		Y N
RAD Screen <0.5 mR/hr:		Y N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received:
	9/18/20	1605	9-18-20 1606	Yes / No (HCL / MeoH / TBR)
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received:
				10+0=12 71
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: Time:
			B. Barnes	9-19-20 0900

If preservation required by Login: Date/Time

Hold: Condition: NCF / OK

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

October 05, 2020

SCS Engineers - KS

Sample Delivery Group:	L1268375
Samples Received:	09/19/2020
Project Number:	C4-052-73682
Description:	Former City Garage Operations
Site:	27220109.00
Report To:	Doug Dreiling 8575 W. 110th Street Overland Park, KS 66210

Entire Report Reviewed By:

Jeff Carr
Project Manager

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PB-2 12-14' L1268375-01 Solid

Collected by	Collected date/time	Received date/time
	09/17/20 15:20	09/19/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1549365	1	09/27/20 03:16	09/27/20 03:40	JAV	Mt. Juliet, TN
Polychlorinated Biphenyls (GC) by Method 8082 A	WG1553658	1	10/04/20 10:35	10/04/20 21:11	MTJ	Mt. Juliet, TN

PB-9 9-11' L1268375-02 Solid

Collected by	Collected date/time	Received date/time
	09/17/20 13:32	09/19/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1549366	1	09/27/20 03:57	09/27/20 04:11	JAV	Mt. Juliet, TN
Polychlorinated Biphenyls (GC) by Method 8082 A	WG1553658	1	10/04/20 10:35	10/04/20 21:22	MTJ	Mt. Juliet, TN

PB-3 9-11' L1268375-03 Solid

Collected by	Collected date/time	Received date/time
	09/18/20 09:57	09/19/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1549366	1	09/27/20 03:57	09/27/20 04:11	JAV	Mt. Juliet, TN
Polychlorinated Biphenyls (GC) by Method 8082 A	WG1553658	1	10/04/20 10:35	10/04/20 21:32	MTJ	Mt. Juliet, TN

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Jeff Carr
Project Manager

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	82.8		1	09/27/2020 03:40	WG1549365

Polychlorinated Biphenyls (GC) by Method 8082 A

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
PCB 1016	ND		0.0411	1	10/04/2020 21:11	WG1553658
PCB 1221	ND		0.0411	1	10/04/2020 21:11	WG1553658
PCB 1232	ND		0.0411	1	10/04/2020 21:11	WG1553658
PCB 1242	ND		0.0411	1	10/04/2020 21:11	WG1553658
PCB 1248	ND		0.0205	1	10/04/2020 21:11	WG1553658
PCB 1254	ND		0.0205	1	10/04/2020 21:11	WG1553658
PCB 1260	ND		0.0205	1	10/04/2020 21:11	WG1553658
(S) Decachlorobiphenyl	*39.8*		*10.0-135*		*10/04/2020 21:11*	WG1553658
(S) Tetrachloro-m-xylene	*78.6*		*10.0-139*		*10/04/2020 21:11*	WG1553658

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	84.5		1	09/27/2020 04:11	WG1549366

Polychlorinated Biphenyls (GC) by Method 8082 A

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
PCB 1016	ND		0.0402	1	10/04/2020 21:22	WG1553658
PCB 1221	ND		0.0402	1	10/04/2020 21:22	WG1553658
PCB 1232	ND		0.0402	1	10/04/2020 21:22	WG1553658
PCB 1242	ND		0.0402	1	10/04/2020 21:22	WG1553658
PCB 1248	ND		0.0201	1	10/04/2020 21:22	WG1553658
PCB 1254	ND		0.0201	1	10/04/2020 21:22	WG1553658
PCB 1260	ND		0.0201	1	10/04/2020 21:22	WG1553658
(S) Decachlorobiphenyl	*71.8*		*10.0-135*		*10/04/2020 21:22*	WG1553658
(S) Tetrachloro-m-xylene	*68.0*		*10.0-139*		*10/04/2020 21:22*	WG1553658

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	82.1		1	09/27/2020 04:11	WG1549366

Polychlorinated Biphenyls (GC) by Method 8082 A

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
PCB 1016	ND		0.0414	1	10/04/2020 21:32	WG1553658
PCB 1221	ND		0.0414	1	10/04/2020 21:32	WG1553658
PCB 1232	ND		0.0414	1	10/04/2020 21:32	WG1553658
PCB 1242	ND		0.0414	1	10/04/2020 21:32	WG1553658
PCB 1248	ND		0.0207	1	10/04/2020 21:32	WG1553658
PCB 1254	ND		0.0207	1	10/04/2020 21:32	WG1553658
PCB 1260	ND		0.0207	1	10/04/2020 21:32	WG1553658
(S) Decachlorobiphenyl	*42.5*		*10.0-135*		*10/04/2020 21:32*	WG1553658
(S) Tetrachloro-m-xylene	*73.0*		*10.0-139*		*10/04/2020 21:32*	WG1553658

Method Blank (MB)

(MB) R3575036-1 09/27/20 03:40

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	%		%	%
Total Solids	0.000			

L1264151-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1264151-04 09/27/20 03:40 • (DUP) R3575036-3 09/27/20 03:40

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	82.8	82.5	1	0.343		10

Laboratory Control Sample (LCS)

(LCS) R3575036-2 09/27/20 03:40

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	%	%	%	%	
Total Solids	50.0	50.0	99.9	85.0-115	

Method Blank (MB)

(MB) R3575038-1 09/27/20 04:11

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00100			

L1264151-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1264151-08 09/27/20 04:11 • (DUP) R3575038-3 09/27/20 04:11

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	82.1	81.7	1	0.522		10

Laboratory Control Sample (LCS)

(LCS) R3575038-2 09/27/20 04:11

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	

Method Blank (MB)

(MB) R3577820-1 10/04/20 18:36

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
PCB 1016	U		0.0118	0.0340
PCB 1221	U		0.0118	0.0340
PCB 1232	U		0.0118	0.0340
PCB 1242	U		0.0118	0.0340
PCB 1248	U		0.00738	0.0170
PCB 1254	U		0.00738	0.0170
PCB 1260	U		0.00738	0.0170
(S) Decachlorobiphenyl	*72.1*			*10.0-135*
(S) Tetrachloro-m-xylene	*78.7*			*10.0-139*

Laboratory Control Sample (LCS)

(LCS) R3577820-2 10/04/20 18:46

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
PCB 1260	0.167	0.171	102	37.0-145	
PCB 1016	0.167	0.159	95.2	36.0-141	
(S) Decachlorobiphenyl			*74.0*	*10.0-135*	
(S) Tetrachloro-m-xylene			*77.2*	*10.0-139*	

L1268157-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1268157-02 10/04/20 19:07 • (MS) R3577820-3 10/04/20 19:18 • (MSD) R3577820-4 10/04/20 19:28

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
PCB 1260	0.179	ND	0.163	0.176	91.0	98.2	1	10.0-160			7.59	38
PCB 1016	0.179	ND	0.163	0.178	91.0	99.4	1	10.0-160			8.81	37
(S) Decachlorobiphenyl					*69.4*	*76.0*		*10.0-135*				
(S) Tetrachloro-m-xylene					*77.6*	*82.1*		*10.0-139*				

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
RDL (dry)	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
	The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

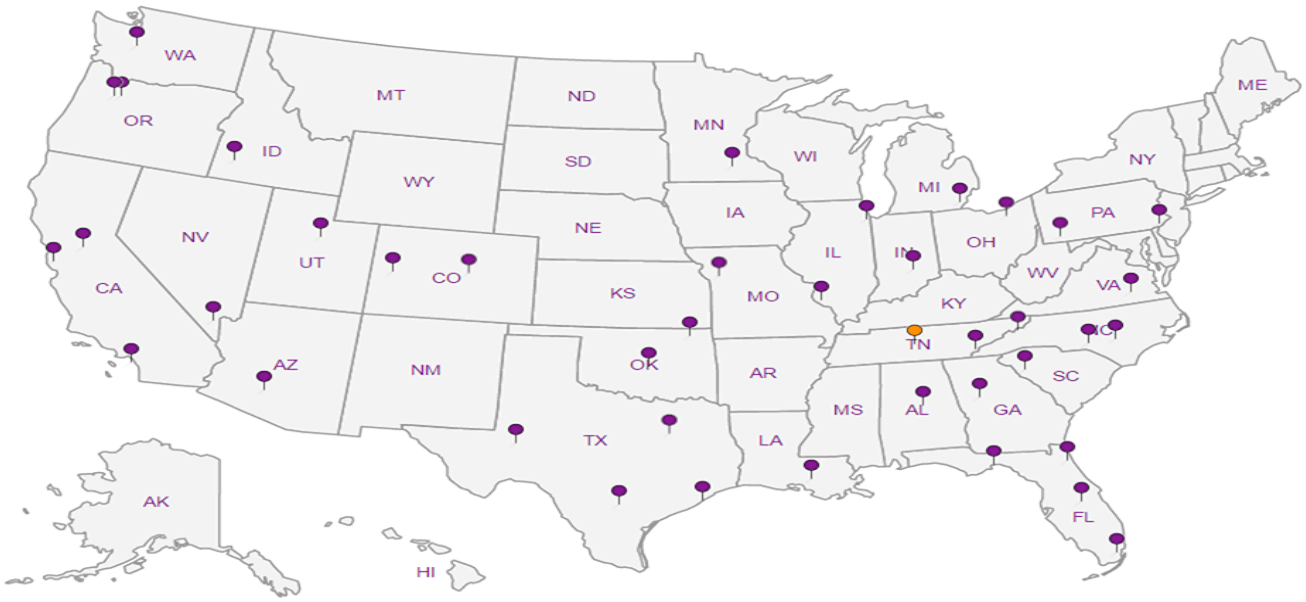
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



SCS Engineers - KS
8575 W. 110th Street
Overland Park, KS 66210

Billing Information:
Accounts Payable
8575 W. 110th Street
Overland Park, KS 66210

Pres Chk

Report to: Doug Drelling
Email To: ddrelling@scsengineers.com

Project Description: Former City Garage Operations
City/State Collected:
Please Circle: PT MT CT ET

Phone: 913-681-0030
Client Project # C4-052-73682
Lab Project # AQUAOPKS-C405273682

Collected by (print): Jeff Janzen
Site/Facility ID # 27220109.00
P.O. #

Collected by (signature):
Immediately Packed on Ice N ___ Y X
Rush? (Lab MUST Be Notified) ___ Same Day ___ Next Day ___ Two Day ___ Three Day ___ Five Day ___ 5 Day (Rad Only) ___ 10 Day (Rad Only)
Date Results Needed
Quote #

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRH/HRH, TS 4ozAmb-NoPres	RCRA Metals 2ozClr-NoPres	SVOCs, Pest/PCBs 4ozClr-NoPres * 8270C	SVOCs, Pesticides 4ozClr-NoPres * 8082	VOCs - 8260 40mlAmb/MeOH5ml/Syr	VPHKS - LRH 40mlAmb/MeOH15ml/Syr				Remarks	Sample # (lab only)
PB-1 2'-4'	G	SS	2'-4'	9/17/20	1634	5	X	X	X		X	X					-01
PB-1 9.5'-11'		SS	9.5-11.5	9/17/20	1652	5	X	X	X		X	X					-02
PB-2 1'-3'		SS	1'-3'	9/17/20	1435	5	X	X	X		X	X					-03
PB-2 12'-14'		SS	12'-14'	9/17/20	1520	5	X	X	X		X	X					-04
PB-9 2'-4'		SS	2'-4'	9/17/20	1306	5	X	X	X		X	X					-05
PB-9 9'-11'		SS	9'-11'	9/17/20	1332	5	X	X	X		X	X					-06
PB-3 1.5'-3.5'		SS	1.5'-3.5'	9/18/20	0939	5	X	X	X		X	X					-07
PB-3 9'-11'		SS	9'-11'	9/18/20	0957	5	X	X	X		X	X					-08
Soil Dup		SS	—	9/17/20	—	5	X	X	X		X	X					-09
Field Blank		~~SS~~ GW	—	9/18/20	0939	3	X	X	X		X	X					-10

* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater DW - Drinking Water OT - Other

Remarks: * - Complete List - Also Report 2,6-Dinitrotoluene. SVOCs Full scan for PB-1 9.5-11', PB-9 9-11', PB3 1.5-3.5' PCBs run for PB-2 1-3', PB-3 1.5-3.5', PB-92-4'
pH ___ Temp ___ Flow ___ Other ___

Samples returned via: ___ UPS ___ FedEx ___ Courier
Tracking # 1845 4330 3173

Sample Receipt Checklist
COC Seal Present/Intact: NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N
RAD Screen <0.5 mR/hr: Y N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	If preservation required by Login: Date/Time
	9/18/20	1605	9.18.20 1606	2	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp °C Bottles Received: 10+2=12	
				71	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 9.19.20 Time: 0900	Hold: Condition: NCF / OK
			B. Barnes		

Chain of Custody Page ___ of ___
Pace Analytical
National Center for Testing & Innovation
12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

SDG # L1268375
Table # A074
Acctnum: AQUAOPKS
Template: T174203
Prelogin: P797673
PM: 206 - Jeff Carr
PB:
Shipped Via:

AN 10/1/20

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

October 05, 2020

SCS Engineers - KS

Sample Delivery Group:	L1265359
Samples Received:	09/23/2020
Project Number:	C4-052-73682
Description:	Former City Garage Operations
Site:	27220109.00
Report To:	Doug Dreiling 8575 W. 110th Street Overland Park, KS 66210

Entire Report Reviewed By:

Jeff Carr
Project Manager

TABLE OF CONTENTS

PB-1A L1265359-01 GW

Collected by	Collected date/time	Received date/time
	09/21/20 15:05	09/23/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Mercury by Method 7470A	WG1548373	1	09/24/20 08:51	09/24/20 21:48	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1549460	1	09/29/20 10:14	09/30/20 08:43	TRB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1551743	1	09/30/20 19:18	09/30/20 19:18	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1552323	10	10/01/20 18:47	10/01/20 18:47	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method KS MRH/HRH	WG1547615	1	10/02/20 07:15	10/05/20 02:12	DMG	Mt. Juliet, TN
Pesticides (GC) by Method 8081B	WG1549659	1.05	09/28/20 08:16	09/29/20 10:01	LEL	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1548770	5	09/28/20 10:29	09/30/20 17:42	AAT	Mt. Juliet, TN

PB-2 L1265359-02 GW

Collected by	Collected date/time	Received date/time
	09/21/20 15:30	09/23/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1551743	1	09/30/20 19:38	09/30/20 19:38	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1552323	1	10/01/20 17:21	10/01/20 17:21	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method KS MRH/HRH	WG1547615	1	10/02/20 07:15	10/03/20 05:45	JDG	Mt. Juliet, TN
Pesticides (GC) by Method 8081B	WG1549659	1.05	09/28/20 08:16	09/29/20 10:16	LEL	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1548770	1.18	09/28/20 10:29	09/30/20 08:17	AAT	Mt. Juliet, TN

PB-3 L1265359-03 GW

Collected by	Collected date/time	Received date/time
	09/21/20 12:45	09/23/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Mercury by Method 7470A	WG1548373	1	09/24/20 08:51	09/24/20 21:50	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1549460	1	09/29/20 10:14	09/30/20 08:46	TRB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1551743	1	09/30/20 19:57	09/30/20 19:57	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1552323	1	10/01/20 17:42	10/01/20 17:42	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method KS MRH/HRH	WG1547615	1	10/02/20 07:15	10/05/20 01:26	DMG	Mt. Juliet, TN
Pesticides (GC) by Method 8081B	WG1549659	1	09/28/20 08:16	09/29/20 10:30	LEL	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1548770	1	09/28/20 10:29	09/30/20 08:37	AAT	Mt. Juliet, TN

PB-5 L1265359-04 GW

Collected by	Collected date/time	Received date/time
	09/21/20 10:10	09/23/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Mercury by Method 7470A	WG1548373	1	09/24/20 08:51	09/24/20 21:52	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1549460	1	09/29/20 10:14	09/30/20 08:49	TRB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1551743	1	09/30/20 20:16	09/30/20 20:16	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1552323	1	10/01/20 18:04	10/01/20 18:04	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method KS MRH/HRH	WG1547615	1.11	10/02/20 07:15	10/03/20 11:27	JDG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1548770	1	09/28/20 10:29	09/30/20 08:58	AAT	Mt. Juliet, TN

PB-6 L1265359-05 GW

Collected by	Collected date/time	Received date/time
	09/21/20 12:18	09/23/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Mercury by Method 7470A	WG1548373	1	09/24/20 08:51	09/24/20 21:54	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1549460	1	09/29/20 10:14	09/30/20 08:52	TRB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1551743	1	09/30/20 20:36	09/30/20 20:36	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method KS MRH/HRH	WG1547615	1.03	10/02/20 07:15	10/03/20 11:50	JDG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1548770	1	09/28/20 10:29	09/30/20 09:19	AAT	Mt. Juliet, TN

PB-8 L1265359-06 GW

Collected by	Collected date/time	Received date/time
	09/21/20 13:35	09/23/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Mercury by Method 7470A	WG1548373	1	09/24/20 08:51	09/24/20 21:56	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1549460	1	09/29/20 10:14	09/30/20 07:35	TRB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1551743	1	09/30/20 20:55	09/30/20 20:55	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method KS MRH/HRH	WG1547615	1.03	10/02/20 07:15	10/03/20 12:13	JDG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1548770	1	09/28/20 10:29	09/30/20 10:22	AAT	Mt. Juliet, TN

PB-10 L1265359-07 GW

Collected by	Collected date/time	Received date/time
	09/21/20 11:42	09/23/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Mercury by Method 7470A	WG1548373	1	09/24/20 08:51	09/24/20 21:58	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1549460	1	09/29/20 10:14	09/30/20 07:38	TRB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1551743	1	09/30/20 21:15	09/30/20 21:15	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method KS MRH/HRH	WG1547615	1.03	10/02/20 07:15	10/03/20 12:36	JDG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1548770	1	09/28/20 10:29	09/30/20 09:40	AAT	Mt. Juliet, TN

PB-4 L1265359-08 GW

Collected by	Collected date/time	Received date/time
	09/21/20 10:35	09/23/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1551743	1	09/30/20 21:34	09/30/20 21:34	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method KS MRH/HRH	WG1547615	1.05	10/02/20 07:15	10/03/20 12:59	JDG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1548770	1	09/28/20 10:29	09/30/20 10:01	AAT	Mt. Juliet, TN

PB-7 L1265359-09 GW

Collected by	Collected date/time	Received date/time
	09/21/20 13:09	09/23/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1551743	1	09/30/20 21:54	09/30/20 21:54	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method KS MRH/HRH	WG1547615	1	10/02/20 07:15	10/03/20 13:22	JDG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1548770	1	09/28/20 10:29	09/30/20 11:04	AAT	Mt. Juliet, TN

PB-9 L1265359-10 GW

Collected by	Collected date/time	Received date/time
	09/21/20 16:30	09/23/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1551743	50	09/30/20 22:52	09/30/20 22:52	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method KS MRH/HRH	WG1547615	71.5	10/02/20 07:15	10/05/20 02:35	DMG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1548770	20	09/28/20 10:29	09/30/20 18:03	AAT	Mt. Juliet, TN

PB-11 L1265359-11 GW

Collected by	Collected date/time	Received date/time
	09/21/20 14:45	09/23/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1551743	1	09/30/20 22:13	09/30/20 22:13	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method KS MRH/HRH	WG1547615	1	10/02/20 07:15	10/03/20 13:44	JDG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1548770	1	09/28/20 10:29	09/30/20 11:25	AAT	Mt. Juliet, TN

TRIP BLANK 1 L1265359-12 GW

Collected by | Collected date/time 09/21/20 00:00 | Received date/time 09/23/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1551766	1	10/01/20 00:48	10/01/20 00:48	DWR	Mt. Juliet, TN

TRIP BLANK 2 L1265359-13 GW

Collected by | Collected date/time 09/21/20 00:00 | Received date/time 09/23/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1551766	1	10/01/20 01:07	10/01/20 01:07	DWR	Mt. Juliet, TN

DUP L1265359-14 GW

Collected by | Collected date/time 09/21/20 12:45 | Received date/time 09/23/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Mercury by Method 7470A	WG1548373	1	09/24/20 08:51	09/24/20 22:02	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1549460	1	09/29/20 10:14	09/30/20 07:41	TRB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1551743	1	09/30/20 18:39	09/30/20 18:39	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1552323	10	10/01/20 18:26	10/01/20 18:26	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method KS MRH/HRH	WG1547615	1	10/02/20 07:15	10/05/20 01:49	DMG	Mt. Juliet, TN
Pesticides (GC) by Method 8081B	WG1549659	1	09/28/20 08:16	09/29/20 10:45	LEL	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1548770	1	09/28/20 10:29	09/30/20 10:43	AAT	Mt. Juliet, TN

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Collected by | Collected date/time 09/21/20 12:45 | Received date/time 09/23/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Mercury by Method 7470A	WG1548373	1	09/24/20 08:51	09/24/20 22:08	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1549460	1	09/29/20 10:14	09/30/20 07:44	TRB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1551743	1	09/30/20 18:20	09/30/20 18:20	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method KS MRH/HRH	WG1547615	1	10/02/20 07:15	10/03/20 14:30	JDG	Mt. Juliet, TN
Pesticides (GC) by Method 8081B	WG1549659	1	09/28/20 08:16	09/29/20 11:00	LEL	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1549309	1	09/27/20 08:30	09/27/20 17:59	AAT	Mt. Juliet, TN

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Jeff Carr
Project Manager

Sample Delivery Group (SDG) Narrative

pH outside of method requirement.

Lab Sample ID	Project Sample ID	Method
L1265359-01	PB-1A	8260D
L1265359-02	PB-2	8260D
L1265359-04	PB-5	8260D

Mercury by Method 7470A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Mercury	ND		0.200	1	09/24/2020 21:48	WG1548373

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Arsenic	ND		10.0	1	09/30/2020 08:43	WG1549460
Barium	779		5.00	1	09/30/2020 08:43	WG1549460
Cadmium	ND		2.00	1	09/30/2020 08:43	WG1549460
Chromium	ND		10.0	1	09/30/2020 08:43	WG1549460
Lead	ND		6.00	1	09/30/2020 08:43	WG1549460
Selenium	ND		10.0	1	09/30/2020 08:43	WG1549460
Silver	ND		5.00	1	09/30/2020 08:43	WG1549460

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
LRH (C5-C8)	1410		100	1	09/30/2020 19:18	WG1551743
Acetone	ND		50.0	1	09/30/2020 19:18	WG1551743
Acrylonitrile	ND	J0	10.0	1	09/30/2020 19:18	WG1551743
Benzene	591		10.0	10	10/01/2020 18:47	WG1552323
Bromobenzene	ND		1.00	1	09/30/2020 19:18	WG1551743
Bromodichloromethane	ND		1.00	1	09/30/2020 19:18	WG1551743
Bromoform	ND		1.00	1	09/30/2020 19:18	WG1551743
Bromomethane	ND		5.00	1	09/30/2020 19:18	WG1551743
n-Butylbenzene	10.1		1.00	1	09/30/2020 19:18	WG1551743
sec-Butylbenzene	8.53		1.00	1	09/30/2020 19:18	WG1551743
tert-Butylbenzene	ND		1.00	1	09/30/2020 19:18	WG1551743
Carbon tetrachloride	ND		1.00	1	09/30/2020 19:18	WG1551743
Chlorobenzene	ND		1.00	1	09/30/2020 19:18	WG1551743
Chlorodibromomethane	ND		1.00	1	09/30/2020 19:18	WG1551743
Chloroethane	ND		5.00	1	09/30/2020 19:18	WG1551743
Chloroform	ND		5.00	1	09/30/2020 19:18	WG1551743
Chloromethane	ND		2.50	1	09/30/2020 19:18	WG1551743
2-Chlorotoluene	ND		1.00	1	09/30/2020 19:18	WG1551743
4-Chlorotoluene	ND		1.00	1	09/30/2020 19:18	WG1551743
1,2-Dibromo-3-Chloropropane	ND		5.00	1	09/30/2020 19:18	WG1551743
1,2-Dibromoethane	ND		1.00	1	09/30/2020 19:18	WG1551743
Dibromomethane	ND		1.00	1	09/30/2020 19:18	WG1551743
1,2-Dichlorobenzene	ND		1.00	1	09/30/2020 19:18	WG1551743
1,3-Dichlorobenzene	ND		1.00	1	09/30/2020 19:18	WG1551743
1,4-Dichlorobenzene	ND		1.00	1	09/30/2020 19:18	WG1551743
Dichlorodifluoromethane	ND		5.00	1	09/30/2020 19:18	WG1551743
1,1-Dichloroethane	ND		1.00	1	09/30/2020 19:18	WG1551743
1,2-Dichloroethane	ND		1.00	1	09/30/2020 19:18	WG1551743
1,1-Dichloroethene	ND		1.00	1	09/30/2020 19:18	WG1551743
cis-1,2-Dichloroethene	ND		1.00	1	09/30/2020 19:18	WG1551743
trans-1,2-Dichloroethene	ND		1.00	1	09/30/2020 19:18	WG1551743
1,2-Dichloropropane	ND		1.00	1	09/30/2020 19:18	WG1551743
1,1-Dichloropropene	ND		1.00	1	09/30/2020 19:18	WG1551743
1,3-Dichloropropane	ND		1.00	1	09/30/2020 19:18	WG1551743
cis-1,3-Dichloropropene	ND		1.00	1	09/30/2020 19:18	WG1551743
trans-1,3-Dichloropropene	ND		1.00	1	09/30/2020 19:18	WG1551743
2,2-Dichloropropane	ND		1.00	1	09/30/2020 19:18	WG1551743
Di-isopropyl ether	ND		1.00	1	09/30/2020 19:18	WG1551743
Ethylbenzene	2.96		1.00	1	09/30/2020 19:18	WG1551743

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Hexachloro-1,3-butadiene	ND		1.00	1	09/30/2020 19:18	WG1551743
Isopropylbenzene	44.8		1.00	1	09/30/2020 19:18	WG1551743
p-Isopropyltoluene	ND		1.00	1	09/30/2020 19:18	WG1551743
2-Butanone (MEK)	ND		10.0	1	09/30/2020 19:18	WG1551743
Methylene Chloride	ND		5.00	1	09/30/2020 19:18	WG1551743
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	09/30/2020 19:18	WG1551743
Methyl tert-butyl ether	ND		1.00	1	09/30/2020 19:18	WG1551743
Naphthalene	164		5.00	1	09/30/2020 19:18	WG1551743
n-Propylbenzene	74.1		1.00	1	09/30/2020 19:18	WG1551743
Styrene	ND		1.00	1	09/30/2020 19:18	WG1551743
1,1,1,2-Tetrachloroethane	ND		1.00	1	09/30/2020 19:18	WG1551743
1,1,2,2-Tetrachloroethane	ND		1.00	1	09/30/2020 19:18	WG1551743
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	09/30/2020 19:18	WG1551743
Tetrachloroethene	ND		1.00	1	09/30/2020 19:18	WG1551743
Toluene	5.34		1.00	1	09/30/2020 19:18	WG1551743
1,2,3-Trichlorobenzene	ND		1.00	1	09/30/2020 19:18	WG1551743
1,2,4-Trichlorobenzene	ND		1.00	1	09/30/2020 19:18	WG1551743
1,1,1-Trichloroethane	ND		1.00	1	09/30/2020 19:18	WG1551743
1,1,2-Trichloroethane	ND		1.00	1	09/30/2020 19:18	WG1551743
Trichloroethene	ND		1.00	1	09/30/2020 19:18	WG1551743
Trichlorofluoromethane	ND		5.00	1	09/30/2020 19:18	WG1551743
1,2,3-Trichloropropane	ND		2.50	1	09/30/2020 19:18	WG1551743
1,2,4-Trimethylbenzene	2.16		1.00	1	09/30/2020 19:18	WG1551743
1,2,3-Trimethylbenzene	4.71		1.00	1	09/30/2020 19:18	WG1551743
1,3,5-Trimethylbenzene	ND		1.00	1	09/30/2020 19:18	WG1551743
Vinyl chloride	ND		1.00	1	09/30/2020 19:18	WG1551743
Xylenes, Total	17.6		3.00	1	09/30/2020 19:18	WG1551743
(S) Toluene-d8	*102*		*80.0-120*		*09/30/2020 19:18*	WG1551743
(S) Toluene-d8	*105*		*80.0-120*		*10/01/2020 18:47*	WG1552323
(S) 4-Bromofluorobenzene	*94.4*		*77.0-126*		*09/30/2020 19:18*	WG1551743
(S) 4-Bromofluorobenzene	*91.1*		*77.0-126*		*10/01/2020 18:47*	WG1552323
(S) 1,2-Dichloroethane-d4	*95.0*		*70.0-130*		*09/30/2020 19:18*	WG1551743
(S) 1,2-Dichloroethane-d4	*112*		*70.0-130*		*10/01/2020 18:47*	WG1552323

Semi-Volatile Organic Compounds (GC) by Method KS MRH/HRH

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
MRH (C9-C18)	1850		100	1	10/05/2020 02:12	WG1547615
HRH (C19-C35)	440		100	1	10/05/2020 02:12	WG1547615
(S) 1-Chloro-octadecane	*104*		*40.0-140*		*10/05/2020 02:12*	WG1547615

Pesticides (GC) by Method 8081B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Aldrin	ND		0.0525	1.05	09/29/2020 10:01	WG1549659
Alpha BHC	ND		0.0525	1.05	09/29/2020 10:01	WG1549659
Beta BHC	ND		0.0525	1.05	09/29/2020 10:01	WG1549659
Delta BHC	ND		0.0525	1.05	09/29/2020 10:01	WG1549659
Gamma BHC	ND		0.0525	1.05	09/29/2020 10:01	WG1549659
Chlordane	ND		5.25	1.05	09/29/2020 10:01	WG1549659
4,4-DDD	ND		0.0525	1.05	09/29/2020 10:01	WG1549659
4,4-DDE	ND		0.0525	1.05	09/29/2020 10:01	WG1549659
4,4-DDT	ND		0.0525	1.05	09/29/2020 10:01	WG1549659
Dieldrin	ND		0.0525	1.05	09/29/2020 10:01	WG1549659
Endosulfan I	ND		0.0525	1.05	09/29/2020 10:01	WG1549659

Pesticides (GC) by Method 8081B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Endosulfan II	ND		0.0525	1.05	09/29/2020 10:01	WG1549659
Endosulfan sulfate	ND		0.0525	1.05	09/29/2020 10:01	WG1549659
Endrin	ND		0.0525	1.05	09/29/2020 10:01	WG1549659
Endrin aldehyde	ND		0.0525	1.05	09/29/2020 10:01	WG1549659
Endrin ketone	ND		0.0525	1.05	09/29/2020 10:01	WG1549659
Hexachlorobenzene	ND		0.0525	1.05	09/29/2020 10:01	WG1549659
Heptachlor	ND		0.0525	1.05	09/29/2020 10:01	WG1549659
Heptachlor epoxide	ND		0.0525	1.05	09/29/2020 10:01	WG1549659
Methoxychlor	ND		0.0525	1.05	09/29/2020 10:01	WG1549659
Toxaphene	ND		0.525	1.05	09/29/2020 10:01	WG1549659
(S) Decachlorobiphenyl	*43.7*		*10.0-128*		*09/29/2020 10:01*	WG1549659
(S) Tetrachloro-m-xylene	*60.5*		*10.0-127*		*09/29/2020 10:01*	WG1549659

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acenaphthene	ND		5.00	5	09/30/2020 17:42	WG1548770
Acenaphthylene	ND		5.00	5	09/30/2020 17:42	WG1548770
Anthracene	ND		5.00	5	09/30/2020 17:42	WG1548770
Benzidine	ND		50.0	5	09/30/2020 17:42	WG1548770
Benzo(a)anthracene	ND		5.00	5	09/30/2020 17:42	WG1548770
Benzo(b)fluoranthene	ND		5.00	5	09/30/2020 17:42	WG1548770
Benzo(k)fluoranthene	ND		5.00	5	09/30/2020 17:42	WG1548770
Benzo(g,h,i)perylene	ND		5.00	5	09/30/2020 17:42	WG1548770
Benzo(a)pyrene	ND		5.00	5	09/30/2020 17:42	WG1548770
Bis(2-chlorethoxy)methane	ND		50.0	5	09/30/2020 17:42	WG1548770
Bis(2-chloroethyl)ether	ND		50.0	5	09/30/2020 17:42	WG1548770
2,2-Oxybis(1-Chloropropane)	ND		50.0	5	09/30/2020 17:42	WG1548770
4-Bromophenyl-phenylether	ND		50.0	5	09/30/2020 17:42	WG1548770
2-Chloronaphthalene	ND		5.00	5	09/30/2020 17:42	WG1548770
4-Chlorophenyl-phenylether	ND		50.0	5	09/30/2020 17:42	WG1548770
Chrysene	ND		5.00	5	09/30/2020 17:42	WG1548770
Dibenz(a,h)anthracene	ND		5.00	5	09/30/2020 17:42	WG1548770
1,2-Dichlorobenzene	ND		50.0	5	09/30/2020 17:42	WG1548770
1,3-Dichlorobenzene	ND		50.0	5	09/30/2020 17:42	WG1548770
1,4-Dichlorobenzene	ND		50.0	5	09/30/2020 17:42	WG1548770
3,3-Dichlorobenzidine	ND		50.0	5	09/30/2020 17:42	WG1548770
2,4-Dinitrotoluene	ND		50.0	5	09/30/2020 17:42	WG1548770
2,6-Dinitrotoluene	ND		50.0	5	09/30/2020 17:42	WG1548770
Fluoranthene	ND		5.00	5	09/30/2020 17:42	WG1548770
Fluorene	ND		5.00	5	09/30/2020 17:42	WG1548770
Hexachlorobenzene	ND		5.00	5	09/30/2020 17:42	WG1548770
Hexachloro-1,3-butadiene	ND		50.0	5	09/30/2020 17:42	WG1548770
Hexachlorocyclopentadiene	ND		50.0	5	09/30/2020 17:42	WG1548770
Hexachloroethane	ND		50.0	5	09/30/2020 17:42	WG1548770
Indeno(1,2,3-cd)pyrene	ND		5.00	5	09/30/2020 17:42	WG1548770
Isophorone	ND		50.0	5	09/30/2020 17:42	WG1548770
Naphthalene	72.3		5.00	5	09/30/2020 17:42	WG1548770
Nitrobenzene	ND		50.0	5	09/30/2020 17:42	WG1548770
n-Nitrosodimethylamine	ND		50.0	5	09/30/2020 17:42	WG1548770
n-Nitrosodiphenylamine	ND		50.0	5	09/30/2020 17:42	WG1548770
n-Nitrosodi-n-propylamine	ND		50.0	5	09/30/2020 17:42	WG1548770
Phenanthrene	ND		5.00	5	09/30/2020 17:42	WG1548770
Benzylbutyl phthalate	ND		15.0	5	09/30/2020 17:42	WG1548770
Bis(2-ethylhexyl)phthalate	ND		15.0	5	09/30/2020 17:42	WG1548770
Di-n-butyl phthalate	ND		15.0	5	09/30/2020 17:42	WG1548770

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Diethyl phthalate	ND		15.0	5	09/30/2020 17:42	WG1548770
Dimethyl phthalate	ND		15.0	5	09/30/2020 17:42	WG1548770
Di-n-octyl phthalate	ND		15.0	5	09/30/2020 17:42	WG1548770
Pyrene	ND		5.00	5	09/30/2020 17:42	WG1548770
1,2,4-Trichlorobenzene	ND		50.0	5	09/30/2020 17:42	WG1548770
4-Chloro-3-methylphenol	ND		50.0	5	09/30/2020 17:42	WG1548770
2-Chlorophenol	ND		50.0	5	09/30/2020 17:42	WG1548770
2,4-Dichlorophenol	ND		50.0	5	09/30/2020 17:42	WG1548770
2,4-Dimethylphenol	ND		50.0	5	09/30/2020 17:42	WG1548770
4,6-Dinitro-2-methylphenol	ND		50.0	5	09/30/2020 17:42	WG1548770
2,4-Dinitrophenol	ND		50.0	5	09/30/2020 17:42	WG1548770
2-Nitrophenol	ND		50.0	5	09/30/2020 17:42	WG1548770
4-Nitrophenol	ND		50.0	5	09/30/2020 17:42	WG1548770
Pentachlorophenol	ND		50.0	5	09/30/2020 17:42	WG1548770
Phenol	ND		50.0	5	09/30/2020 17:42	WG1548770
2,4,6-Trichlorophenol	ND		50.0	5	09/30/2020 17:42	WG1548770
(S) 2-Fluorophenol	*27.6*		*10.0-120*		*09/30/2020 17:42*	WG1548770
(S) Phenol-d5	*17.6*		*10.0-120*		*09/30/2020 17:42*	WG1548770
(S) Nitrobenzene-d5	*50.4*		*10.0-127*		*09/30/2020 17:42*	WG1548770
(S) 2-Fluorobiphenyl	*57.7*		*10.0-130*		*09/30/2020 17:42*	WG1548770
(S) 2,4,6-Tribromophenol	*52.6*		*10.0-155*		*09/30/2020 17:42*	WG1548770
(S) p-Terphenyl-d14	*58.6*		*10.0-128*		*09/30/2020 17:42*	WG1548770

Sample Narrative:

L1265359-01 WG1548770: Dilution due to matrix.

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
LRH (C5-C8)	ND		100	1	09/30/2020 19:38	WG1551743
Acetone	ND		50.0	1	09/30/2020 19:38	WG1551743
Acrylonitrile	ND	J0	10.0	1	09/30/2020 19:38	WG1551743
Benzene	ND		1.00	1	10/01/2020 17:21	WG1552323
Bromobenzene	ND		1.00	1	09/30/2020 19:38	WG1551743
Bromodichloromethane	ND		1.00	1	09/30/2020 19:38	WG1551743
Bromoform	ND		1.00	1	09/30/2020 19:38	WG1551743
Bromomethane	ND		5.00	1	09/30/2020 19:38	WG1551743
n-Butylbenzene	ND		1.00	1	09/30/2020 19:38	WG1551743
sec-Butylbenzene	ND		1.00	1	09/30/2020 19:38	WG1551743
tert-Butylbenzene	ND		1.00	1	09/30/2020 19:38	WG1551743
Carbon tetrachloride	ND		1.00	1	09/30/2020 19:38	WG1551743
Chlorobenzene	ND		1.00	1	09/30/2020 19:38	WG1551743
Chlorodibromomethane	ND		1.00	1	09/30/2020 19:38	WG1551743
Chloroethane	ND		5.00	1	09/30/2020 19:38	WG1551743
Chloroform	ND		5.00	1	09/30/2020 19:38	WG1551743
Chloromethane	ND		2.50	1	09/30/2020 19:38	WG1551743
2-Chlorotoluene	ND		1.00	1	09/30/2020 19:38	WG1551743
4-Chlorotoluene	ND		1.00	1	09/30/2020 19:38	WG1551743
1,2-Dibromo-3-Chloropropane	ND		5.00	1	09/30/2020 19:38	WG1551743
1,2-Dibromoethane	ND		1.00	1	09/30/2020 19:38	WG1551743
Dibromomethane	ND		1.00	1	09/30/2020 19:38	WG1551743
1,2-Dichlorobenzene	ND		1.00	1	09/30/2020 19:38	WG1551743
1,3-Dichlorobenzene	ND		1.00	1	09/30/2020 19:38	WG1551743
1,4-Dichlorobenzene	ND		1.00	1	09/30/2020 19:38	WG1551743
Dichlorodifluoromethane	ND		5.00	1	09/30/2020 19:38	WG1551743
1,1-Dichloroethane	ND		1.00	1	09/30/2020 19:38	WG1551743
1,2-Dichloroethane	ND		1.00	1	09/30/2020 19:38	WG1551743
1,1-Dichloroethene	ND		1.00	1	09/30/2020 19:38	WG1551743
cis-1,2-Dichloroethene	ND		1.00	1	09/30/2020 19:38	WG1551743
trans-1,2-Dichloroethene	ND		1.00	1	09/30/2020 19:38	WG1551743
1,2-Dichloropropane	ND		1.00	1	09/30/2020 19:38	WG1551743
1,1-Dichloropropene	ND		1.00	1	09/30/2020 19:38	WG1551743
1,3-Dichloropropane	ND		1.00	1	09/30/2020 19:38	WG1551743
cis-1,3-Dichloropropene	ND		1.00	1	09/30/2020 19:38	WG1551743
trans-1,3-Dichloropropene	ND		1.00	1	09/30/2020 19:38	WG1551743
2,2-Dichloropropane	ND		1.00	1	09/30/2020 19:38	WG1551743
Di-isopropyl ether	ND		1.00	1	09/30/2020 19:38	WG1551743
Ethylbenzene	ND		1.00	1	09/30/2020 19:38	WG1551743
Hexachloro-1,3-butadiene	ND		1.00	1	09/30/2020 19:38	WG1551743
Isopropylbenzene	ND		1.00	1	09/30/2020 19:38	WG1551743
p-Isopropyltoluene	1.18		1.00	1	09/30/2020 19:38	WG1551743
2-Butanone (MEK)	ND		10.0	1	09/30/2020 19:38	WG1551743
Methylene Chloride	ND		5.00	1	09/30/2020 19:38	WG1551743
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	09/30/2020 19:38	WG1551743
Methyl tert-butyl ether	ND		1.00	1	09/30/2020 19:38	WG1551743
Naphthalene	ND		5.00	1	09/30/2020 19:38	WG1551743
n-Propylbenzene	ND		1.00	1	09/30/2020 19:38	WG1551743
Styrene	ND		1.00	1	09/30/2020 19:38	WG1551743
1,1,1,2-Tetrachloroethane	ND		1.00	1	09/30/2020 19:38	WG1551743
1,1,2,2-Tetrachloroethane	ND		1.00	1	09/30/2020 19:38	WG1551743
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	09/30/2020 19:38	WG1551743
Tetrachloroethene	ND		1.00	1	09/30/2020 19:38	WG1551743
Toluene	ND		1.00	1	09/30/2020 19:38	WG1551743
1,2,3-Trichlorobenzene	ND		1.00	1	09/30/2020 19:38	WG1551743
1,2,4-Trichlorobenzene	ND		1.00	1	09/30/2020 19:38	WG1551743

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,1-Trichloroethane	ND		1.00	1	09/30/2020 19:38	WG1551743
1,1,2-Trichloroethane	ND		1.00	1	09/30/2020 19:38	WG1551743
Trichloroethene	ND		1.00	1	09/30/2020 19:38	WG1551743
Trichlorofluoromethane	ND		5.00	1	09/30/2020 19:38	WG1551743
1,2,3-Trichloropropane	ND		2.50	1	09/30/2020 19:38	WG1551743
1,2,4-Trimethylbenzene	ND		1.00	1	09/30/2020 19:38	WG1551743
1,2,3-Trimethylbenzene	ND		1.00	1	09/30/2020 19:38	WG1551743
1,3,5-Trimethylbenzene	ND		1.00	1	09/30/2020 19:38	WG1551743
Vinyl chloride	ND		1.00	1	09/30/2020 19:38	WG1551743
Xylenes, Total	ND		3.00	1	09/30/2020 19:38	WG1551743
(S) Toluene-d8	*107*		*80.0-120*		*09/30/2020 19:38*	WG1551743
(S) Toluene-d8	*102*		*80.0-120*		*10/01/2020 17:21*	WG1552323
(S) 4-Bromofluorobenzene	*103*		*77.0-126*		*09/30/2020 19:38*	WG1551743
(S) 4-Bromofluorobenzene	*90.6*		*77.0-126*		*10/01/2020 17:21*	WG1552323
(S) 1,2-Dichloroethane-d4	*89.1*		*70.0-130*		*09/30/2020 19:38*	WG1551743
(S) 1,2-Dichloroethane-d4	*114*		*70.0-130*		*10/01/2020 17:21*	WG1552323

Semi-Volatile Organic Compounds (GC) by Method KS MRH/HRH

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
MRH (C9-C18)	122		100	1	10/03/2020 05:45	WG1547615
HRH (C19-C35)	ND		100	1	10/03/2020 05:45	WG1547615
(S) 1-Chloro-octadecane	*85.1*		*40.0-140*		*10/03/2020 05:45*	WG1547615

Pesticides (GC) by Method 8081B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Aldrin	ND		0.0525	1.05	09/29/2020 10:16	WG1549659
Alpha BHC	ND		0.0525	1.05	09/29/2020 10:16	WG1549659
Beta BHC	ND		0.0525	1.05	09/29/2020 10:16	WG1549659
Delta BHC	ND		0.0525	1.05	09/29/2020 10:16	WG1549659
Gamma BHC	ND		0.0525	1.05	09/29/2020 10:16	WG1549659
Chlordane	ND		5.25	1.05	09/29/2020 10:16	WG1549659
4,4-DDD	ND		0.0525	1.05	09/29/2020 10:16	WG1549659
4,4-DDE	ND		0.0525	1.05	09/29/2020 10:16	WG1549659
4,4-DDT	ND		0.0525	1.05	09/29/2020 10:16	WG1549659
Dieldrin	ND		0.0525	1.05	09/29/2020 10:16	WG1549659
Endosulfan I	ND		0.0525	1.05	09/29/2020 10:16	WG1549659
Endosulfan II	ND		0.0525	1.05	09/29/2020 10:16	WG1549659
Endosulfan sulfate	ND		0.0525	1.05	09/29/2020 10:16	WG1549659
Endrin	ND		0.0525	1.05	09/29/2020 10:16	WG1549659
Endrin aldehyde	ND		0.0525	1.05	09/29/2020 10:16	WG1549659
Endrin ketone	ND		0.0525	1.05	09/29/2020 10:16	WG1549659
Hexachlorobenzene	ND		0.0525	1.05	09/29/2020 10:16	WG1549659
Heptachlor	ND		0.0525	1.05	09/29/2020 10:16	WG1549659
Heptachlor epoxide	ND		0.0525	1.05	09/29/2020 10:16	WG1549659
Methoxychlor	ND		0.0525	1.05	09/29/2020 10:16	WG1549659
Toxaphene	ND		0.525	1.05	09/29/2020 10:16	WG1549659
(S) Decachlorobiphenyl	*65.1*		*10.0-128*		*09/29/2020 10:16*	WG1549659
(S) Tetrachloro-m-xylene	*69.0*		*10.0-127*		*09/29/2020 10:16*	WG1549659

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acenaphthene	ND		1.18	1.18	09/30/2020 08:17	WG1548770
Acenaphthylene	ND		1.18	1.18	09/30/2020 08:17	WG1548770
Anthracene	ND		1.18	1.18	09/30/2020 08:17	WG1548770
Benzidine	ND		11.8	1.18	09/30/2020 08:17	WG1548770
Benzo(a)anthracene	ND		1.18	1.18	09/30/2020 08:17	WG1548770
Benzo(b)fluoranthene	ND		1.18	1.18	09/30/2020 08:17	WG1548770
Benzo(k)fluoranthene	ND		1.18	1.18	09/30/2020 08:17	WG1548770
Benzo(g,h,i)perylene	ND		1.18	1.18	09/30/2020 08:17	WG1548770
Benzo(a)pyrene	ND		1.18	1.18	09/30/2020 08:17	WG1548770
Bis(2-chlorethoxy)methane	ND		11.8	1.18	09/30/2020 08:17	WG1548770
Bis(2-chloroethyl)ether	ND		11.8	1.18	09/30/2020 08:17	WG1548770
2,2-Oxybis(1-Chloropropane)	ND		11.8	1.18	09/30/2020 08:17	WG1548770
4-Bromophenyl-phenylether	ND		11.8	1.18	09/30/2020 08:17	WG1548770
2-Chloronaphthalene	ND		1.18	1.18	09/30/2020 08:17	WG1548770
4-Chlorophenyl-phenylether	ND		11.8	1.18	09/30/2020 08:17	WG1548770
Chrysene	ND		1.18	1.18	09/30/2020 08:17	WG1548770
Dibenz(a,h)anthracene	ND		1.18	1.18	09/30/2020 08:17	WG1548770
1,2-Dichlorobenzene	ND		11.8	1.18	09/30/2020 08:17	WG1548770
1,3-Dichlorobenzene	ND		11.8	1.18	09/30/2020 08:17	WG1548770
1,4-Dichlorobenzene	ND		11.8	1.18	09/30/2020 08:17	WG1548770
3,3-Dichlorobenzidine	ND		11.8	1.18	09/30/2020 08:17	WG1548770
2,4-Dinitrotoluene	ND		11.8	1.18	09/30/2020 08:17	WG1548770
2,6-Dinitrotoluene	ND		11.8	1.18	09/30/2020 08:17	WG1548770
Fluoranthene	ND		1.18	1.18	09/30/2020 08:17	WG1548770
Fluorene	ND		1.18	1.18	09/30/2020 08:17	WG1548770
Hexachlorobenzene	ND		1.18	1.18	09/30/2020 08:17	WG1548770
Hexachloro-1,3-butadiene	ND		11.8	1.18	09/30/2020 08:17	WG1548770
Hexachlorocyclopentadiene	ND		11.8	1.18	09/30/2020 08:17	WG1548770
Hexachloroethane	ND		11.8	1.18	09/30/2020 08:17	WG1548770
Indeno(1,2,3-cd)pyrene	ND		1.18	1.18	09/30/2020 08:17	WG1548770
Isophorone	ND		11.8	1.18	09/30/2020 08:17	WG1548770
Naphthalene	ND		1.18	1.18	09/30/2020 08:17	WG1548770
Nitrobenzene	ND		11.8	1.18	09/30/2020 08:17	WG1548770
n-Nitrosodimethylamine	ND		11.8	1.18	09/30/2020 08:17	WG1548770
n-Nitrosodiphenylamine	ND		11.8	1.18	09/30/2020 08:17	WG1548770
n-Nitrosodi-n-propylamine	ND		11.8	1.18	09/30/2020 08:17	WG1548770
Phenanthrene	ND		1.18	1.18	09/30/2020 08:17	WG1548770
Benzylbutyl phthalate	ND		3.54	1.18	09/30/2020 08:17	WG1548770
Bis(2-ethylhexyl)phthalate	ND		3.54	1.18	09/30/2020 08:17	WG1548770
Di-n-butyl phthalate	ND		3.54	1.18	09/30/2020 08:17	WG1548770
Diethyl phthalate	ND		3.54	1.18	09/30/2020 08:17	WG1548770
Dimethyl phthalate	ND		3.54	1.18	09/30/2020 08:17	WG1548770
Di-n-octyl phthalate	ND		3.54	1.18	09/30/2020 08:17	WG1548770
Pyrene	ND		1.18	1.18	09/30/2020 08:17	WG1548770
1,2,4-Trichlorobenzene	ND		11.8	1.18	09/30/2020 08:17	WG1548770
4-Chloro-3-methylphenol	ND		11.8	1.18	09/30/2020 08:17	WG1548770
2-Chlorophenol	ND		11.8	1.18	09/30/2020 08:17	WG1548770
2,4-Dichlorophenol	ND		11.8	1.18	09/30/2020 08:17	WG1548770
2,4-Dimethylphenol	ND		11.8	1.18	09/30/2020 08:17	WG1548770
4,6-Dinitro-2-methylphenol	ND		11.8	1.18	09/30/2020 08:17	WG1548770
2,4-Dinitrophenol	ND		11.8	1.18	09/30/2020 08:17	WG1548770
2-Nitrophenol	ND		11.8	1.18	09/30/2020 08:17	WG1548770
4-Nitrophenol	ND		11.8	1.18	09/30/2020 08:17	WG1548770
Pentachlorophenol	ND		11.8	1.18	09/30/2020 08:17	WG1548770
Phenol	ND		11.8	1.18	09/30/2020 08:17	WG1548770
2,4,6-Trichlorophenol	ND		11.8	1.18	09/30/2020 08:17	WG1548770

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
(S) 2-Fluorophenol	*52.8*		*10.0-120*		*09/30/2020 08:17*	WG1548770
(S) Phenol-d5	*33.4*		*10.0-120*		*09/30/2020 08:17*	WG1548770
(S) Nitrobenzene-d5	*77.1*		*10.0-127*		*09/30/2020 08:17*	WG1548770
(S) 2-Fluorobiphenyl	*88.1*		*10.0-130*		*09/30/2020 08:17*	WG1548770
(S) 2,4,6-Tribromophenol	*86.8*		*10.0-155*		*09/30/2020 08:17*	WG1548770
(S) p-Terphenyl-d14	*88.1*		*10.0-128*		*09/30/2020 08:17*	WG1548770

Mercury by Method 7470A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Mercury	ND		0.200	1	09/24/2020 21:50	WG1548373

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Arsenic	ND		10.0	1	09/30/2020 08:46	WG1549460
Barium	722		5.00	1	09/30/2020 08:46	WG1549460
Cadmium	ND		2.00	1	09/30/2020 08:46	WG1549460
Chromium	ND		10.0	1	09/30/2020 08:46	WG1549460
Lead	ND		6.00	1	09/30/2020 08:46	WG1549460
Selenium	ND		10.0	1	09/30/2020 08:46	WG1549460
Silver	ND		5.00	1	09/30/2020 08:46	WG1549460

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
LRH (C5-C8)	ND		100	1	09/30/2020 19:57	WG1551743
Acetone	ND		50.0	1	09/30/2020 19:57	WG1551743
Acrylonitrile	ND	J0	10.0	1	09/30/2020 19:57	WG1551743
Benzene	ND		1.00	1	10/01/2020 17:42	WG1552323
Bromobenzene	ND		1.00	1	09/30/2020 19:57	WG1551743
Bromodichloromethane	ND		1.00	1	09/30/2020 19:57	WG1551743
Bromoform	ND		1.00	1	09/30/2020 19:57	WG1551743
Bromomethane	ND		5.00	1	09/30/2020 19:57	WG1551743
n-Butylbenzene	ND		1.00	1	09/30/2020 19:57	WG1551743
sec-Butylbenzene	ND		1.00	1	09/30/2020 19:57	WG1551743
tert-Butylbenzene	ND		1.00	1	09/30/2020 19:57	WG1551743
Carbon tetrachloride	ND		1.00	1	09/30/2020 19:57	WG1551743
Chlorobenzene	ND		1.00	1	09/30/2020 19:57	WG1551743
Chlorodibromomethane	ND		1.00	1	09/30/2020 19:57	WG1551743
Chloroethane	ND		5.00	1	09/30/2020 19:57	WG1551743
Chloroform	ND		5.00	1	09/30/2020 19:57	WG1551743
Chloromethane	ND		2.50	1	09/30/2020 19:57	WG1551743
2-Chlorotoluene	ND		1.00	1	09/30/2020 19:57	WG1551743
4-Chlorotoluene	ND		1.00	1	09/30/2020 19:57	WG1551743
1,2-Dibromo-3-Chloropropane	ND		5.00	1	09/30/2020 19:57	WG1551743
1,2-Dibromoethane	ND		1.00	1	09/30/2020 19:57	WG1551743
Dibromomethane	ND		1.00	1	09/30/2020 19:57	WG1551743
1,2-Dichlorobenzene	ND		1.00	1	09/30/2020 19:57	WG1551743
1,3-Dichlorobenzene	ND		1.00	1	09/30/2020 19:57	WG1551743
1,4-Dichlorobenzene	1.53		1.00	1	09/30/2020 19:57	WG1551743
Dichlorodifluoromethane	ND		5.00	1	09/30/2020 19:57	WG1551743
1,1-Dichloroethane	ND		1.00	1	09/30/2020 19:57	WG1551743
1,2-Dichloroethane	ND		1.00	1	09/30/2020 19:57	WG1551743
1,1-Dichloroethene	ND		1.00	1	09/30/2020 19:57	WG1551743
cis-1,2-Dichloroethene	ND		1.00	1	09/30/2020 19:57	WG1551743
trans-1,2-Dichloroethene	ND		1.00	1	09/30/2020 19:57	WG1551743
1,2-Dichloropropane	ND		1.00	1	09/30/2020 19:57	WG1551743
1,1-Dichloropropene	ND		1.00	1	09/30/2020 19:57	WG1551743
1,3-Dichloropropane	ND		1.00	1	09/30/2020 19:57	WG1551743
cis-1,3-Dichloropropene	ND		1.00	1	09/30/2020 19:57	WG1551743
trans-1,3-Dichloropropene	ND		1.00	1	09/30/2020 19:57	WG1551743
2,2-Dichloropropane	ND		1.00	1	09/30/2020 19:57	WG1551743
Di-isopropyl ether	ND		1.00	1	09/30/2020 19:57	WG1551743
Ethylbenzene	ND		1.00	1	09/30/2020 19:57	WG1551743

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Hexachloro-1,3-butadiene	ND		1.00	1	09/30/2020 19:57	WG1551743
Isopropylbenzene	ND		1.00	1	09/30/2020 19:57	WG1551743
p-Isopropyltoluene	ND		1.00	1	09/30/2020 19:57	WG1551743
2-Butanone (MEK)	ND		10.0	1	09/30/2020 19:57	WG1551743
Methylene Chloride	ND		5.00	1	09/30/2020 19:57	WG1551743
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	09/30/2020 19:57	WG1551743
Methyl tert-butyl ether	ND		1.00	1	09/30/2020 19:57	WG1551743
Naphthalene	ND		5.00	1	09/30/2020 19:57	WG1551743
n-Propylbenzene	ND		1.00	1	09/30/2020 19:57	WG1551743
Styrene	ND		1.00	1	09/30/2020 19:57	WG1551743
1,1,1,2-Tetrachloroethane	ND		1.00	1	09/30/2020 19:57	WG1551743
1,1,2,2-Tetrachloroethane	ND		1.00	1	09/30/2020 19:57	WG1551743
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	09/30/2020 19:57	WG1551743
Tetrachloroethene	ND		1.00	1	09/30/2020 19:57	WG1551743
Toluene	ND		1.00	1	09/30/2020 19:57	WG1551743
1,2,3-Trichlorobenzene	ND		1.00	1	09/30/2020 19:57	WG1551743
1,2,4-Trichlorobenzene	ND		1.00	1	09/30/2020 19:57	WG1551743
1,1,1-Trichloroethane	ND		1.00	1	09/30/2020 19:57	WG1551743
1,1,2-Trichloroethane	ND		1.00	1	09/30/2020 19:57	WG1551743
Trichloroethene	ND		1.00	1	09/30/2020 19:57	WG1551743
Trichlorofluoromethane	ND		5.00	1	09/30/2020 19:57	WG1551743
1,2,3-Trichloropropane	ND		2.50	1	09/30/2020 19:57	WG1551743
1,2,4-Trimethylbenzene	ND		1.00	1	09/30/2020 19:57	WG1551743
1,2,3-Trimethylbenzene	ND		1.00	1	09/30/2020 19:57	WG1551743
1,3,5-Trimethylbenzene	ND		1.00	1	09/30/2020 19:57	WG1551743
Vinyl chloride	ND		1.00	1	09/30/2020 19:57	WG1551743
Xylenes, Total	ND		3.00	1	09/30/2020 19:57	WG1551743
(S) Toluene-d8	*107*		*80.0-120*		*09/30/2020 19:57*	WG1551743
(S) Toluene-d8	*107*		*80.0-120*		*10/01/2020 17:42*	WG1552323
(S) 4-Bromofluorobenzene	*108*		*77.0-126*		*09/30/2020 19:57*	WG1551743
(S) 4-Bromofluorobenzene	*90.9*		*77.0-126*		*10/01/2020 17:42*	WG1552323
(S) 1,2-Dichloroethane-d4	*97.2*		*70.0-130*		*09/30/2020 19:57*	WG1551743
(S) 1,2-Dichloroethane-d4	*113*		*70.0-130*		*10/01/2020 17:42*	WG1552323

Semi-Volatile Organic Compounds (GC) by Method KS MRH/HRH

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
MRH (C9-C18)	249		100	1	10/05/2020 01:26	WG1547615
HRH (C19-C35)	140		100	1	10/05/2020 01:26	WG1547615
(S) 1-Chloro-octadecane	*102*		*40.0-140*		*10/05/2020 01:26*	WG1547615

Pesticides (GC) by Method 8081B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Aldrin	ND		0.0500	1	09/29/2020 10:30	WG1549659
Alpha BHC	ND		0.0500	1	09/29/2020 10:30	WG1549659
Beta BHC	ND		0.0500	1	09/29/2020 10:30	WG1549659
Delta BHC	ND		0.0500	1	09/29/2020 10:30	WG1549659
Gamma BHC	ND		0.0500	1	09/29/2020 10:30	WG1549659
Chlordane	ND		5.00	1	09/29/2020 10:30	WG1549659
4,4-DDD	ND	P	0.0500	1	09/29/2020 10:30	WG1549659
4,4-DDE	ND		0.0500	1	09/29/2020 10:30	WG1549659
4,4-DDT	ND		0.0500	1	09/29/2020 10:30	WG1549659
Dieldrin	ND		0.0500	1	09/29/2020 10:30	WG1549659
Endosulfan I	ND		0.0500	1	09/29/2020 10:30	WG1549659

Pesticides (GC) by Method 8081B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Endosulfan II	ND		0.0500	1	09/29/2020 10:30	WG1549659
Endosulfan sulfate	ND		0.0500	1	09/29/2020 10:30	WG1549659
Endrin	ND		0.0500	1	09/29/2020 10:30	WG1549659
Endrin aldehyde	ND		0.0500	1	09/29/2020 10:30	WG1549659
Endrin ketone	ND		0.0500	1	09/29/2020 10:30	WG1549659
Hexachlorobenzene	ND		0.0500	1	09/29/2020 10:30	WG1549659
Heptachlor	ND		0.0500	1	09/29/2020 10:30	WG1549659
Heptachlor epoxide	ND		0.0500	1	09/29/2020 10:30	WG1549659
Methoxychlor	ND		0.0500	1	09/29/2020 10:30	WG1549659
Toxaphene	ND		0.500	1	09/29/2020 10:30	WG1549659
(S) Decachlorobiphenyl	*55.8*		*10.0-128*		*09/29/2020 10:30*	WG1549659
(S) Tetrachloro-m-xylene	*72.0*		*10.0-127*		*09/29/2020 10:30*	WG1549659

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acenaphthene	ND		1.00	1	09/30/2020 08:37	WG1548770
Acenaphthylene	ND		1.00	1	09/30/2020 08:37	WG1548770
Anthracene	ND		1.00	1	09/30/2020 08:37	WG1548770
Benzidine	ND		10.0	1	09/30/2020 08:37	WG1548770
Benzo(a)anthracene	ND		1.00	1	09/30/2020 08:37	WG1548770
Benzo(b)fluoranthene	ND		1.00	1	09/30/2020 08:37	WG1548770
Benzo(k)fluoranthene	ND		1.00	1	09/30/2020 08:37	WG1548770
Benzo(g,h,i)perylene	ND		1.00	1	09/30/2020 08:37	WG1548770
Benzo(a)pyrene	ND		1.00	1	09/30/2020 08:37	WG1548770
Bis(2-chlorethoxy)methane	ND		10.0	1	09/30/2020 08:37	WG1548770
Bis(2-chloroethyl)ether	ND		10.0	1	09/30/2020 08:37	WG1548770
2,2-Oxybis(1-Chloropropane)	ND		10.0	1	09/30/2020 08:37	WG1548770
4-Bromophenyl-phenylether	ND		10.0	1	09/30/2020 08:37	WG1548770
2-Chloronaphthalene	ND		1.00	1	09/30/2020 08:37	WG1548770
4-Chlorophenyl-phenylether	ND		10.0	1	09/30/2020 08:37	WG1548770
Chrysene	ND		1.00	1	09/30/2020 08:37	WG1548770
Dibenz(a,h)anthracene	ND		1.00	1	09/30/2020 08:37	WG1548770
1,2-Dichlorobenzene	ND		10.0	1	09/30/2020 08:37	WG1548770
1,3-Dichlorobenzene	ND		10.0	1	09/30/2020 08:37	WG1548770
1,4-Dichlorobenzene	ND		10.0	1	09/30/2020 08:37	WG1548770
3,3-Dichlorobenzidine	ND		10.0	1	09/30/2020 08:37	WG1548770
2,4-Dinitrotoluene	ND		10.0	1	09/30/2020 08:37	WG1548770
2,6-Dinitrotoluene	ND		10.0	1	09/30/2020 08:37	WG1548770
Fluoranthene	ND		1.00	1	09/30/2020 08:37	WG1548770
Fluorene	ND		1.00	1	09/30/2020 08:37	WG1548770
Hexachlorobenzene	ND		1.00	1	09/30/2020 08:37	WG1548770
Hexachloro-1,3-butadiene	ND		10.0	1	09/30/2020 08:37	WG1548770
Hexachlorocyclopentadiene	ND		10.0	1	09/30/2020 08:37	WG1548770
Hexachloroethane	ND		10.0	1	09/30/2020 08:37	WG1548770
Indeno(1,2,3-cd)pyrene	ND		1.00	1	09/30/2020 08:37	WG1548770
Isophorone	ND		10.0	1	09/30/2020 08:37	WG1548770
Naphthalene	2.80		1.00	1	09/30/2020 08:37	WG1548770
Nitrobenzene	ND		10.0	1	09/30/2020 08:37	WG1548770
n-Nitrosodimethylamine	ND		10.0	1	09/30/2020 08:37	WG1548770
n-Nitrosodiphenylamine	ND		10.0	1	09/30/2020 08:37	WG1548770
n-Nitrosodi-n-propylamine	ND		10.0	1	09/30/2020 08:37	WG1548770
Phenanthrene	ND		1.00	1	09/30/2020 08:37	WG1548770
Benzylbutyl phthalate	ND		3.00	1	09/30/2020 08:37	WG1548770
Bis(2-ethylhexyl)phthalate	ND		3.00	1	09/30/2020 08:37	WG1548770
Di-n-butyl phthalate	ND		3.00	1	09/30/2020 08:37	WG1548770

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Diethyl phthalate	ND		3.00	1	09/30/2020 08:37	WG1548770
Dimethyl phthalate	ND		3.00	1	09/30/2020 08:37	WG1548770
Di-n-octyl phthalate	ND		3.00	1	09/30/2020 08:37	WG1548770
Pyrene	ND		1.00	1	09/30/2020 08:37	WG1548770
1,2,4-Trichlorobenzene	ND		10.0	1	09/30/2020 08:37	WG1548770
4-Chloro-3-methylphenol	ND		10.0	1	09/30/2020 08:37	WG1548770
2-Chlorophenol	ND		10.0	1	09/30/2020 08:37	WG1548770
2,4-Dichlorophenol	ND		10.0	1	09/30/2020 08:37	WG1548770
2,4-Dimethylphenol	ND		10.0	1	09/30/2020 08:37	WG1548770
4,6-Dinitro-2-methylphenol	ND		10.0	1	09/30/2020 08:37	WG1548770
2,4-Dinitrophenol	ND		10.0	1	09/30/2020 08:37	WG1548770
2-Nitrophenol	ND		10.0	1	09/30/2020 08:37	WG1548770
4-Nitrophenol	ND		10.0	1	09/30/2020 08:37	WG1548770
Pentachlorophenol	ND		10.0	1	09/30/2020 08:37	WG1548770
Phenol	ND		10.0	1	09/30/2020 08:37	WG1548770
2,4,6-Trichlorophenol	ND		10.0	1	09/30/2020 08:37	WG1548770
(S) 2-Fluorophenol	*36.8*		*10.0-120*		*09/30/2020 08:37*	WG1548770
(S) Phenol-d5	*22.4*		*10.0-120*		*09/30/2020 08:37*	WG1548770
(S) Nitrobenzene-d5	*53.0*		*10.0-127*		*09/30/2020 08:37*	WG1548770
(S) 2-Fluorobiphenyl	*60.1*		*10.0-130*		*09/30/2020 08:37*	WG1548770
(S) 2,4,6-Tribromophenol	*64.0*		*10.0-155*		*09/30/2020 08:37*	WG1548770
(S) p-Terphenyl-d14	*64.1*		*10.0-128*		*09/30/2020 08:37*	WG1548770

Mercury by Method 7470A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Mercury	ND		0.200	1	09/24/2020 21:52	WG1548373

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Arsenic	48.6		10.0	1	09/30/2020 08:49	WG1549460
Barium	536		5.00	1	09/30/2020 08:49	WG1549460
Cadmium	ND		2.00	1	09/30/2020 08:49	WG1549460
Chromium	ND		10.0	1	09/30/2020 08:49	WG1549460
Lead	ND		6.00	1	09/30/2020 08:49	WG1549460
Selenium	ND		10.0	1	09/30/2020 08:49	WG1549460
Silver	ND		5.00	1	09/30/2020 08:49	WG1549460

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
LRH (C5-C8)	ND		100	1	09/30/2020 20:16	WG1551743
Acetone	ND		50.0	1	09/30/2020 20:16	WG1551743
Acrylonitrile	ND	J0	10.0	1	09/30/2020 20:16	WG1551743
Benzene	ND		1.00	1	10/01/2020 18:04	WG1552323
Bromobenzene	ND		1.00	1	09/30/2020 20:16	WG1551743
Bromodichloromethane	ND		1.00	1	09/30/2020 20:16	WG1551743
Bromoform	ND		1.00	1	09/30/2020 20:16	WG1551743
Bromomethane	ND		5.00	1	09/30/2020 20:16	WG1551743
n-Butylbenzene	ND		1.00	1	09/30/2020 20:16	WG1551743
sec-Butylbenzene	ND		1.00	1	09/30/2020 20:16	WG1551743
tert-Butylbenzene	ND		1.00	1	09/30/2020 20:16	WG1551743
Carbon tetrachloride	ND		1.00	1	09/30/2020 20:16	WG1551743
Chlorobenzene	ND		1.00	1	09/30/2020 20:16	WG1551743
Chlorodibromomethane	ND		1.00	1	09/30/2020 20:16	WG1551743
Chloroethane	ND		5.00	1	09/30/2020 20:16	WG1551743
Chloroform	ND		5.00	1	09/30/2020 20:16	WG1551743
Chloromethane	ND		2.50	1	09/30/2020 20:16	WG1551743
2-Chlorotoluene	ND		1.00	1	09/30/2020 20:16	WG1551743
4-Chlorotoluene	ND		1.00	1	09/30/2020 20:16	WG1551743
1,2-Dibromo-3-Chloropropane	ND		5.00	1	09/30/2020 20:16	WG1551743
1,2-Dibromoethane	ND		1.00	1	09/30/2020 20:16	WG1551743
Dibromomethane	ND		1.00	1	09/30/2020 20:16	WG1551743
1,2-Dichlorobenzene	ND		1.00	1	09/30/2020 20:16	WG1551743
1,3-Dichlorobenzene	ND		1.00	1	09/30/2020 20:16	WG1551743
1,4-Dichlorobenzene	ND		1.00	1	09/30/2020 20:16	WG1551743
Dichlorodifluoromethane	ND		5.00	1	09/30/2020 20:16	WG1551743
1,1-Dichloroethane	ND		1.00	1	09/30/2020 20:16	WG1551743
1,2-Dichloroethane	ND		1.00	1	09/30/2020 20:16	WG1551743
1,1-Dichloroethene	ND		1.00	1	09/30/2020 20:16	WG1551743
cis-1,2-Dichloroethene	ND		1.00	1	09/30/2020 20:16	WG1551743
trans-1,2-Dichloroethene	ND		1.00	1	09/30/2020 20:16	WG1551743
1,2-Dichloropropane	ND		1.00	1	09/30/2020 20:16	WG1551743
1,1-Dichloropropene	ND		1.00	1	09/30/2020 20:16	WG1551743
1,3-Dichloropropane	ND		1.00	1	09/30/2020 20:16	WG1551743
cis-1,3-Dichloropropene	ND		1.00	1	09/30/2020 20:16	WG1551743
trans-1,3-Dichloropropene	ND		1.00	1	09/30/2020 20:16	WG1551743
2,2-Dichloropropane	ND		1.00	1	09/30/2020 20:16	WG1551743
Di-isopropyl ether	ND		1.00	1	09/30/2020 20:16	WG1551743
Ethylbenzene	ND		1.00	1	09/30/2020 20:16	WG1551743

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Hexachloro-1,3-butadiene	ND		1.00	1	09/30/2020 20:16	WG1551743
Isopropylbenzene	ND		1.00	1	09/30/2020 20:16	WG1551743
p-Isopropyltoluene	ND		1.00	1	09/30/2020 20:16	WG1551743
2-Butanone (MEK)	ND		10.0	1	09/30/2020 20:16	WG1551743
Methylene Chloride	ND		5.00	1	09/30/2020 20:16	WG1551743
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	09/30/2020 20:16	WG1551743
Methyl tert-butyl ether	ND		1.00	1	09/30/2020 20:16	WG1551743
Naphthalene	ND		5.00	1	09/30/2020 20:16	WG1551743
n-Propylbenzene	ND		1.00	1	09/30/2020 20:16	WG1551743
Styrene	ND		1.00	1	09/30/2020 20:16	WG1551743
1,1,1,2-Tetrachloroethane	ND		1.00	1	09/30/2020 20:16	WG1551743
1,1,2,2-Tetrachloroethane	ND		1.00	1	09/30/2020 20:16	WG1551743
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	09/30/2020 20:16	WG1551743
Tetrachloroethene	ND		1.00	1	09/30/2020 20:16	WG1551743
Toluene	ND		1.00	1	09/30/2020 20:16	WG1551743
1,2,3-Trichlorobenzene	ND		1.00	1	09/30/2020 20:16	WG1551743
1,2,4-Trichlorobenzene	ND		1.00	1	09/30/2020 20:16	WG1551743
1,1,1-Trichloroethane	ND		1.00	1	09/30/2020 20:16	WG1551743
1,1,2-Trichloroethane	ND		1.00	1	09/30/2020 20:16	WG1551743
Trichloroethene	ND		1.00	1	09/30/2020 20:16	WG1551743
Trichlorofluoromethane	ND		5.00	1	09/30/2020 20:16	WG1551743
1,2,3-Trichloropropane	ND		2.50	1	09/30/2020 20:16	WG1551743
1,2,4-Trimethylbenzene	ND		1.00	1	09/30/2020 20:16	WG1551743
1,2,3-Trimethylbenzene	ND		1.00	1	09/30/2020 20:16	WG1551743
1,3,5-Trimethylbenzene	ND		1.00	1	09/30/2020 20:16	WG1551743
Vinyl chloride	ND		1.00	1	09/30/2020 20:16	WG1551743
Xylenes, Total	ND		3.00	1	09/30/2020 20:16	WG1551743
(S) Toluene-d8	*108*		*80.0-120*		*09/30/2020 20:16*	WG1551743
(S) Toluene-d8	*103*		*80.0-120*		*10/01/2020 18:04*	WG1552323
(S) 4-Bromofluorobenzene	*105*		*77.0-126*		*09/30/2020 20:16*	WG1551743
(S) 4-Bromofluorobenzene	*89.3*		*77.0-126*		*10/01/2020 18:04*	WG1552323
(S) 1,2-Dichloroethane-d4	*98.6*		*70.0-130*		*09/30/2020 20:16*	WG1551743
(S) 1,2-Dichloroethane-d4	*113*		*70.0-130*		*10/01/2020 18:04*	WG1552323

Semi-Volatile Organic Compounds (GC) by Method KS MRH/HRH

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
MRH (C9-C18)	ND		111	1.11	10/03/2020 11:27	WG1547615
HRH (C19-C35)	ND		111	1.11	10/03/2020 11:27	WG1547615
(S) 1-Chloro-octadecane	*94.1*		*40.0-140*		*10/03/2020 11:27*	WG1547615

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acenaphthene	ND		1.00	1	09/30/2020 08:58	WG1548770
Acenaphthylene	ND		1.00	1	09/30/2020 08:58	WG1548770
Anthracene	ND		1.00	1	09/30/2020 08:58	WG1548770
Benzidine	ND		10.0	1	09/30/2020 08:58	WG1548770
Benzo(a)anthracene	ND		1.00	1	09/30/2020 08:58	WG1548770
Benzo(b)fluoranthene	ND		1.00	1	09/30/2020 08:58	WG1548770
Benzo(k)fluoranthene	ND		1.00	1	09/30/2020 08:58	WG1548770
Benzo(g,h,i)perylene	ND		1.00	1	09/30/2020 08:58	WG1548770
Benzo(a)pyrene	ND		1.00	1	09/30/2020 08:58	WG1548770
Bis(2-chlorethoxy)methane	ND		10.0	1	09/30/2020 08:58	WG1548770
Bis(2-chloroethyl)ether	ND		10.0	1	09/30/2020 08:58	WG1548770

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
2,2-Oxybis(1-Chloropropane)	ND		10.0	1	09/30/2020 08:58	WG1548770
4-Bromophenyl-phenylether	ND		10.0	1	09/30/2020 08:58	WG1548770
2-Chloronaphthalene	ND		1.00	1	09/30/2020 08:58	WG1548770
4-Chlorophenyl-phenylether	ND		10.0	1	09/30/2020 08:58	WG1548770
Chrysene	ND		1.00	1	09/30/2020 08:58	WG1548770
Dibenz(a,h)anthracene	ND		1.00	1	09/30/2020 08:58	WG1548770
1,2-Dichlorobenzene	ND		10.0	1	09/30/2020 08:58	WG1548770
1,3-Dichlorobenzene	ND		10.0	1	09/30/2020 08:58	WG1548770
1,4-Dichlorobenzene	ND		10.0	1	09/30/2020 08:58	WG1548770
3,3-Dichlorobenzidine	ND		10.0	1	09/30/2020 08:58	WG1548770
2,4-Dinitrotoluene	ND		10.0	1	09/30/2020 08:58	WG1548770
2,6-Dinitrotoluene	ND		10.0	1	09/30/2020 08:58	WG1548770
Fluoranthene	ND		1.00	1	09/30/2020 08:58	WG1548770
Fluorene	ND		1.00	1	09/30/2020 08:58	WG1548770
Hexachlorobenzene	ND		1.00	1	09/30/2020 08:58	WG1548770
Hexachloro-1,3-butadiene	ND		10.0	1	09/30/2020 08:58	WG1548770
Hexachlorocyclopentadiene	ND		10.0	1	09/30/2020 08:58	WG1548770
Hexachloroethane	ND		10.0	1	09/30/2020 08:58	WG1548770
Indeno(1,2,3-cd)pyrene	ND		1.00	1	09/30/2020 08:58	WG1548770
Isophorone	ND		10.0	1	09/30/2020 08:58	WG1548770
Naphthalene	ND		1.00	1	09/30/2020 08:58	WG1548770
Nitrobenzene	ND		10.0	1	09/30/2020 08:58	WG1548770
n-Nitrosodimethylamine	ND		10.0	1	09/30/2020 08:58	WG1548770
n-Nitrosodiphenylamine	ND		10.0	1	09/30/2020 08:58	WG1548770
n-Nitrosodi-n-propylamine	ND		10.0	1	09/30/2020 08:58	WG1548770
Phenanthrene	ND		1.00	1	09/30/2020 08:58	WG1548770
Benzylbutyl phthalate	ND		3.00	1	09/30/2020 08:58	WG1548770
Bis(2-ethylhexyl)phthalate	ND		3.00	1	09/30/2020 08:58	WG1548770
Di-n-butyl phthalate	ND		3.00	1	09/30/2020 08:58	WG1548770
Diethyl phthalate	ND		3.00	1	09/30/2020 08:58	WG1548770
Dimethyl phthalate	ND		3.00	1	09/30/2020 08:58	WG1548770
Di-n-octyl phthalate	ND		3.00	1	09/30/2020 08:58	WG1548770
Pyrene	ND		1.00	1	09/30/2020 08:58	WG1548770
1,2,4-Trichlorobenzene	ND		10.0	1	09/30/2020 08:58	WG1548770
4-Chloro-3-methylphenol	ND		10.0	1	09/30/2020 08:58	WG1548770
2-Chlorophenol	ND		10.0	1	09/30/2020 08:58	WG1548770
2,4-Dichlorophenol	ND		10.0	1	09/30/2020 08:58	WG1548770
2,4-Dimethylphenol	ND		10.0	1	09/30/2020 08:58	WG1548770
4,6-Dinitro-2-methylphenol	ND		10.0	1	09/30/2020 08:58	WG1548770
2,4-Dinitrophenol	ND		10.0	1	09/30/2020 08:58	WG1548770
2-Nitrophenol	ND		10.0	1	09/30/2020 08:58	WG1548770
4-Nitrophenol	ND		10.0	1	09/30/2020 08:58	WG1548770
Pentachlorophenol	ND		10.0	1	09/30/2020 08:58	WG1548770
Phenol	ND		10.0	1	09/30/2020 08:58	WG1548770
2,4,6-Trichlorophenol	ND		10.0	1	09/30/2020 08:58	WG1548770
(S) 2-Fluorophenol	*42.6*		*10.0-120*		*09/30/2020 08:58*	WG1548770
(S) Phenol-d5	*27.0*		*10.0-120*		*09/30/2020 08:58*	WG1548770
(S) Nitrobenzene-d5	*72.4*		*10.0-127*		*09/30/2020 08:58*	WG1548770
(S) 2-Fluorobiphenyl	*80.2*		*10.0-130*		*09/30/2020 08:58*	WG1548770
(S) 2,4,6-Tribromophenol	*81.5*		*10.0-155*		*09/30/2020 08:58*	WG1548770
(S) p-Terphenyl-d14	*85.6*		*10.0-128*		*09/30/2020 08:58*	WG1548770

Mercury by Method 7470A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Mercury	ND		0.200	1	09/24/2020 21:54	WG1548373

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Arsenic	ND		10.0	1	09/30/2020 08:52	WG1549460
Barium	796		5.00	1	09/30/2020 08:52	WG1549460
Cadmium	ND		2.00	1	09/30/2020 08:52	WG1549460
Chromium	ND		10.0	1	09/30/2020 08:52	WG1549460
Lead	ND		6.00	1	09/30/2020 08:52	WG1549460
Selenium	ND		10.0	1	09/30/2020 08:52	WG1549460
Silver	ND		5.00	1	09/30/2020 08:52	WG1549460

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
LRH (C5-C8)	ND		100	1	09/30/2020 20:36	WG1551743
Acetone	ND		50.0	1	09/30/2020 20:36	WG1551743
Acrylonitrile	ND	J0	10.0	1	09/30/2020 20:36	WG1551743
Benzene	ND		1.00	1	09/30/2020 20:36	WG1551743
Bromobenzene	ND		1.00	1	09/30/2020 20:36	WG1551743
Bromodichloromethane	ND		1.00	1	09/30/2020 20:36	WG1551743
Bromoform	ND		1.00	1	09/30/2020 20:36	WG1551743
Bromomethane	ND		5.00	1	09/30/2020 20:36	WG1551743
n-Butylbenzene	ND		1.00	1	09/30/2020 20:36	WG1551743
sec-Butylbenzene	ND		1.00	1	09/30/2020 20:36	WG1551743
tert-Butylbenzene	ND		1.00	1	09/30/2020 20:36	WG1551743
Carbon tetrachloride	ND		1.00	1	09/30/2020 20:36	WG1551743
Chlorobenzene	1.69		1.00	1	09/30/2020 20:36	WG1551743
Chlorodibromomethane	ND		1.00	1	09/30/2020 20:36	WG1551743
Chloroethane	ND		5.00	1	09/30/2020 20:36	WG1551743
Chloroform	ND		5.00	1	09/30/2020 20:36	WG1551743
Chloromethane	ND		2.50	1	09/30/2020 20:36	WG1551743
2-Chlorotoluene	ND		1.00	1	09/30/2020 20:36	WG1551743
4-Chlorotoluene	ND		1.00	1	09/30/2020 20:36	WG1551743
1,2-Dibromo-3-Chloropropane	ND		5.00	1	09/30/2020 20:36	WG1551743
1,2-Dibromoethane	ND		1.00	1	09/30/2020 20:36	WG1551743
Dibromomethane	ND		1.00	1	09/30/2020 20:36	WG1551743
1,2-Dichlorobenzene	ND		1.00	1	09/30/2020 20:36	WG1551743
1,3-Dichlorobenzene	ND		1.00	1	09/30/2020 20:36	WG1551743
1,4-Dichlorobenzene	ND		1.00	1	09/30/2020 20:36	WG1551743
Dichlorodifluoromethane	ND		5.00	1	09/30/2020 20:36	WG1551743
1,1-Dichloroethane	ND		1.00	1	09/30/2020 20:36	WG1551743
1,2-Dichloroethane	ND		1.00	1	09/30/2020 20:36	WG1551743
1,1-Dichloroethene	ND		1.00	1	09/30/2020 20:36	WG1551743
cis-1,2-Dichloroethene	ND		1.00	1	09/30/2020 20:36	WG1551743
trans-1,2-Dichloroethene	ND		1.00	1	09/30/2020 20:36	WG1551743
1,2-Dichloropropane	ND		1.00	1	09/30/2020 20:36	WG1551743
1,1-Dichloropropene	ND		1.00	1	09/30/2020 20:36	WG1551743
1,3-Dichloropropane	ND		1.00	1	09/30/2020 20:36	WG1551743
cis-1,3-Dichloropropene	ND		1.00	1	09/30/2020 20:36	WG1551743
trans-1,3-Dichloropropene	ND		1.00	1	09/30/2020 20:36	WG1551743
2,2-Dichloropropane	ND		1.00	1	09/30/2020 20:36	WG1551743
Di-isopropyl ether	ND		1.00	1	09/30/2020 20:36	WG1551743
Ethylbenzene	ND		1.00	1	09/30/2020 20:36	WG1551743

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Hexachloro-1,3-butadiene	ND		1.00	1	09/30/2020 20:36	WG1551743
Isopropylbenzene	1.70		1.00	1	09/30/2020 20:36	WG1551743
p-Isopropyltoluene	ND		1.00	1	09/30/2020 20:36	WG1551743
2-Butanone (MEK)	ND		10.0	1	09/30/2020 20:36	WG1551743
Methylene Chloride	ND		5.00	1	09/30/2020 20:36	WG1551743
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	09/30/2020 20:36	WG1551743
Methyl tert-butyl ether	ND		1.00	1	09/30/2020 20:36	WG1551743
Naphthalene	9.82		5.00	1	09/30/2020 20:36	WG1551743
n-Propylbenzene	ND		1.00	1	09/30/2020 20:36	WG1551743
Styrene	ND		1.00	1	09/30/2020 20:36	WG1551743
1,1,1,2-Tetrachloroethane	ND		1.00	1	09/30/2020 20:36	WG1551743
1,1,2,2-Tetrachloroethane	ND		1.00	1	09/30/2020 20:36	WG1551743
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	09/30/2020 20:36	WG1551743
Tetrachloroethene	ND		1.00	1	09/30/2020 20:36	WG1551743
Toluene	ND		1.00	1	09/30/2020 20:36	WG1551743
1,2,3-Trichlorobenzene	ND		1.00	1	09/30/2020 20:36	WG1551743
1,2,4-Trichlorobenzene	ND		1.00	1	09/30/2020 20:36	WG1551743
1,1,1-Trichloroethane	ND		1.00	1	09/30/2020 20:36	WG1551743
1,1,2-Trichloroethane	ND		1.00	1	09/30/2020 20:36	WG1551743
Trichloroethene	ND		1.00	1	09/30/2020 20:36	WG1551743
Trichlorofluoromethane	5.93		5.00	1	09/30/2020 20:36	WG1551743
1,2,3-Trichloropropane	ND		2.50	1	09/30/2020 20:36	WG1551743
1,2,4-Trimethylbenzene	ND		1.00	1	09/30/2020 20:36	WG1551743
1,2,3-Trimethylbenzene	ND		1.00	1	09/30/2020 20:36	WG1551743
1,3,5-Trimethylbenzene	ND		1.00	1	09/30/2020 20:36	WG1551743
Vinyl chloride	ND		1.00	1	09/30/2020 20:36	WG1551743
Xylenes, Total	ND		3.00	1	09/30/2020 20:36	WG1551743
(S) Toluene-d8	*107*		*80.0-120*		*09/30/2020 20:36*	WG1551743
(S) 4-Bromofluorobenzene	*102*		*77.0-126*		*09/30/2020 20:36*	WG1551743
(S) 1,2-Dichloroethane-d4	*90.3*		*70.0-130*		*09/30/2020 20:36*	WG1551743

Semi-Volatile Organic Compounds (GC) by Method KS MRH/HRH

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
MRH (C9-C18)	276		103	1.03	10/03/2020 11:50	WG1547615
HRH (C19-C35)	265		103	1.03	10/03/2020 11:50	WG1547615
(S) 1-Chloro-octadecane	*88.9*		*40.0-140*		*10/03/2020 11:50*	WG1547615

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acenaphthene	ND		1.00	1	09/30/2020 09:19	WG1548770
Acenaphthylene	ND		1.00	1	09/30/2020 09:19	WG1548770
Anthracene	ND		1.00	1	09/30/2020 09:19	WG1548770
Benzidine	ND		10.0	1	09/30/2020 09:19	WG1548770
Benzo(a)anthracene	ND		1.00	1	09/30/2020 09:19	WG1548770
Benzo(b)fluoranthene	ND		1.00	1	09/30/2020 09:19	WG1548770
Benzo(k)fluoranthene	ND		1.00	1	09/30/2020 09:19	WG1548770
Benzo(g,h,i)perylene	ND		1.00	1	09/30/2020 09:19	WG1548770
Benzo(a)pyrene	ND		1.00	1	09/30/2020 09:19	WG1548770
Bis(2-chlorethoxy)methane	ND		10.0	1	09/30/2020 09:19	WG1548770
Bis(2-chloroethyl)ether	ND		10.0	1	09/30/2020 09:19	WG1548770
2,2-Oxybis(1-Chloropropane)	ND		10.0	1	09/30/2020 09:19	WG1548770
4-Bromophenyl-phenylether	ND		10.0	1	09/30/2020 09:19	WG1548770
2-Chloronaphthalene	ND		1.00	1	09/30/2020 09:19	WG1548770

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
4-Chlorophenyl-phenylether	ND		10.0	1	09/30/2020 09:19	WG1548770
Chrysene	ND		1.00	1	09/30/2020 09:19	WG1548770
Dibenz(a,h)anthracene	ND		1.00	1	09/30/2020 09:19	WG1548770
1,2-Dichlorobenzene	ND		10.0	1	09/30/2020 09:19	WG1548770
1,3-Dichlorobenzene	ND		10.0	1	09/30/2020 09:19	WG1548770
1,4-Dichlorobenzene	ND		10.0	1	09/30/2020 09:19	WG1548770
3,3-Dichlorobenzidine	ND		10.0	1	09/30/2020 09:19	WG1548770
2,4-Dinitrotoluene	ND		10.0	1	09/30/2020 09:19	WG1548770
2,6-Dinitrotoluene	ND		10.0	1	09/30/2020 09:19	WG1548770
Fluoranthene	ND		1.00	1	09/30/2020 09:19	WG1548770
Fluorene	ND		1.00	1	09/30/2020 09:19	WG1548770
Hexachlorobenzene	ND		1.00	1	09/30/2020 09:19	WG1548770
Hexachloro-1,3-butadiene	ND		10.0	1	09/30/2020 09:19	WG1548770
Hexachlorocyclopentadiene	ND		10.0	1	09/30/2020 09:19	WG1548770
Hexachloroethane	ND		10.0	1	09/30/2020 09:19	WG1548770
Indeno(1,2,3-cd)pyrene	ND		1.00	1	09/30/2020 09:19	WG1548770
Isophorone	ND		10.0	1	09/30/2020 09:19	WG1548770
Naphthalene	7.12		1.00	1	09/30/2020 09:19	WG1548770
Nitrobenzene	ND		10.0	1	09/30/2020 09:19	WG1548770
n-Nitrosodimethylamine	ND		10.0	1	09/30/2020 09:19	WG1548770
n-Nitrosodiphenylamine	ND		10.0	1	09/30/2020 09:19	WG1548770
n-Nitrosodi-n-propylamine	ND		10.0	1	09/30/2020 09:19	WG1548770
Phenanthrene	ND		1.00	1	09/30/2020 09:19	WG1548770
Benzylbutyl phthalate	ND		3.00	1	09/30/2020 09:19	WG1548770
Bis(2-ethylhexyl)phthalate	ND		3.00	1	09/30/2020 09:19	WG1548770
Di-n-butyl phthalate	ND		3.00	1	09/30/2020 09:19	WG1548770
Diethyl phthalate	ND		3.00	1	09/30/2020 09:19	WG1548770
Dimethyl phthalate	ND		3.00	1	09/30/2020 09:19	WG1548770
Di-n-octyl phthalate	ND		3.00	1	09/30/2020 09:19	WG1548770
Pyrene	ND		1.00	1	09/30/2020 09:19	WG1548770
1,2,4-Trichlorobenzene	ND		10.0	1	09/30/2020 09:19	WG1548770
4-Chloro-3-methylphenol	ND		10.0	1	09/30/2020 09:19	WG1548770
2-Chlorophenol	ND		10.0	1	09/30/2020 09:19	WG1548770
2,4-Dichlorophenol	ND		10.0	1	09/30/2020 09:19	WG1548770
2,4-Dimethylphenol	ND		10.0	1	09/30/2020 09:19	WG1548770
4,6-Dinitro-2-methylphenol	ND		10.0	1	09/30/2020 09:19	WG1548770
2,4-Dinitrophenol	ND		10.0	1	09/30/2020 09:19	WG1548770
2-Nitrophenol	ND		10.0	1	09/30/2020 09:19	WG1548770
4-Nitrophenol	ND		10.0	1	09/30/2020 09:19	WG1548770
Pentachlorophenol	ND		10.0	1	09/30/2020 09:19	WG1548770
Phenol	ND		10.0	1	09/30/2020 09:19	WG1548770
2,4,6-Trichlorophenol	ND		10.0	1	09/30/2020 09:19	WG1548770
(S) 2-Fluorophenol	*50.0*		*10.0-120*		*09/30/2020 09:19*	WG1548770
(S) Phenol-d5	*29.3*		*10.0-120*		*09/30/2020 09:19*	WG1548770
(S) Nitrobenzene-d5	*85.0*		*10.0-127*		*09/30/2020 09:19*	WG1548770
(S) 2-Fluorobiphenyl	*93.6*		*10.0-130*		*09/30/2020 09:19*	WG1548770
(S) 2,4,6-Tribromophenol	*98.0*		*10.0-155*		*09/30/2020 09:19*	WG1548770
(S) p-Terphenyl-d14	*100*		*10.0-128*		*09/30/2020 09:19*	WG1548770

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Mercury by Method 7470A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Mercury	ND		0.200	1	09/24/2020 21:56	WG1548373

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Arsenic	ND		10.0	1	09/30/2020 07:35	WG1549460
Barium	5190		5.00	1	09/30/2020 07:35	WG1549460
Cadmium	ND		2.00	1	09/30/2020 07:35	WG1549460
Chromium	ND		10.0	1	09/30/2020 07:35	WG1549460
Lead	ND		6.00	1	09/30/2020 07:35	WG1549460
Selenium	ND		10.0	1	09/30/2020 07:35	WG1549460
Silver	ND		5.00	1	09/30/2020 07:35	WG1549460

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
LRH (C5-C8)	ND		100	1	09/30/2020 20:55	WG1551743
Acetone	ND		50.0	1	09/30/2020 20:55	WG1551743
Acrylonitrile	ND	J0	10.0	1	09/30/2020 20:55	WG1551743
Benzene	6.49		1.00	1	09/30/2020 20:55	WG1551743
Bromobenzene	ND		1.00	1	09/30/2020 20:55	WG1551743
Bromodichloromethane	ND		1.00	1	09/30/2020 20:55	WG1551743
Bromoform	ND		1.00	1	09/30/2020 20:55	WG1551743
Bromomethane	ND		5.00	1	09/30/2020 20:55	WG1551743
n-Butylbenzene	ND		1.00	1	09/30/2020 20:55	WG1551743
sec-Butylbenzene	1.18		1.00	1	09/30/2020 20:55	WG1551743
tert-Butylbenzene	ND		1.00	1	09/30/2020 20:55	WG1551743
Carbon tetrachloride	ND		1.00	1	09/30/2020 20:55	WG1551743
Chlorobenzene	2.42		1.00	1	09/30/2020 20:55	WG1551743
Chlorodibromomethane	ND		1.00	1	09/30/2020 20:55	WG1551743
Chloroethane	ND		5.00	1	09/30/2020 20:55	WG1551743
Chloroform	ND		5.00	1	09/30/2020 20:55	WG1551743
Chloromethane	ND		2.50	1	09/30/2020 20:55	WG1551743
2-Chlorotoluene	ND		1.00	1	09/30/2020 20:55	WG1551743
4-Chlorotoluene	ND		1.00	1	09/30/2020 20:55	WG1551743
1,2-Dibromo-3-Chloropropane	ND		5.00	1	09/30/2020 20:55	WG1551743
1,2-Dibromoethane	ND		1.00	1	09/30/2020 20:55	WG1551743
Dibromomethane	ND		1.00	1	09/30/2020 20:55	WG1551743
1,2-Dichlorobenzene	ND		1.00	1	09/30/2020 20:55	WG1551743
1,3-Dichlorobenzene	ND		1.00	1	09/30/2020 20:55	WG1551743
1,4-Dichlorobenzene	1.14		1.00	1	09/30/2020 20:55	WG1551743
Dichlorodifluoromethane	ND		5.00	1	09/30/2020 20:55	WG1551743
1,1-Dichloroethane	ND		1.00	1	09/30/2020 20:55	WG1551743
1,2-Dichloroethane	ND		1.00	1	09/30/2020 20:55	WG1551743
1,1-Dichloroethene	ND		1.00	1	09/30/2020 20:55	WG1551743
cis-1,2-Dichloroethene	ND		1.00	1	09/30/2020 20:55	WG1551743
trans-1,2-Dichloroethene	ND		1.00	1	09/30/2020 20:55	WG1551743
1,2-Dichloropropane	ND		1.00	1	09/30/2020 20:55	WG1551743
1,1-Dichloropropene	ND		1.00	1	09/30/2020 20:55	WG1551743
1,3-Dichloropropane	ND		1.00	1	09/30/2020 20:55	WG1551743
cis-1,3-Dichloropropene	ND		1.00	1	09/30/2020 20:55	WG1551743
trans-1,3-Dichloropropene	ND		1.00	1	09/30/2020 20:55	WG1551743
2,2-Dichloropropane	ND		1.00	1	09/30/2020 20:55	WG1551743
Di-isopropyl ether	ND		1.00	1	09/30/2020 20:55	WG1551743
Ethylbenzene	1.83		1.00	1	09/30/2020 20:55	WG1551743

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Hexachloro-1,3-butadiene	ND		1.00	1	09/30/2020 20:55	WG1551743
Isopropylbenzene	3.28		1.00	1	09/30/2020 20:55	WG1551743
p-Isopropyltoluene	ND		1.00	1	09/30/2020 20:55	WG1551743
2-Butanone (MEK)	ND		10.0	1	09/30/2020 20:55	WG1551743
Methylene Chloride	ND		5.00	1	09/30/2020 20:55	WG1551743
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	09/30/2020 20:55	WG1551743
Methyl tert-butyl ether	ND		1.00	1	09/30/2020 20:55	WG1551743
Naphthalene	5.60		5.00	1	09/30/2020 20:55	WG1551743
n-Propylbenzene	2.81		1.00	1	09/30/2020 20:55	WG1551743
Styrene	ND		1.00	1	09/30/2020 20:55	WG1551743
1,1,1,2-Tetrachloroethane	ND		1.00	1	09/30/2020 20:55	WG1551743
1,1,2,2-Tetrachloroethane	ND		1.00	1	09/30/2020 20:55	WG1551743
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	09/30/2020 20:55	WG1551743
Tetrachloroethene	ND		1.00	1	09/30/2020 20:55	WG1551743
Toluene	ND		1.00	1	09/30/2020 20:55	WG1551743
1,2,3-Trichlorobenzene	ND		1.00	1	09/30/2020 20:55	WG1551743
1,2,4-Trichlorobenzene	ND		1.00	1	09/30/2020 20:55	WG1551743
1,1,1-Trichloroethane	ND		1.00	1	09/30/2020 20:55	WG1551743
1,1,2-Trichloroethane	ND		1.00	1	09/30/2020 20:55	WG1551743
Trichloroethene	ND		1.00	1	09/30/2020 20:55	WG1551743
Trichlorofluoromethane	ND		5.00	1	09/30/2020 20:55	WG1551743
1,2,3-Trichloropropane	ND		2.50	1	09/30/2020 20:55	WG1551743
1,2,4-Trimethylbenzene	2.74		1.00	1	09/30/2020 20:55	WG1551743
1,2,3-Trimethylbenzene	1.54		1.00	1	09/30/2020 20:55	WG1551743
1,3,5-Trimethylbenzene	ND		1.00	1	09/30/2020 20:55	WG1551743
Vinyl chloride	ND		1.00	1	09/30/2020 20:55	WG1551743
Xylenes, Total	3.26		3.00	1	09/30/2020 20:55	WG1551743
(S) Toluene-d8	*108*		*80.0-120*		*09/30/2020 20:55*	WG1551743
(S) 4-Bromofluorobenzene	*104*		*77.0-126*		*09/30/2020 20:55*	WG1551743
(S) 1,2-Dichloroethane-d4	*89.9*		*70.0-130*		*09/30/2020 20:55*	WG1551743

Semi-Volatile Organic Compounds (GC) by Method KS MRH/HRH

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
MRH (C9-C18)	472		103	1.03	10/03/2020 12:13	WG1547615
HRH (C19-C35)	367		103	1.03	10/03/2020 12:13	WG1547615
(S) 1-Chloro-octadecane	*96.5*		*40.0-140*		*10/03/2020 12:13*	WG1547615

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acenaphthene	ND		1.00	1	09/30/2020 10:22	WG1548770
Acenaphthylene	ND		1.00	1	09/30/2020 10:22	WG1548770
Anthracene	ND		1.00	1	09/30/2020 10:22	WG1548770
Benzidine	ND		10.0	1	09/30/2020 10:22	WG1548770
Benzo(a)anthracene	ND		1.00	1	09/30/2020 10:22	WG1548770
Benzo(b)fluoranthene	ND		1.00	1	09/30/2020 10:22	WG1548770
Benzo(k)fluoranthene	ND		1.00	1	09/30/2020 10:22	WG1548770
Benzo(g,h,i)perylene	ND		1.00	1	09/30/2020 10:22	WG1548770
Benzo(a)pyrene	ND		1.00	1	09/30/2020 10:22	WG1548770
Bis(2-chlorethoxy)methane	ND		10.0	1	09/30/2020 10:22	WG1548770
Bis(2-chloroethyl)ether	ND		10.0	1	09/30/2020 10:22	WG1548770
2,2-Oxybis(1-Chloropropane)	ND		10.0	1	09/30/2020 10:22	WG1548770
4-Bromophenyl-phenylether	ND		10.0	1	09/30/2020 10:22	WG1548770
2-Chloronaphthalene	ND		1.00	1	09/30/2020 10:22	WG1548770

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
4-Chlorophenyl-phenylether	ND		10.0	1	09/30/2020 10:22	WG1548770
Chrysene	ND		1.00	1	09/30/2020 10:22	WG1548770
Dibenz(a,h)anthracene	ND		1.00	1	09/30/2020 10:22	WG1548770
1,2-Dichlorobenzene	ND		10.0	1	09/30/2020 10:22	WG1548770
1,3-Dichlorobenzene	ND		10.0	1	09/30/2020 10:22	WG1548770
1,4-Dichlorobenzene	ND		10.0	1	09/30/2020 10:22	WG1548770
3,3-Dichlorobenzidine	ND		10.0	1	09/30/2020 10:22	WG1548770
2,4-Dinitrotoluene	ND		10.0	1	09/30/2020 10:22	WG1548770
2,6-Dinitrotoluene	ND		10.0	1	09/30/2020 10:22	WG1548770
Fluoranthene	ND		1.00	1	09/30/2020 10:22	WG1548770
Fluorene	ND		1.00	1	09/30/2020 10:22	WG1548770
Hexachlorobenzene	ND		1.00	1	09/30/2020 10:22	WG1548770
Hexachloro-1,3-butadiene	ND		10.0	1	09/30/2020 10:22	WG1548770
Hexachlorocyclopentadiene	ND		10.0	1	09/30/2020 10:22	WG1548770
Hexachloroethane	ND		10.0	1	09/30/2020 10:22	WG1548770
Indeno(1,2,3-cd)pyrene	ND		1.00	1	09/30/2020 10:22	WG1548770
Isophorone	ND		10.0	1	09/30/2020 10:22	WG1548770
Naphthalene	4.20		1.00	1	09/30/2020 10:22	WG1548770
Nitrobenzene	ND		10.0	1	09/30/2020 10:22	WG1548770
n-Nitrosodimethylamine	ND		10.0	1	09/30/2020 10:22	WG1548770
n-Nitrosodiphenylamine	ND		10.0	1	09/30/2020 10:22	WG1548770
n-Nitrosodi-n-propylamine	ND		10.0	1	09/30/2020 10:22	WG1548770
Phenanthrene	ND		1.00	1	09/30/2020 10:22	WG1548770
Benzylbutyl phthalate	ND		3.00	1	09/30/2020 10:22	WG1548770
Bis(2-ethylhexyl)phthalate	ND		3.00	1	09/30/2020 10:22	WG1548770
Di-n-butyl phthalate	ND		3.00	1	09/30/2020 10:22	WG1548770
Diethyl phthalate	ND		3.00	1	09/30/2020 10:22	WG1548770
Dimethyl phthalate	ND		3.00	1	09/30/2020 10:22	WG1548770
Di-n-octyl phthalate	ND		3.00	1	09/30/2020 10:22	WG1548770
Pyrene	ND		1.00	1	09/30/2020 10:22	WG1548770
1,2,4-Trichlorobenzene	ND		10.0	1	09/30/2020 10:22	WG1548770
4-Chloro-3-methylphenol	ND		10.0	1	09/30/2020 10:22	WG1548770
2-Chlorophenol	ND		10.0	1	09/30/2020 10:22	WG1548770
2,4-Dichlorophenol	ND		10.0	1	09/30/2020 10:22	WG1548770
2,4-Dimethylphenol	ND		10.0	1	09/30/2020 10:22	WG1548770
4,6-Dinitro-2-methylphenol	ND		10.0	1	09/30/2020 10:22	WG1548770
2,4-Dinitrophenol	ND		10.0	1	09/30/2020 10:22	WG1548770
2-Nitrophenol	ND		10.0	1	09/30/2020 10:22	WG1548770
4-Nitrophenol	ND		10.0	1	09/30/2020 10:22	WG1548770
Pentachlorophenol	ND		10.0	1	09/30/2020 10:22	WG1548770
Phenol	ND		10.0	1	09/30/2020 10:22	WG1548770
2,4,6-Trichlorophenol	ND		10.0	1	09/30/2020 10:22	WG1548770
(S) 2-Fluorophenol	*44.7*		*10.0-120*		*09/30/2020 10:22*	WG1548770
(S) Phenol-d5	*27.1*		*10.0-120*		*09/30/2020 10:22*	WG1548770
(S) Nitrobenzene-d5	*91.6*		*10.0-127*		*09/30/2020 10:22*	WG1548770
(S) 2-Fluorobiphenyl	*86.2*		*10.0-130*		*09/30/2020 10:22*	WG1548770
(S) 2,4,6-Tribromophenol	*87.0*		*10.0-155*		*09/30/2020 10:22*	WG1548770
(S) p-Terphenyl-d14	*86.8*		*10.0-128*		*09/30/2020 10:22*	WG1548770

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Mercury by Method 7470A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Mercury	ND		0.200	1	09/24/2020 21:58	WG1548373

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Arsenic	ND		10.0	1	09/30/2020 07:38	WG1549460
Barium	668		5.00	1	09/30/2020 07:38	WG1549460
Cadmium	ND		2.00	1	09/30/2020 07:38	WG1549460
Chromium	ND		10.0	1	09/30/2020 07:38	WG1549460
Lead	26.1		6.00	1	09/30/2020 07:38	WG1549460
Selenium	ND		10.0	1	09/30/2020 07:38	WG1549460
Silver	ND		5.00	1	09/30/2020 07:38	WG1549460

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
LRH (C5-C8)	ND		100	1	09/30/2020 21:15	WG1551743
Acetone	ND		50.0	1	09/30/2020 21:15	WG1551743
Acrylonitrile	ND	J0	10.0	1	09/30/2020 21:15	WG1551743
Benzene	2.03		1.00	1	09/30/2020 21:15	WG1551743
Bromobenzene	ND		1.00	1	09/30/2020 21:15	WG1551743
Bromodichloromethane	ND		1.00	1	09/30/2020 21:15	WG1551743
Bromoform	ND		1.00	1	09/30/2020 21:15	WG1551743
Bromomethane	ND		5.00	1	09/30/2020 21:15	WG1551743
n-Butylbenzene	ND		1.00	1	09/30/2020 21:15	WG1551743
sec-Butylbenzene	ND		1.00	1	09/30/2020 21:15	WG1551743
tert-Butylbenzene	ND		1.00	1	09/30/2020 21:15	WG1551743
Carbon tetrachloride	ND		1.00	1	09/30/2020 21:15	WG1551743
Chlorobenzene	ND		1.00	1	09/30/2020 21:15	WG1551743
Chlorodibromomethane	ND		1.00	1	09/30/2020 21:15	WG1551743
Chloroethane	ND		5.00	1	09/30/2020 21:15	WG1551743
Chloroform	ND		5.00	1	09/30/2020 21:15	WG1551743
Chloromethane	ND		2.50	1	09/30/2020 21:15	WG1551743
2-Chlorotoluene	ND		1.00	1	09/30/2020 21:15	WG1551743
4-Chlorotoluene	ND		1.00	1	09/30/2020 21:15	WG1551743
1,2-Dibromo-3-Chloropropane	ND		5.00	1	09/30/2020 21:15	WG1551743
1,2-Dibromoethane	ND		1.00	1	09/30/2020 21:15	WG1551743
Dibromomethane	ND		1.00	1	09/30/2020 21:15	WG1551743
1,2-Dichlorobenzene	ND		1.00	1	09/30/2020 21:15	WG1551743
1,3-Dichlorobenzene	ND		1.00	1	09/30/2020 21:15	WG1551743
1,4-Dichlorobenzene	ND		1.00	1	09/30/2020 21:15	WG1551743
Dichlorodifluoromethane	ND		5.00	1	09/30/2020 21:15	WG1551743
1,1-Dichloroethane	ND		1.00	1	09/30/2020 21:15	WG1551743
1,2-Dichloroethane	ND		1.00	1	09/30/2020 21:15	WG1551743
1,1-Dichloroethene	ND		1.00	1	09/30/2020 21:15	WG1551743
cis-1,2-Dichloroethene	ND		1.00	1	09/30/2020 21:15	WG1551743
trans-1,2-Dichloroethene	ND		1.00	1	09/30/2020 21:15	WG1551743
1,2-Dichloropropane	ND		1.00	1	09/30/2020 21:15	WG1551743
1,1-Dichloropropene	ND		1.00	1	09/30/2020 21:15	WG1551743
1,3-Dichloropropane	ND		1.00	1	09/30/2020 21:15	WG1551743
cis-1,3-Dichloropropene	ND		1.00	1	09/30/2020 21:15	WG1551743
trans-1,3-Dichloropropene	ND		1.00	1	09/30/2020 21:15	WG1551743
2,2-Dichloropropane	ND		1.00	1	09/30/2020 21:15	WG1551743
Di-isopropyl ether	ND		1.00	1	09/30/2020 21:15	WG1551743
Ethylbenzene	ND		1.00	1	09/30/2020 21:15	WG1551743

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Hexachloro-1,3-butadiene	ND		1.00	1	09/30/2020 21:15	WG1551743
Isopropylbenzene	ND		1.00	1	09/30/2020 21:15	WG1551743
p-Isopropyltoluene	ND		1.00	1	09/30/2020 21:15	WG1551743
2-Butanone (MEK)	ND		10.0	1	09/30/2020 21:15	WG1551743
Methylene Chloride	ND		5.00	1	09/30/2020 21:15	WG1551743
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	09/30/2020 21:15	WG1551743
Methyl tert-butyl ether	ND		1.00	1	09/30/2020 21:15	WG1551743
Naphthalene	ND		5.00	1	09/30/2020 21:15	WG1551743
n-Propylbenzene	ND		1.00	1	09/30/2020 21:15	WG1551743
Styrene	ND		1.00	1	09/30/2020 21:15	WG1551743
1,1,1,2-Tetrachloroethane	ND		1.00	1	09/30/2020 21:15	WG1551743
1,1,2,2-Tetrachloroethane	ND		1.00	1	09/30/2020 21:15	WG1551743
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	09/30/2020 21:15	WG1551743
Tetrachloroethene	ND		1.00	1	09/30/2020 21:15	WG1551743
Toluene	ND		1.00	1	09/30/2020 21:15	WG1551743
1,2,3-Trichlorobenzene	ND		1.00	1	09/30/2020 21:15	WG1551743
1,2,4-Trichlorobenzene	ND		1.00	1	09/30/2020 21:15	WG1551743
1,1,1-Trichloroethane	ND		1.00	1	09/30/2020 21:15	WG1551743
1,1,2-Trichloroethane	ND		1.00	1	09/30/2020 21:15	WG1551743
Trichloroethene	ND		1.00	1	09/30/2020 21:15	WG1551743
Trichlorofluoromethane	ND		5.00	1	09/30/2020 21:15	WG1551743
1,2,3-Trichloropropane	ND		2.50	1	09/30/2020 21:15	WG1551743
1,2,4-Trimethylbenzene	ND		1.00	1	09/30/2020 21:15	WG1551743
1,2,3-Trimethylbenzene	ND		1.00	1	09/30/2020 21:15	WG1551743
1,3,5-Trimethylbenzene	ND		1.00	1	09/30/2020 21:15	WG1551743
Vinyl chloride	ND		1.00	1	09/30/2020 21:15	WG1551743
Xylenes, Total	ND		3.00	1	09/30/2020 21:15	WG1551743
(S) Toluene-d8	*110*		*80.0-120*		*09/30/2020 21:15*	WG1551743
(S) 4-Bromofluorobenzene	*107*		*77.0-126*		*09/30/2020 21:15*	WG1551743
(S) 1,2-Dichloroethane-d4	*96.1*		*70.0-130*		*09/30/2020 21:15*	WG1551743

Semi-Volatile Organic Compounds (GC) by Method KS MRH/HRH

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
MRH (C9-C18)	221		103	1.03	10/03/2020 12:36	WG1547615
HRH (C19-C35)	695		103	1.03	10/03/2020 12:36	WG1547615
(S) 1-Chloro-octadecane	*94.9*		*40.0-140*		*10/03/2020 12:36*	WG1547615

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acenaphthene	ND		1.00	1	09/30/2020 09:40	WG1548770
Acenaphthylene	ND		1.00	1	09/30/2020 09:40	WG1548770
Anthracene	ND		1.00	1	09/30/2020 09:40	WG1548770
Benzidine	ND		10.0	1	09/30/2020 09:40	WG1548770
Benzo(a)anthracene	ND		1.00	1	09/30/2020 09:40	WG1548770
Benzo(b)fluoranthene	ND		1.00	1	09/30/2020 09:40	WG1548770
Benzo(k)fluoranthene	ND		1.00	1	09/30/2020 09:40	WG1548770
Benzo(g,h,i)perylene	ND		1.00	1	09/30/2020 09:40	WG1548770
Benzo(a)pyrene	ND		1.00	1	09/30/2020 09:40	WG1548770
Bis(2-chlorethoxy)methane	ND		10.0	1	09/30/2020 09:40	WG1548770
Bis(2-chloroethyl)ether	ND		10.0	1	09/30/2020 09:40	WG1548770
2,2-Oxybis(1-Chloropropane)	ND		10.0	1	09/30/2020 09:40	WG1548770
4-Bromophenyl-phenylether	ND		10.0	1	09/30/2020 09:40	WG1548770
2-Chloronaphthalene	ND		1.00	1	09/30/2020 09:40	WG1548770

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
4-Chlorophenyl-phenylether	ND		10.0	1	09/30/2020 09:40	WG1548770
Chrysene	ND		1.00	1	09/30/2020 09:40	WG1548770
Dibenz(a,h)anthracene	ND		1.00	1	09/30/2020 09:40	WG1548770
1,2-Dichlorobenzene	ND		10.0	1	09/30/2020 09:40	WG1548770
1,3-Dichlorobenzene	ND		10.0	1	09/30/2020 09:40	WG1548770
1,4-Dichlorobenzene	ND		10.0	1	09/30/2020 09:40	WG1548770
3,3-Dichlorobenzidine	ND		10.0	1	09/30/2020 09:40	WG1548770
2,4-Dinitrotoluene	ND		10.0	1	09/30/2020 09:40	WG1548770
2,6-Dinitrotoluene	ND		10.0	1	09/30/2020 09:40	WG1548770
Fluoranthene	ND		1.00	1	09/30/2020 09:40	WG1548770
Fluorene	ND		1.00	1	09/30/2020 09:40	WG1548770
Hexachlorobenzene	ND		1.00	1	09/30/2020 09:40	WG1548770
Hexachloro-1,3-butadiene	ND		10.0	1	09/30/2020 09:40	WG1548770
Hexachlorocyclopentadiene	ND		10.0	1	09/30/2020 09:40	WG1548770
Hexachloroethane	ND		10.0	1	09/30/2020 09:40	WG1548770
Indeno(1,2,3-cd)pyrene	ND		1.00	1	09/30/2020 09:40	WG1548770
Isophorone	ND		10.0	1	09/30/2020 09:40	WG1548770
Naphthalene	ND		1.00	1	09/30/2020 09:40	WG1548770
Nitrobenzene	ND		10.0	1	09/30/2020 09:40	WG1548770
n-Nitrosodimethylamine	ND		10.0	1	09/30/2020 09:40	WG1548770
n-Nitrosodiphenylamine	ND		10.0	1	09/30/2020 09:40	WG1548770
n-Nitrosodi-n-propylamine	ND		10.0	1	09/30/2020 09:40	WG1548770
Phenanthrene	ND		1.00	1	09/30/2020 09:40	WG1548770
Benzylbutyl phthalate	ND		3.00	1	09/30/2020 09:40	WG1548770
Bis(2-ethylhexyl)phthalate	ND		3.00	1	09/30/2020 09:40	WG1548770
Di-n-butyl phthalate	ND		3.00	1	09/30/2020 09:40	WG1548770
Diethyl phthalate	ND		3.00	1	09/30/2020 09:40	WG1548770
Dimethyl phthalate	ND		3.00	1	09/30/2020 09:40	WG1548770
Di-n-octyl phthalate	ND		3.00	1	09/30/2020 09:40	WG1548770
Pyrene	ND		1.00	1	09/30/2020 09:40	WG1548770
1,2,4-Trichlorobenzene	ND		10.0	1	09/30/2020 09:40	WG1548770
4-Chloro-3-methylphenol	ND		10.0	1	09/30/2020 09:40	WG1548770
2-Chlorophenol	ND		10.0	1	09/30/2020 09:40	WG1548770
2,4-Dichlorophenol	ND		10.0	1	09/30/2020 09:40	WG1548770
2,4-Dimethylphenol	ND		10.0	1	09/30/2020 09:40	WG1548770
4,6-Dinitro-2-methylphenol	ND		10.0	1	09/30/2020 09:40	WG1548770
2,4-Dinitrophenol	ND		10.0	1	09/30/2020 09:40	WG1548770
2-Nitrophenol	ND		10.0	1	09/30/2020 09:40	WG1548770
4-Nitrophenol	ND		10.0	1	09/30/2020 09:40	WG1548770
Pentachlorophenol	ND		10.0	1	09/30/2020 09:40	WG1548770
Phenol	ND		10.0	1	09/30/2020 09:40	WG1548770
2,4,6-Trichlorophenol	ND		10.0	1	09/30/2020 09:40	WG1548770
(S) 2-Fluorophenol	*42.0*		*10.0-120*		*09/30/2020 09:40*	WG1548770
(S) Phenol-d5	*26.7*		*10.0-120*		*09/30/2020 09:40*	WG1548770
(S) Nitrobenzene-d5	*72.1*		*10.0-127*		*09/30/2020 09:40*	WG1548770
(S) 2-Fluorobiphenyl	*82.1*		*10.0-130*		*09/30/2020 09:40*	WG1548770
(S) 2,4,6-Tribromophenol	*83.5*		*10.0-155*		*09/30/2020 09:40*	WG1548770
(S) p-Terphenyl-d14	*85.7*		*10.0-128*		*09/30/2020 09:40*	WG1548770

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
LRH (C5-C8)	ND		100	1	09/30/2020 21:34	WG1551743
Acetone	ND		50.0	1	09/30/2020 21:34	WG1551743
Acrylonitrile	ND	J0	10.0	1	09/30/2020 21:34	WG1551743
Benzene	ND		1.00	1	09/30/2020 21:34	WG1551743
Bromobenzene	ND		1.00	1	09/30/2020 21:34	WG1551743
Bromodichloromethane	ND		1.00	1	09/30/2020 21:34	WG1551743
Bromoform	ND		1.00	1	09/30/2020 21:34	WG1551743
Bromomethane	ND		5.00	1	09/30/2020 21:34	WG1551743
n-Butylbenzene	ND		1.00	1	09/30/2020 21:34	WG1551743
sec-Butylbenzene	ND		1.00	1	09/30/2020 21:34	WG1551743
tert-Butylbenzene	ND		1.00	1	09/30/2020 21:34	WG1551743
Carbon tetrachloride	ND		1.00	1	09/30/2020 21:34	WG1551743
Chlorobenzene	ND		1.00	1	09/30/2020 21:34	WG1551743
Chlorodibromomethane	ND		1.00	1	09/30/2020 21:34	WG1551743
Chloroethane	ND		5.00	1	09/30/2020 21:34	WG1551743
Chloroform	ND		5.00	1	09/30/2020 21:34	WG1551743
Chloromethane	ND		2.50	1	09/30/2020 21:34	WG1551743
2-Chlorotoluene	ND		1.00	1	09/30/2020 21:34	WG1551743
4-Chlorotoluene	ND		1.00	1	09/30/2020 21:34	WG1551743
1,2-Dibromo-3-Chloropropane	ND		5.00	1	09/30/2020 21:34	WG1551743
1,2-Dibromoethane	ND		1.00	1	09/30/2020 21:34	WG1551743
Dibromomethane	ND		1.00	1	09/30/2020 21:34	WG1551743
1,2-Dichlorobenzene	ND		1.00	1	09/30/2020 21:34	WG1551743
1,3-Dichlorobenzene	ND		1.00	1	09/30/2020 21:34	WG1551743
1,4-Dichlorobenzene	ND		1.00	1	09/30/2020 21:34	WG1551743
Dichlorodifluoromethane	ND		5.00	1	09/30/2020 21:34	WG1551743
1,1-Dichloroethane	ND		1.00	1	09/30/2020 21:34	WG1551743
1,2-Dichloroethane	ND		1.00	1	09/30/2020 21:34	WG1551743
1,1-Dichloroethene	ND		1.00	1	09/30/2020 21:34	WG1551743
cis-1,2-Dichloroethene	ND		1.00	1	09/30/2020 21:34	WG1551743
trans-1,2-Dichloroethene	ND		1.00	1	09/30/2020 21:34	WG1551743
1,2-Dichloropropane	ND		1.00	1	09/30/2020 21:34	WG1551743
1,1-Dichloropropene	ND		1.00	1	09/30/2020 21:34	WG1551743
1,3-Dichloropropane	ND		1.00	1	09/30/2020 21:34	WG1551743
cis-1,3-Dichloropropene	ND		1.00	1	09/30/2020 21:34	WG1551743
trans-1,3-Dichloropropene	ND		1.00	1	09/30/2020 21:34	WG1551743
2,2-Dichloropropane	ND		1.00	1	09/30/2020 21:34	WG1551743
Di-isopropyl ether	ND		1.00	1	09/30/2020 21:34	WG1551743
Ethylbenzene	ND		1.00	1	09/30/2020 21:34	WG1551743
Hexachloro-1,3-butadiene	ND		1.00	1	09/30/2020 21:34	WG1551743
Isopropylbenzene	ND		1.00	1	09/30/2020 21:34	WG1551743
p-Isopropyltoluene	ND		1.00	1	09/30/2020 21:34	WG1551743
2-Butanone (MEK)	ND		10.0	1	09/30/2020 21:34	WG1551743
Methylene Chloride	ND		5.00	1	09/30/2020 21:34	WG1551743
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	09/30/2020 21:34	WG1551743
Methyl tert-butyl ether	ND		1.00	1	09/30/2020 21:34	WG1551743
Naphthalene	ND		5.00	1	09/30/2020 21:34	WG1551743
n-Propylbenzene	ND		1.00	1	09/30/2020 21:34	WG1551743
Styrene	ND		1.00	1	09/30/2020 21:34	WG1551743
1,1,1,2-Tetrachloroethane	ND		1.00	1	09/30/2020 21:34	WG1551743
1,1,2,2-Tetrachloroethane	ND		1.00	1	09/30/2020 21:34	WG1551743
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	09/30/2020 21:34	WG1551743
Tetrachloroethene	ND		1.00	1	09/30/2020 21:34	WG1551743
Toluene	ND		1.00	1	09/30/2020 21:34	WG1551743
1,2,3-Trichlorobenzene	ND		1.00	1	09/30/2020 21:34	WG1551743
1,2,4-Trichlorobenzene	ND		1.00	1	09/30/2020 21:34	WG1551743

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,1-Trichloroethane	ND		1.00	1	09/30/2020 21:34	WG1551743
1,1,2-Trichloroethane	ND		1.00	1	09/30/2020 21:34	WG1551743
Trichloroethene	ND		1.00	1	09/30/2020 21:34	WG1551743
Trichlorofluoromethane	ND		5.00	1	09/30/2020 21:34	WG1551743
1,2,3-Trichloropropane	ND		2.50	1	09/30/2020 21:34	WG1551743
1,2,4-Trimethylbenzene	ND		1.00	1	09/30/2020 21:34	WG1551743
1,2,3-Trimethylbenzene	ND		1.00	1	09/30/2020 21:34	WG1551743
1,3,5-Trimethylbenzene	ND		1.00	1	09/30/2020 21:34	WG1551743
Vinyl chloride	ND		1.00	1	09/30/2020 21:34	WG1551743
Xylenes, Total	ND		3.00	1	09/30/2020 21:34	WG1551743
(S) Toluene-d8	*110*		*80.0-120*		*09/30/2020 21:34*	WG1551743
(S) 4-Bromofluorobenzene	*102*		*77.0-126*		*09/30/2020 21:34*	WG1551743
(S) 1,2-Dichloroethane-d4	*94.0*		*70.0-130*		*09/30/2020 21:34*	WG1551743

Semi-Volatile Organic Compounds (GC) by Method KS MRH/HRH

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
MRH (C9-C18)	ND		105	1.05	10/03/2020 12:59	WG1547615
HRH (C19-C35)	ND		105	1.05	10/03/2020 12:59	WG1547615
(S) 1-Chloro-octadecane	*79.5*		*40.0-140*		*10/03/2020 12:59*	WG1547615

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acenaphthene	ND		1.00	1	09/30/2020 10:01	WG1548770
Acenaphthylene	ND		1.00	1	09/30/2020 10:01	WG1548770
Anthracene	ND		1.00	1	09/30/2020 10:01	WG1548770
Benzidine	ND		10.0	1	09/30/2020 10:01	WG1548770
Benzo(a)anthracene	ND		1.00	1	09/30/2020 10:01	WG1548770
Benzo(b)fluoranthene	ND		1.00	1	09/30/2020 10:01	WG1548770
Benzo(k)fluoranthene	ND		1.00	1	09/30/2020 10:01	WG1548770
Benzo(g,h,i)perylene	ND		1.00	1	09/30/2020 10:01	WG1548770
Benzo(a)pyrene	ND		1.00	1	09/30/2020 10:01	WG1548770
Bis(2-chlorethoxy)methane	ND		10.0	1	09/30/2020 10:01	WG1548770
Bis(2-chloroethyl)ether	ND		10.0	1	09/30/2020 10:01	WG1548770
2,2-Oxybis(1-Chloropropane)	ND		10.0	1	09/30/2020 10:01	WG1548770
4-Bromophenyl-phenylether	ND		10.0	1	09/30/2020 10:01	WG1548770
2-Chloronaphthalene	ND		1.00	1	09/30/2020 10:01	WG1548770
4-Chlorophenyl-phenylether	ND		10.0	1	09/30/2020 10:01	WG1548770
Chrysene	ND		1.00	1	09/30/2020 10:01	WG1548770
Dibenz(a,h)anthracene	ND		1.00	1	09/30/2020 10:01	WG1548770
1,2-Dichlorobenzene	ND		10.0	1	09/30/2020 10:01	WG1548770
1,3-Dichlorobenzene	ND		10.0	1	09/30/2020 10:01	WG1548770
1,4-Dichlorobenzene	ND		10.0	1	09/30/2020 10:01	WG1548770
3,3-Dichlorobenzidine	ND		10.0	1	09/30/2020 10:01	WG1548770
2,4-Dinitrotoluene	ND		10.0	1	09/30/2020 10:01	WG1548770
2,6-Dinitrotoluene	ND		10.0	1	09/30/2020 10:01	WG1548770
Fluoranthene	ND		1.00	1	09/30/2020 10:01	WG1548770
Fluorene	ND		1.00	1	09/30/2020 10:01	WG1548770
Hexachlorobenzene	ND		1.00	1	09/30/2020 10:01	WG1548770
Hexachloro-1,3-butadiene	ND		10.0	1	09/30/2020 10:01	WG1548770
Hexachlorocyclopentadiene	ND		10.0	1	09/30/2020 10:01	WG1548770
Hexachloroethane	ND		10.0	1	09/30/2020 10:01	WG1548770
Indeno(1,2,3-cd)pyrene	ND		1.00	1	09/30/2020 10:01	WG1548770
Isophorone	ND		10.0	1	09/30/2020 10:01	WG1548770

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Naphthalene	ND		1.00	1	09/30/2020 10:01	WG1548770
Nitrobenzene	ND		10.0	1	09/30/2020 10:01	WG1548770
n-Nitrosodimethylamine	ND		10.0	1	09/30/2020 10:01	WG1548770
n-Nitrosodiphenylamine	ND		10.0	1	09/30/2020 10:01	WG1548770
n-Nitrosodi-n-propylamine	ND		10.0	1	09/30/2020 10:01	WG1548770
Phenanthrene	ND		1.00	1	09/30/2020 10:01	WG1548770
Benzylbutyl phthalate	ND		3.00	1	09/30/2020 10:01	WG1548770
Bis(2-ethylhexyl)phthalate	ND		3.00	1	09/30/2020 10:01	WG1548770
Di-n-butyl phthalate	ND		3.00	1	09/30/2020 10:01	WG1548770
Diethyl phthalate	ND		3.00	1	09/30/2020 10:01	WG1548770
Dimethyl phthalate	ND		3.00	1	09/30/2020 10:01	WG1548770
Di-n-octyl phthalate	ND		3.00	1	09/30/2020 10:01	WG1548770
Pyrene	ND		1.00	1	09/30/2020 10:01	WG1548770
1,2,4-Trichlorobenzene	ND		10.0	1	09/30/2020 10:01	WG1548770
4-Chloro-3-methylphenol	ND		10.0	1	09/30/2020 10:01	WG1548770
2-Chlorophenol	ND		10.0	1	09/30/2020 10:01	WG1548770
2,4-Dichlorophenol	ND		10.0	1	09/30/2020 10:01	WG1548770
2,4-Dimethylphenol	ND		10.0	1	09/30/2020 10:01	WG1548770
4,6-Dinitro-2-methylphenol	ND		10.0	1	09/30/2020 10:01	WG1548770
2,4-Dinitrophenol	ND		10.0	1	09/30/2020 10:01	WG1548770
2-Nitrophenol	ND		10.0	1	09/30/2020 10:01	WG1548770
4-Nitrophenol	ND		10.0	1	09/30/2020 10:01	WG1548770
Pentachlorophenol	ND		10.0	1	09/30/2020 10:01	WG1548770
Phenol	ND		10.0	1	09/30/2020 10:01	WG1548770
2,4,6-Trichlorophenol	ND		10.0	1	09/30/2020 10:01	WG1548770
(S) 2-Fluorophenol	*41.1*		*10.0-120*		*09/30/2020 10:01*	WG1548770
(S) Phenol-d5	*27.5*		*10.0-120*		*09/30/2020 10:01*	WG1548770
(S) Nitrobenzene-d5	*72.3*		*10.0-127*		*09/30/2020 10:01*	WG1548770
(S) 2-Fluorobiphenyl	*82.9*		*10.0-130*		*09/30/2020 10:01*	WG1548770
(S) 2,4,6-Tribromophenol	*76.0*		*10.0-155*		*09/30/2020 10:01*	WG1548770
(S) p-Terphenyl-d14	*84.7*		*10.0-128*		*09/30/2020 10:01*	WG1548770

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
LRH (C5-C8)	ND		100	1	09/30/2020 21:54	WG1551743
Acetone	ND		50.0	1	09/30/2020 21:54	WG1551743
Acrylonitrile	ND	J0	10.0	1	09/30/2020 21:54	WG1551743
Benzene	5.47		1.00	1	09/30/2020 21:54	WG1551743
Bromobenzene	ND		1.00	1	09/30/2020 21:54	WG1551743
Bromodichloromethane	ND		1.00	1	09/30/2020 21:54	WG1551743
Bromoform	ND		1.00	1	09/30/2020 21:54	WG1551743
Bromomethane	ND		5.00	1	09/30/2020 21:54	WG1551743
n-Butylbenzene	ND		1.00	1	09/30/2020 21:54	WG1551743
sec-Butylbenzene	ND		1.00	1	09/30/2020 21:54	WG1551743
tert-Butylbenzene	ND		1.00	1	09/30/2020 21:54	WG1551743
Carbon tetrachloride	ND		1.00	1	09/30/2020 21:54	WG1551743
Chlorobenzene	3.48		1.00	1	09/30/2020 21:54	WG1551743
Chlorodibromomethane	ND		1.00	1	09/30/2020 21:54	WG1551743
Chloroethane	ND		5.00	1	09/30/2020 21:54	WG1551743
Chloroform	ND		5.00	1	09/30/2020 21:54	WG1551743
Chloromethane	ND		2.50	1	09/30/2020 21:54	WG1551743
2-Chlorotoluene	ND		1.00	1	09/30/2020 21:54	WG1551743
4-Chlorotoluene	ND		1.00	1	09/30/2020 21:54	WG1551743
1,2-Dibromo-3-Chloropropane	ND		5.00	1	09/30/2020 21:54	WG1551743
1,2-Dibromoethane	ND		1.00	1	09/30/2020 21:54	WG1551743
Dibromomethane	ND		1.00	1	09/30/2020 21:54	WG1551743
1,2-Dichlorobenzene	1.80		1.00	1	09/30/2020 21:54	WG1551743
1,3-Dichlorobenzene	ND		1.00	1	09/30/2020 21:54	WG1551743
1,4-Dichlorobenzene	2.03		1.00	1	09/30/2020 21:54	WG1551743
Dichlorodifluoromethane	30.1		5.00	1	09/30/2020 21:54	WG1551743
1,1-Dichloroethane	ND		1.00	1	09/30/2020 21:54	WG1551743
1,2-Dichloroethane	ND		1.00	1	09/30/2020 21:54	WG1551743
1,1-Dichloroethene	ND		1.00	1	09/30/2020 21:54	WG1551743
cis-1,2-Dichloroethene	ND		1.00	1	09/30/2020 21:54	WG1551743
trans-1,2-Dichloroethene	ND		1.00	1	09/30/2020 21:54	WG1551743
1,2-Dichloropropane	ND		1.00	1	09/30/2020 21:54	WG1551743
1,1-Dichloropropene	ND		1.00	1	09/30/2020 21:54	WG1551743
1,3-Dichloropropane	ND		1.00	1	09/30/2020 21:54	WG1551743
cis-1,3-Dichloropropene	ND		1.00	1	09/30/2020 21:54	WG1551743
trans-1,3-Dichloropropene	ND		1.00	1	09/30/2020 21:54	WG1551743
2,2-Dichloropropane	ND		1.00	1	09/30/2020 21:54	WG1551743
Di-isopropyl ether	ND		1.00	1	09/30/2020 21:54	WG1551743
Ethylbenzene	ND		1.00	1	09/30/2020 21:54	WG1551743
Hexachloro-1,3-butadiene	ND		1.00	1	09/30/2020 21:54	WG1551743
Isopropylbenzene	1.53		1.00	1	09/30/2020 21:54	WG1551743
p-Isopropyltoluene	6.48		1.00	1	09/30/2020 21:54	WG1551743
2-Butanone (MEK)	ND		10.0	1	09/30/2020 21:54	WG1551743
Methylene Chloride	ND		5.00	1	09/30/2020 21:54	WG1551743
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	09/30/2020 21:54	WG1551743
Methyl tert-butyl ether	ND		1.00	1	09/30/2020 21:54	WG1551743
Naphthalene	ND		5.00	1	09/30/2020 21:54	WG1551743
n-Propylbenzene	ND		1.00	1	09/30/2020 21:54	WG1551743
Styrene	ND		1.00	1	09/30/2020 21:54	WG1551743
1,1,1,2-Tetrachloroethane	ND		1.00	1	09/30/2020 21:54	WG1551743
1,1,2,2-Tetrachloroethane	ND		1.00	1	09/30/2020 21:54	WG1551743
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	09/30/2020 21:54	WG1551743
Tetrachloroethene	ND		1.00	1	09/30/2020 21:54	WG1551743
Toluene	ND		1.00	1	09/30/2020 21:54	WG1551743
1,2,3-Trichlorobenzene	ND		1.00	1	09/30/2020 21:54	WG1551743
1,2,4-Trichlorobenzene	ND		1.00	1	09/30/2020 21:54	WG1551743

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,1-Trichloroethane	ND		1.00	1	09/30/2020 21:54	WG1551743
1,1,2-Trichloroethane	ND		1.00	1	09/30/2020 21:54	WG1551743
Trichloroethene	ND		1.00	1	09/30/2020 21:54	WG1551743
Trichlorofluoromethane	ND		5.00	1	09/30/2020 21:54	WG1551743
1,2,3-Trichloropropane	ND		2.50	1	09/30/2020 21:54	WG1551743
1,2,4-Trimethylbenzene	ND		1.00	1	09/30/2020 21:54	WG1551743
1,2,3-Trimethylbenzene	ND		1.00	1	09/30/2020 21:54	WG1551743
1,3,5-Trimethylbenzene	ND		1.00	1	09/30/2020 21:54	WG1551743
Vinyl chloride	ND		1.00	1	09/30/2020 21:54	WG1551743
Xylenes, Total	ND		3.00	1	09/30/2020 21:54	WG1551743
(S) Toluene-d8	*111*		*80.0-120*		*09/30/2020 21:54*	WG1551743
(S) 4-Bromofluorobenzene	*108*		*77.0-126*		*09/30/2020 21:54*	WG1551743
(S) 1,2-Dichloroethane-d4	*90.8*		*70.0-130*		*09/30/2020 21:54*	WG1551743

Semi-Volatile Organic Compounds (GC) by Method KS MRH/HRH

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
MRH (C9-C18)	1970		100	1	10/03/2020 13:22	WG1547615
HRH (C19-C35)	2390		100	1	10/03/2020 13:22	WG1547615
(S) 1-Chloro-octadecane	*94.6*		*40.0-140*		*10/03/2020 13:22*	WG1547615

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acenaphthene	ND		1.00	1	09/30/2020 11:04	WG1548770
Acenaphthylene	ND		1.00	1	09/30/2020 11:04	WG1548770
Anthracene	ND		1.00	1	09/30/2020 11:04	WG1548770
Benzidine	ND		10.0	1	09/30/2020 11:04	WG1548770
Benzo(a)anthracene	ND		1.00	1	09/30/2020 11:04	WG1548770
Benzo(b)fluoranthene	ND		1.00	1	09/30/2020 11:04	WG1548770
Benzo(k)fluoranthene	ND		1.00	1	09/30/2020 11:04	WG1548770
Benzo(g,h,i)perylene	ND		1.00	1	09/30/2020 11:04	WG1548770
Benzo(a)pyrene	ND		1.00	1	09/30/2020 11:04	WG1548770
Bis(2-chlorethoxy)methane	ND		10.0	1	09/30/2020 11:04	WG1548770
Bis(2-chloroethyl)ether	ND		10.0	1	09/30/2020 11:04	WG1548770
2,2-Oxybis(1-Chloropropane)	ND		10.0	1	09/30/2020 11:04	WG1548770
4-Bromophenyl-phenylether	ND		10.0	1	09/30/2020 11:04	WG1548770
2-Chloronaphthalene	ND		1.00	1	09/30/2020 11:04	WG1548770
4-Chlorophenyl-phenylether	ND		10.0	1	09/30/2020 11:04	WG1548770
Chrysene	ND		1.00	1	09/30/2020 11:04	WG1548770
Dibenz(a,h)anthracene	ND		1.00	1	09/30/2020 11:04	WG1548770
1,2-Dichlorobenzene	ND		10.0	1	09/30/2020 11:04	WG1548770
1,3-Dichlorobenzene	ND		10.0	1	09/30/2020 11:04	WG1548770
1,4-Dichlorobenzene	ND		10.0	1	09/30/2020 11:04	WG1548770
3,3-Dichlorobenzidine	ND		10.0	1	09/30/2020 11:04	WG1548770
2,4-Dinitrotoluene	ND		10.0	1	09/30/2020 11:04	WG1548770
2,6-Dinitrotoluene	ND		10.0	1	09/30/2020 11:04	WG1548770
Fluoranthene	ND		1.00	1	09/30/2020 11:04	WG1548770
Fluorene	ND		1.00	1	09/30/2020 11:04	WG1548770
Hexachlorobenzene	ND		1.00	1	09/30/2020 11:04	WG1548770
Hexachloro-1,3-butadiene	ND		10.0	1	09/30/2020 11:04	WG1548770
Hexachlorocyclopentadiene	ND		10.0	1	09/30/2020 11:04	WG1548770
Hexachloroethane	ND		10.0	1	09/30/2020 11:04	WG1548770
Indeno(1,2,3-cd)pyrene	ND		1.00	1	09/30/2020 11:04	WG1548770
Isophorone	ND		10.0	1	09/30/2020 11:04	WG1548770

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Naphthalene	ND		1.00	1	09/30/2020 11:04	WG1548770
Nitrobenzene	ND		10.0	1	09/30/2020 11:04	WG1548770
n-Nitrosodimethylamine	ND		10.0	1	09/30/2020 11:04	WG1548770
n-Nitrosodiphenylamine	ND		10.0	1	09/30/2020 11:04	WG1548770
n-Nitrosodi-n-propylamine	ND		10.0	1	09/30/2020 11:04	WG1548770
Phenanthrene	ND		1.00	1	09/30/2020 11:04	WG1548770
Benzylbutyl phthalate	ND		3.00	1	09/30/2020 11:04	WG1548770
Bis(2-ethylhexyl)phthalate	ND		3.00	1	09/30/2020 11:04	WG1548770
Di-n-butyl phthalate	ND		3.00	1	09/30/2020 11:04	WG1548770
Diethyl phthalate	ND		3.00	1	09/30/2020 11:04	WG1548770
Dimethyl phthalate	ND		3.00	1	09/30/2020 11:04	WG1548770
Di-n-octyl phthalate	ND		3.00	1	09/30/2020 11:04	WG1548770
Pyrene	ND		1.00	1	09/30/2020 11:04	WG1548770
1,2,4-Trichlorobenzene	ND		10.0	1	09/30/2020 11:04	WG1548770
4-Chloro-3-methylphenol	ND		10.0	1	09/30/2020 11:04	WG1548770
2-Chlorophenol	ND		10.0	1	09/30/2020 11:04	WG1548770
2,4-Dichlorophenol	ND		10.0	1	09/30/2020 11:04	WG1548770
2,4-Dimethylphenol	ND		10.0	1	09/30/2020 11:04	WG1548770
4,6-Dinitro-2-methylphenol	ND		10.0	1	09/30/2020 11:04	WG1548770
2,4-Dinitrophenol	ND		10.0	1	09/30/2020 11:04	WG1548770
2-Nitrophenol	ND		10.0	1	09/30/2020 11:04	WG1548770
4-Nitrophenol	ND		10.0	1	09/30/2020 11:04	WG1548770
Pentachlorophenol	ND		10.0	1	09/30/2020 11:04	WG1548770
Phenol	ND		10.0	1	09/30/2020 11:04	WG1548770
2,4,6-Trichlorophenol	ND		10.0	1	09/30/2020 11:04	WG1548770
(S) 2-Fluorophenol	*42.5*		*10.0-120*		*09/30/2020 11:04*	WG1548770
(S) Phenol-d5	*24.6*		*10.0-120*		*09/30/2020 11:04*	WG1548770
(S) Nitrobenzene-d5	*84.2*		*10.0-127*		*09/30/2020 11:04*	WG1548770
(S) 2-Fluorobiphenyl	*86.5*		*10.0-130*		*09/30/2020 11:04*	WG1548770
(S) 2,4,6-Tribromophenol	*91.8*		*10.0-155*		*09/30/2020 11:04*	WG1548770
(S) p-Terphenyl-d14	*91.9*		*10.0-128*		*09/30/2020 11:04*	WG1548770

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
LRH (C5-C8)	ND		5000	50	09/30/2020 22:52	WG1551743
Acetone	ND		2500	50	09/30/2020 22:52	WG1551743
Acrylonitrile	ND	J0	500	50	09/30/2020 22:52	WG1551743
Benzene	ND		50.0	50	09/30/2020 22:52	WG1551743
Bromobenzene	ND		50.0	50	09/30/2020 22:52	WG1551743
Bromodichloromethane	ND		50.0	50	09/30/2020 22:52	WG1551743
Bromoform	ND		50.0	50	09/30/2020 22:52	WG1551743
Bromomethane	ND		250	50	09/30/2020 22:52	WG1551743
n-Butylbenzene	128		50.0	50	09/30/2020 22:52	WG1551743
sec-Butylbenzene	82.3		50.0	50	09/30/2020 22:52	WG1551743
tert-Butylbenzene	ND		50.0	50	09/30/2020 22:52	WG1551743
Carbon tetrachloride	ND		50.0	50	09/30/2020 22:52	WG1551743
Chlorobenzene	ND		50.0	50	09/30/2020 22:52	WG1551743
Chlorodibromomethane	ND		50.0	50	09/30/2020 22:52	WG1551743
Chloroethane	ND		250	50	09/30/2020 22:52	WG1551743
Chloroform	ND		250	50	09/30/2020 22:52	WG1551743
Chloromethane	ND		125	50	09/30/2020 22:52	WG1551743
2-Chlorotoluene	ND		50.0	50	09/30/2020 22:52	WG1551743
4-Chlorotoluene	ND		50.0	50	09/30/2020 22:52	WG1551743
1,2-Dibromo-3-Chloropropane	ND		250	50	09/30/2020 22:52	WG1551743
1,2-Dibromoethane	ND		50.0	50	09/30/2020 22:52	WG1551743
Dibromomethane	ND		50.0	50	09/30/2020 22:52	WG1551743
1,2-Dichlorobenzene	ND		50.0	50	09/30/2020 22:52	WG1551743
1,3-Dichlorobenzene	ND		50.0	50	09/30/2020 22:52	WG1551743
1,4-Dichlorobenzene	ND		50.0	50	09/30/2020 22:52	WG1551743
Dichlorodifluoromethane	ND		250	50	09/30/2020 22:52	WG1551743
1,1-Dichloroethane	ND		50.0	50	09/30/2020 22:52	WG1551743
1,2-Dichloroethane	ND		50.0	50	09/30/2020 22:52	WG1551743
1,1-Dichloroethene	ND		50.0	50	09/30/2020 22:52	WG1551743
cis-1,2-Dichloroethene	ND		50.0	50	09/30/2020 22:52	WG1551743
trans-1,2-Dichloroethene	ND		50.0	50	09/30/2020 22:52	WG1551743
1,2-Dichloropropane	ND		50.0	50	09/30/2020 22:52	WG1551743
1,1-Dichloropropene	ND		50.0	50	09/30/2020 22:52	WG1551743
1,3-Dichloropropane	ND		50.0	50	09/30/2020 22:52	WG1551743
cis-1,3-Dichloropropene	ND		50.0	50	09/30/2020 22:52	WG1551743
trans-1,3-Dichloropropene	ND		50.0	50	09/30/2020 22:52	WG1551743
2,2-Dichloropropane	ND		50.0	50	09/30/2020 22:52	WG1551743
Di-isopropyl ether	ND		50.0	50	09/30/2020 22:52	WG1551743
Ethylbenzene	ND		50.0	50	09/30/2020 22:52	WG1551743
Hexachloro-1,3-butadiene	ND		50.0	50	09/30/2020 22:52	WG1551743
Isopropylbenzene	ND		50.0	50	09/30/2020 22:52	WG1551743
p-Isopropyltoluene	ND		50.0	50	09/30/2020 22:52	WG1551743
2-Butanone (MEK)	ND		500	50	09/30/2020 22:52	WG1551743
Methylene Chloride	ND		250	50	09/30/2020 22:52	WG1551743
4-Methyl-2-pentanone (MIBK)	ND		500	50	09/30/2020 22:52	WG1551743
Methyl tert-butyl ether	ND		50.0	50	09/30/2020 22:52	WG1551743
Naphthalene	ND		250	50	09/30/2020 22:52	WG1551743
n-Propylbenzene	94.7		50.0	50	09/30/2020 22:52	WG1551743
Styrene	ND		50.0	50	09/30/2020 22:52	WG1551743
1,1,1,2-Tetrachloroethane	ND		50.0	50	09/30/2020 22:52	WG1551743
1,1,2,2-Tetrachloroethane	ND		50.0	50	09/30/2020 22:52	WG1551743
1,1,2-Trichlorotrifluoroethane	ND		50.0	50	09/30/2020 22:52	WG1551743
Tetrachloroethene	ND		50.0	50	09/30/2020 22:52	WG1551743
Toluene	ND		50.0	50	09/30/2020 22:52	WG1551743
1,2,3-Trichlorobenzene	ND		50.0	50	09/30/2020 22:52	WG1551743
1,2,4-Trichlorobenzene	ND		50.0	50	09/30/2020 22:52	WG1551743

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,1-Trichloroethane	ND		50.0	50	09/30/2020 22:52	WG1551743
1,1,2-Trichloroethane	ND		50.0	50	09/30/2020 22:52	WG1551743
Trichloroethene	ND		50.0	50	09/30/2020 22:52	WG1551743
Trichlorofluoromethane	ND		250	50	09/30/2020 22:52	WG1551743
1,2,3-Trichloropropane	ND		125	50	09/30/2020 22:52	WG1551743
1,2,4-Trimethylbenzene	ND		50.0	50	09/30/2020 22:52	WG1551743
1,2,3-Trimethylbenzene	ND		50.0	50	09/30/2020 22:52	WG1551743
1,3,5-Trimethylbenzene	ND		50.0	50	09/30/2020 22:52	WG1551743
Vinyl chloride	ND		50.0	50	09/30/2020 22:52	WG1551743
Xylenes, Total	ND		150	50	09/30/2020 22:52	WG1551743
(S) Toluene-d8	*106*		*80.0-120*		*09/30/2020 22:52*	WG1551743
(S) 4-Bromofluorobenzene	*109*		*77.0-126*		*09/30/2020 22:52*	WG1551743
(S) 1,2-Dichloroethane-d4	*98.9*		*70.0-130*		*09/30/2020 22:52*	WG1551743

Sample Narrative:

L1265359-10 WG1551743: Lowest possible dilution due to sample matrix.

Semi-Volatile Organic Compounds (GC) by Method KS MRH/HRH

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
MRH (C9-C18)	247000		7150	71.5	10/05/2020 02:35	WG1547615
HRH (C19-C35)	94600		7150	71.5	10/05/2020 02:35	WG1547615
(S) 1-Chloro-octadecane	*0.000*	J7	*40.0-140*		*10/05/2020 02:35*	WG1547615

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acenaphthene	66.3		20.0	20	09/30/2020 18:03	WG1548770
Acenaphthylene	ND		20.0	20	09/30/2020 18:03	WG1548770
Anthracene	ND		20.0	20	09/30/2020 18:03	WG1548770
Benzidine	ND		200	20	09/30/2020 18:03	WG1548770
Benzo(a)anthracene	ND		20.0	20	09/30/2020 18:03	WG1548770
Benzo(b)fluoranthene	ND		20.0	20	09/30/2020 18:03	WG1548770
Benzo(k)fluoranthene	ND		20.0	20	09/30/2020 18:03	WG1548770
Benzo(g,h,i)perylene	ND		20.0	20	09/30/2020 18:03	WG1548770
Benzo(a)pyrene	ND		20.0	20	09/30/2020 18:03	WG1548770
Bis(2-chlorethoxy)methane	ND		200	20	09/30/2020 18:03	WG1548770
Bis(2-chloroethyl)ether	ND		200	20	09/30/2020 18:03	WG1548770
2,2-Oxybis(1-Chloropropane)	ND		200	20	09/30/2020 18:03	WG1548770
4-Bromophenyl-phenylether	ND		200	20	09/30/2020 18:03	WG1548770
2-Chloronaphthalene	ND		20.0	20	09/30/2020 18:03	WG1548770
4-Chlorophenyl-phenylether	ND		200	20	09/30/2020 18:03	WG1548770
Chrysene	ND		20.0	20	09/30/2020 18:03	WG1548770
Dibenz(a,h)anthracene	ND		20.0	20	09/30/2020 18:03	WG1548770
1,2-Dichlorobenzene	ND		200	20	09/30/2020 18:03	WG1548770
1,3-Dichlorobenzene	ND		200	20	09/30/2020 18:03	WG1548770
1,4-Dichlorobenzene	ND		200	20	09/30/2020 18:03	WG1548770
3,3-Dichlorobenzidine	ND		200	20	09/30/2020 18:03	WG1548770
2,4-Dinitrotoluene	ND		200	20	09/30/2020 18:03	WG1548770
2,6-Dinitrotoluene	ND		200	20	09/30/2020 18:03	WG1548770
Fluoranthene	ND		20.0	20	09/30/2020 18:03	WG1548770
Fluorene	62.0		20.0	20	09/30/2020 18:03	WG1548770
Hexachlorobenzene	ND		20.0	20	09/30/2020 18:03	WG1548770
Hexachloro-1,3-butadiene	ND		200	20	09/30/2020 18:03	WG1548770
Hexachlorocyclopentadiene	ND		200	20	09/30/2020 18:03	WG1548770

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Hexachloroethane	ND		200	20	09/30/2020 18:03	WG1548770
Indeno(1,2,3-cd)pyrene	ND		20.0	20	09/30/2020 18:03	WG1548770
Isophorone	ND		200	20	09/30/2020 18:03	WG1548770
Naphthalene	ND		20.0	20	09/30/2020 18:03	WG1548770
Nitrobenzene	ND		200	20	09/30/2020 18:03	WG1548770
n-Nitrosodimethylamine	ND		200	20	09/30/2020 18:03	WG1548770
n-Nitrosodiphenylamine	ND		200	20	09/30/2020 18:03	WG1548770
n-Nitrosodi-n-propylamine	ND		200	20	09/30/2020 18:03	WG1548770
Phenanthrene	199		20.0	20	09/30/2020 18:03	WG1548770
Benzylbutyl phthalate	ND		60.0	20	09/30/2020 18:03	WG1548770
Bis(2-ethylhexyl)phthalate	ND		60.0	20	09/30/2020 18:03	WG1548770
Di-n-butyl phthalate	ND		60.0	20	09/30/2020 18:03	WG1548770
Diethyl phthalate	ND		60.0	20	09/30/2020 18:03	WG1548770
Dimethyl phthalate	ND		60.0	20	09/30/2020 18:03	WG1548770
Di-n-octyl phthalate	ND		60.0	20	09/30/2020 18:03	WG1548770
Pyrene	ND		20.0	20	09/30/2020 18:03	WG1548770
1,2,4-Trichlorobenzene	ND		200	20	09/30/2020 18:03	WG1548770
4-Chloro-3-methylphenol	ND		200	20	09/30/2020 18:03	WG1548770
2-Chlorophenol	ND		200	20	09/30/2020 18:03	WG1548770
2,4-Dichlorophenol	ND		200	20	09/30/2020 18:03	WG1548770
2,4-Dimethylphenol	ND		200	20	09/30/2020 18:03	WG1548770
4,6-Dinitro-2-methylphenol	ND		200	20	09/30/2020 18:03	WG1548770
2,4-Dinitrophenol	ND		200	20	09/30/2020 18:03	WG1548770
2-Nitrophenol	ND		200	20	09/30/2020 18:03	WG1548770
4-Nitrophenol	ND		200	20	09/30/2020 18:03	WG1548770
Pentachlorophenol	ND		200	20	09/30/2020 18:03	WG1548770
Phenol	ND		200	20	09/30/2020 18:03	WG1548770
2,4,6-Trichlorophenol	ND		200	20	09/30/2020 18:03	WG1548770
(S) 2-Fluorophenol	*33.4*	J7	*10.0-120*		*09/30/2020 18:03*	WG1548770
(S) Phenol-d5	*0.000*	J7	*10.0-120*		*09/30/2020 18:03*	WG1548770
(S) Nitrobenzene-d5	*0.000*	J7	*10.0-127*		*09/30/2020 18:03*	WG1548770
(S) 2-Fluorobiphenyl	*66.8*	J7	*10.0-130*		*09/30/2020 18:03*	WG1548770
(S) 2,4,6-Tribromophenol	*50.6*	J7	*10.0-155*		*09/30/2020 18:03*	WG1548770
(S) p-Terphenyl-d14	*62.7*	J7	*10.0-128*		*09/30/2020 18:03*	WG1548770

Sample Narrative:

L1265359-10 WG1548770: Dilution due to matrix.

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
LRH (C5-C8)	ND		100	1	09/30/2020 22:13	WG1551743
Acetone	ND		50.0	1	09/30/2020 22:13	WG1551743
Acrylonitrile	ND	J0	10.0	1	09/30/2020 22:13	WG1551743
Benzene	4.44		1.00	1	09/30/2020 22:13	WG1551743
Bromobenzene	ND		1.00	1	09/30/2020 22:13	WG1551743
Bromodichloromethane	ND		1.00	1	09/30/2020 22:13	WG1551743
Bromoform	ND		1.00	1	09/30/2020 22:13	WG1551743
Bromomethane	ND		5.00	1	09/30/2020 22:13	WG1551743
n-Butylbenzene	ND		1.00	1	09/30/2020 22:13	WG1551743
sec-Butylbenzene	ND		1.00	1	09/30/2020 22:13	WG1551743
tert-Butylbenzene	ND		1.00	1	09/30/2020 22:13	WG1551743
Carbon tetrachloride	ND		1.00	1	09/30/2020 22:13	WG1551743
Chlorobenzene	ND		1.00	1	09/30/2020 22:13	WG1551743
Chlorodibromomethane	ND		1.00	1	09/30/2020 22:13	WG1551743
Chloroethane	ND		5.00	1	09/30/2020 22:13	WG1551743
Chloroform	ND		5.00	1	09/30/2020 22:13	WG1551743
Chloromethane	ND		2.50	1	09/30/2020 22:13	WG1551743
2-Chlorotoluene	ND		1.00	1	09/30/2020 22:13	WG1551743
4-Chlorotoluene	ND		1.00	1	09/30/2020 22:13	WG1551743
1,2-Dibromo-3-Chloropropane	ND		5.00	1	09/30/2020 22:13	WG1551743
1,2-Dibromoethane	ND		1.00	1	09/30/2020 22:13	WG1551743
Dibromomethane	ND		1.00	1	09/30/2020 22:13	WG1551743
1,2-Dichlorobenzene	ND		1.00	1	09/30/2020 22:13	WG1551743
1,3-Dichlorobenzene	ND		1.00	1	09/30/2020 22:13	WG1551743
1,4-Dichlorobenzene	ND		1.00	1	09/30/2020 22:13	WG1551743
Dichlorodifluoromethane	ND		5.00	1	09/30/2020 22:13	WG1551743
1,1-Dichloroethane	ND		1.00	1	09/30/2020 22:13	WG1551743
1,2-Dichloroethane	ND		1.00	1	09/30/2020 22:13	WG1551743
1,1-Dichloroethene	ND		1.00	1	09/30/2020 22:13	WG1551743
cis-1,2-Dichloroethene	ND		1.00	1	09/30/2020 22:13	WG1551743
trans-1,2-Dichloroethene	ND		1.00	1	09/30/2020 22:13	WG1551743
1,2-Dichloropropane	ND		1.00	1	09/30/2020 22:13	WG1551743
1,1-Dichloropropene	ND		1.00	1	09/30/2020 22:13	WG1551743
1,3-Dichloropropane	ND		1.00	1	09/30/2020 22:13	WG1551743
cis-1,3-Dichloropropene	ND		1.00	1	09/30/2020 22:13	WG1551743
trans-1,3-Dichloropropene	ND		1.00	1	09/30/2020 22:13	WG1551743
2,2-Dichloropropane	ND		1.00	1	09/30/2020 22:13	WG1551743
Di-isopropyl ether	ND		1.00	1	09/30/2020 22:13	WG1551743
Ethylbenzene	ND		1.00	1	09/30/2020 22:13	WG1551743
Hexachloro-1,3-butadiene	ND		1.00	1	09/30/2020 22:13	WG1551743
Isopropylbenzene	2.58		1.00	1	09/30/2020 22:13	WG1551743
p-Isopropyltoluene	ND		1.00	1	09/30/2020 22:13	WG1551743
2-Butanone (MEK)	ND		10.0	1	09/30/2020 22:13	WG1551743
Methylene Chloride	ND		5.00	1	09/30/2020 22:13	WG1551743
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	09/30/2020 22:13	WG1551743
Methyl tert-butyl ether	ND		1.00	1	09/30/2020 22:13	WG1551743
Naphthalene	ND		5.00	1	09/30/2020 22:13	WG1551743
n-Propylbenzene	2.40		1.00	1	09/30/2020 22:13	WG1551743
Styrene	ND		1.00	1	09/30/2020 22:13	WG1551743
1,1,1,2-Tetrachloroethane	ND		1.00	1	09/30/2020 22:13	WG1551743
1,1,2,2-Tetrachloroethane	ND		1.00	1	09/30/2020 22:13	WG1551743
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	09/30/2020 22:13	WG1551743
Tetrachloroethene	ND		1.00	1	09/30/2020 22:13	WG1551743
Toluene	ND		1.00	1	09/30/2020 22:13	WG1551743
1,2,3-Trichlorobenzene	ND		1.00	1	09/30/2020 22:13	WG1551743
1,2,4-Trichlorobenzene	ND		1.00	1	09/30/2020 22:13	WG1551743

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,1-Trichloroethane	ND		1.00	1	09/30/2020 22:13	WG1551743
1,1,2-Trichloroethane	ND		1.00	1	09/30/2020 22:13	WG1551743
Trichloroethene	ND		1.00	1	09/30/2020 22:13	WG1551743
Trichlorofluoromethane	ND		5.00	1	09/30/2020 22:13	WG1551743
1,2,3-Trichloropropane	ND		2.50	1	09/30/2020 22:13	WG1551743
1,2,4-Trimethylbenzene	ND		1.00	1	09/30/2020 22:13	WG1551743
1,2,3-Trimethylbenzene	ND		1.00	1	09/30/2020 22:13	WG1551743
1,3,5-Trimethylbenzene	ND		1.00	1	09/30/2020 22:13	WG1551743
Vinyl chloride	ND		1.00	1	09/30/2020 22:13	WG1551743
Xylenes, Total	ND		3.00	1	09/30/2020 22:13	WG1551743
(S) Toluene-d8	*108*		*80.0-120*		*09/30/2020 22:13*	WG1551743
(S) 4-Bromofluorobenzene	*103*		*77.0-126*		*09/30/2020 22:13*	WG1551743
(S) 1,2-Dichloroethane-d4	*91.2*		*70.0-130*		*09/30/2020 22:13*	WG1551743

Semi-Volatile Organic Compounds (GC) by Method KS MRH/HRH

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
MRH (C9-C18)	286		100	1	10/03/2020 13:44	WG1547615
HRH (C19-C35)	817		100	1	10/03/2020 13:44	WG1547615
(S) 1-Chloro-octadecane	*76.3*		*40.0-140*		*10/03/2020 13:44*	WG1547615

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acenaphthene	ND		1.00	1	09/30/2020 11:25	WG1548770
Acenaphthylene	ND		1.00	1	09/30/2020 11:25	WG1548770
Anthracene	ND		1.00	1	09/30/2020 11:25	WG1548770
Benzidine	ND		10.0	1	09/30/2020 11:25	WG1548770
Benzo(a)anthracene	ND		1.00	1	09/30/2020 11:25	WG1548770
Benzo(b)fluoranthene	ND		1.00	1	09/30/2020 11:25	WG1548770
Benzo(k)fluoranthene	ND		1.00	1	09/30/2020 11:25	WG1548770
Benzo(g,h,i)perylene	ND		1.00	1	09/30/2020 11:25	WG1548770
Benzo(a)pyrene	ND		1.00	1	09/30/2020 11:25	WG1548770
Bis(2-chlorethoxy)methane	ND		10.0	1	09/30/2020 11:25	WG1548770
Bis(2-chloroethyl)ether	ND		10.0	1	09/30/2020 11:25	WG1548770
2,2-Oxybis(1-Chloropropane)	ND		10.0	1	09/30/2020 11:25	WG1548770
4-Bromophenyl-phenylether	ND		10.0	1	09/30/2020 11:25	WG1548770
2-Chloronaphthalene	ND		1.00	1	09/30/2020 11:25	WG1548770
4-Chlorophenyl-phenylether	ND		10.0	1	09/30/2020 11:25	WG1548770
Chrysene	ND		1.00	1	09/30/2020 11:25	WG1548770
Dibenz(a,h)anthracene	ND		1.00	1	09/30/2020 11:25	WG1548770
1,2-Dichlorobenzene	ND		10.0	1	09/30/2020 11:25	WG1548770
1,3-Dichlorobenzene	ND		10.0	1	09/30/2020 11:25	WG1548770
1,4-Dichlorobenzene	ND		10.0	1	09/30/2020 11:25	WG1548770
3,3-Dichlorobenzidine	ND		10.0	1	09/30/2020 11:25	WG1548770
2,4-Dinitrotoluene	ND		10.0	1	09/30/2020 11:25	WG1548770
2,6-Dinitrotoluene	ND		10.0	1	09/30/2020 11:25	WG1548770
Fluoranthene	ND		1.00	1	09/30/2020 11:25	WG1548770
Fluorene	ND		1.00	1	09/30/2020 11:25	WG1548770
Hexachlorobenzene	ND		1.00	1	09/30/2020 11:25	WG1548770
Hexachloro-1,3-butadiene	ND		10.0	1	09/30/2020 11:25	WG1548770
Hexachlorocyclopentadiene	ND		10.0	1	09/30/2020 11:25	WG1548770
Hexachloroethane	ND		10.0	1	09/30/2020 11:25	WG1548770
Indeno(1,2,3-cd)pyrene	ND		1.00	1	09/30/2020 11:25	WG1548770
Isophorone	ND		10.0	1	09/30/2020 11:25	WG1548770

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Naphthalene	ND		1.00	1	09/30/2020 11:25	WG1548770
Nitrobenzene	ND		10.0	1	09/30/2020 11:25	WG1548770
n-Nitrosodimethylamine	ND		10.0	1	09/30/2020 11:25	WG1548770
n-Nitrosodiphenylamine	ND		10.0	1	09/30/2020 11:25	WG1548770
n-Nitrosodi-n-propylamine	ND		10.0	1	09/30/2020 11:25	WG1548770
Phenanthrene	ND		1.00	1	09/30/2020 11:25	WG1548770
Benzylbutyl phthalate	ND		3.00	1	09/30/2020 11:25	WG1548770
Bis(2-ethylhexyl)phthalate	6.07		3.00	1	09/30/2020 11:25	WG1548770
Di-n-butyl phthalate	ND		3.00	1	09/30/2020 11:25	WG1548770
Diethyl phthalate	ND		3.00	1	09/30/2020 11:25	WG1548770
Dimethyl phthalate	ND		3.00	1	09/30/2020 11:25	WG1548770
Di-n-octyl phthalate	ND		3.00	1	09/30/2020 11:25	WG1548770
Pyrene	ND		1.00	1	09/30/2020 11:25	WG1548770
1,2,4-Trichlorobenzene	ND		10.0	1	09/30/2020 11:25	WG1548770
4-Chloro-3-methylphenol	ND		10.0	1	09/30/2020 11:25	WG1548770
2-Chlorophenol	ND		10.0	1	09/30/2020 11:25	WG1548770
2,4-Dichlorophenol	ND		10.0	1	09/30/2020 11:25	WG1548770
2,4-Dimethylphenol	ND		10.0	1	09/30/2020 11:25	WG1548770
4,6-Dinitro-2-methylphenol	ND		10.0	1	09/30/2020 11:25	WG1548770
2,4-Dinitrophenol	ND		10.0	1	09/30/2020 11:25	WG1548770
2-Nitrophenol	ND		10.0	1	09/30/2020 11:25	WG1548770
4-Nitrophenol	ND		10.0	1	09/30/2020 11:25	WG1548770
Pentachlorophenol	ND		10.0	1	09/30/2020 11:25	WG1548770
Phenol	ND		10.0	1	09/30/2020 11:25	WG1548770
2,4,6-Trichlorophenol	ND		10.0	1	09/30/2020 11:25	WG1548770
(S) 2-Fluorophenol	*40.9*		*10.0-120*		*09/30/2020 11:25*	WG1548770
(S) Phenol-d5	*25.3*		*10.0-120*		*09/30/2020 11:25*	WG1548770
(S) Nitrobenzene-d5	*68.2*		*10.0-127*		*09/30/2020 11:25*	WG1548770
(S) 2-Fluorobiphenyl	*72.6*		*10.0-130*		*09/30/2020 11:25*	WG1548770
(S) 2,4,6-Tribromophenol	*78.5*		*10.0-155*		*09/30/2020 11:25*	WG1548770
(S) p-Terphenyl-d14	*88.4*		*10.0-128*		*09/30/2020 11:25*	WG1548770

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		50.0	1	10/01/2020 00:48	WG1551766
Acrolein	ND	J0	50.0	1	10/01/2020 00:48	WG1551766
Acrylonitrile	ND		10.0	1	10/01/2020 00:48	WG1551766
Benzene	ND		1.00	1	10/01/2020 00:48	WG1551766
Bromobenzene	ND		1.00	1	10/01/2020 00:48	WG1551766
Bromodichloromethane	ND		1.00	1	10/01/2020 00:48	WG1551766
Bromoform	ND		1.00	1	10/01/2020 00:48	WG1551766
Bromomethane	ND		5.00	1	10/01/2020 00:48	WG1551766
n-Butylbenzene	ND		1.00	1	10/01/2020 00:48	WG1551766
sec-Butylbenzene	ND		1.00	1	10/01/2020 00:48	WG1551766
tert-Butylbenzene	ND		1.00	1	10/01/2020 00:48	WG1551766
Carbon tetrachloride	ND		1.00	1	10/01/2020 00:48	WG1551766
Chlorobenzene	ND		1.00	1	10/01/2020 00:48	WG1551766
Chlorodibromomethane	ND		1.00	1	10/01/2020 00:48	WG1551766
Chloroethane	ND		5.00	1	10/01/2020 00:48	WG1551766
Chloroform	ND		5.00	1	10/01/2020 00:48	WG1551766
Chloromethane	ND		2.50	1	10/01/2020 00:48	WG1551766
2-Chlorotoluene	ND		1.00	1	10/01/2020 00:48	WG1551766
4-Chlorotoluene	ND		1.00	1	10/01/2020 00:48	WG1551766
1,2-Dibromo-3-Chloropropane	ND		5.00	1	10/01/2020 00:48	WG1551766
1,2-Dibromoethane	ND		1.00	1	10/01/2020 00:48	WG1551766
Dibromomethane	ND		1.00	1	10/01/2020 00:48	WG1551766
1,2-Dichlorobenzene	ND		1.00	1	10/01/2020 00:48	WG1551766
1,3-Dichlorobenzene	ND		1.00	1	10/01/2020 00:48	WG1551766
1,4-Dichlorobenzene	ND		1.00	1	10/01/2020 00:48	WG1551766
Dichlorodifluoromethane	ND		5.00	1	10/01/2020 00:48	WG1551766
1,1-Dichloroethane	ND		1.00	1	10/01/2020 00:48	WG1551766
1,2-Dichloroethane	ND		1.00	1	10/01/2020 00:48	WG1551766
1,1-Dichloroethene	ND		1.00	1	10/01/2020 00:48	WG1551766
cis-1,2-Dichloroethene	ND		1.00	1	10/01/2020 00:48	WG1551766
trans-1,2-Dichloroethene	ND		1.00	1	10/01/2020 00:48	WG1551766
1,2-Dichloropropane	ND		1.00	1	10/01/2020 00:48	WG1551766
1,1-Dichloropropene	ND		1.00	1	10/01/2020 00:48	WG1551766
1,3-Dichloropropane	ND		1.00	1	10/01/2020 00:48	WG1551766
cis-1,3-Dichloropropene	ND		1.00	1	10/01/2020 00:48	WG1551766
trans-1,3-Dichloropropene	ND		1.00	1	10/01/2020 00:48	WG1551766
2,2-Dichloropropane	ND		1.00	1	10/01/2020 00:48	WG1551766
Di-isopropyl ether	ND		1.00	1	10/01/2020 00:48	WG1551766
Ethylbenzene	ND		1.00	1	10/01/2020 00:48	WG1551766
Hexachloro-1,3-butadiene	ND		1.00	1	10/01/2020 00:48	WG1551766
Isopropylbenzene	ND		1.00	1	10/01/2020 00:48	WG1551766
p-Isopropyltoluene	ND		1.00	1	10/01/2020 00:48	WG1551766
2-Butanone (MEK)	ND		10.0	1	10/01/2020 00:48	WG1551766
Methylene Chloride	ND		5.00	1	10/01/2020 00:48	WG1551766
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	10/01/2020 00:48	WG1551766
Methyl tert-butyl ether	ND		1.00	1	10/01/2020 00:48	WG1551766
Naphthalene	ND		5.00	1	10/01/2020 00:48	WG1551766
n-Propylbenzene	ND		1.00	1	10/01/2020 00:48	WG1551766
Styrene	ND		1.00	1	10/01/2020 00:48	WG1551766
1,1,1,2-Tetrachloroethane	ND		1.00	1	10/01/2020 00:48	WG1551766
1,1,2,2-Tetrachloroethane	ND		1.00	1	10/01/2020 00:48	WG1551766
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	10/01/2020 00:48	WG1551766
Tetrachloroethene	ND		1.00	1	10/01/2020 00:48	WG1551766
Toluene	ND		1.00	1	10/01/2020 00:48	WG1551766
1,2,3-Trichlorobenzene	ND		1.00	1	10/01/2020 00:48	WG1551766
1,2,4-Trichlorobenzene	ND		1.00	1	10/01/2020 00:48	WG1551766

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,1-Trichloroethane	ND		1.00	1	10/01/2020 00:48	WG1551766
1,1,2-Trichloroethane	ND		1.00	1	10/01/2020 00:48	WG1551766
Trichloroethene	ND		1.00	1	10/01/2020 00:48	WG1551766
Trichlorofluoromethane	ND		5.00	1	10/01/2020 00:48	WG1551766
1,2,3-Trichloropropane	ND		2.50	1	10/01/2020 00:48	WG1551766
1,2,4-Trimethylbenzene	ND		1.00	1	10/01/2020 00:48	WG1551766
1,2,3-Trimethylbenzene	ND		1.00	1	10/01/2020 00:48	WG1551766
1,3,5-Trimethylbenzene	ND		1.00	1	10/01/2020 00:48	WG1551766
Vinyl chloride	ND		1.00	1	10/01/2020 00:48	WG1551766
Xylenes, Total	ND		3.00	1	10/01/2020 00:48	WG1551766
(S) Toluene-d8	*109*		*80.0-120*		*10/01/2020 00:48*	WG1551766
(S) 4-Bromofluorobenzene	*102*		*77.0-126*		*10/01/2020 00:48*	WG1551766
(S) 1,2-Dichloroethane-d4	*95.6*		*70.0-130*		*10/01/2020 00:48*	WG1551766

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		50.0	1	10/01/2020 01:07	WG1551766
Acrolein	ND	J0	50.0	1	10/01/2020 01:07	WG1551766
Acrylonitrile	ND		10.0	1	10/01/2020 01:07	WG1551766
Benzene	ND		1.00	1	10/01/2020 01:07	WG1551766
Bromobenzene	ND		1.00	1	10/01/2020 01:07	WG1551766
Bromodichloromethane	ND		1.00	1	10/01/2020 01:07	WG1551766
Bromoform	ND		1.00	1	10/01/2020 01:07	WG1551766
Bromomethane	ND		5.00	1	10/01/2020 01:07	WG1551766
n-Butylbenzene	ND		1.00	1	10/01/2020 01:07	WG1551766
sec-Butylbenzene	ND		1.00	1	10/01/2020 01:07	WG1551766
tert-Butylbenzene	ND		1.00	1	10/01/2020 01:07	WG1551766
Carbon tetrachloride	ND		1.00	1	10/01/2020 01:07	WG1551766
Chlorobenzene	ND		1.00	1	10/01/2020 01:07	WG1551766
Chlorodibromomethane	ND		1.00	1	10/01/2020 01:07	WG1551766
Chloroethane	ND		5.00	1	10/01/2020 01:07	WG1551766
Chloroform	ND		5.00	1	10/01/2020 01:07	WG1551766
Chloromethane	ND		2.50	1	10/01/2020 01:07	WG1551766
2-Chlorotoluene	ND		1.00	1	10/01/2020 01:07	WG1551766
4-Chlorotoluene	ND		1.00	1	10/01/2020 01:07	WG1551766
1,2-Dibromo-3-Chloropropane	ND		5.00	1	10/01/2020 01:07	WG1551766
1,2-Dibromoethane	ND		1.00	1	10/01/2020 01:07	WG1551766
Dibromomethane	ND		1.00	1	10/01/2020 01:07	WG1551766
1,2-Dichlorobenzene	ND		1.00	1	10/01/2020 01:07	WG1551766
1,3-Dichlorobenzene	ND		1.00	1	10/01/2020 01:07	WG1551766
1,4-Dichlorobenzene	ND		1.00	1	10/01/2020 01:07	WG1551766
Dichlorodifluoromethane	ND		5.00	1	10/01/2020 01:07	WG1551766
1,1-Dichloroethane	ND		1.00	1	10/01/2020 01:07	WG1551766
1,2-Dichloroethane	ND		1.00	1	10/01/2020 01:07	WG1551766
1,1-Dichloroethene	ND		1.00	1	10/01/2020 01:07	WG1551766
cis-1,2-Dichloroethene	ND		1.00	1	10/01/2020 01:07	WG1551766
trans-1,2-Dichloroethene	ND		1.00	1	10/01/2020 01:07	WG1551766
1,2-Dichloropropane	ND		1.00	1	10/01/2020 01:07	WG1551766
1,1-Dichloropropene	ND		1.00	1	10/01/2020 01:07	WG1551766
1,3-Dichloropropane	ND		1.00	1	10/01/2020 01:07	WG1551766
cis-1,3-Dichloropropene	ND		1.00	1	10/01/2020 01:07	WG1551766
trans-1,3-Dichloropropene	ND		1.00	1	10/01/2020 01:07	WG1551766
2,2-Dichloropropane	ND		1.00	1	10/01/2020 01:07	WG1551766
Di-isopropyl ether	ND		1.00	1	10/01/2020 01:07	WG1551766
Ethylbenzene	ND		1.00	1	10/01/2020 01:07	WG1551766
Hexachloro-1,3-butadiene	ND		1.00	1	10/01/2020 01:07	WG1551766
Isopropylbenzene	ND		1.00	1	10/01/2020 01:07	WG1551766
p-Isopropyltoluene	ND		1.00	1	10/01/2020 01:07	WG1551766
2-Butanone (MEK)	ND		10.0	1	10/01/2020 01:07	WG1551766
Methylene Chloride	ND		5.00	1	10/01/2020 01:07	WG1551766
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	10/01/2020 01:07	WG1551766
Methyl tert-butyl ether	ND		1.00	1	10/01/2020 01:07	WG1551766
Naphthalene	ND		5.00	1	10/01/2020 01:07	WG1551766
n-Propylbenzene	ND		1.00	1	10/01/2020 01:07	WG1551766
Styrene	ND		1.00	1	10/01/2020 01:07	WG1551766
1,1,1,2-Tetrachloroethane	ND		1.00	1	10/01/2020 01:07	WG1551766
1,1,2,2-Tetrachloroethane	ND		1.00	1	10/01/2020 01:07	WG1551766
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	10/01/2020 01:07	WG1551766
Tetrachloroethene	ND		1.00	1	10/01/2020 01:07	WG1551766
Toluene	ND		1.00	1	10/01/2020 01:07	WG1551766
1,2,3-Trichlorobenzene	ND		1.00	1	10/01/2020 01:07	WG1551766
1,2,4-Trichlorobenzene	ND		1.00	1	10/01/2020 01:07	WG1551766

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,1-Trichloroethane	ND		1.00	1	10/01/2020 01:07	WG1551766
1,1,2-Trichloroethane	ND		1.00	1	10/01/2020 01:07	WG1551766
Trichloroethene	ND		1.00	1	10/01/2020 01:07	WG1551766
Trichlorofluoromethane	ND		5.00	1	10/01/2020 01:07	WG1551766
1,2,3-Trichloropropane	ND		2.50	1	10/01/2020 01:07	WG1551766
1,2,4-Trimethylbenzene	ND		1.00	1	10/01/2020 01:07	WG1551766
1,2,3-Trimethylbenzene	ND		1.00	1	10/01/2020 01:07	WG1551766
1,3,5-Trimethylbenzene	ND		1.00	1	10/01/2020 01:07	WG1551766
Vinyl chloride	ND		1.00	1	10/01/2020 01:07	WG1551766
Xylenes, Total	ND		3.00	1	10/01/2020 01:07	WG1551766
(S) Toluene-d8	*112*		*80.0-120*		*10/01/2020 01:07*	WG1551766
(S) 4-Bromofluorobenzene	*104*		*77.0-126*		*10/01/2020 01:07*	WG1551766
(S) 1,2-Dichloroethane-d4	*92.1*		*70.0-130*		*10/01/2020 01:07*	WG1551766

Mercury by Method 7470A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Mercury	ND		0.200	1	09/24/2020 22:02	WG1548373

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Arsenic	ND		10.0	1	09/30/2020 07:41	WG1549460
Barium	773		5.00	1	09/30/2020 07:41	WG1549460
Cadmium	ND		2.00	1	09/30/2020 07:41	WG1549460
Chromium	ND		10.0	1	09/30/2020 07:41	WG1549460
Lead	ND		6.00	1	09/30/2020 07:41	WG1549460
Selenium	10.7		10.0	1	09/30/2020 07:41	WG1549460
Silver	ND		5.00	1	09/30/2020 07:41	WG1549460

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
LRH (C5-C8)	1430		100	1	09/30/2020 18:39	WG1551743
Acetone	ND		50.0	1	09/30/2020 18:39	WG1551743
Acrylonitrile	ND	J0	10.0	1	09/30/2020 18:39	WG1551743
Benzene	485		10.0	10	10/01/2020 18:26	WG1552323
Bromobenzene	ND		1.00	1	09/30/2020 18:39	WG1551743
Bromodichloromethane	ND		1.00	1	09/30/2020 18:39	WG1551743
Bromoform	ND		1.00	1	09/30/2020 18:39	WG1551743
Bromomethane	ND		5.00	1	09/30/2020 18:39	WG1551743
n-Butylbenzene	8.69		1.00	1	09/30/2020 18:39	WG1551743
sec-Butylbenzene	8.15		1.00	1	09/30/2020 18:39	WG1551743
tert-Butylbenzene	ND		1.00	1	09/30/2020 18:39	WG1551743
Carbon tetrachloride	ND		1.00	1	09/30/2020 18:39	WG1551743
Chlorobenzene	ND		1.00	1	09/30/2020 18:39	WG1551743
Chlorodibromomethane	ND		1.00	1	09/30/2020 18:39	WG1551743
Chloroethane	ND		5.00	1	09/30/2020 18:39	WG1551743
Chloroform	ND		5.00	1	09/30/2020 18:39	WG1551743
Chloromethane	ND		2.50	1	09/30/2020 18:39	WG1551743
2-Chlorotoluene	ND		1.00	1	09/30/2020 18:39	WG1551743
4-Chlorotoluene	ND		1.00	1	09/30/2020 18:39	WG1551743
1,2-Dibromo-3-Chloropropane	ND		5.00	1	09/30/2020 18:39	WG1551743
1,2-Dibromoethane	ND		1.00	1	09/30/2020 18:39	WG1551743
Dibromomethane	ND		1.00	1	09/30/2020 18:39	WG1551743
1,2-Dichlorobenzene	ND		1.00	1	09/30/2020 18:39	WG1551743
1,3-Dichlorobenzene	ND		1.00	1	09/30/2020 18:39	WG1551743
1,4-Dichlorobenzene	ND		1.00	1	09/30/2020 18:39	WG1551743
Dichlorodifluoromethane	ND		5.00	1	09/30/2020 18:39	WG1551743
1,1-Dichloroethane	ND		1.00	1	09/30/2020 18:39	WG1551743
1,2-Dichloroethane	ND		1.00	1	09/30/2020 18:39	WG1551743
1,1-Dichloroethene	ND		1.00	1	09/30/2020 18:39	WG1551743
cis-1,2-Dichloroethene	ND		1.00	1	09/30/2020 18:39	WG1551743
trans-1,2-Dichloroethene	ND		1.00	1	09/30/2020 18:39	WG1551743
1,2-Dichloropropane	ND		1.00	1	09/30/2020 18:39	WG1551743
1,1-Dichloropropene	ND		1.00	1	09/30/2020 18:39	WG1551743
1,3-Dichloropropane	ND		1.00	1	09/30/2020 18:39	WG1551743
cis-1,3-Dichloropropene	ND		1.00	1	09/30/2020 18:39	WG1551743
trans-1,3-Dichloropropene	ND		1.00	1	09/30/2020 18:39	WG1551743
2,2-Dichloropropane	ND		1.00	1	09/30/2020 18:39	WG1551743
Di-isopropyl ether	ND		1.00	1	09/30/2020 18:39	WG1551743
Ethylbenzene	3.01		1.00	1	09/30/2020 18:39	WG1551743

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Hexachloro-1,3-butadiene	ND		1.00	1	09/30/2020 18:39	WG1551743
Isopropylbenzene	45.6		1.00	1	09/30/2020 18:39	WG1551743
p-Isopropyltoluene	ND		1.00	1	09/30/2020 18:39	WG1551743
2-Butanone (MEK)	ND		10.0	1	09/30/2020 18:39	WG1551743
Methylene Chloride	ND		5.00	1	09/30/2020 18:39	WG1551743
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	09/30/2020 18:39	WG1551743
Methyl tert-butyl ether	ND		1.00	1	09/30/2020 18:39	WG1551743
Naphthalene	149		5.00	1	09/30/2020 18:39	WG1551743
n-Propylbenzene	69.3		1.00	1	09/30/2020 18:39	WG1551743
Styrene	ND		1.00	1	09/30/2020 18:39	WG1551743
1,1,1,2-Tetrachloroethane	ND		1.00	1	09/30/2020 18:39	WG1551743
1,1,2,2-Tetrachloroethane	ND		1.00	1	09/30/2020 18:39	WG1551743
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	09/30/2020 18:39	WG1551743
Tetrachloroethene	ND		1.00	1	09/30/2020 18:39	WG1551743
Toluene	5.26		1.00	1	09/30/2020 18:39	WG1551743
1,2,3-Trichlorobenzene	ND		1.00	1	09/30/2020 18:39	WG1551743
1,2,4-Trichlorobenzene	ND		1.00	1	09/30/2020 18:39	WG1551743
1,1,1-Trichloroethane	ND		1.00	1	09/30/2020 18:39	WG1551743
1,1,2-Trichloroethane	ND		1.00	1	09/30/2020 18:39	WG1551743
Trichloroethene	ND		1.00	1	09/30/2020 18:39	WG1551743
Trichlorofluoromethane	ND		5.00	1	09/30/2020 18:39	WG1551743
1,2,3-Trichloropropane	ND		2.50	1	09/30/2020 18:39	WG1551743
1,2,4-Trimethylbenzene	1.83		1.00	1	09/30/2020 18:39	WG1551743
1,2,3-Trimethylbenzene	4.16		1.00	1	09/30/2020 18:39	WG1551743
1,3,5-Trimethylbenzene	ND		1.00	1	09/30/2020 18:39	WG1551743
Vinyl chloride	ND		1.00	1	09/30/2020 18:39	WG1551743
Xylenes, Total	17.2		3.00	1	09/30/2020 18:39	WG1551743
(S) Toluene-d8	*102*		*80.0-120*		*09/30/2020 18:39*	WG1551743
(S) Toluene-d8	*106*		*80.0-120*		*10/01/2020 18:26*	WG1552323
(S) 4-Bromofluorobenzene	*99.7*		*77.0-126*		*09/30/2020 18:39*	WG1551743
(S) 4-Bromofluorobenzene	*92.8*		*77.0-126*		*10/01/2020 18:26*	WG1552323
(S) 1,2-Dichloroethane-d4	*90.6*		*70.0-130*		*09/30/2020 18:39*	WG1551743
(S) 1,2-Dichloroethane-d4	*113*		*70.0-130*		*10/01/2020 18:26*	WG1552323

Semi-Volatile Organic Compounds (GC) by Method KS MRH/HRH

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
MRH (C9-C18)	1820		100	1	10/05/2020 01:49	WG1547615
HRH (C19-C35)	344		100	1	10/05/2020 01:49	WG1547615
(S) 1-Chloro-octadecane	*103*		*40.0-140*		*10/05/2020 01:49*	WG1547615

Pesticides (GC) by Method 8081B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Aldrin	ND		0.0500	1	09/29/2020 10:45	WG1549659
Alpha BHC	ND		0.0500	1	09/29/2020 10:45	WG1549659
Beta BHC	ND		0.0500	1	09/29/2020 10:45	WG1549659
Delta BHC	ND		0.0500	1	09/29/2020 10:45	WG1549659
Gamma BHC	ND		0.0500	1	09/29/2020 10:45	WG1549659
Chlordane	ND		5.00	1	09/29/2020 10:45	WG1549659
4,4-DDD	ND	P	0.0500	1	09/29/2020 10:45	WG1549659
4,4-DDE	ND		0.0500	1	09/29/2020 10:45	WG1549659
4,4-DDT	ND		0.0500	1	09/29/2020 10:45	WG1549659
Dieldrin	ND		0.0500	1	09/29/2020 10:45	WG1549659
Endosulfan I	ND		0.0500	1	09/29/2020 10:45	WG1549659

Pesticides (GC) by Method 8081B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Endosulfan II	ND		0.0500	1	09/29/2020 10:45	WG1549659
Endosulfan sulfate	ND		0.0500	1	09/29/2020 10:45	WG1549659
Endrin	ND		0.0500	1	09/29/2020 10:45	WG1549659
Endrin aldehyde	ND		0.0500	1	09/29/2020 10:45	WG1549659
Endrin ketone	ND		0.0500	1	09/29/2020 10:45	WG1549659
Hexachlorobenzene	ND		0.0500	1	09/29/2020 10:45	WG1549659
Heptachlor	ND		0.0500	1	09/29/2020 10:45	WG1549659
Heptachlor epoxide	ND		0.0500	1	09/29/2020 10:45	WG1549659
Methoxychlor	ND		0.0500	1	09/29/2020 10:45	WG1549659
Toxaphene	ND		0.500	1	09/29/2020 10:45	WG1549659
(S) Decachlorobiphenyl	*58.5*		*10.0-128*		*09/29/2020 10:45*	WG1549659
(S) Tetrachloro-m-xylene	*76.6*		*10.0-127*		*09/29/2020 10:45*	WG1549659

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acenaphthene	1.03		1.00	1	09/30/2020 10:43	WG1548770
Acenaphthylene	ND		1.00	1	09/30/2020 10:43	WG1548770
Anthracene	ND		1.00	1	09/30/2020 10:43	WG1548770
Benzidine	ND		10.0	1	09/30/2020 10:43	WG1548770
Benzo(a)anthracene	ND		1.00	1	09/30/2020 10:43	WG1548770
Benzo(b)fluoranthene	ND		1.00	1	09/30/2020 10:43	WG1548770
Benzo(k)fluoranthene	ND		1.00	1	09/30/2020 10:43	WG1548770
Benzo(g,h,i)perylene	ND		1.00	1	09/30/2020 10:43	WG1548770
Benzo(a)pyrene	ND		1.00	1	09/30/2020 10:43	WG1548770
Bis(2-chlorethoxy)methane	ND		10.0	1	09/30/2020 10:43	WG1548770
Bis(2-chloroethyl)ether	ND		10.0	1	09/30/2020 10:43	WG1548770
2,2-Oxybis(1-Chloropropane)	ND		10.0	1	09/30/2020 10:43	WG1548770
4-Bromophenyl-phenylether	ND		10.0	1	09/30/2020 10:43	WG1548770
2-Chloronaphthalene	ND		1.00	1	09/30/2020 10:43	WG1548770
4-Chlorophenyl-phenylether	ND		10.0	1	09/30/2020 10:43	WG1548770
Chrysene	ND		1.00	1	09/30/2020 10:43	WG1548770
Dibenz(a,h)anthracene	ND		1.00	1	09/30/2020 10:43	WG1548770
1,2-Dichlorobenzene	ND		10.0	1	09/30/2020 10:43	WG1548770
1,3-Dichlorobenzene	ND		10.0	1	09/30/2020 10:43	WG1548770
1,4-Dichlorobenzene	ND		10.0	1	09/30/2020 10:43	WG1548770
3,3-Dichlorobenzidine	ND		10.0	1	09/30/2020 10:43	WG1548770
2,4-Dinitrotoluene	ND		10.0	1	09/30/2020 10:43	WG1548770
2,6-Dinitrotoluene	ND		10.0	1	09/30/2020 10:43	WG1548770
Fluoranthene	ND		1.00	1	09/30/2020 10:43	WG1548770
Fluorene	ND		1.00	1	09/30/2020 10:43	WG1548770
Hexachlorobenzene	ND		1.00	1	09/30/2020 10:43	WG1548770
Hexachloro-1,3-butadiene	ND		10.0	1	09/30/2020 10:43	WG1548770
Hexachlorocyclopentadiene	ND		10.0	1	09/30/2020 10:43	WG1548770
Hexachloroethane	ND		10.0	1	09/30/2020 10:43	WG1548770
Indeno(1,2,3-cd)pyrene	ND		1.00	1	09/30/2020 10:43	WG1548770
Isophorone	ND		10.0	1	09/30/2020 10:43	WG1548770
Naphthalene	111		1.00	1	09/30/2020 10:43	WG1548770
Nitrobenzene	ND		10.0	1	09/30/2020 10:43	WG1548770
n-Nitrosodimethylamine	ND		10.0	1	09/30/2020 10:43	WG1548770
n-Nitrosodiphenylamine	ND		10.0	1	09/30/2020 10:43	WG1548770
n-Nitrosodi-n-propylamine	ND		10.0	1	09/30/2020 10:43	WG1548770
Phenanthrene	ND		1.00	1	09/30/2020 10:43	WG1548770
Benzylbutyl phthalate	ND		3.00	1	09/30/2020 10:43	WG1548770
Bis(2-ethylhexyl)phthalate	6.97		3.00	1	09/30/2020 10:43	WG1548770
Di-n-butyl phthalate	ND		3.00	1	09/30/2020 10:43	WG1548770

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Diethyl phthalate	ND		3.00	1	09/30/2020 10:43	WG1548770
Dimethyl phthalate	ND		3.00	1	09/30/2020 10:43	WG1548770
Di-n-octyl phthalate	ND		3.00	1	09/30/2020 10:43	WG1548770
Pyrene	ND		1.00	1	09/30/2020 10:43	WG1548770
1,2,4-Trichlorobenzene	ND		10.0	1	09/30/2020 10:43	WG1548770
4-Chloro-3-methylphenol	ND		10.0	1	09/30/2020 10:43	WG1548770
2-Chlorophenol	ND		10.0	1	09/30/2020 10:43	WG1548770
2,4-Dichlorophenol	ND		10.0	1	09/30/2020 10:43	WG1548770
2,4-Dimethylphenol	ND		10.0	1	09/30/2020 10:43	WG1548770
4,6-Dinitro-2-methylphenol	ND		10.0	1	09/30/2020 10:43	WG1548770
2,4-Dinitrophenol	ND		10.0	1	09/30/2020 10:43	WG1548770
2-Nitrophenol	ND		10.0	1	09/30/2020 10:43	WG1548770
4-Nitrophenol	ND		10.0	1	09/30/2020 10:43	WG1548770
Pentachlorophenol	ND		10.0	1	09/30/2020 10:43	WG1548770
Phenol	ND		10.0	1	09/30/2020 10:43	WG1548770
2,4,6-Trichlorophenol	ND		10.0	1	09/30/2020 10:43	WG1548770
(S) 2-Fluorophenol	*50.5*		*10.0-120*		*09/30/2020 10:43*	WG1548770
(S) Phenol-d5	*30.8*		*10.0-120*		*09/30/2020 10:43*	WG1548770
(S) Nitrobenzene-d5	*77.9*		*10.0-127*		*09/30/2020 10:43*	WG1548770
(S) 2-Fluorobiphenyl	*85.0*		*10.0-130*		*09/30/2020 10:43*	WG1548770
(S) 2,4,6-Tribromophenol	*92.0*		*10.0-155*		*09/30/2020 10:43*	WG1548770
(S) p-Terphenyl-d14	*91.4*		*10.0-128*		*09/30/2020 10:43*	WG1548770

Mercury by Method 7470A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Mercury	ND		0.200	1	09/24/2020 22:08	WG1548373

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Arsenic	ND		10.0	1	09/30/2020 07:44	WG1549460
Barium	ND		5.00	1	09/30/2020 07:44	WG1549460
Cadmium	ND		2.00	1	09/30/2020 07:44	WG1549460
Chromium	ND		10.0	1	09/30/2020 07:44	WG1549460
Lead	ND		6.00	1	09/30/2020 07:44	WG1549460
Selenium	ND		10.0	1	09/30/2020 07:44	WG1549460
Silver	ND		5.00	1	09/30/2020 07:44	WG1549460

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
LRH (C5-C8)	ND		100	1	09/30/2020 18:20	WG1551743
Acetone	ND		50.0	1	09/30/2020 18:20	WG1551743
Acrylonitrile	ND	J0	10.0	1	09/30/2020 18:20	WG1551743
Benzene	ND		1.00	1	09/30/2020 18:20	WG1551743
Bromobenzene	ND		1.00	1	09/30/2020 18:20	WG1551743
Bromodichloromethane	ND		1.00	1	09/30/2020 18:20	WG1551743
Bromoform	ND		1.00	1	09/30/2020 18:20	WG1551743
Bromomethane	ND		5.00	1	09/30/2020 18:20	WG1551743
n-Butylbenzene	ND		1.00	1	09/30/2020 18:20	WG1551743
sec-Butylbenzene	ND		1.00	1	09/30/2020 18:20	WG1551743
tert-Butylbenzene	ND		1.00	1	09/30/2020 18:20	WG1551743
Carbon tetrachloride	ND		1.00	1	09/30/2020 18:20	WG1551743
Chlorobenzene	ND		1.00	1	09/30/2020 18:20	WG1551743
Chlorodibromomethane	ND		1.00	1	09/30/2020 18:20	WG1551743
Chloroethane	ND		5.00	1	09/30/2020 18:20	WG1551743
Chloroform	ND		5.00	1	09/30/2020 18:20	WG1551743
Chloromethane	ND		2.50	1	09/30/2020 18:20	WG1551743
2-Chlorotoluene	ND		1.00	1	09/30/2020 18:20	WG1551743
4-Chlorotoluene	ND		1.00	1	09/30/2020 18:20	WG1551743
1,2-Dibromo-3-Chloropropane	ND		5.00	1	09/30/2020 18:20	WG1551743
1,2-Dibromoethane	ND		1.00	1	09/30/2020 18:20	WG1551743
Dibromomethane	ND		1.00	1	09/30/2020 18:20	WG1551743
1,2-Dichlorobenzene	ND		1.00	1	09/30/2020 18:20	WG1551743
1,3-Dichlorobenzene	ND		1.00	1	09/30/2020 18:20	WG1551743
1,4-Dichlorobenzene	ND		1.00	1	09/30/2020 18:20	WG1551743
Dichlorodifluoromethane	ND		5.00	1	09/30/2020 18:20	WG1551743
1,1-Dichloroethane	ND		1.00	1	09/30/2020 18:20	WG1551743
1,2-Dichloroethane	ND		1.00	1	09/30/2020 18:20	WG1551743
1,1-Dichloroethene	ND		1.00	1	09/30/2020 18:20	WG1551743
cis-1,2-Dichloroethene	ND		1.00	1	09/30/2020 18:20	WG1551743
trans-1,2-Dichloroethene	ND		1.00	1	09/30/2020 18:20	WG1551743
1,2-Dichloropropane	ND		1.00	1	09/30/2020 18:20	WG1551743
1,1-Dichloropropene	ND		1.00	1	09/30/2020 18:20	WG1551743
1,3-Dichloropropane	ND		1.00	1	09/30/2020 18:20	WG1551743
cis-1,3-Dichloropropene	ND		1.00	1	09/30/2020 18:20	WG1551743
trans-1,3-Dichloropropene	ND		1.00	1	09/30/2020 18:20	WG1551743
2,2-Dichloropropane	ND		1.00	1	09/30/2020 18:20	WG1551743
Di-isopropyl ether	ND		1.00	1	09/30/2020 18:20	WG1551743
Ethylbenzene	ND		1.00	1	09/30/2020 18:20	WG1551743

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Hexachloro-1,3-butadiene	ND		1.00	1	09/30/2020 18:20	WG1551743
Isopropylbenzene	ND		1.00	1	09/30/2020 18:20	WG1551743
p-Isopropyltoluene	ND		1.00	1	09/30/2020 18:20	WG1551743
2-Butanone (MEK)	ND		10.0	1	09/30/2020 18:20	WG1551743
Methylene Chloride	ND		5.00	1	09/30/2020 18:20	WG1551743
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	09/30/2020 18:20	WG1551743
Methyl tert-butyl ether	ND		1.00	1	09/30/2020 18:20	WG1551743
Naphthalene	ND		5.00	1	09/30/2020 18:20	WG1551743
n-Propylbenzene	ND		1.00	1	09/30/2020 18:20	WG1551743
Styrene	ND		1.00	1	09/30/2020 18:20	WG1551743
1,1,1,2-Tetrachloroethane	ND		1.00	1	09/30/2020 18:20	WG1551743
1,1,2,2-Tetrachloroethane	ND		1.00	1	09/30/2020 18:20	WG1551743
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	09/30/2020 18:20	WG1551743
Tetrachloroethene	ND		1.00	1	09/30/2020 18:20	WG1551743
Toluene	ND		1.00	1	09/30/2020 18:20	WG1551743
1,2,3-Trichlorobenzene	ND		1.00	1	09/30/2020 18:20	WG1551743
1,2,4-Trichlorobenzene	ND		1.00	1	09/30/2020 18:20	WG1551743
1,1,1-Trichloroethane	ND		1.00	1	09/30/2020 18:20	WG1551743
1,1,2-Trichloroethane	ND		1.00	1	09/30/2020 18:20	WG1551743
Trichloroethene	ND		1.00	1	09/30/2020 18:20	WG1551743
Trichlorofluoromethane	ND		5.00	1	09/30/2020 18:20	WG1551743
1,2,3-Trichloropropane	ND		2.50	1	09/30/2020 18:20	WG1551743
1,2,4-Trimethylbenzene	ND		1.00	1	09/30/2020 18:20	WG1551743
1,2,3-Trimethylbenzene	ND		1.00	1	09/30/2020 18:20	WG1551743
1,3,5-Trimethylbenzene	ND		1.00	1	09/30/2020 18:20	WG1551743
Vinyl chloride	ND		1.00	1	09/30/2020 18:20	WG1551743
Xylenes, Total	ND		3.00	1	09/30/2020 18:20	WG1551743
(S) Toluene-d8	*107*		*80.0-120*		*09/30/2020 18:20*	WG1551743
(S) 4-Bromofluorobenzene	*103*		*77.0-126*		*09/30/2020 18:20*	WG1551743
(S) 1,2-Dichloroethane-d4	*99.2*		*70.0-130*		*09/30/2020 18:20*	WG1551743

Semi-Volatile Organic Compounds (GC) by Method KS MRH/HRH

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
MRH (C9-C18)	ND		100	1	10/03/2020 14:30	WG1547615
HRH (C19-C35)	ND		100	1	10/03/2020 14:30	WG1547615
(S) 1-Chloro-octadecane	*77.5*		*40.0-140*		*10/03/2020 14:30*	WG1547615

Pesticides (GC) by Method 8081B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Aldrin	ND		0.0500	1	09/29/2020 11:00	WG1549659
Alpha BHC	ND		0.0500	1	09/29/2020 11:00	WG1549659
Beta BHC	ND		0.0500	1	09/29/2020 11:00	WG1549659
Delta BHC	ND		0.0500	1	09/29/2020 11:00	WG1549659
Gamma BHC	ND		0.0500	1	09/29/2020 11:00	WG1549659
Chlordane	ND		5.00	1	09/29/2020 11:00	WG1549659
4,4-DDD	ND		0.0500	1	09/29/2020 11:00	WG1549659
4,4-DDE	ND		0.0500	1	09/29/2020 11:00	WG1549659
4,4-DDT	ND		0.0500	1	09/29/2020 11:00	WG1549659
Dieldrin	ND		0.0500	1	09/29/2020 11:00	WG1549659
Endosulfan I	ND		0.0500	1	09/29/2020 11:00	WG1549659
Endosulfan II	ND		0.0500	1	09/29/2020 11:00	WG1549659
Endosulfan sulfate	ND		0.0500	1	09/29/2020 11:00	WG1549659
Endrin	ND		0.0500	1	09/29/2020 11:00	WG1549659

Pesticides (GC) by Method 8081B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Endrin aldehyde	ND		0.0500	1	09/29/2020 11:00	WG1549659
Endrin ketone	ND		0.0500	1	09/29/2020 11:00	WG1549659
Hexachlorobenzene	ND		0.0500	1	09/29/2020 11:00	WG1549659
Heptachlor	ND		0.0500	1	09/29/2020 11:00	WG1549659
Heptachlor epoxide	ND		0.0500	1	09/29/2020 11:00	WG1549659
Methoxychlor	ND		0.0500	1	09/29/2020 11:00	WG1549659
Toxaphene	ND		0.500	1	09/29/2020 11:00	WG1549659
(S) Decachlorobiphenyl	*72.1*		*10.0-128*		*09/29/2020 11:00*	WG1549659
(S) Tetrachloro-m-xylene	*76.1*		*10.0-127*		*09/29/2020 11:00*	WG1549659

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acenaphthene	ND		1.00	1	09/27/2020 17:59	WG1549309
Acenaphthylene	ND		1.00	1	09/27/2020 17:59	WG1549309
Anthracene	ND		1.00	1	09/27/2020 17:59	WG1549309
Benzidine	ND	J4	10.0	1	09/27/2020 17:59	WG1549309
Benzo(a)anthracene	ND		1.00	1	09/27/2020 17:59	WG1549309
Benzo(b)fluoranthene	ND		1.00	1	09/27/2020 17:59	WG1549309
Benzo(k)fluoranthene	ND		1.00	1	09/27/2020 17:59	WG1549309
Benzo(g,h,i)perylene	ND		1.00	1	09/27/2020 17:59	WG1549309
Benzo(a)pyrene	ND		1.00	1	09/27/2020 17:59	WG1549309
Bis(2-chlorethoxy)methane	ND		10.0	1	09/27/2020 17:59	WG1549309
Bis(2-chloroethyl)ether	ND		10.0	1	09/27/2020 17:59	WG1549309
2,2-Oxybis(1-Chloropropane)	ND		10.0	1	09/27/2020 17:59	WG1549309
4-Bromophenyl-phenylether	ND		10.0	1	09/27/2020 17:59	WG1549309
2-Chloronaphthalene	ND		1.00	1	09/27/2020 17:59	WG1549309
4-Chlorophenyl-phenylether	ND		10.0	1	09/27/2020 17:59	WG1549309
Chrysene	ND		1.00	1	09/27/2020 17:59	WG1549309
Dibenz(a,h)anthracene	ND		1.00	1	09/27/2020 17:59	WG1549309
1,2-Dichlorobenzene	ND		10.0	1	09/27/2020 17:59	WG1549309
1,3-Dichlorobenzene	ND		10.0	1	09/27/2020 17:59	WG1549309
1,4-Dichlorobenzene	ND		10.0	1	09/27/2020 17:59	WG1549309
3,3-Dichlorobenzidine	ND		10.0	1	09/27/2020 17:59	WG1549309
2,4-Dinitrotoluene	ND		10.0	1	09/27/2020 17:59	WG1549309
2,6-Dinitrotoluene	ND		10.0	1	09/27/2020 17:59	WG1549309
Fluoranthene	ND		1.00	1	09/27/2020 17:59	WG1549309
Fluorene	ND		1.00	1	09/27/2020 17:59	WG1549309
Hexachlorobenzene	ND		1.00	1	09/27/2020 17:59	WG1549309
Hexachloro-1,3-butadiene	ND		10.0	1	09/27/2020 17:59	WG1549309
Hexachlorocyclopentadiene	ND		10.0	1	09/27/2020 17:59	WG1549309
Hexachloroethane	ND		10.0	1	09/27/2020 17:59	WG1549309
Indeno(1,2,3-cd)pyrene	ND		1.00	1	09/27/2020 17:59	WG1549309
Isophorone	ND		10.0	1	09/27/2020 17:59	WG1549309
Naphthalene	1.22	B	1.00	1	09/27/2020 17:59	WG1549309
Nitrobenzene	ND		10.0	1	09/27/2020 17:59	WG1549309
n-Nitrosodimethylamine	ND		10.0	1	09/27/2020 17:59	WG1549309
n-Nitrosodiphenylamine	ND		10.0	1	09/27/2020 17:59	WG1549309
n-Nitrosodi-n-propylamine	ND		10.0	1	09/27/2020 17:59	WG1549309
Phenanthrene	ND		1.00	1	09/27/2020 17:59	WG1549309
Benzylbutyl phthalate	ND		3.00	1	09/27/2020 17:59	WG1549309
Bis(2-ethylhexyl)phthalate	ND		3.00	1	09/27/2020 17:59	WG1549309
Di-n-butyl phthalate	ND		3.00	1	09/27/2020 17:59	WG1549309
Diethyl phthalate	ND		3.00	1	09/27/2020 17:59	WG1549309
Dimethyl phthalate	ND		3.00	1	09/27/2020 17:59	WG1549309
Di-n-octyl phthalate	ND		3.00	1	09/27/2020 17:59	WG1549309

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Pyrene	ND		1.00	1	09/27/2020 17:59	WG1549309
1,2,4-Trichlorobenzene	ND		10.0	1	09/27/2020 17:59	WG1549309
4-Chloro-3-methylphenol	ND		10.0	1	09/27/2020 17:59	WG1549309
2-Chlorophenol	ND		10.0	1	09/27/2020 17:59	WG1549309
2,4-Dichlorophenol	ND		10.0	1	09/27/2020 17:59	WG1549309
2,4-Dimethylphenol	ND		10.0	1	09/27/2020 17:59	WG1549309
4,6-Dinitro-2-methylphenol	ND		10.0	1	09/27/2020 17:59	WG1549309
2,4-Dinitrophenol	ND		10.0	1	09/27/2020 17:59	WG1549309
2-Nitrophenol	ND		10.0	1	09/27/2020 17:59	WG1549309
4-Nitrophenol	ND		10.0	1	09/27/2020 17:59	WG1549309
Pentachlorophenol	ND		10.0	1	09/27/2020 17:59	WG1549309
Phenol	ND		10.0	1	09/27/2020 17:59	WG1549309
2,4,6-Trichlorophenol	ND		10.0	1	09/27/2020 17:59	WG1549309
(S) 2-Fluorophenol	*42.3*		*10.0-120*		*09/27/2020 17:59*	WG1549309
(S) Phenol-d5	*24.7*		*10.0-120*		*09/27/2020 17:59*	WG1549309
(S) Nitrobenzene-d5	*71.2*		*10.0-127*		*09/27/2020 17:59*	WG1549309
(S) 2-Fluorobiphenyl	*82.6*		*10.0-130*		*09/27/2020 17:59*	WG1549309
(S) 2,4,6-Tribromophenol	*101*		*10.0-155*		*09/27/2020 17:59*	WG1549309
(S) p-Terphenyl-d14	*84.0*		*10.0-128*		*09/27/2020 17:59*	WG1549309

Method Blank (MB)

(MB) R3574232-1 09/24/20 21:10

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Mercury	U		0.100	0.200

Laboratory Control Sample (LCS)

(LCS) R3574232-2 09/24/20 21:18

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Mercury	3.00	3.00	99.9	80.0-120	

L1265292-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1265292-01 09/24/20 21:20 • (MS) R3574232-3 09/24/20 21:22 • (MSD) R3574232-4 09/24/20 21:24

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury	3.00	ND	2.61	2.89	86.8	96.4	1	75.0-125			10.4	20

Method Blank (MB)

(MB) R3576191-1 09/30/20 07:54

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Arsenic	U		4.40	10.0
Barium	U		0.895	5.00
Cadmium	U		0.563	2.00
Chromium	U		5.00	10.0
Lead	U		2.95	6.00
Selenium	U		7.35	10.0
Silver	U		1.91	5.00

Laboratory Control Sample (LCS)

(LCS) R3576191-2 09/30/20 07:57

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	1000	959	95.9	80.0-120	
Barium	1000	996	99.6	80.0-120	
Cadmium	1000	960	96.0	80.0-120	
Chromium	1000	969	96.9	80.0-120	
Lead	1000	974	97.4	80.0-120	
Selenium	1000	964	96.4	80.0-120	
Silver	200	184	92.2	80.0-120	

L1265314-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1265314-01 09/30/20 08:00 • (MS) R3576191-4 09/30/20 08:05 • (MSD) R3576191-5 09/30/20 08:07

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	1000	ND	994	985	98.8	97.9	1	75.0-125			0.870	20
Barium	1000	164	1150	1150	98.7	98.3	1	75.0-125			0.319	20
Cadmium	1000	ND	978	980	97.8	98.0	1	75.0-125			0.202	20
Chromium	1000	ND	972	970	96.5	96.3	1	75.0-125			0.228	20
Lead	1000	ND	988	983	98.3	97.8	1	75.0-125			0.465	20
Selenium	1000	ND	984	1000	98.4	100	1	75.0-125			1.62	20
Silver	200	ND	188	187	92.9	92.2	1	75.0-125			0.670	20

Method Blank (MB)

(MB) R3576468-3 09/30/20 11:52

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
LRH (C5-C8)	U		33.3	100
Acetone	U		11.3	50.0
Acrylonitrile	U		0.671	10.0
Benzene	U		0.0941	1.00
Bromobenzene	U		0.118	1.00
Bromodichloromethane	U		0.136	1.00
Bromoform	U		0.129	1.00
Bromomethane	U		0.605	5.00
n-Butylbenzene	U		0.157	1.00
sec-Butylbenzene	U		0.125	1.00
tert-Butylbenzene	U		0.127	1.00
Carbon tetrachloride	U		0.128	1.00
Chlorobenzene	U		0.116	1.00
Chlorodibromomethane	U		0.140	1.00
Chloroethane	U		0.192	5.00
Chloroform	U		0.111	5.00
Chloromethane	U		0.960	2.50
2-Chlorotoluene	U		0.106	1.00
4-Chlorotoluene	U		0.114	1.00
1,2-Dibromo-3-Chloropropane	U		0.276	5.00
1,2-Dibromoethane	U		0.126	1.00
Dibromomethane	U		0.122	1.00
1,2-Dichlorobenzene	U		0.107	1.00
1,3-Dichlorobenzene	U		0.110	1.00
1,4-Dichlorobenzene	U		0.120	1.00
Dichlorodifluoromethane	U		0.374	5.00
1,1-Dichloroethane	U		0.100	1.00
1,2-Dichloroethane	U		0.0819	1.00
1,1-Dichloroethene	U		0.188	1.00
cis-1,2-Dichloroethene	U		0.126	1.00
trans-1,2-Dichloroethene	U		0.149	1.00
1,2-Dichloropropane	U		0.149	1.00
1,1-Dichloropropene	U		0.142	1.00
1,3-Dichloropropane	U		0.110	1.00
cis-1,3-Dichloropropene	U		0.111	1.00
trans-1,3-Dichloropropene	U		0.118	1.00
2,2-Dichloropropane	U		0.161	1.00
Di-isopropyl ether	U		0.105	1.00
Ethylbenzene	U		0.137	1.00
Hexachloro-1,3-butadiene	U		0.337	1.00

Method Blank (MB)

(MB) R3576468-3 09/30/20 11:52

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Isopropylbenzene	U		0.105	1.00
p-Isopropyltoluene	U		0.120	1.00
2-Butanone (MEK)	U		1.19	10.0
Methylene Chloride	U		0.430	5.00
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0
Methyl tert-butyl ether	U		0.101	1.00
Naphthalene	U		1.00	5.00
n-Propylbenzene	U		0.0993	1.00
Styrene	U		0.118	1.00
1,1,1,2-Tetrachloroethane	U		0.147	1.00
1,1,2,2-Tetrachloroethane	U		0.133	1.00
Tetrachloroethene	U		0.300	1.00
Toluene	U		0.278	1.00
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00
1,2,3-Trichlorobenzene	U		0.230	1.00
1,2,4-Trichlorobenzene	U		0.481	1.00
1,1,1-Trichloroethane	U		0.149	1.00
1,1,2-Trichloroethane	U		0.158	1.00
Trichloroethene	U		0.190	1.00
Trichlorofluoromethane	U		0.160	5.00
1,2,3-Trichloropropane	U		0.237	2.50
1,2,3-Trimethylbenzene	U		0.104	1.00
1,2,4-Trimethylbenzene	U		0.322	1.00
1,3,5-Trimethylbenzene	U		0.104	1.00
Vinyl chloride	U		0.234	1.00
Xylenes, Total	U		0.174	3.00
(S) Toluene-d8	*108*			*80.0-120*
(S) 4-Bromofluorobenzene	*105*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*97.3*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3576468-1 09/30/20 10:53

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	25.0	21.3	85.2	19.0-160	
Acrylonitrile	25.0	17.6	70.4	55.0-149	
Benzene	5.00	5.03	101	70.0-123	
Bromobenzene	5.00	5.22	104	73.0-121	

Laboratory Control Sample (LCS)

(LCS) R3576468-1 09/30/20 10:53

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Bromodichloromethane	5.00	4.91	98.2	75.0-120	
Bromoform	5.00	4.59	91.8	68.0-132	
Bromomethane	5.00	5.82	116	10.0-160	
n-Butylbenzene	5.00	5.04	101	73.0-125	
sec-Butylbenzene	5.00	5.17	103	75.0-125	
tert-Butylbenzene	5.00	5.27	105	76.0-124	
Carbon tetrachloride	5.00	4.84	96.8	68.0-126	
Chlorobenzene	5.00	5.44	109	80.0-121	
Chlorodibromomethane	5.00	5.05	101	77.0-125	
Chloroethane	5.00	5.62	112	47.0-150	
Chloroform	5.00	5.05	101	73.0-120	
Chloromethane	5.00	5.76	115	41.0-142	
2-Chlorotoluene	5.00	5.32	106	76.0-123	
4-Chlorotoluene	5.00	5.44	109	75.0-122	
1,2-Dibromo-3-Chloropropane	5.00	4.03	80.6	58.0-134	
1,2-Dibromoethane	5.00	4.85	97.0	80.0-122	
Dibromomethane	5.00	5.19	104	80.0-120	
1,2-Dichlorobenzene	5.00	4.94	98.8	79.0-121	
1,3-Dichlorobenzene	5.00	5.27	105	79.0-120	
1,4-Dichlorobenzene	5.00	5.09	102	79.0-120	
Dichlorodifluoromethane	5.00	4.99	99.8	51.0-149	
1,1-Dichloroethane	5.00	5.54	111	70.0-126	
1,2-Dichloroethane	5.00	4.98	99.6	70.0-128	
1,1-Dichloroethene	5.00	5.85	117	71.0-124	
cis-1,2-Dichloroethene	5.00	5.51	110	73.0-120	
trans-1,2-Dichloroethene	5.00	5.46	109	73.0-120	
1,2-Dichloropropane	5.00	5.56	111	77.0-125	
1,1-Dichloropropene	5.00	5.21	104	74.0-126	
1,3-Dichloropropane	5.00	4.97	99.4	80.0-120	
cis-1,3-Dichloropropene	5.00	4.87	97.4	80.0-123	
trans-1,3-Dichloropropene	5.00	4.84	96.8	78.0-124	
2,2-Dichloropropane	5.00	5.60	112	58.0-130	
Di-isopropyl ether	5.00	4.96	99.2	58.0-138	
Ethylbenzene	5.00	5.14	103	79.0-123	
Hexachloro-1,3-butadiene	5.00	4.43	88.6	54.0-138	
Isopropylbenzene	5.00	5.03	101	76.0-127	
p-Isopropyltoluene	5.00	5.25	105	76.0-125	
2-Butanone (MEK)	25.0	19.5	78.0	44.0-160	
Methylene Chloride	5.00	4.76	95.2	67.0-120	
4-Methyl-2-pentanone (MIBK)	25.0	21.4	85.6	68.0-142	

Laboratory Control Sample (LCS)

(LCS) R3576468-1 09/30/20 10:53

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Methyl tert-butyl ether	5.00	4.73	94.6	68.0-125	
Naphthalene	5.00	4.50	90.0	54.0-135	
n-Propylbenzene	5.00	5.54	111	77.0-124	
Styrene	5.00	4.82	96.4	73.0-130	
1,1,1,2-Tetrachloroethane	5.00	5.11	102	75.0-125	
1,1,2,2-Tetrachloroethane	5.00	4.97	99.4	65.0-130	
Tetrachloroethene	5.00	5.57	111	72.0-132	
Toluene	5.00	5.26	105	79.0-120	
1,1,2-Trichlorotrifluoroethane	5.00	5.21	104	69.0-132	
1,2,3-Trichlorobenzene	5.00	4.84	96.8	50.0-138	
1,2,4-Trichlorobenzene	5.00	4.51	90.2	57.0-137	
1,1,1-Trichloroethane	5.00	5.18	104	73.0-124	
1,1,2-Trichloroethane	5.00	5.14	103	80.0-120	
Trichloroethene	5.00	5.10	102	78.0-124	
Trichlorofluoromethane	5.00	5.23	105	59.0-147	
1,2,3-Trichloropropane	5.00	4.90	98.0	73.0-130	
1,2,3-Trimethylbenzene	5.00	4.89	97.8	77.0-120	
1,2,4-Trimethylbenzene	5.00	5.10	102	76.0-121	
1,3,5-Trimethylbenzene	5.00	5.20	104	76.0-122	
Vinyl chloride	5.00	5.85	117	67.0-131	
Xylenes, Total	15.0	15.5	103	79.0-123	
(S) Toluene-d8			*108*	*80.0-120*	
(S) 4-Bromofluorobenzene			*104*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*99.9*	*70.0-130*	

Laboratory Control Sample (LCS)

(LCS) R3576468-2 09/30/20 11:13

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
LRH (C5-C8)	1200	1230	103	70.0-130	
(S) Toluene-d8			*104*	*80.0-120*	
(S) 4-Bromofluorobenzene			*104*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*98.4*	*70.0-130*	

Method Blank (MB)

(MB) R3576585-3 10/01/20 00:28

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		11.3	50.0
Acrolein	U		2.54	50.0
Acrylonitrile	U		0.671	10.0
Benzene	U		0.0941	1.00
Bromobenzene	U		0.118	1.00
Bromodichloromethane	U		0.136	1.00
Bromoform	U		0.129	1.00
Bromomethane	U		0.605	5.00
n-Butylbenzene	U		0.157	1.00
sec-Butylbenzene	U		0.125	1.00
tert-Butylbenzene	U		0.127	1.00
Carbon tetrachloride	U		0.128	1.00
Chlorobenzene	U		0.116	1.00
Chlorodibromomethane	U		0.140	1.00
Chloroethane	U		0.192	5.00
Chloroform	U		0.111	5.00
Chloromethane	U		0.960	2.50
2-Chlorotoluene	U		0.106	1.00
4-Chlorotoluene	U		0.114	1.00
1,2-Dibromo-3-Chloropropane	U		0.276	5.00
1,2-Dibromoethane	U		0.126	1.00
Dibromomethane	U		0.122	1.00
1,2-Dichlorobenzene	U		0.107	1.00
1,3-Dichlorobenzene	U		0.110	1.00
1,4-Dichlorobenzene	U		0.120	1.00
Dichlorodifluoromethane	U		0.374	5.00
1,1-Dichloroethane	U		0.100	1.00
1,2-Dichloroethane	U		0.0819	1.00
1,1-Dichloroethene	U		0.188	1.00
cis-1,2-Dichloroethene	U		0.126	1.00
trans-1,2-Dichloroethene	U		0.149	1.00
1,2-Dichloropropane	U		0.149	1.00
1,1-Dichloropropene	U		0.142	1.00
1,3-Dichloropropane	U		0.110	1.00
cis-1,3-Dichloropropene	U		0.111	1.00
trans-1,3-Dichloropropene	U		0.118	1.00
2,2-Dichloropropane	U		0.161	1.00
Di-isopropyl ether	U		0.105	1.00
Ethylbenzene	U		0.137	1.00
Hexachloro-1,3-butadiene	U		0.337	1.00

Method Blank (MB)

(MB) R3576585-3 10/01/20 00:28

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Isopropylbenzene	U		0.105	1.00
p-Isopropyltoluene	U		0.120	1.00
2-Butanone (MEK)	U		1.19	10.0
Methylene Chloride	U		0.430	5.00
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0
Methyl tert-butyl ether	U		0.101	1.00
Naphthalene	U		1.00	5.00
n-Propylbenzene	U		0.0993	1.00
Styrene	U		0.118	1.00
1,1,1,2-Tetrachloroethane	U		0.147	1.00
1,1,2,2-Tetrachloroethane	U		0.133	1.00
Tetrachloroethene	U		0.300	1.00
Toluene	U		0.278	1.00
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00
1,2,3-Trichlorobenzene	U		0.230	1.00
1,2,4-Trichlorobenzene	U		0.481	1.00
1,1,1-Trichloroethane	U		0.149	1.00
1,1,2-Trichloroethane	U		0.158	1.00
Trichloroethene	U		0.190	1.00
Trichlorofluoromethane	U		0.160	5.00
1,2,3-Trichloropropane	U		0.237	2.50
1,2,3-Trimethylbenzene	U		0.104	1.00
1,2,4-Trimethylbenzene	U		0.322	1.00
1,3,5-Trimethylbenzene	U		0.104	1.00
Vinyl chloride	U		0.234	1.00
Xylenes, Total	U		0.174	3.00
(S) Toluene-d8	*110*			*80.0-120*
(S) 4-Bromofluorobenzene	*102*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*87.8*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3576585-1 09/30/20 23:31 • (LCSD) R3576585-2 09/30/20 23:50

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	25.0	21.9	23.9	87.6	95.6	19.0-160			8.73	27
Acrolein	25.0	15.3	17.8	61.2	71.2	10.0-160			15.1	26
Acrylonitrile	25.0	21.9	18.7	87.6	74.8	55.0-149			15.8	20
Benzene	5.00	5.03	4.87	101	97.4	70.0-123			3.23	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3576585-1 09/30/20 23:31 • (LCSD) R3576585-2 09/30/20 23:50

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromobenzene	5.00	5.23	4.96	105	99.2	73.0-121			5.30	20
Bromodichloromethane	5.00	4.71	4.66	94.2	93.2	75.0-120			1.07	20
Bromoform	5.00	4.69	4.46	93.8	89.2	68.0-132			5.03	20
Bromomethane	5.00	5.21	5.24	104	105	10.0-160			0.574	25
n-Butylbenzene	5.00	5.14	5.05	103	101	73.0-125			1.77	20
sec-Butylbenzene	5.00	5.12	5.08	102	102	75.0-125			0.784	20
tert-Butylbenzene	5.00	5.36	5.42	107	108	76.0-124			1.11	20
Carbon tetrachloride	5.00	4.01	3.44	80.2	68.8	68.0-126			15.3	20
Chlorobenzene	5.00	5.31	5.31	106	106	80.0-121			0.000	20
Chlorodibromomethane	5.00	5.11	4.95	102	99.0	77.0-125			3.18	20
Chloroethane	5.00	5.30	5.41	106	108	47.0-150			2.05	20
Chloroform	5.00	4.90	4.67	98.0	93.4	73.0-120			4.81	20
Chloromethane	5.00	4.95	4.92	99.0	98.4	41.0-142			0.608	20
2-Chlorotoluene	5.00	5.28	5.17	106	103	76.0-123			2.11	20
4-Chlorotoluene	5.00	5.22	5.18	104	104	75.0-122			0.769	20
1,2-Dibromo-3-Chloropropane	5.00	4.81	4.12	96.2	82.4	58.0-134			15.5	20
1,2-Dibromoethane	5.00	5.09	4.68	102	93.6	80.0-122			8.39	20
Dibromomethane	5.00	5.28	5.10	106	102	80.0-120			3.47	20
1,2-Dichlorobenzene	5.00	4.90	4.86	98.0	97.2	79.0-121			0.820	20
1,3-Dichlorobenzene	5.00	5.16	5.04	103	101	79.0-120			2.35	20
1,4-Dichlorobenzene	5.00	5.23	4.93	105	98.6	79.0-120			5.91	20
Dichlorodifluoromethane	5.00	4.27	4.37	85.4	87.4	51.0-149			2.31	20
1,1-Dichloroethane	5.00	5.39	5.20	108	104	70.0-126			3.59	20
1,2-Dichloroethane	5.00	4.93	4.74	98.6	94.8	70.0-128			3.93	20
1,1-Dichloroethene	5.00	5.42	5.47	108	109	71.0-124			0.918	20
cis-1,2-Dichloroethene	5.00	5.46	5.28	109	106	73.0-120			3.35	20
trans-1,2-Dichloroethene	5.00	5.61	5.44	112	109	73.0-120			3.08	20
1,2-Dichloropropane	5.00	5.40	5.14	108	103	77.0-125			4.93	20
1,1-Dichloropropene	5.00	5.22	4.63	104	92.6	74.0-126			12.0	20
1,3-Dichloropropane	5.00	5.12	4.84	102	96.8	80.0-120			5.62	20
cis-1,3-Dichloropropene	5.00	4.81	4.59	96.2	91.8	80.0-123			4.68	20
trans-1,3-Dichloropropene	5.00	4.82	4.67	96.4	93.4	78.0-124			3.16	20
2,2-Dichloropropane	5.00	4.57	4.34	91.4	86.8	58.0-130			5.16	20
Di-isopropyl ether	5.00	4.65	4.29	93.0	85.8	58.0-138			8.05	20
Ethylbenzene	5.00	5.19	5.19	104	104	79.0-123			0.000	20
Hexachloro-1,3-butadiene	5.00	4.21	4.62	84.2	92.4	54.0-138			9.29	20
Isopropylbenzene	5.00	5.07	5.01	101	100	76.0-127			1.19	20
p-Isopropyltoluene	5.00	5.17	5.17	103	103	76.0-125			0.000	20
2-Butanone (MEK)	25.0	23.0	20.0	92.0	80.0	44.0-160			14.0	20
Methylene Chloride	5.00	4.67	4.68	93.4	93.6	67.0-120			0.214	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3576585-1 09/30/20 23:31 • (LCSD) R3576585-2 09/30/20 23:50

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
4-Methyl-2-pentanone (MIBK)	25.0	23.0	19.8	92.0	79.2	68.0-142			15.0	20
Methyl tert-butyl ether	5.00	4.85	4.60	97.0	92.0	68.0-125			5.29	20
Naphthalene	5.00	4.75	4.41	95.0	88.2	54.0-135			7.42	20
n-Propylbenzene	5.00	5.43	5.38	109	108	77.0-124			0.925	20
Styrene	5.00	4.98	5.05	99.6	101	73.0-130			1.40	20
1,1,1,2-Tetrachloroethane	5.00	5.13	4.95	103	99.0	75.0-125			3.57	20
1,1,2,2-Tetrachloroethane	5.00	5.53	4.95	111	99.0	65.0-130			11.1	20
Tetrachloroethene	5.00	5.01	5.09	100	102	72.0-132			1.58	20
Toluene	5.00	5.42	5.28	108	106	79.0-120			2.62	20
1,1,2-Trichlorotrifluoroethane	5.00	5.14	4.82	103	96.4	69.0-132			6.43	20
1,2,3-Trichlorobenzene	5.00	4.66	4.66	93.2	93.2	50.0-138			0.000	20
1,2,4-Trichlorobenzene	5.00	4.32	4.35	86.4	87.0	57.0-137			0.692	20
1,1,1-Trichloroethane	5.00	4.61	4.66	92.2	93.2	73.0-124			1.08	20
1,1,2-Trichloroethane	5.00	5.36	5.20	107	104	80.0-120			3.03	20
Trichloroethene	5.00	4.98	5.10	99.6	102	78.0-124			2.38	20
Trichlorofluoromethane	5.00	4.22	4.16	84.4	83.2	59.0-147			1.43	20
1,2,3-Trichloropropane	5.00	5.00	4.35	100	87.0	73.0-130			13.9	20
1,2,3-Trimethylbenzene	5.00	4.99	4.76	99.8	95.2	77.0-120			4.72	20
1,2,4-Trimethylbenzene	5.00	5.16	5.13	103	103	76.0-121			0.583	20
1,3,5-Trimethylbenzene	5.00	5.27	5.17	105	103	76.0-122			1.92	20
Vinyl chloride	5.00	5.22	5.04	104	101	67.0-131			3.51	20
Xylenes, Total	15.0	15.5	15.2	103	101	79.0-123			1.95	20
(S) Toluene-d8				*108*	*106*	*80.0-120*				
(S) 4-Bromofluorobenzene				*102*	*105*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*99.3*	*94.5*	*70.0-130*				

Method Blank (MB)

(MB) R3576841-2 10/01/20 10:19

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.0941	1.00
(S) Toluene-d8	*103*			*80.0-120*
(S) 4-Bromofluorobenzene	*88.4*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3576841-1 10/01/20 08:30

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	5.00	5.36	107	70.0-123	
(S) Toluene-d8			*102*	*80.0-120*	
(S) 4-Bromofluorobenzene			*98.9*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*112*	*70.0-130*	

Method Blank (MB)

(MB) R3577378-1 10/02/20 12:48

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
MRH (C9-C18)	U		7.54	100
HRH (C19-C35)	U		8.05	100
(S) 1-Chloro-octadecane	*95.0*			*40.0-140*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3577378-2 10/02/20 13:10 • (LCSD) R3577378-3 10/02/20 13:33

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
MRH (C9-C18)	1200	1010	1050	84.2	87.5	40.0-140			3.88	25
HRH (C19-C35)	1600	1740	1750	109	109	40.0-140			0.573	25
(S) 1-Chloro-octadecane				*104*	*104*	*40.0-140*				

Method Blank (MB)

(MB) R3576013-1 09/29/20 09:17

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Aldrin	U		0.0198	0.0500
Alpha BHC	U		0.0172	0.0500
Beta BHC	U		0.0208	0.0500
Delta BHC	U		0.0150	0.0500
Gamma BHC	U		0.0209	0.0500
4,4-DDD	U		0.0177	0.0500
4,4-DDE	U		0.0154	0.0500
4,4-DDT	U		0.0198	0.0500
Dieldrin	U		0.0162	0.0500
Endosulfan I	U		0.0160	0.0500
Endosulfan II	U		0.0164	0.0500
Endosulfan sulfate	U		0.0217	0.0500
Endrin	U		0.0161	0.0500
Endrin aldehyde	U		0.0237	0.0500
Endrin ketone	U		0.0219	0.0500
Heptachlor	U		0.0148	0.0500
Heptachlor epoxide	U		0.0183	0.0500
Hexachlorobenzene	U		0.0176	0.0500
Methoxychlor	U		0.0193	0.0500
Chlordane	U		0.0198	5.00
Toxaphene	U		0.168	0.500
(S) Decachlorobiphenyl	*86.5*			*10.0-128*
(S) Tetrachloro-m-xylene	*72.0*			*10.0-127*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3576013-2 09/29/20 09:32 • (LCSD) R3576013-3 09/29/20 09:46

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Aldrin	1.00	0.753	0.759	75.3	75.9	22.0-124			0.794	34
Alpha BHC	1.00	0.837	0.879	83.7	87.9	54.0-130			4.90	23
Beta BHC	1.00	0.859	0.903	85.9	90.3	53.0-136			4.99	20
Delta BHC	1.00	0.874	0.922	87.4	92.2	54.0-133			5.35	20
Gamma BHC	1.00	0.847	0.892	84.7	89.2	55.0-129			5.18	20
4,4-DDD	1.00	0.863	0.898	86.3	89.8	56.0-140			3.98	22
4,4-DDE	1.00	0.854	0.883	85.4	88.3	52.0-128			3.34	22
4,4-DDT	1.00	0.801	0.829	80.1	82.9	50.0-141			3.44	23
Dieldrin	1.00	0.917	0.959	91.7	95.9	59.0-133			4.48	20
Endosulfan I	1.00	0.832	0.868	83.2	86.8	57.0-131			4.24	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3576013-2 09/29/20 09:32 • (LCSD) R3576013-3 09/29/20 09:46

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Endosulfan II	1.00	0.834	0.872	83.4	87.2	58.0-133			4.45	20
Endosulfan sulfate	1.00	0.861	0.900	86.1	90.0	58.0-133			4.43	21
Endrin	1.00	0.880	0.914	88.0	91.4	57.0-134			3.79	21
Endrin aldehyde	1.00	0.827	0.858	82.7	85.8	53.0-129			3.68	20
Endrin ketone	1.00	0.907	0.951	90.7	95.1	60.0-145			4.74	20
Heptachlor	1.00	0.769	0.782	76.9	78.2	27.0-132			1.68	31
Heptachlor epoxide	1.00	0.829	0.870	82.9	87.0	57.0-130			4.83	20
Hexachlorobenzene	1.00	0.772	0.779	77.2	77.9	30.0-114			0.903	30
Methoxychlor	1.00	0.906	0.933	90.6	93.3	54.0-155			2.94	24
(S) Decachlorobiphenyl				*73.3*	*82.7*	*10.0-128*				
(S) Tetrachloro-m-xylene				*65.5*	*65.5*	*10.0-127*				

Method Blank (MB)

(MB) R3576112-2 09/29/20 18:45

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acenaphthene	U		0.0886	1.00
Acenaphthylene	U		0.0921	1.00
Anthracene	U		0.0804	1.00
Benzidine	U		3.74	10.0
Benzo(a)anthracene	U		0.199	1.00
Benzo(b)fluoranthene	U		0.130	1.00
Benzo(k)fluoranthene	U		0.120	1.00
Benzo(g,h,i)perylene	U		0.121	1.00
Benzo(a)pyrene	U		0.0381	1.00
Bis(2-chlorethoxy)methane	U		0.116	10.0
Bis(2-chloroethyl)ether	U		0.137	10.0
2,2-Oxybis(1-Chloropropane)	U		0.210	10.0
4-Bromophenyl-phenylether	U		0.0877	10.0
2-Chloronaphthalene	U		0.0648	1.00
4-Chlorophenyl-phenylether	U		0.0926	10.0
Chrysene	U		0.130	1.00
Dibenz(a,h)anthracene	U		0.0644	1.00
1,2-Dichlorobenzene	U		0.0713	10.0
1,3-Dichlorobenzene	U		0.132	10.0
1,4-Dichlorobenzene	U		0.0942	10.0
3,3-Dichlorobenzidine	U		0.212	10.0
2,4-Dinitrotoluene	U		0.0983	10.0
2,6-Dinitrotoluene	U		0.250	10.0
Fluoranthene	U		0.102	1.00
Fluorene	U		0.0844	1.00
Hexachlorobenzene	U		0.0755	1.00
Hexachloro-1,3-butadiene	U		0.0968	10.0
Hexachlorocyclopentadiene	U		0.0598	10.0
Hexachloroethane	U		0.127	10.0
Indeno(1,2,3-cd)pyrene	U		0.279	1.00
Isophorone	U		0.143	10.0
Naphthalene	U		0.159	1.00
Nitrobenzene	U		0.297	10.0
n-Nitrosodimethylamine	U		0.998	10.0
n-Nitrosodiphenylamine	U		2.37	10.0
n-Nitrosodi-n-propylamine	U		0.261	10.0
Phenanthrene	U		0.112	1.00
Benzylbutyl phthalate	U		0.765	3.00
Bis(2-ethylhexyl)phthalate	U		0.895	3.00
Di-n-butyl phthalate	U		0.453	3.00

Method Blank (MB)

(MB) R3576112-2 09/29/20 18:45

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Diethyl phthalate	U		0.287	3.00
Dimethyl phthalate	U		0.260	3.00
Di-n-octyl phthalate	U		0.932	3.00
Pyrene	U		0.107	1.00
1,2,4-Trichlorobenzene	U		0.0698	10.0
4-Chloro-3-methylphenol	U		0.131	10.0
2-Chlorophenol	U		0.133	10.0
2,4-Dichlorophenol	U		0.102	10.0
2,4-Dimethylphenol	U		0.0636	10.0
4,6-Dinitro-2-methylphenol	U		1.12	10.0
2,4-Dinitrophenol	U		5.93	10.0
2-Nitrophenol	U		0.117	10.0
4-Nitrophenol	U		0.143	10.0
Pentachlorophenol	U		0.313	10.0
Phenol	U		4.33	10.0
2,4,6-Trichlorophenol	U		0.100	10.0
(S) 2-Fluorophenol	*41.2*			*10.0-120*
(S) Phenol-d5	*24.7*			*10.0-120*
(S) Nitrobenzene-d5	*61.6*			*10.0-127*
(S) 2-Fluorobiphenyl	*74.0*			*10.0-130*
(S) 2,4,6-Tribromophenol	*66.5*			*10.0-155*
(S) p-Terphenyl-d14	*78.4*			*10.0-128*

Laboratory Control Sample (LCS)

(LCS) R3576112-1 09/29/20 18:24

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acenaphthene	50.0	41.6	83.2	41.0-120	
Acenaphthylene	50.0	44.7	89.4	43.0-120	
Anthracene	50.0	46.0	92.0	45.0-120	
Benzidine	100	33.7	33.7	10.0-120	
Benzo(a)anthracene	50.0	45.9	91.8	47.0-120	
Benzo(b)fluoranthene	50.0	47.3	94.6	46.0-120	
Benzo(k)fluoranthene	50.0	48.6	97.2	46.0-120	
Benzo(g,h,i)perylene	50.0	48.8	97.6	48.0-121	
Benzo(a)pyrene	50.0	51.6	103	47.0-120	
Bis(2-chlorethoxy)methane	50.0	38.7	77.4	33.0-120	
Bis(2-chloroethyl)ether	50.0	47.6	95.2	23.0-120	

Laboratory Control Sample (LCS)

(LCS) R3576112-1 09/29/20 18:24

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
2,2-Oxybis(1-Chloropropane)	50.0	41.5	83.0	28.0-120	
4-Bromophenyl-phenylether	50.0	43.7	87.4	45.0-120	
2-Chloronaphthalene	50.0	42.6	85.2	37.0-120	
4-Chlorophenyl-phenylether	50.0	45.8	91.6	44.0-120	
Chrysene	50.0	46.1	92.2	48.0-120	
Dibenz(a,h)anthracene	50.0	49.4	98.8	47.0-120	
1,2-Dichlorobenzene	50.0	42.8	85.6	20.0-120	
1,3-Dichlorobenzene	50.0	42.4	84.8	17.0-120	
1,4-Dichlorobenzene	50.0	41.7	83.4	18.0-120	
3,3-Dichlorobenzidine	100	98.4	98.4	44.0-120	
2,4-Dinitrotoluene	50.0	47.6	95.2	49.0-124	
2,6-Dinitrotoluene	50.0	45.6	91.2	46.0-120	
Fluoranthene	50.0	48.4	96.8	51.0-120	
Fluorene	50.0	45.6	91.2	47.0-120	
Hexachlorobenzene	50.0	43.8	87.6	44.0-120	
Hexachloro-1,3-butadiene	50.0	37.3	74.6	19.0-120	
Hexachlorocyclopentadiene	50.0	29.6	59.2	15.0-120	
Hexachloroethane	50.0	42.1	84.2	15.0-120	
Indeno(1,2,3-cd)pyrene	50.0	48.5	97.0	49.0-122	
Isophorone	50.0	36.1	72.2	36.0-120	
Naphthalene	50.0	38.2	76.4	27.0-120	
Nitrobenzene	50.0	38.2	76.4	27.0-120	
n-Nitrosodimethylamine	50.0	25.1	50.2	10.0-120	
n-Nitrosodiphenylamine	50.0	44.9	89.8	47.0-120	
n-Nitrosodi-n-propylamine	50.0	40.4	80.8	31.0-120	
Phenanthrene	50.0	44.8	89.6	46.0-120	
Benzylbutyl phthalate	50.0	49.4	98.8	43.0-121	
Bis(2-ethylhexyl)phthalate	50.0	48.2	96.4	43.0-122	
Di-n-butyl phthalate	50.0	50.0	100	49.0-121	
Diethyl phthalate	50.0	44.8	89.6	48.0-122	
Dimethyl phthalate	50.0	46.4	92.8	48.0-120	
Di-n-octyl phthalate	50.0	50.1	100	42.0-125	
Pyrene	50.0	46.2	92.4	47.0-120	
1,2,4-Trichlorobenzene	50.0	37.3	74.6	24.0-120	
4-Chloro-3-methylphenol	50.0	37.5	75.0	40.0-120	
2-Chlorophenol	50.0	40.4	80.8	25.0-120	
2,4-Dichlorophenol	50.0	38.8	77.6	36.0-120	
2,4-Dimethylphenol	50.0	38.7	77.4	33.0-120	
4,6-Dinitro-2-methylphenol	50.0	41.3	82.6	38.0-138	
2,4-Dinitrophenol	50.0	39.0	78.0	10.0-120	

Laboratory Control Sample (LCS)

(LCS) R3576112-1 09/29/20 18:24

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
2-Nitrophenol	50.0	39.6	79.2	31.0-120	
4-Nitrophenol	50.0	14.8	29.6	10.0-120	
Pentachlorophenol	50.0	40.0	80.0	23.0-120	
Phenol	50.0	15.3	30.6	10.0-120	
2,4,6-Trichlorophenol	50.0	43.4	86.8	42.0-120	
(S) 2-Fluorophenol			*49.2*	*10.0-120*	
(S) Phenol-d5			*29.2*	*10.0-120*	
(S) Nitrobenzene-d5			*63.8*	*10.0-127*	
(S) 2-Fluorobiphenyl			*85.5*	*10.0-130*	
(S) 2,4,6-Tribromophenol			*86.5*	*10.0-155*	
(S) p-Terphenyl-d14			*89.3*	*10.0-128*	

L1264834-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1264834-11 09/29/20 19:27 • (MS) R3576112-3 09/29/20 19:48 • (MSD) R3576112-4 09/29/20 20:09

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acenaphthene	45.5	ND	37.9	38.1	83.3	83.7	1	28.0-120			0.526	25
Acenaphthylene	45.5	ND	41.4	40.7	91.0	89.5	1	31.0-121			1.71	25
Anthracene	45.5	ND	43.0	42.5	94.5	93.4	1	36.0-120			1.17	23
Benzidine	91.0	ND	27.6	38.8	30.3	42.6	1	10.0-120			33.7	37
Benzo(a)anthracene	45.5	ND	41.4	41.7	91.0	91.6	1	39.0-120			0.722	23
Benzo(b)fluoranthene	45.5	ND	42.2	42.6	92.7	93.6	1	37.0-120			0.943	23
Benzo(k)fluoranthene	45.5	ND	43.6	43.7	95.8	96.0	1	37.0-120			0.229	26
Benzo(g,h,i)perylene	45.5	ND	42.6	43.6	93.6	95.8	1	37.0-123			2.32	25
Benzo(a)pyrene	45.5	ND	46.0	47.0	101	103	1	37.0-120			2.15	24
Bis(2-chlorethoxy)methane	45.5	ND	35.7	34.7	78.5	76.3	1	17.0-120			2.84	31
Bis(2-chloroethyl)ether	45.5	ND	41.8	41.5	91.9	91.2	1	14.0-120			0.720	33
2,2-Oxybis(1-Chloropropane)	45.5	ND	36.7	36.3	80.7	79.8	1	18.0-120			1.10	34
4-Bromophenyl-phenylether	45.5	ND	41.5	40.8	91.2	89.7	1	37.0-120			1.70	24
2-Chloronaphthalene	45.5	ND	39.7	38.1	87.3	83.7	1	29.0-120			4.11	28
4-Chlorophenyl-phenylether	45.5	ND	41.8	42.0	91.9	92.3	1	36.0-120			0.477	23
Chrysene	45.5	ND	41.5	41.6	91.2	91.4	1	38.0-120			0.241	23
Dibenz(a,h)anthracene	45.5	ND	43.3	44.3	95.2	97.4	1	36.0-121			2.28	24
3,3-Dichlorobenzidine	91.0	ND	89.0	91.6	97.8	101	1	10.0-134			2.88	30
2,4-Dinitrotoluene	45.5	ND	43.5	44.5	95.6	97.8	1	39.0-125			2.27	25
2,6-Dinitrotoluene	45.5	ND	41.9	42.2	92.1	92.7	1	36.0-120			0.713	27
Fluoranthene	45.5	ND	44.5	43.7	97.8	96.0	1	41.0-121			1.81	22
Fluorene	45.5	ND	42.0	41.7	92.3	91.6	1	37.0-120			0.717	24

L1264834-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1264834-11 09/29/20 19:27 • (MS) R3576112-3 09/29/20 19:48 • (MSD) R3576112-4 09/29/20 20:09

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Hexachlorobenzene	45.5	ND	40.5	40.3	89.0	88.6	1	35.0-122			0.495	24
Hexachloro-1,3-butadiene	45.5	ND	34.7	33.9	76.3	74.5	1	12.0-120			2.33	34
Hexachlorocyclopentadiene	45.5	ND	26.5	26.7	58.2	58.7	1	10.0-120			0.752	33
Hexachloroethane	45.5	ND	39.0	37.9	85.7	83.3	1	10.0-120			2.86	40
Indeno(1,2,3-cd)pyrene	45.5	ND	43.1	44.4	94.7	97.6	1	38.0-125			2.97	24
Isophorone	45.5	ND	34.0	32.0	74.7	70.3	1	21.0-120			6.06	27
Naphthalene	45.5	ND	35.1	34.1	77.1	74.9	1	10.0-120			2.89	31
Nitrobenzene	45.5	ND	34.0	34.7	74.7	76.3	1	12.0-120			2.04	30
n-Nitrosodimethylamine	45.5	ND	22.4	19.9	49.2	43.7	1	10.0-120			11.8	40
n-Nitrosodiphenylamine	45.5	ND	42.2	41.7	92.7	91.6	1	37.0-120			1.19	24
n-Nitrosodi-n-propylamine	45.5	ND	36.3	34.6	79.8	76.0	1	16.0-120			4.80	30
Phenanthrene	45.5	ND	41.7	41.0	91.6	90.1	1	33.0-120			1.69	22
Benzylbutyl phthalate	45.5	ND	45.1	45.6	99.1	100	1	34.0-126			1.10	24
1,2-Dichlorobenzene	45.5	ND	39.5	38.2	86.8	84.0	1	18.0-120			3.35	40
Bis(2-ethylhexyl)phthalate	45.5	ND	42.9	43.6	94.3	95.8	1	33.0-126			1.62	25
1,3-Dichlorobenzene	45.5	ND	39.6	37.7	87.0	82.9	1	15.0-120			4.92	40
Di-n-butyl phthalate	45.5	ND	46.4	46.2	102	102	1	35.0-128			0.432	23
1,4-Dichlorobenzene	45.5	ND	39.1	37.5	85.9	82.4	1	17.0-120			4.18	40
Diethyl phthalate	45.5	ND	41.3	41.6	90.8	91.4	1	39.0-125			0.724	24
Dimethyl phthalate	45.5	ND	42.8	42.6	94.1	93.6	1	37.0-120			0.468	24
Di-n-octyl phthalate	45.5	ND	44.4	46.1	97.6	101	1	25.0-135			3.76	26
Pyrene	45.5	ND	41.9	42.8	92.1	94.1	1	39.0-120			2.13	22
1,2,4-Trichlorobenzene	45.5	ND	34.8	33.8	76.5	74.3	1	15.0-120			2.92	31
4-Chloro-3-methylphenol	45.5	ND	35.2	34.7	77.4	76.3	1	26.0-120			1.43	27
2-Chlorophenol	45.5	ND	35.7	35.3	78.5	77.6	1	18.0-120			1.13	34
2,4-Dichlorophenol	45.5	ND	35.6	34.9	78.2	76.7	1	19.0-120			1.99	27
2,4-Dimethylphenol	45.5	ND	32.7	35.0	71.9	76.9	1	15.0-120			6.79	28
4,6-Dinitro-2-methylphenol	45.5	ND	38.6	38.6	84.8	84.8	1	10.0-144			0.000	39
2,4-Dinitrophenol	45.5	ND	36.0	36.8	79.1	80.9	1	10.0-120			2.20	40
2-Nitrophenol	45.5	ND	36.0	35.4	79.1	77.8	1	20.0-120			1.68	30
4-Nitrophenol	45.5	ND	12.5	12.8	27.5	28.1	1	10.0-120			2.37	40
Pentachlorophenol	45.5	ND	38.5	37.9	84.6	83.3	1	10.0-128			1.57	37
Phenol	45.5	ND	15.0	14.2	33.0	31.2	1	10.0-120			5.48	40
2,4,6-Trichlorophenol	45.5	ND	39.7	38.8	87.3	85.3	1	26.0-120			2.29	31
(S) 2-Fluorophenol					*46.9*	*46.0*		*10.0-120*				
(S) Phenol-d5					*26.4*	*26.6*		*10.0-120*				
(S) Nitrobenzene-d5					*61.1*	*63.6*		*10.0-127*				
(S) 2-Fluorobiphenyl					*86.0*	*83.1*		*10.0-130*				
(S) 2,4,6-Tribromophenol					*87.9*	*87.9*		*10.0-155*				
(S) p-Terphenyl-d14					*88.0*	*90.5*		*10.0-128*				

Method Blank (MB)

(MB) R3575404-2 09/27/20 17:37

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acenaphthene	U		0.0886	1.00
Acenaphthylene	U		0.0921	1.00
Anthracene	U		0.0804	1.00
Benzidine	U		3.74	10.0
Benzo(a)anthracene	U		0.199	1.00
Benzo(b)fluoranthene	U		0.130	1.00
Benzo(k)fluoranthene	U		0.120	1.00
Benzo(g,h,i)perylene	U		0.121	1.00
Benzo(a)pyrene	U		0.0381	1.00
Bis(2-chlorethoxy)methane	U		0.116	10.0
Bis(2-chloroethyl)ether	U		0.137	10.0
2,2-oxybis(1-chloropropane)	U		0.210	10.0
4-Bromophenyl-phenylether	U		0.0877	10.0
2-Chloronaphthalene	U		0.0648	1.00
4-Chlorophenyl-phenylether	U		0.0926	10.0
Chrysene	U		0.130	1.00
Dibenz(a,h)anthracene	U		0.0644	1.00
1,2-Dichlorobenzene	U		0.0713	10.0
1,3-Dichlorobenzene	U		0.132	10.0
1,4-Dichlorobenzene	U		0.0942	10.0
3,3-Dichlorobenzidine	U		0.212	10.0
2,4-Dinitrotoluene	U		0.0983	10.0
2,6-Dinitrotoluene	U		0.250	10.0
Fluoranthene	U		0.102	1.00
Fluorene	U		0.0844	1.00
Hexachlorobenzene	U		0.0755	1.00
Hexachloro-1,3-butadiene	U		0.0968	10.0
Hexachlorocyclopentadiene	U		0.0598	10.0
Hexachloroethane	U		0.127	10.0
Indeno(1,2,3-cd)pyrene	U		0.279	1.00
Isophorone	U		0.143	10.0
Naphthalene	0.212	J	0.159	1.00
Nitrobenzene	U		0.297	10.0
n-Nitrosodimethylamine	U		0.998	10.0
n-Nitrosodiphenylamine	U		2.37	10.0
n-Nitrosodi-n-propylamine	U		0.261	10.0
Phenanthrene	U		0.112	1.00
Benzylbutyl phthalate	U		0.765	3.00
Bis(2-ethylhexyl)phthalate	U		0.895	3.00
Di-n-butyl phthalate	U		0.453	3.00

Method Blank (MB)

(MB) R3575404-2 09/27/20 17:37

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Diethyl phthalate	U		0.287	3.00
Dimethyl phthalate	U		0.260	3.00
Di-n-octyl phthalate	U		0.932	3.00
Pyrene	U		0.107	1.00
1,2,4-Trichlorobenzene	U		0.0698	10.0
4-Chloro-3-methylphenol	U		0.131	10.0
2-Chlorophenol	U		0.133	10.0
2-Nitrophenol	U		0.117	10.0
4-Nitrophenol	U		0.143	10.0
Pentachlorophenol	U		0.313	10.0
Phenol	U		4.33	10.0
2,4,6-Trichlorophenol	U		0.100	10.0
2,4-Dichlorophenol	U		0.102	10.0
2,4-Dimethylphenol	U		0.0636	10.0
4,6-Dinitro-2-methylphenol	U		1.12	10.0
2,4-Dinitrophenol	U		5.93	10.0
(S) Nitrobenzene-d5	*39.3*			*10.0-127*
(S) 2-Fluorobiphenyl	*49.6*			*10.0-130*
(S) p-Terphenyl-d14	*54.8*			*10.0-128*
(S) Phenol-d5	*19.5*			*10.0-120*
(S) 2-Fluorophenol	*31.4*			*10.0-120*
(S) 2,4,6-Tribromophenol	*48.8*			*10.0-155*

Laboratory Control Sample (LCS)

(LCS) R3575404-1 09/27/20 17:16

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acenaphthene	50.0	36.5	73.0	41.0-120	
Acenaphthylene	50.0	40.1	80.2	43.0-120	
Anthracene	50.0	40.7	81.4	45.0-120	
Benzidine	100	4.76	4.76	10.0-120	J4
Benzo(a)anthracene	50.0	43.9	87.8	47.0-120	
Benzo(b)fluoranthene	50.0	42.7	85.4	46.0-120	
Benzo(k)fluoranthene	50.0	41.1	82.2	46.0-120	
Benzo(g,h,i)perylene	50.0	47.7	95.4	48.0-121	
Benzo(a)pyrene	50.0	45.8	91.6	47.0-120	
Bis(2-chlorethoxy)methane	50.0	30.8	61.6	33.0-120	
Bis(2-chloroethyl)ether	50.0	38.6	77.2	23.0-120	

Laboratory Control Sample (LCS)

(LCS) R3575404-1 09/27/20 17:16

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
2,2-oxybis(1-chloropropane)	50.0	38.4	76.8	28.0-120	
4-Bromophenyl-phenylether	50.0	46.3	92.6	45.0-120	
2-Chloronaphthalene	50.0	38.7	77.4	37.0-120	
4-Chlorophenyl-phenylether	50.0	42.1	84.2	44.0-120	
Chrysene	50.0	39.9	79.8	48.0-120	
Dibenz(a,h)anthracene	50.0	46.9	93.8	47.0-120	
3,3-Dichlorobenzidine	100	80.5	80.5	44.0-120	
2,4-Dinitrotoluene	50.0	45.8	91.6	49.0-124	
2,6-Dinitrotoluene	50.0	41.8	83.6	46.0-120	
Fluoranthene	50.0	44.5	89.0	51.0-120	
Fluorene	50.0	40.0	80.0	47.0-120	
Hexachlorobenzene	50.0	48.7	97.4	44.0-120	
Hexachloro-1,3-butadiene	50.0	42.2	84.4	19.0-120	
Hexachlorocyclopentadiene	50.0	30.6	61.2	15.0-120	
Hexachloroethane	50.0	38.1	76.2	15.0-120	
Indeno(1,2,3-cd)pyrene	50.0	48.1	96.2	49.0-122	
Isophorone	50.0	33.3	66.6	36.0-120	
Naphthalene	50.0	34.2	68.4	27.0-120	
Nitrobenzene	50.0	34.3	68.6	27.0-120	
n-Nitrosodimethylamine	50.0	27.0	54.0	10.0-120	
n-Nitrosodiphenylamine	50.0	38.9	77.8	47.0-120	
n-Nitrosodi-n-propylamine	50.0	39.3	78.6	31.0-120	
Phenanthrene	50.0	40.2	80.4	46.0-120	
Benzylbutyl phthalate	50.0	45.3	90.6	43.0-121	
Bis(2-ethylhexyl)phthalate	50.0	44.9	89.8	43.0-122	
Di-n-butyl phthalate	50.0	48.1	96.2	49.0-121	
Diethyl phthalate	50.0	47.3	94.6	48.0-122	
Dimethyl phthalate	50.0	42.7	85.4	48.0-120	
Di-n-octyl phthalate	50.0	42.2	84.4	42.0-125	
Pyrene	50.0	40.2	80.4	47.0-120	
1,2,4-Trichlorobenzene	50.0	34.8	69.6	24.0-120	
4-Chloro-3-methylphenol	50.0	34.1	68.2	40.0-120	
2-Chlorophenol	50.0	36.7	73.4	25.0-120	
2,4-Dichlorophenol	50.0	34.7	69.4	36.0-120	
2,4-Dimethylphenol	50.0	38.7	77.4	33.0-120	
4,6-Dinitro-2-methylphenol	50.0	43.9	87.8	38.0-138	
2,4-Dinitrophenol	50.0	43.8	87.6	10.0-120	
2-Nitrophenol	50.0	39.8	79.6	31.0-120	
4-Nitrophenol	50.0	15.9	31.8	10.0-120	
Pentachlorophenol	50.0	44.2	88.4	23.0-120	

Laboratory Control Sample (LCS)

(LCS) R3575404-1 09/27/20 17:16

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Phenol	50.0	12.6	25.2	10.0-120	
2,4,6-Trichlorophenol	50.0	41.1	82.2	42.0-120	
1,2-Dichlorobenzene	50.0	37.6	75.2	20.0-120	
1,3-Dichlorobenzene	50.0	36.6	73.2	17.0-120	
1,4-Dichlorobenzene	50.0	37.4	74.8	18.0-120	
(S) Nitrobenzene-d5			*59.8*	*10.0-127*	
(S) 2-Fluorobiphenyl			*78.9*	*10.0-130*	
(S) p-Terphenyl-d14			*82.3*	*10.0-128*	
(S) Phenol-d5			*23.3*	*10.0-120*	
(S) 2-Fluorophenol			*40.7*	*10.0-120*	
(S) 2,4,6-Tribromophenol			*112*	*10.0-155*	

L1265922-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1265922-03 09/27/20 19:45 • (MS) R3575404-3 09/27/20 20:06 • (MSD) R3575404-4 09/27/20 20:28

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acenaphthene	50.0	3.32	37.9	36.3	69.2	66.0	1	28.0-120			4.31	25
Acenaphthylene	50.0	ND	38.0	35.6	76.0	71.2	1	31.0-121			6.52	25
Anthracene	50.0	ND	42.6	41.8	83.6	82.0	1	36.0-120			1.90	23
Benzidine	100	ND	ND	ND	0.000	0.000	1	10.0-120	J6	J6	0.000	37
Benzo(a)anthracene	50.0	ND	45.7	42.6	91.4	85.2	1	39.0-120			7.02	23
Benzo(b)fluoranthene	50.0	ND	43.4	40.8	86.8	81.6	1	37.0-120			6.18	23
Benzo(k)fluoranthene	50.0	ND	43.9	40.6	87.8	81.2	1	37.0-120			7.81	26
Benzo(g,h,i)perylene	50.0	ND	50.7	46.5	101	93.0	1	37.0-123			8.64	25
Benzo(a)pyrene	50.0	ND	48.6	45.2	97.2	90.4	1	37.0-120			7.25	24
Bis(2-chlorethoxy)methane	50.0	ND	27.9	28.3	55.8	56.6	1	17.0-120			1.42	31
Bis(2-chloroethyl)ether	50.0	ND	34.1	33.5	68.2	67.0	1	14.0-120			1.78	33
2,2-oxybis(1-chloropropane)	50.0	ND	32.9	34.0	65.8	68.0	1	18.0-120			3.29	34
4-Bromophenyl-phenylether	50.0	ND	47.5	45.2	95.0	90.4	1	37.0-120			4.96	24
2-Chloronaphthalene	50.0	ND	34.4	34.2	68.8	68.4	1	29.0-120			0.583	28
4-Chlorophenyl-phenylether	50.0	ND	41.2	39.4	82.4	78.8	1	36.0-120			4.47	23
Chrysene	50.0	ND	41.0	37.9	82.0	75.8	1	38.0-120			7.86	23
Dibenz(a,h)anthracene	50.0	ND	49.1	45.7	98.2	91.4	1	36.0-121			7.17	24
3,3-Dichlorobenzidine	100	ND	42.8	37.7	42.8	37.7	1	10.0-134			12.7	30
2,4-Dinitrotoluene	50.0	ND	46.7	45.1	93.4	90.2	1	39.0-125			3.49	25
2,6-Dinitrotoluene	50.0	ND	41.3	39.8	82.6	79.6	1	36.0-120			3.70	27
Fluoranthene	50.0	ND	46.5	44.2	92.5	87.9	1	41.0-121			5.07	22
Fluorene	50.0	ND	40.1	38.2	78.7	74.9	1	37.0-120			4.85	24

L1265922-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1265922-03 09/27/20 19:45 • (MS) R3575404-3 09/27/20 20:06 • (MSD) R3575404-4 09/27/20 20:28

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Hexachlorobenzene	50.0	ND	47.7	47.6	95.4	95.2	1	35.0-122			0.210	24
Hexachloro-1,3-butadiene	50.0	ND	37.6	37.2	75.2	74.4	1	12.0-120			1.07	34
Hexachlorocyclopentadiene	50.0	ND	31.2	31.1	62.4	62.2	1	10.0-120			0.321	33
Hexachloroethane	50.0	ND	36.2	34.3	72.4	68.6	1	10.0-120			5.39	40
Indeno(1,2,3-cd)pyrene	50.0	ND	52.3	49.4	105	98.8	1	38.0-125			5.70	24
Isophorone	50.0	ND	30.5	30.4	61.0	60.8	1	21.0-120			0.328	27
Naphthalene	50.0	17.4	45.9	43.2	57.0	51.6	1	10.0-120			6.06	31
Nitrobenzene	50.0	ND	30.3	30.0	60.6	60.0	1	12.0-120			0.995	30
n-Nitrosodimethylamine	50.0	ND	22.7	22.7	45.4	45.4	1	10.0-120			0.000	40
n-Nitrosodiphenylamine	50.0	ND	36.0	34.0	72.0	68.0	1	37.0-120			5.71	24
n-Nitrosodi-n-propylamine	50.0	ND	34.8	34.3	69.6	68.6	1	16.0-120			1.45	30
Phenanthrene	50.0	ND	42.5	40.4	84.0	79.8	1	33.0-120			5.07	22
Benzylbutyl phthalate	50.0	ND	49.5	45.8	99.0	91.6	1	34.0-126			7.76	24
Bis(2-ethylhexyl)phthalate	50.0	ND	47.3	44.3	94.6	88.6	1	33.0-126			6.55	25
Di-n-butyl phthalate	50.0	ND	49.9	47.9	99.8	95.8	1	35.0-128			4.09	23
Diethyl phthalate	50.0	ND	47.9	45.4	95.8	90.8	1	39.0-125			5.36	24
Dimethyl phthalate	50.0	ND	43.9	41.4	87.8	82.8	1	37.0-120			5.86	24
Di-n-octyl phthalate	50.0	ND	45.8	44.2	91.6	88.4	1	25.0-135			3.56	26
Pyrene	50.0	ND	41.9	38.8	83.3	77.1	1	39.0-120			7.68	22
1,2,4-Trichlorobenzene	50.0	ND	31.4	30.4	62.8	60.8	1	15.0-120			3.24	31
4-Chloro-3-methylphenol	50.0	ND	35.8	33.3	71.6	66.6	1	26.0-120			7.24	27
2-Chlorophenol	50.0	ND	30.9	30.4	61.8	60.8	1	18.0-120			1.63	34
2,4-Dichlorophenol	50.0	ND	31.7	30.8	63.4	61.6	1	19.0-120			2.88	27
2,4-Dimethylphenol	50.0	ND	37.7	34.9	74.3	68.7	1	15.0-120			7.71	28
4,6-Dinitro-2-methylphenol	50.0	ND	47.6	46.2	95.2	92.4	1	10.0-144			2.99	39
2,4-Dinitrophenol	50.0	ND	52.2	47.4	104	94.8	1	10.0-120			9.64	40
1,2-Dichlorobenzene	50.0	ND	32.5	32.1	65.0	64.2	1	18.0-120			1.24	40
1,3-Dichlorobenzene	50.0	ND	31.5	30.3	63.0	60.6	1	15.0-120			3.88	40
1,4-Dichlorobenzene	50.0	ND	32.3	31.4	64.6	62.8	1	17.0-120			2.83	40
2-Nitrophenol	50.0	ND	38.0	36.9	76.0	73.8	1	20.0-120			2.94	30
4-Nitrophenol	50.0	ND	17.8	16.7	35.6	33.4	1	10.0-120			6.38	40
Pentachlorophenol	50.0	ND	52.0	48.5	104	97.0	1	10.0-128			6.97	37
Phenol	50.0	ND	11.4	11.5	22.8	23.0	1	10.0-120			0.873	40
2,4,6-Trichlorophenol	50.0	ND	39.4	37.8	78.8	75.6	1	26.0-120			4.15	31
(S) Nitrobenzene-d5					*56.6*	*57.0*		*10.0-127*				
(S) 2-Fluorobiphenyl					*68.9*	*69.4*		*10.0-130*				
(S) p-Terphenyl-d14					*87.3*	*82.7*		*10.0-128*				
(S) Phenol-d5					*21.2*	*21.8*		*10.0-120*				
(S) 2-Fluorophenol					*34.7*	*34.6*		*10.0-120*				
(S) 2,4,6-Tribromophenol					*119*	*115*		*10.0-155*				

L1265922-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1265922-03 09/27/20 19:45 • (MS) R3575404-3 09/27/20 20:06 • (MSD) R3575404-4 09/27/20 20:28

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %

Sample Narrative:

OS: Dilution due to sample volume.

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: The identification of the analyte is acceptable, but the reported concentration is an estimate. The calibration met method criteria.
J4	The associated batch QC was outside the established quality control range for accuracy.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.
P	RPD between the primary and confirmatory analysis exceeded 40%.

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

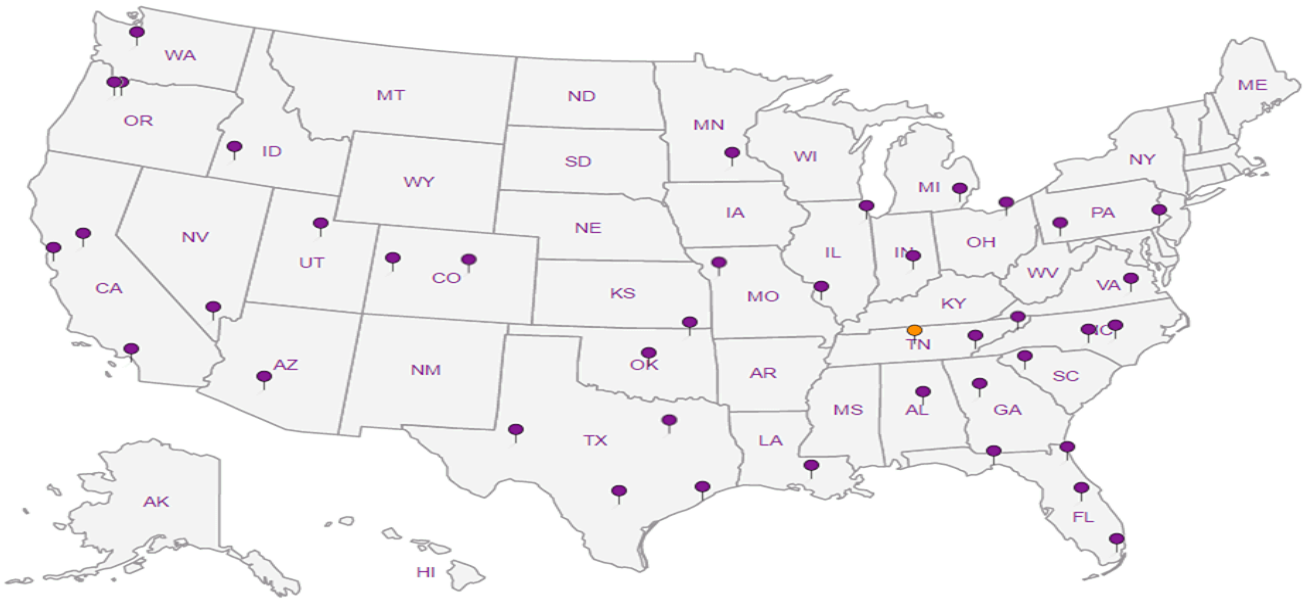
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



SCS Engineers - KS

8575 W. 110th Street
Overland Park, KS 66210

Billing Information:
Accounts Payable
8575 W. 110th Street
Overland Park, KS 66210

Pres Chk

Chain of Custody Page ___ of ___

Pace Analytical® National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

Report to: Doug Dreiling

Email To: ddreiling@scsengineers.com

Project Description: Former City Garage Operations

City/State Collected:

Please Circle: PT MT CT ET

Phone: 913-681-0030

Client Project # C4-052-73682

Lab Project # AQUAOPKS-C405273682

Collected by (print): Jeff Janzen

Site/Facility ID # 27220109.00

P.O. #

Collected by (signature):

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Immediately Packed on Ice N ___ Y X

SDG # L1265359

Table #

Acctnum: AQUAOPKS

Template: T174283

Prelogin: P797834

PM: 206 - Jeff Carr

PB:

Shipped Via: FedEX Ground

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	8260 Full Scan, LRH 40mlAmb HCl	Pesticides - 8081 100ml Amb-NoPres	RCRA Metals 250mlHDPE-HNO3 (Dissolved Field Filtered)	SVOCs - 8270 100ml Amb NoPres (* JJ 8270D)	TPHKSLVI - MRH / HRH 40mlAmb-HCl-BT	V8260 40mlAmb-HCl-Blk				Remarks	Sample # (lab only)
PB-1A	G	GW		9/21/20	1505	10	X	X	X	X	X						-01
PB-2	G	GW		9/21/20	1530	10	X	X	X	X	X						-02
PB-3	G	GW		9/21/20	1245	10	X	X	X	X	X						-03
~~		~~GW~~				~~10~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~		JJ				
~~		~~GW~~				~~10~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~		JJ				
~~		~~GW~~				~~10~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~		JJ				
PB-5	G	GW		9/21/20	1010	8	X		X	X	X						-04
PB-6	G	GW		9/21/20	1218	8	X		X	X	X						-05
PB-8	G	GW		9/21/20	1335	8	X		X	X	X						-06
PB-10	G	GW		9/21/20	1142 JJ	~~8~~ 7	X		~~X~~	X	X						-07

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other ________

Remarks: * Report 2,6-Dinitrotoluene on SVOC list, Report Kansas methods for all analysis. Report D,D,D-4,4 ~~8270~~

pH ______ Temp ______
Flow ______ Other ______

Samples returned via: ___ UPS ___ FedEx ___ Courier ________

Tracking # 9186 2500 2260/2274

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR
[signature]	09/22/20	1330	[signature] 9-22-20 1330	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 1.7-1=1.6 °C Bottles Received: 110
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) [signature]	Date: 9/23/20 Time: 900

Sample Receipt Checklist
COC Seal Present/Intact: NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N
RAD Screen <0.5 mR/hr: Y N

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

SCS Engineers - KS
8575 W. 110th Street
Overland Park, KS 66210

Billing Information:
Accounts Payable
8575 W. 110th Street
Overland Park, KS 66210

Pres Chk

Report to: Doug Dreiling
Email To: ddreiling@scsengineers.com

Project Description: Former City Garage Operations
City/State Collected:
Please Circle: PT MT CT ET

Phone: 913-681-0030
Client Project # C4-052-73682
Lab Project # AQUAOPKS-C405273682

Collected by (print): Jeff Jantz
Site/Facility ID # 27220109.00
P.O. #

Collected by (signature):
Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day
Date Results Needed

Quote #

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	8260 Full Scan, LRH 40mlAmb HCl	Pesticides - 8081 100ml Amb-NoPres	RCRA Metals 250mlHDPE-HNO3 Dissolved Field Filtered	SVOCs - 8270 100ml Amb NoPres 8270D 4°C	TPHKSLVI - MRH / HRH 40mlAmb-HCl-BT	V8260 40mlAmb-HCl-Blk					Remarks	Sample # (lab only)
PB-4	G	GW		9/21/20	1035	7	X			X	X							-08
PB-7	G	GW		9/21/20	1509	7	X			X	X							-09
PB-9	G	GW		9/21/20	1630	7	X			X	X							-10
PB-11	G	GW		9/21/20	1445	7	X			X	X							-11
		GW				7	X			X	X		JJ					
TRIP BLANK 1	—	GW		—	—	1						X						-12
TRIP BLANK 2	—	GW		—	—	1						X						-13
~~TRIP BLANK 3~~ JJ		~~GW~~				1						X	JJ					
DUP	G	GW		9/21/20	—	10	X	X	X	X	X							-14
Field Blnk	G	GW		9/21/20	1545	10	X	X	X	X	X							-15

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: * Report 2,6-Dinitrotoluene on SVOC report. Report Kansas Methods for all analysis. 2250, 2244

pH _____ Temp _____
Flow _____ Other _____

Samples returned via: __ UPS __ FedEx __ Courier _____
Tracking # 7186 2501 2260 2274

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	9/22/20	1330	9-22-20 1330
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)

Trip Blank Received: Yes / No HCl / MeoH TBR
Temp: 1.7, 1.6 °C
Bottles Received: 110
Date: 9/22/20 Time: 1400

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Sample Receipt Checklist
COC Seal Present/Intact: __NP __Y __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: __Y __N
Correct bottles used: __Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: __Y __N

Chain of Custody Page ___ of ___

Pace Analytical®
National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

SDG # L1265359
B127
Tab

Acctnum: AQUAOPKS
Template: T174283
Prelogin: P797834
PM: 206 - Jeff Carr
PB:
Shipped Via: FedEX Ground

Hailey Melson

Pace Analytical®
National Center for Testing & Innovation

Login #: L1265359	Client: AQUAOPKS	Date: 09/23/2020	Evaluated by: Monica R.

Non-Conformance (check applicable items)

	Sample Integrity		Chain of Custody Clarification		
	Parameter(s) past holding time	1	Login Clarification Needed		**If Broken Container:**
	Temperature not in range		Chain of custody is incomplete		Insufficient packing material around container
	Improper container type		Please specify Metals requested.		Insufficient packing material inside cooler
	pH not in range.		Please specify TCLP requested.		Improper handling by carrier (FedEx / UPS / Cou
	Insufficient sample volume.		Received additional samples not listed on coc.		Sample was frozen
	Sample is biphasic.		Sample ids on containers do not match ids on coc		Container lid not intact
	Vials received with headspace.		Trip Blank not received.		**If no Chain of Custody:**
2	Broken container		Client did not "X" analysis.		Received by:
	Broken container:		Chain of Custody is missing		Date/Time:
	Sufficient sample remains				Temp./Cont. Rec./pH:
					Carrier:
					Tracking#

Login Comments:

1) No HNO3 container received for PB-2.
2) One HCL vial received broken for PB-2

Client informed by:		Call		Email	X	Voice Mail		Date: 9/24/20	Time: 0906
TSR Initials: JC	Client Contact: D. Dreiling								

Login Instructions: 1, 2> Client informed. Metals products need to be removed from PB-2.

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

September 28, 2020

SCS Engineers - KS

Sample Delivery Group:	L1265287
Samples Received:	09/23/2020
Project Number:	C4-052-73682
Description:	Former City Garage Operations
Site:	27220109.00
Report To:	Doug Dreiling 8575 W. 110th Street Overland Park, KS 66210

Entire Report Reviewed By:

Jeff Carr
Project Manager

TABLE OF CONTENTS

AS-1 L1265287-01 Air

Collected by: Jeff J.
Collected date/time: 09/21/20 16:10
Received date/time: 09/23/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1549178	1	09/25/20 21:52	09/25/20 21:52	DAH	Mt. Juliet, TN

AS-2 L1265287-02 Air

Collected by: Jeff J.
Collected date/time: 09/21/20 16:12
Received date/time: 09/23/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1549178	1	09/25/20 22:35	09/25/20 22:35	DAH	Mt. Juliet, TN

AS-AMB L1265287-03 Air

Collected by: Jeff J.
Collected date/time: 09/21/20 16:14
Received date/time: 09/23/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1549178	1	09/25/20 23:17	09/25/20 23:17	DAH	Mt. Juliet, TN

DUP L1265287-04 Air

Collected by: Jeff J.
Collected date/time: 09/21/20 00:00
Received date/time: 09/23/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1549178	1	09/25/20 23:59	09/25/20 23:59	DAH	Mt. Juliet, TN

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Jeff Carr
Project Manager

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	3.00	7.13		1	WG1549178
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1549178
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1549178
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1549178
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1549178
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1549178
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1549178
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1549178
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1549178
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1549178
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1549178
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1549178
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1549178
Chloromethane	74-87-3	50.50	0.200	0.413	0.250	0.516		1	WG1549178
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1549178
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1549178
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1549178
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1549178
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1549178
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1549178
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1549178
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1549178
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1549178
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1549178
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1549178
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1549178
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1549178
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1549178
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1549178
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1549178
Ethanol	64-17-5	46.10	0.630	1.19	50.8	95.8		1	WG1549178
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1549178
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1549178
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG1549178
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.230	1.14		1	WG1549178
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1549178
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1549178
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1549178
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1549178
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1549178
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1549178
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.301	1.05		1	WG1549178
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1549178
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1549178
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1549178
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1549178
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1549178
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1549178
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1549178
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1549178
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1549178
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1549178
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1549178
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1549178
Toluene	108-88-3	92.10	0.200	0.753	0.243	0.915		1	WG1549178
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1549178

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1549178
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1549178
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1549178
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1549178
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1549178
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1549178
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1549178
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1549178
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1549178
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1549178
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1549178
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*98.9*				WG1549178

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	9.11	21.6		1	WG1549178
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1549178
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1549178
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1549178
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1549178
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1549178
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1549178
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1549178
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1549178
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1549178
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1549178
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1549178
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1549178
Chloromethane	74-87-3	50.50	0.200	0.413	0.638	1.32		1	WG1549178
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1549178
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1549178
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1549178
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1549178
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1549178
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1549178
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1549178
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1549178
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1549178
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1549178
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1549178
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1549178
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1549178
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1549178
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1549178
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1549178
Ethanol	64-17-5	46.10	0.630	1.19	41.6	78.4		1	WG1549178
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1549178
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1549178
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.260	1.46		1	WG1549178
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.567	2.80		1	WG1549178
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1549178
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1549178
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1549178
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1549178
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1549178
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1549178
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1549178
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1549178
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1549178
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1549178
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1549178
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1549178
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1549178
2-Propanol	67-63-0	60.10	1.25	3.07	22.6	55.6		1	WG1549178
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1549178
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1549178
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1549178
Tetrachloroethylene	127-18-4	166	0.200	1.36	0.753	5.11		1	WG1549178
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1549178
Toluene	108-88-3	92.10	0.200	0.753	0.462	1.74		1	WG1549178
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1549178

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1549178
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1549178
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1549178
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1549178
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1549178
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1549178
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1549178
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1549178
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1549178
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1549178
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1549178
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*98.7*				WG1549178

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	5.53	13.1		1	WG1549178
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1549178
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1549178
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1549178
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1549178
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1549178
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1549178
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1549178
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1549178
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1549178
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1549178
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1549178
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1549178
Chloromethane	74-87-3	50.50	0.200	0.413	0.585	1.21		1	WG1549178
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1549178
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1549178
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1549178
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1549178
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1549178
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1549178
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1549178
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1549178
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1549178
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1549178
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1549178
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1549178
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1549178
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1549178
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1549178
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1549178
Ethanol	64-17-5	46.10	0.630	1.19	4.41	8.31		1	WG1549178
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1549178
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1549178
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.242	1.36		1	WG1549178
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.550	2.72		1	WG1549178
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1549178
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1549178
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1549178
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1549178
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1549178
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1549178
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1549178
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1549178
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1549178
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1549178
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1549178
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1549178
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1549178
2-Propanol	67-63-0	60.10	1.25	3.07	1.73	4.25		1	WG1549178
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1549178
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1549178
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1549178
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1549178
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1549178
Toluene	108-88-3	92.10	0.200	0.753	0.493	1.86		1	WG1549178
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1549178

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1549178
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1549178
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1549178
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1549178
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1549178
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1549178
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1549178
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1549178
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1549178
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1549178
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1549178
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*98.3*				WG1549178

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	6.64	15.8		1	WG1549178
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1549178
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1549178
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1549178
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1549178
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1549178
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1549178
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1549178
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1549178
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1549178
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1549178
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1549178
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1549178
Chloromethane	74-87-3	50.50	0.200	0.413	0.616	1.27		1	WG1549178
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1549178
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1549178
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1549178
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1549178
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1549178
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1549178
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1549178
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1549178
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1549178
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1549178
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1549178
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1549178
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1549178
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1549178
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1549178
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1549178
Ethanol	64-17-5	46.10	0.630	1.19	119	224	E	1	WG1549178
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1549178
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1549178
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.249	1.40		1	WG1549178
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.576	2.85		1	WG1549178
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1549178
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1549178
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1549178
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1549178
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1549178
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1549178
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1549178
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1549178
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1549178
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1549178
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1549178
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1549178
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1549178
2-Propanol	67-63-0	60.10	1.25	3.07	2.38	5.85		1	WG1549178
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1549178
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1549178
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1549178
Tetrachloroethylene	127-18-4	166	0.200	1.36	0.233	1.58		1	WG1549178
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1549178
Toluene	108-88-3	92.10	0.200	0.753	0.525	1.98		1	WG1549178
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1549178

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1549178
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1549178
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1549178
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1549178
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1549178
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1549178
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1549178
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1549178
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1549178
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1549178
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1549178
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*98.0*				WG1549178

Method Blank (MB)

(MB) R3574683-3 09/25/20 09:33

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Acetone	U		0.584	1.25
Allyl Chloride	U		0.114	0.200
Benzene	U		0.0715	0.200
Benzyl Chloride	U		0.0598	0.200
Bromodichloromethane	U		0.0702	0.200
Bromoform	U		0.0732	0.600
Bromomethane	U		0.0982	0.200
1,3-Butadiene	U		0.104	2.00
Carbon disulfide	U		0.102	0.200
Carbon tetrachloride	U		0.0732	0.200
Chlorobenzene	U		0.0832	0.200
Chloroethane	U		0.0996	0.200
Chloroform	U		0.0717	0.200
Chloromethane	U		0.103	0.200
2-Chlorotoluene	U		0.0828	0.200
Cyclohexane	U		0.0753	0.200
Dibromochloromethane	U		0.0727	0.200
1,2-Dibromoethane	U		0.0721	0.200
1,2-Dichlorobenzene	U		0.128	0.200
1,3-Dichlorobenzene	U		0.182	0.200
1,4-Dichlorobenzene	U		0.0557	0.200
1,2-Dichloroethane	U		0.0700	0.200
1,1-Dichloroethane	U		0.0723	0.200
1,1-Dichloroethene	U		0.0762	0.200
cis-1,2-Dichloroethene	U		0.0784	0.200
trans-1,2-Dichloroethene	U		0.0673	0.200
1,2-Dichloropropane	U		0.0760	0.200
cis-1,3-Dichloropropene	U		0.0689	0.200
trans-1,3-Dichloropropene	U		0.0728	0.200
1,4-Dioxane	U		0.0833	0.200
Ethylbenzene	U		0.0835	0.200
4-Ethyltoluene	U		0.0783	0.200
Trichlorofluoromethane	U		0.0819	0.200
Dichlorodifluoromethane	U		0.137	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0793	0.200
1,2-Dichlorotetrafluoroethane	U		0.0890	0.200
Heptane	U		0.104	0.200
Hexachloro-1,3-butadiene	U		0.105	0.630
n-Hexane	U		0.206	0.630
Isopropylbenzene	U		0.0777	0.200

Method Blank (MB)

(MB) R3574683-3 09/25/20 09:33

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Methylene Chloride	U		0.0979	0.200
Methyl Butyl Ketone	U		0.133	1.25
2-Butanone (MEK)	U		0.0814	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0765	1.25
Methyl Methacrylate	U		0.0876	0.200
MTBE	U		0.0647	0.200
Naphthalene	U		0.350	0.630
2-Propanol	U		0.264	1.25
Propene	0.125	J	0.0932	0.400
Styrene	U		0.0788	0.200
1,1,2,2-Tetrachloroethane	U		0.0743	0.200
Tetrachloroethylene	U		0.0814	0.200
Tetrahydrofuran	U		0.0734	0.200
Toluene	U		0.0870	0.200
1,2,4-Trichlorobenzene	U		0.148	0.630
1,1,1-Trichloroethane	U		0.0736	0.200
1,1,2-Trichloroethane	U		0.0775	0.200
Trichloroethylene	U		0.0680	0.200
1,2,4-Trimethylbenzene	U		0.0764	0.200
1,3,5-Trimethylbenzene	U		0.0779	0.200
2,2,4-Trimethylpentane	U		0.133	0.200
Vinyl chloride	U		0.0949	0.200
Vinyl Bromide	U		0.0852	0.200
Vinyl acetate	U		0.116	0.200
m&p-Xylene	U		0.135	0.400
o-Xylene	U		0.0828	0.200
Ethanol	U		0.265	0.630
(S) 1,4-Bromofluorobenzene	*99.2*			*60.0-140*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3574683-1 09/25/20 08:10 • (LCSD) R3574683-2 09/25/20 08:52

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethanol	3.75	3.81	3.73	102	99.5	55.0-148			2.12	25
Propene	3.75	3.85	3.90	103	104	64.0-144			1.29	25
Dichlorodifluoromethane	3.75	3.91	3.95	104	105	64.0-139			1.02	25
1,2-Dichlorotetrafluoroethane	3.75	3.84	3.96	102	106	70.0-130			3.08	25
Chloromethane	3.75	3.82	3.90	102	104	70.0-130			2.07	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3574683-1 09/25/20 08:10 • (LCSD) R3574683-2 09/25/20 08:52

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Vinyl chloride	3.75	3.86	3.98	103	106	70.0-130			3.06	25
1,3-Butadiene	3.75	3.80	3.84	101	102	70.0-130			1.05	25
Bromomethane	3.75	3.85	3.98	103	106	70.0-130			3.32	25
Chloroethane	3.75	3.83	4.15	102	111	70.0-130			8.02	25
Trichlorofluoromethane	3.75	3.85	3.96	103	106	70.0-130			2.82	25
1,1,2-Trichlorotrifluoroethane	3.75	3.85	3.94	103	105	70.0-130			2.31	25
1,1-Dichloroethene	3.75	3.84	3.91	102	104	70.0-130			1.81	25
1,1-Dichloroethane	3.75	3.84	3.93	102	105	70.0-130			2.32	25
Acetone	3.75	3.49	3.57	93.1	95.2	70.0-130			2.27	25
2-Propanol	3.75	3.87	4.05	103	108	70.0-139			4.55	25
Carbon disulfide	3.75	3.87	3.89	103	104	70.0-130			0.515	25
Methylene Chloride	3.75	3.74	3.83	99.7	102	70.0-130			2.38	25
MTBE	3.75	3.81	3.88	102	103	70.0-130			1.82	25
trans-1,2-Dichloroethene	3.75	3.80	3.93	101	105	70.0-130			3.36	25
n-Hexane	3.75	3.86	3.96	103	106	70.0-130			2.56	25
Vinyl acetate	3.75	3.35	3.36	89.3	89.6	70.0-130			0.298	25
Methyl Ethyl Ketone	3.75	3.76	4.00	100	107	70.0-130			6.19	25
cis-1,2-Dichloroethene	3.75	3.74	3.85	99.7	103	70.0-130			2.90	25
Chloroform	3.75	3.78	3.90	101	104	70.0-130			3.13	25
Cyclohexane	3.75	3.81	3.91	102	104	70.0-130			2.59	25
1,1,1-Trichloroethane	3.75	3.86	3.99	103	106	70.0-130			3.31	25
Carbon tetrachloride	3.75	3.86	3.92	103	105	70.0-130			1.54	25
Benzene	3.75	3.89	3.96	104	106	70.0-130			1.78	25
1,2-Dichloroethane	3.75	3.90	4.01	104	107	70.0-130			2.78	25
Heptane	3.75	3.13	3.37	83.5	89.9	70.0-130			7.38	25
Trichloroethylene	3.75	3.89	3.94	104	105	70.0-130			1.28	25
1,2-Dichloropropane	3.75	3.94	4.01	105	107	70.0-130			1.76	25
1,4-Dioxane	3.75	3.72	3.83	99.2	102	70.0-140			2.91	25
Bromodichloromethane	3.75	3.93	3.92	105	105	70.0-130			0.255	25
cis-1,3-Dichloropropene	3.75	3.98	4.00	106	107	70.0-130			0.501	25
4-Methyl-2-pentanone (MIBK)	3.75	3.90	4.01	104	107	70.0-139			2.78	25
Toluene	3.75	3.89	3.95	104	105	70.0-130			1.53	25
trans-1,3-Dichloropropene	3.75	3.92	3.95	105	105	70.0-130			0.762	25
1,1,2-Trichloroethane	3.75	3.87	3.90	103	104	70.0-130			0.772	25
Tetrachloroethylene	3.75	3.74	3.85	99.7	103	70.0-130			2.90	25
Methyl Butyl Ketone	3.75	3.83	3.90	102	104	70.0-149			1.81	25
Dibromochloromethane	3.75	3.94	3.99	105	106	70.0-130			1.26	25
1,2-Dibromoethane	3.75	3.96	3.97	106	106	70.0-130			0.252	25
Chlorobenzene	3.75	3.91	3.89	104	104	70.0-130			0.513	25
Ethylbenzene	3.75	3.84	3.94	102	105	70.0-130			2.57	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3574683-1 09/25/20 08:10 • (LCSD) R3574683-2 09/25/20 08:52

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
m&p-Xylene	7.50	7.71	7.90	103	105	70.0-130			2.43	25
o-Xylene	3.75	3.84	3.92	102	105	70.0-130			2.06	25
Styrene	3.75	3.84	3.94	102	105	70.0-130			2.57	25
Bromoform	3.75	3.86	3.96	103	106	70.0-130			2.56	25
1,1,2,2-Tetrachloroethane	3.75	3.80	3.90	101	104	70.0-130			2.60	25
4-Ethyltoluene	3.75	3.85	3.97	103	106	70.0-130			3.07	25
1,3,5-Trimethylbenzene	3.75	3.82	3.94	102	105	70.0-130			3.09	25
1,2,4-Trimethylbenzene	3.75	3.80	3.91	101	104	70.0-130			2.85	25
1,3-Dichlorobenzene	3.75	3.85	4.01	103	107	70.0-130			4.07	25
1,4-Dichlorobenzene	3.75	3.89	4.02	104	107	70.0-130			3.29	25
Benzyl Chloride	3.75	4.16	4.24	111	113	70.0-152			1.90	25
1,2-Dichlorobenzene	3.75	3.87	3.93	103	105	70.0-130			1.54	25
1,2,4-Trichlorobenzene	3.75	3.97	4.07	106	109	70.0-160			2.49	25
Hexachloro-1,3-butadiene	3.75	4.09	4.21	109	112	70.0-151			2.89	25
Naphthalene	3.75	3.87	4.03	103	107	70.0-159			4.05	25
Allyl Chloride	3.75	3.61	4.32	96.3	115	70.0-130			17.9	25
2-Chlorotoluene	3.75	3.77	3.94	101	105	70.0-130			4.41	25
Methyl Methacrylate	3.75	3.71	3.81	98.9	102	70.0-130			2.66	25
Tetrahydrofuran	3.75	3.79	3.94	101	105	70.0-137			3.88	25
2,2,4-Trimethylpentane	3.75	3.90	4.00	104	107	70.0-130			2.53	25
Vinyl Bromide	3.75	3.88	3.94	103	105	70.0-130			1.53	25
Isopropylbenzene	3.75	3.78	3.93	101	105	70.0-130			3.89	25
(S) 1,4-Bromofluorobenzene				*97.5*	*98.5*	*60.0-140*				

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas [5]	LAB0152
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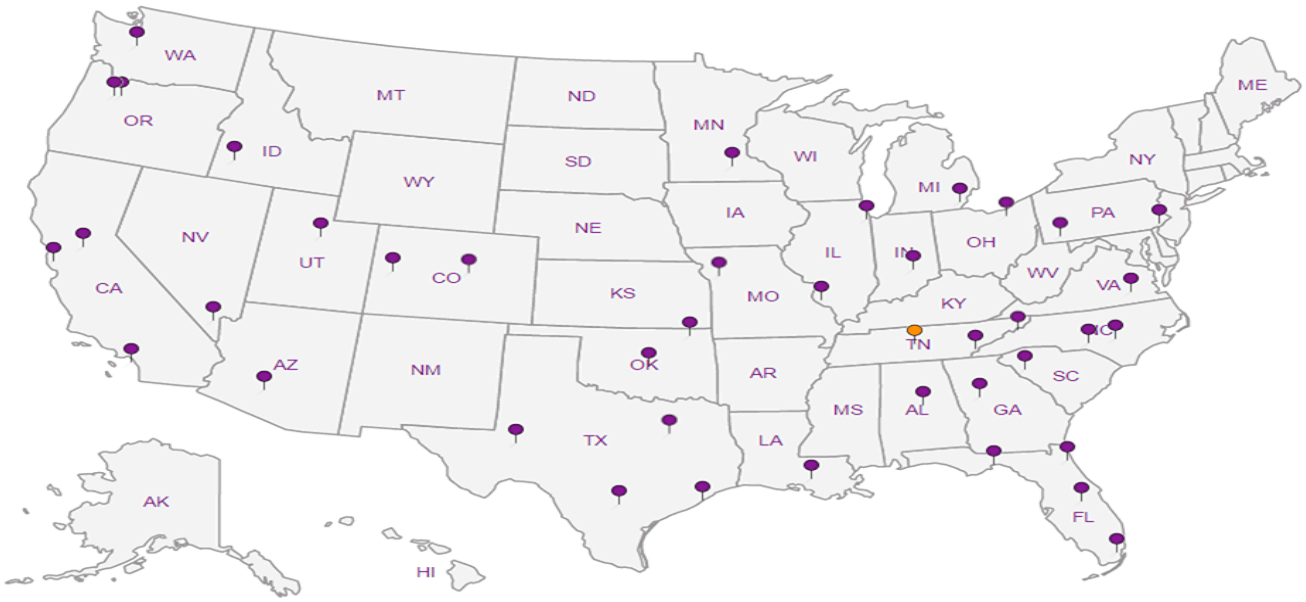
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



SCS Engineers - KS

8575 W. 110th Street
Overland Park, KS 66210

Billing Information:
Accounts Payable
8575 W. 110th Street
Overland Park, KS 66210

Pres Chk:

Report to: **Doug Dreiling**

Email To: **ddreiling@scsengineers.com**

Project Description: **Former City Garage Operations**

City/State Collected:

Please Circle: PT MT CT ET

Phone: **913-681-0030**

Client Project # **C4-052-73682**

Lab Project # **AQUAOPKS-C405273682**

Collected by (print): Jeff Jansen

Site/Facility ID # **27220109.00**

P.O. #

Collected by (signature):

Immediately Packed on Ice N X Y ___

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Date Results Needed

Quote #

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

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Tabl 1113

Acctnum: **AQUAOPKS**

Template: **T174281**

Prelogin: **P797735**

PM: **206 - Jeff Carr**

PB: CSL 09/16/20

Shipped Via: **FedEX Ground**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	TO-15 Summa	Remarks	Sample # (lab only)
AS-1	G	Air	NA	9/21/20	0819-1610	1	X		01
AS-2	↓	Air	↓	↓	0822-1612	1	X		02
AS-AMB	↓	Air	↓	↓	0823-1619	1	X		03
DUP	↓	Air	↓	↓	—	1	X		04

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking # 1411 1765 4843

Sample Receipt Checklist

COC Seal Present/Intact:	NP	Y N
COC Signed/Accurate:		Y N
Bottles arrive intact:		Y N
Correct bottles used:		Y N
Sufficient volume sent:		Y N
If Applicable		
VOA Zero Headspace:		Y N
Preservation Correct/Checked:		Y N
RAD Screen <0.5 mR/hr:		Y N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR
	09/22/20	1330	9-22-20 1330	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: AMB °C Bottles Received: 4
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 9/23/20 Time: 9:02

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK