FINAL
August 2023

2022 ANNUAL GROUNDWATER MONITORING REPORT

FIRE TRAINING PIT (FTP) AND TRACKED VEHICLE REPAIR/OLD MOBILIZATION AND TRAINING EQUIPMENT SITE (TVR/OLD MATES)

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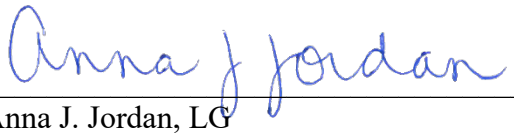

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ABBREVIATIONS AND ACRONYMS

µg/L	micrograms per liter
bgs	below ground surface
cis-DCE	cis-1,2-dichloroethylene
COC	contaminant of concern
cPAH	carcinogenic polycyclic aromatic hydrocarbon
E&E	Ecology & Environment
Ecology	Washington State Department of Ecology
ERP	Environmental Restoration Program
Fremont	Fremont Analytical
FTP	fire training pit
IEJV	INNOVEX-ERRG Joint Venture
JBLM	Joint Base Lewis-McChord
LC	laboratory control
LCD	laboratory control duplicate
MMP	main motor pool
MS	Matrix Spike
MSD	Matrix Spike Duplicate
MTCA	Model Toxics Control Act
Old MATES	Old Mobilization and Training Equipment Site
ORC	Oxygen release compound
Pace	Pace Analytical Laboratory
PAH	polycyclic aromatic hydrocarbon
PAIC	Pomona Artesian Irrigation Company
PAL	Project Action Limit
PCB	polychlorinated biphenyl
PDB	passive diffusion bag
Pegasus	Pegasus Environmental Management Services
QC	quality control
RCRA	Resource Conservation and Recovery Act
RFA	RCRA facility assessment

RPD	relative percent difference
SAIC	Science Applications International Corporation
SI	site investigation
SVOC	semivolatile organic compound
SWMU	Solid Waste Management Unit
TCE	trichloroethylene
TCLP	Toxicity Characteristic Leaching Procedure
TPH	total petroleum hydrocarbons
TPH-D	total petroleum hydrocarbons – diesel range
TPH-G	total petroleum hydrocarbons – gasoline range
TPH-O	total petroleum hydrocarbons – heavy oil range
TEC	toxic equivalent concentration
TVR	Tracked Vehicle Repair
UFP-QAPP	Uniform Federal Policy-Quality Assurance Project Plan
U.S.	United States
UST	underground storage tank
VOC	volatile organic compound
WAC	Washington Administrative Code
YTC	Yakima Training Center

1. INTRODUCTION

This Annual Groundwater Monitoring Report documents the March (Spring) and September (Fall) 2022 semiannual groundwater monitoring events conducted at the Yakima Training Center (YTC) former Fire Training Pit (FTP) and the Tracked Vehicle Repair/Old Mobilization and Training Equipment Site (TVR/Old MATES).

This report presents sampling procedures, water level measurements, and analytical results for groundwater monitoring activities conducted at the FTP and TVR/Old MATES sites in 2022. This report was prepared for Joint Base Lewis-McChord (JBLM) Public Works by INNOVEX-ERRG Joint Venture (IEJV). This work was completed in accordance with the Site-Specific Uniform Federal Policy–Quality Assurance Project Plan (UFP-QAPP) (EA 2019), and Washington Administrative Code (WAC) Chapters 173-340-810 and 173-340-820.

Long-term management remedies, including land-use controls and groundwater monitoring to monitor natural attenuation of site contaminants for the foreseeable future, were selected and are implemented at the former FTP site and TVR/Old MATES facilities in accordance with their respective Decision Documents (Fort Lewis Environmental Restoration Program [ERP] 2007a and 2007b). Groundwater monitoring for site-related contaminants will continue until contaminant concentrations fall below Model Toxics Control Act (MTCA) Method A/Standard Method B groundwater cleanup levels (JBLM 2017).

Site-related contaminants are petroleum hydrocarbons, volatile organic compounds (VOCs), and semi-volatile organic compounds (SVOCs) at the former FTP site and VOCs at TVR/Old MATES. Well construction details are included in Table 1. MTCA groundwater cleanup levels for selected contaminants of concern (COCs) are included in Tables 2, 3, 4, and 5.

The objectives of the groundwater monitoring program at FTP and TVR/Old MATES are to:

- Evaluate the groundwater concentrations of COCs at select monitoring wells.
- Determine whether COCs in groundwater are increasing, decreasing, or otherwise show evidence of offsite migration.

Based on these objectives, this report intends to evaluate whether the existing groundwater monitoring program is adequate to characterize the extent of groundwater contamination or if changes to the monitoring network and/or monitoring frequency are required to meet regulatory objectives.

1.1 YTC BACKGROUND

YTC is an active United States (U.S.) Army sub-installation of JBLM located approximately 5 miles northeast of the City of Yakima (Figure 1). YTC has been used for training military artillery, infantry, and engineering units since 1941. Expansion of YTC occurred in the early

1950s with the acquisition of additional land and permanent construction of the Cantonment Area in the southwest portion of YTC. An expansion of YTC to the north occurred in the early 1990s. Currently, YTC has an area of 327,231 acres.

1.2 SITE DESCRIPTIONS

1.2.1 Former Fire Training Pit

The former FTP is located in the northeast portion of the Cantonment Area (Figure 2). The former FTP was used to practice extinguishing fires two to three times per year from an unknown start date until 1987 with a single training event in 1990 (Shapiro & Associates 1991). Practice events consisted of saturating an open, unlined earthen pit with water, adding and igniting 500 to 1,000 gallons of waste JP-4 aviation fuel, diesel fuel, or motor gasoline and then extinguishing the fire (Shapiro & Associates 1991).

Although reports of the releases differ slightly (Ecology & Environment [E&E] 1993, Science Applications International Corporation [SAIC] 1995), petroleum products were released to site soils as a result of past fire training practices. During the 1990s, the site was used for storing stockpiles of waste sand-filter material and sediments from the adjacent vehicle wash rack treatment system (E&E 1993) as well as storing fuel bladders (Shannon & Wilson 2001). Currently the site is vacant and is not being used by YTC.

The groundwater monitoring network at the former FTP includes well FTP-1, FTP-13, FTP-14, FTP-15, and FTP-16. The wells, excluding well FTP-13, are located downgradient of the contamination source. FTP-13 is located approximately cross gradient (south) of the contamination source. Well construction details for the monitoring wells are presented in Table 1.

1.2.2 TVR/Old MATES

TVR/Old MATES is located in the west central portion of the Cantonment Area (Figure 2). Trichloroethylene (TCE) was detected during a 1993 Site Investigation (SI) conducted by E&E in two monitoring wells installed near the TVR facility, two monitoring wells installed near the Old MATES, and the Marie well (a domestic drinking water well decommissioned in the late 1990s).

The monitoring well network at TVR/Old MATES includes wells MTS-1, MTS-2, MTS-3, MTS-4, TVR-1, TVR-2, TVR-3, TVR-4, TVR-5, TVR-6, TVR-7, 815-2, and MMP-1, as well as the two currently active water supply wells (Pomona production well and the Pomona Artesian Irrigation Company [PAIC] production well). Monitoring wells MTS-1, MTS-2, MTS-4, TVR-1 through TVR-7, MMP-1, 815-2, the Pomona production well, and the PAIC production well are located downgradient of the contaminant source. TCE and other VOCs have not been detected in either of the currently active water supply wells. Well construction details for the monitoring wells are presented in Table 1.

Vehicle maintenance has been conducted and de-greasing solvents have been used since approximately 1968 at Building 845, and since 1975 at Building 951 (Shapiro & Associates 1991). Four 250-gallon underground storage tanks (USTs) for waste oil were in use at Building 845 from 1975 until 1991 (Shapiro & Associates 1991, Pegasus Environmental Management Services [Pegasus] 1993, SAIC 1995). A fifth waste oil UST (650 gallons) was used at Building 845 from 1980 until 1991 (Shapiro & Associates 1991, Pegasus 1993, SAIC 1995). One 2,000-gallon waste oil UST removed from Building 951 in 1995 was thought to be in operation since 1968 (Shapiro & Associates 1991, SAIC 1995). All six of these former waste oil USTs have been removed. Three of the five waste oil tanks at Building 845 and the 2,000-gallon waste oil UST at Building 951 were "clean closed" with soil concentrations below cleanup levels promulgated under the MTCA (CEcon Corporation 1994, SAIC 1995). However, as discussed in the investigation chronology section (Section 1.4), soil contamination from waste oil USTs 845-3 and 845-4 remained under adjacent structures following tank removal activities. A downgradient monitoring well (TVR-2) is located as close to the UST 845-3/4 excavation as possible. It should also be noted that a former floor drain from Building 845 discharged immediately adjacent to the current location of monitoring well TVR-1 (Cory 2004).

1.3 SITE GEOLOGY AND HYDROGEOLOGY

Structurally and physiographically, YTC is located within the Yakima Fold Belt, which is characterized by northwest/southeast-trending anticlines and synclines. Most of the YTC Cantonment area is located within the synclinal valley between the anticlinal Yakima and Umtanum Ridges.

Lithologically, YTC is underlain by a thick sequence of basalt flows known as the Columbia River Basalt Group. From youngest to oldest, the four formations that comprise the Columbia River Basalt Group are the Saddle Mountain Basalt, Wanapum Basalt, Grande Ronde Basalt, and Imnaha Basalt (Schuster et al. 1997). Portions of the YTC Cantonment area have sedimentary rocks/deposits of the Ellensburg Formation and/or quaternary deposits on top of the basalt flows (Schuster et al. 1997).

The uppermost sediments underlying the former FTP site consist of localized fill materials and up to 12 feet of alluvium comprised primarily of unconsolidated silty sand and unconsolidated soils of the Ellensburg Formation (Shannon & Wilson 2001). The uppermost bedrock unit at the former FTP site is the Pomona Flow of the Saddle Mountain Basalt Formation (E&E 1993, Schuster et al. 1997, Shannon & Wilson 2001). In general, this unit is present at a depth of approximately 5 to 10 feet below ground surface (bgs) at the site (E&E 1993, Shannon & Wilson 2001). Basalt apparently extends to an approximate depth of 150 feet bgs without significant interbeds (E&E 1993, Shannon & Wilson 2001).

The former FTP site has perched groundwater located in fractured basalt near the top of the Pomona Basalt flow (E&E 1993, Shannon & Wilson 2001). Depth-to-water at the site is approximately 10 to 25 feet bgs (Shannon & Wilson 2001). The direction of the shallow groundwater flow is towards the southwest and generally mirrors the surface topography. The

next deepest groundwater-bearing unit is at approximately 150 feet below the site (Shannon & Wilson 2001).

The unconsolidated sediments underlying TVR/Old MATES consist of localized fill, alluvium comprised primarily of unconsolidated silty sand, and unconsolidated soils of the Ellensburg Formation (Shannon & Wilson 2001). Together, the alluvium and Ellensburg sediments are up to 50 feet thick at the Old MATES facility. The uppermost bedrock unit beneath the sediments in the TVR/Old MATES area is the Pomona Flow of the Saddle Mountain Basalt Formation (E&E 1993, Shannon & Wilson 2001). In general, this unit was encountered at depths between 10 and 45 feet bgs in the six monitoring wells at TVR, MTS (Old MATES wells), and main motor pool (MMP) (E&E 1993). Saddle Mountain Basalt extends beneath the site without significant interbeds to a depth of greater than 100 feet bgs (E&E 1993). The direction of groundwater flow is to the west towards the Yakima River (E&E 1993).

1.4 INVESTIGATION CHRONOLOGY

1.4.1 Facility-Wide Investigations

A facility-wide preliminary assessment of YTC was completed in the early 1990s by Shapiro & Associates, Inc. The preliminary assessment documented the aforementioned site uses, identified potential receptors, and concluded that the two sites covered by this report could potentially be releasing hazardous substances to groundwater as a result of historical activities.

A Site Screening Inspection and Hazard Ranking System Score for YTC were completed in January 1993 by Resource Applications, Inc. (1993a, 1993b). A Hazard Ranking System Score was calculated; however, it was not high enough for YTC to be considered for inclusion on the Comprehensive Environmental Response, Compensation, and Liability Act National Priorities List.

Yakima Health District collected groundwater samples from 12 private domestic wells located downgradient of YTC and analyzed those samples for VOCs in 1995 (Yakima Health District 1995). The PAIC Well (located on YTC across the street from YTC's Pomona Well) was one of the 12 wells sampled. No contaminants were detected in the wells, with the exception of styrene in a single well at a concentration equal to the detection limit of 0.1 micrograms per liter (µg/L).

The final Resource Conservation and Recovery Act (RCRA) Facility Assessment (RFA) Report was completed in September 1995 by SAIC. The RFA for the entire installation was a result of a RCRA Part B Permit Application for the Range 14 open burning/open detonation area. The 1995 RFA indicated a high potential for releases to soil and possibly groundwater at the former FTP. As a result, there was a recommendation to remediate contaminated soil and the petroleum product in well FTP-1. Although the 1995 RFA did not explicitly address TCE in groundwater in the TVR/Old MATES area, the RFA recommended a corrective action for soil contamination that remained under a building adjacent to waste oil USTs 845-3 (Solid Waste Management Unit [SWMU] 43) and 845-4 (SWMU 44). RCRA corrective actions that were recommended or

implied by the RFA need to satisfy MTCA regulations in accordance with WAC 173-303-646(3).

In October 2012, YTC had its first 5-year periodic review regarding six sites currently managed by the JBLM Installation Restoration Program. The review focused on sites where environmental remedies are currently in place; however, the COCs were still above their respective cleanup levels (U.S. Army Corps of Engineers 2012). Both the former FTP and the TVR/Old MATES sites were part of this periodic review. No significant concerns regarding the monitoring network were noted for the former FTP site and no recommendations were made. One concern was noted regarding the TVR/Old MATES monitoring network. TCE concentrations had been increasing over time in samples collected from monitoring well TVR-6, located on the western end of the monitoring network. It was suggested that if TCE concentrations continued to increase in TVR-6, it may warrant installing additional downgradient monitoring wells. However, since TCE concentrations at TVR-6 have consistently been below the MTCA Method A Cleanup Level of 5 µg/L since March 2017, the addition of wells near TVR-6 may no longer be warranted.

A second 5-year periodic review occurred in 2017 and concluded that remedies at the former TVR/Old MATES sites are protective of human health and the environment through land use controls. However, it did recommend that the installation of one or two additional downgradient wells should be considered to better define the downgradient plume extent and confirm that TCE is not migrating off YTC (Regional Planning and Environmental Center, Fort Worth District, U.S. Army Corps of Engineers 2017).

The UFP-QAPP for the former FTP and TVR/Old MATES sites was updated in 2019 (EA 2019), and an updated QAPP is being prepared for sampling events beginning in 2023.

1.4.2 Fire Training Pit

1.4.2.1 Investigations

The former FTP was one of the YTC facilities/sites investigated and summarized in the E&E SI Report (September 1993). Monitoring well FTP-1 was installed and four grab surface or near-surface soil samples and two composite surface soil samples were collected during the E&E SI. Significant groundwater was not encountered during the drilling of the FTP-1 borehole to a depth of approximately 140 feet. However, when it came time to decommission the FTP-1 borehole, several gallons of petroleum product were discovered on top of a column of water. As a result, FTP-1 was completed to a depth of approximately 20 feet in the shallow groundwater, located within the weathered portion of the uppermost basalt flow with a screen interval depth of 8 to 18 feet.

A RCRA facility investigation to further delineate the nature and extent of contamination at the former FTP site was completed in November 2001 by Shannon & Wilson. Monitoring wells FTP-13 through FTP-16 were installed in 1999 in the perched groundwater located at the fractured top of the uppermost basalt flow. Groundwater monitoring events were conducted in July 1999, November 2000, and May 2001. Nine other soil borings were also advanced during the investigation.

1.4.2.2 Soil Removal

An interim remedial action was completed at the former FTP site in 2003 to remove soil contamination that exceeded MTCA Method A/Standard Method B cleanup levels. Soil was excavated during three separate mobilizations: July 2003, September 2003, and October 2003. The total excavation area was approximately 5,000 square feet and extended downward until the underlying basalt was encountered. Soil (1,351 tons) was disposed off-site in November 2003. Contaminant concentrations in confirmation soil samples were below MTCA Method A/Standard Method B cleanup levels except for gasoline and diesel range total petroleum hydrocarbons (TPH) (total petroleum hydrocarbons – gasoline range [TPH-G] and total petroleum hydrocarbons – diesel range [TPH-D], respectively) in two samples collected from the soil/basalt interface. The excavation was backfilled with clean soil. The cleanup action was documented in a January 2004 report (Bay West 2004).

The terrestrial ecological pathway was closed as described in the April 2006 terrestrial ecological evaluation by Pacific Northwest National Laboratory.

1.4.2.3 Groundwater Monitoring

The Fort Lewis ERP conducted groundwater monitoring events in January 2004, March and August 2005, March and August 2006, March and September 2007, and March and September 2008. Between March 2005 and March 2007, 4-inch diameter "socks" containing Oxygen Release Compound (ORC) were installed in the monitoring wells by Fort Lewis ERP in well FTP-1 between 11 to 18 feet bgs. During the deployment of ORC at FTP-1, depth-to-water ranged from 11.54 feet bgs in August 2006 to 15.59 feet bgs in March 2007.

Groundwater monitoring has been conducted semi-annually at well FTP-1 since 2005. One sampling event, considered the "wet season," or Spring event, is typically conducted in February or March of each year. The second sampling event, considered the "dry season," or Fall event, is typically conducted in August or September of each year. Groundwater samples are collected for analysis of hydrocarbons and depth-to-water is measured during each event.

TPH concentrations in samples from FTP-14, FTP-15, and FTP-16 were generally below the MTCA cleanup levels since monitoring began at the FTP (EA 2020). Sampling for TPH-G, TPH-D, and TPH – heavy oil range (TPH-O) was reduced from semiannual to annual in 2018 with Washington State Department of Ecology (Ecology) concurrence. Sampling was then discontinued at these wells in 2019 with Ecology concurrence.

1.4.3 TVR/Old MATES

1.4.3.1 UST Removal

In October 1991, Pegasus evacuated, excavated, removed, cleaned, and disposed of five waste oil USTs at Building 845 (TVR). Pegasus noted visible surface contamination associated with three of the UST excavations. Soil samples from all excavations were analyzed for TPH, benzene, toluene, ethylbenzene, xylenes, Toxicity Characteristic Leaching Procedure (TCLP) VOCs, and TCLP metals. TPH concentrations exceeding 10,000 milligrams per kilogram were detected in

samples collected from all five UST excavations. TCLP TCE and TCLP tetrachloroethylene were detected at 20 milligrams per liter (mg/L) in the sample from UST 845-5, and 17 mg/L in the sample from UST 845-6, respectively. No TCLP VOCs were detected in samples collected from USTs 845-3 (SWMU 43) and 845-4 (SWMU 44) excavations. No additional corrective action was taken by Pegasus due to contract limitations.

1.4.3.2 Soil Removal

CEcon Corporation was contracted to excavate and remove contaminated soil left in place following the tank removal activities by Pegasus. CEcon Corporation removed approximately 1,000 cubic yards of soil while excavating contaminated soil from the five Building 845 waste oil tank sites in October 1993. Confirmation samples collected by CEcon Corporation verified that no further action was required for USTs 845-2 (SWMU 42), 845-5 (SWMU 45), and 845-6 (SWMU 46); however, some TPH contaminated soil was left in place on the north and east sidewalls of the UST 845-3/4 (SWMUs 43/44) excavation, since existing structures (Building 845 lube rack and oil-water separator) prevented further excavation in those directions (over 400 cubic yards of soil had already been removed). Although all confirmation samples collected by CEcon Corporation were analyzed for potential contaminants suspected at the time, no confirmation samples were analyzed for VOCs.

1.4.3.3 Additional Investigation

TVR, Old MATES, and MMP were among the facilities investigated in the September 1993 SI by E&E. Groundwater samples were collected from the two TVR, two Old MATES, and two MMP monitoring wells as well as the Pomona, PAIC, and Marie drinking water wells. In addition, soil samples were collected from each monitoring well borehole during drilling and analyzed for VOCs, SVOCs, pesticides/polychlorinated biphenyls (PCBs), metals, and TPH. Based on the presence of TCE in groundwater at TVR and Old MATES and the absence of contamination in corresponding soil samples, the SI Report concluded that TCE contamination in groundwater "may indicate migration from an unidentified source at the YTC facility."

1.4.3.4 Groundwater Monitoring

Fort Lewis ERP conducted a groundwater monitoring event in January 2004 and installed monitoring wells MTS-3, MTS-4, TVR-3, and TVR-4 between October and November 2004. The ERP conducted groundwater monitoring events in March 2005 and August 2005 and installed additional monitoring wells TVR-5, TVR-6, TVR-7, and 815-2 in October 2005.

Groundwater monitoring has been conducted semi-annually since 2005 at wells MTS-1, MTS-2, MTS-4, TVR-1, TVR-3, TVR-6, and TVR-7, as well as the two currently active water supply wells (Pomona production well and the PAIC production well). Sampling events typically coincide with FTP sampling events. Beginning in August 2005, groundwater samples have been collected using disposable passive diffusion bags (PDBs). PDBs are sealed, low density polyethylene bags filled with de-ionized water. PDBs are hung so that the top of the PDBs are approximately 3 feet off the bottom of monitoring wells using a dedicated stainless-steel cable and clip. PDBs are hung at least two weeks prior to sampling to allow VOC concentrations in groundwater and the water inside of the PDB to reach equilibrium (Interstate Technology and

Regulatory Council 2004). During each sampling event, samples are analyzed for VOCs and depth-to-water is measured.

Sampling at wells 815-2, MMP-1, TVR-2, and TVR-5 was discontinued in 2020 with the Ecology concurrence. Contaminant concentrations were consistently below the MTCA Method A cleanup level since at least 2015, and all wells exhibited statistically significant downward trends in TCE concentrations (EA 2020).

1.5 POTENTIAL GROUNDWATER RECEPTORS

The nearest potential groundwater receptors to the FTP and TVR/Old MATES sites are the Pomona and PAIC drinking water wells. The Pomona and PAIC wells are domestic water supply wells located approximately 1 mile southwest of the FTP site and approximately 250 feet southwest of well TVR-1. Over the past decade, additional residential drinking water wells have been installed west of the YTC boundary, approximately 1,500 to 3,000 feet northwest of the TVR/Old MATES TCE plume (Figure 2).

The Pomona well is an artesian well used by YTC as a primary production source for the Pomona water distribution system. The Pomona well is completed in the Wanapum and/or Grande Ronde Formation (HongWest & Associates 1996) with open borehole completion between depths of approximately 353 and 407 feet bgs (Fain 2000, Cory 2004). Sources of information provided incorrect information about the well construction details of the Pomona Well (including a typo in Table 2-1 of the current Water System Plan) (Cory 2004). A downhole video survey conducted by YTC in 1995 is considered to be the most accurate source of construction detail information for the Pomona Well to date. In addition to indicating the open interval referenced above, the video survey also indicated that water was entering the Pomona Well at approximately 401 feet bgs (Fain 2000).

The PAIC well is an artesian well used by PAIC as the sole production well for the PAIC water system serving approximately 60 homes and businesses located west of YTC (Wilson 2004). It appears that the PAIC well was constructed in an identical fashion as the Pomona well. Both wells were installed by the PAIC in 1913 by the same driller within 100 feet of each other (Fain 2000). Well logs from pumping tests conducted in 1940 indicate identical (although very generic) well construction details for the Pomona well and PAIC well (Fain 2000). The construction details on the 1940 well logs were 10-inch diameter casings to a depth of 60 feet bgs and 6 $^{5}/_{8}$-inch diameter casings from 60 to 430 feet bgs for both wells. Since the video survey of the Pomona well showed the 1940 well log and other sources of post-drilling anecdotal information to be incorrect with respect to the actual well construction details of the well, it is reasonable to assume that the video survey is also a more accurate representation of well construction details for the PAIC well than the 1940 well log.

The bases for assuming nearly identical well construction details for the two wells are 1) both wells are artesian, 2) both wells have similar production capacities, 3) both wells were installed at the same time and location by the same well driller for the same water system, and 4) both wells have identical 1940 well logs.

Given the distance of both wells from the FTP site and the hydraulic separation between the shallow groundwater and the aquifer(s) where the water supply wells are completed, it is unlikely that these potential receptors are being impacted by the FTP site. It is also unlikely that either water supply well would be impacted by TCE contamination in the TVR/Old MATES area given the relatively low TCE concentrations detected in samples collected from monitoring wells and the hydraulic separation between the Selah Interbed and the aquifer(s) in which the water supply wells are completed. Existing water quality data from both the Pomona and PAIC wells support this conclusion.

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2. FIELD ACTIVITIES

This section presents field activities conducted in Spring and Fall 2022. Copies of completed field forms for 2022 sampling events are included in Appendix A.

2.1 GROUNDWATER MEASUREMENT, SAMPLING, AND ANALYSIS

2.1.1 Groundwater Flow

Static water level measurements were measured using an electronic water level indicator (water level meter or interface probe) at each well location. Water level measurements were recorded to the nearest 0.01 feet from the top of the well casing at each well location and recorded in the field logbook. The electronic instrument was decontaminated before use, between wells, and at the end of the day.

2.1.2 Groundwater Sampling Tasks

Groundwater sampling was conducted during the first quarter (spring/wet season) and third quarter (fall/dry season). Sample containers were provided by the analytical laboratories (Pace Analytical Laboratory of Mt. Juliet, Tennessee and Fremont Analytical of Seattle, Washington) prior to sampling. Groundwater samples were transported to Pace Analytical Laboratory (Pace) and Fremont Analytical (Fremont) under chain-of-custody. Copies of laboratory analytical reports are included in Appendix A.

2.1.2.1 Former Fire Training Pit Site

Monitoring well FTP-1 was purged and sampled using a disposable bailer in Spring 2022. During the Fall sampling event, well FTP-1 was partially purged using a low-flow Grundfos submersible pump. The pump overheated and the remaining volume of water was bailed using a disposable Teflon bailer until three well volumes were removed. Water quality parameters were not monitored or recorded during bailing operations. Pertinent sampling information was recorded on purge forms including unusual conditions (colors, odors, surface sheens, etc.) observed during well purging or sampling. Sampling information was also recorded in the field logbook.

Groundwater samples were collected using a disposable Teflon bailer once three well volumes were removed. In Spring and Fall 2022, groundwater samples from well FTP-1 were analyzed for the following COCs.

- VOCs by EPA Method 8260D and 8260D SIM.
- SVOCs by EPA Method 8270E and 8270E SIM.
- Gasoline-range TPH by Ecology Method NWTPH-Gx.
- Diesel-range TPH by Ecology Method NWTPH-Dx.
- Heavy oil-range TPH by Ecology Method NWTPH-Dx.

Samples aliquots for the analysis of volatile analytes (VOCs and TPH-G) were collected before the others.

2.1.2.2 Tracked Vehicle Repair/Old Mobilization and Training Equipment Site

Groundwater samples from the Pomona Well and the PAIC Well were collected from taps on each well while the pumps were running. Samples were collected for VOC analysis and were analyzed by EPA Methods 8260D and 8260D SIM. Water quality parameters were not collected during sampling.

Monitoring wells at the TVR/Old MATES were sampled using disposable PDBs. PDBs were deployed into wells a minimum of two weeks prior to sampling to achieve aquifer equilibrium. A dedicated harness was used to position PDB samplers at approximately 2 to 5 feet above the bottom of each well screen. Following the two-week (minimum) equilibration period, the PDBs were extracted, and samples were collected for VOC analysis by EPA Methods 8260D and 8260D SIM. Water quality parameters were not collected during sampling. PDB installation dates and sampling information were recorded in the field logbook (Appendix A).

2.1.3 Equipment Decontamination Tasks

Non-disposable equipment that directly or indirectly contacted samples, such as electronic water level indicators, was decontaminated between well/sampling locations.

2.1.4 Investigation-Derived Waste

Investigation-derived waste generated during sampling activities was limited to purge water at the former FTP site, decontamination fluids, used PDBs, and personal protective equipment (e.g., nitrile gloves). Purge water and decontamination water was containerized and discharged to the oil-water separator at the main vehicle washrack catch basin. Investigation-derived waste disposal was coordinated with YTC Wastewater Treatment Plant Operator prior to disposal. Personal protective equipment, used PDBs, and other garbage was disposed of in a designated collection bin as part of the normal solid waste stream.

2.1.5 Field Quality Control Tasks

Quality control (QC) tasks were overseen by IEJV's Field Team Leader and/or QC Manager. Field QC samples are intended to provide an indication of the consistency of samples collection and analyses over the course of the program. Field and laboratory QC samples included field duplicates, matrix spike/matrix spike duplicates, and trip blanks.

One field duplicate sample was collected annually at the FTP site, and one field duplicate sample was collected per sampling event at TVR/Old MATES. Matrix spike/matrix spike duplicate samples were collected at each site at a rate of 5 percent of project samples (1 set per 20 field samples). One laboratory-supplied trip blank accompanied each cooler containing samples sent to the laboratory for VOC analysis.

2.2 DEVIATIONS FROM THE UFP-QAPP

No deviations from the Site-Specific Quality Assurance Project Plan (EA 2019a) were noted, except for the following.

- Depth to water was not measured in monitoring well FTP-13 during the Spring sampling event. A measurement was collected during the Fall event.

- Monitoring well FTP-1 was partially purged using a low-flow pump during the Fall sampling event, until the pump overheated. Samples were collected using a disposable bailer for both sampling events, in accordance with the QAPP.

- The following alternate laboratory-analytical methods were used.

    - During the Spring event, cPAHs were analyzed by EPA Method 8270E instead of Method 8270E SIM, resulting in an elevated limit of detection (LOD). For benzo(a)pyrene, the elevated LOD was greater than the PAL. There is no applicable PAL for other analyzed cPAHs. The correct analytical method was used during the Fall event. This is discussed further in Section 3.2.1.4.

    - During the Spring event, Vinyl Chloride was analyzed by EPA Method 8260C instead of Method 8260D SIM, resulting in an elevated limit of detection (LOD). The elevated LOD was greater than the PAL. The correct analytical method was used during the Fall event. This is discussed further in Section 3.2.1.4.

3. RESULTS AND DISCUSSION

This section presents groundwater elevation measurements and the analytical results from the 2022 sampling events, as well as the results of statistical analysis performed on data from the former FTP site and TVR/Old MATES. Monitoring well construction details for wells from both sites are shown in Table 1. Copies of field notes, groundwater sampling logs, and laboratory analytical reports for both 2022 sampling events are included in Appendix A.

Graphs of historical TCE results for TVR/Old MATES are included in Appendix B. Histograms, linear regressions, and Mann-Kendall are also presented in Appendix C.

3.1 DATA QUALITY REVIEW AND VERIFICATION

A data quality review was completed on the laboratory data from the Spring and Fall 2022 sampling events. The data quality review documentation is included in Appendix A. The data was reviewed by a party independent from the laboratory for adherence to the project quality control requirements and for usability. The review found that the data quality objectives were met for both the FTP and TVR/Old MATES sites during the Spring and Fall events. The data are considered acceptable for use and for comparison with other site data.

During the 2022 Fall event, the laboratory analytical results indicated a high RPD for numerous analytes in the field duplicate sample pair FTP-1-20220926 and FTP-1A-20220926 (Appendix A, Laboratory Report L1540401). These results have been flagged as estimated.

Additionally, numerous analytes had MS/MSD recovery percentages outside of the QC limits (both low and high values were observed). According to Pace, the matrix of the spike sample is likely causing the low or high recoveries, since the samples were generally within applicable QC limits for the LC/LCS analyses.

3.2 FORMER FTP SITE

3.2.1 Groundwater Elevations and Sampling Results

Figure 3 presents inferred groundwater elevation contours and groundwater flow direction for the former FTP site based on depth-to-water elevations measured during the Spring and Fall 2022 monitoring events. No measurable amounts of light non-aqueous phase liquid or dense non-aqueous phase liquid were observed in well FTP-1 during either event. Tables 2 and 5 present depth-to-water measurements and summaries of contaminant concentrations compared to MTCA Method A and Standard Method B cleanup levels. Figures 4 and 5 present the TPH concentrations for the Spring and Fall sampling events, respectively.

Contaminant concentrations in groundwater samples from FTP-1 remain above the MTCA Method A Cleanup Levels. TPH concentrations near FTP-1 appear localized and do not appear to be migrating. This suggests a residual contaminant source near the top of the weathered basalt. Historical TPH-G, TPH-D, and TPH-O concentrations in groundwater samples from well FTP-1

are presented in Appendix B. At downgradient wells, historical concentrations of TPH-G, TPH-D, and TPH-O are well below MTCA Method A cleanup levels (Table 2).

3.2.1.1 TPH-G

TPH-G was detected at 518 µg/L (Spring) and 1,000 J+ µg/L (Fall) in samples collected from FTP-1. The concentration detected in Spring was the first time since sampling began that the gasoline concentration was below the 800 µg/L MTCA Method A cleanup level for TPH-G. However, the concentrations from the Fall sampling event exceed the MTCA cleanup level.

3.2.1.2 TPH-D

TPH-D was detected at 14,300 µg/L (Spring) and 11,300 J µg/L (Fall) in samples collected from FTP-1. These concentrations exceed the 500 µg/L MTCA Method A cleanup level for TPH-D.

3.2.1.3 TPH-O

TPH-O was detected at 1,520 µg/L (Spring) and 1,330 J+ µg/L (Fall) in samples collected from FTP-1. These concentrations exceed the 500 µg/L MTCA Method A cleanup level for TPH-O.

3.2.1.4 Other Chemicals of Concern

Other COCs detected in groundwater samples from well FTP-1 include the following (Tables 2 and Table3):

- Benzene at 0.614 µg/L (Fall)
- Ethylbenzene at 1.50 µg/L (Spring) and 2.03 J µg/L (Fall)
- Xylenes at 0.460 µg/L (Spring) and 0.379 J µg/L (Fall)
- Total naphthalenes at 2.612 J µg/L (Fall)
- Vinyl chloride at 0.00859 J+ µg/L (Fall)
- Fluorene at 1.36 J µg/L (Fall)
- Bis(2-ethylhexyl)phthalate at 3.83 J µg/L (Fall)

Concentrations of these contaminants did not exceed the applicable MTCA Method A or Method B cleanup levels during either 2022 sampling event.

During the Spring event, the incorrect analytical methods were inadvertently selected on the Laboratory Chain of Custody for cPAHs and vinyl chloride, which resulted in increased limits of detection (LOD) for the analytes (noted on Tables 3 and 4). For two of the analytes (i.e., vinyl chloride and benzo(a)pyrene), the elevated LOD exceeded the PAL. Vinyl chloride and cPAHs were analyzed by EPA Method 8260D SIM and 8270E SIM, respectively, during the Fall sampling event. These methods will also be used during future sampling events.

Total polycyclic aromatic hydrocarbons (PAHs) were 95 µg/L (Spring) and 4.741 µg/L (Fall) in samples collected from FTP-1. The total PAH concentrations are calculated from the sum of 16 PAHs (see Note 2, Table 4 for the included analytes), including the LOD value if the constituent was not detected above the LOD. During Spring 2022, none of the PAH constituents used in the

calculation were detected above the LOD. However, the incorrect analytical method was used, resulting in elevated LODs (see below for further discussion). However, the calculated total PAH value was consistent with historical values. There is no cleanup level defined for total PAHs.

While various PAHs were detected in Spring and Fall samples, no carcinogenic PAHs (cPAHs) were detected in the primary sample. However, the duplicate sample collected in the Fall contained several detected cPAHs. In accordance with the UFP-QAPP, cPAHs are evaluated by converting to the total toxic equivalent concentration (TEC) of benzo(a)pyrene. The total TEC (as outlined by WAC Chapter 173-340-708(8)(e)) was calculated to be 0.165 J µg/L. This value exceeds the MTCA Method A cleanup level of 0.1 µg/L.

3.2.2 Statistical Results

TPH data from FTP-1 was statistically analyzed as described in Appendix C. Statistical analysis was only performed on data from FTP-1 as it is the only well with TPH-G, TPH-D, and TPH-O concentrations above the MTCA Method A cleanup levels of 800 µg/L, 500 µg/L, and 500 µg/L, respectively. Historical concentration graphs are included in Appendix B. Histograms, linear regressions, and Mann–Kendall scatter plots are included in Appendix C. Results from the statistical analyses of the data are compiled in Table 6 and summarized below:

- A statistically significant downward trend for TPH-G concentrations in samples collected from FTP-1.
- A non-statistically significant downward trend in TPH-D concentrations in samples collected from FTP-1.
- A statistically significant upward trend in TPH-O concentrations in samples collected from FTP-1.

3.3 TVR/OLD MATES SITE

3.3.1 Groundwater Elevations and Sampling Results

Figure 6 presents inferred groundwater elevation contours and groundwater flow direction based on measured elevations from the Spring and Fall 2022 monitoring events for the TVR/Old MATES site. Figure 7 presents TCE concentrations of samples collected during the 2022 Spring and Fall sampling events. Table 5 presents both depth-to-water measurements and a summary of the concentrations of TCE and cis-1,2-dichloroethene (cis-DCE) for the site.

Cis-DCE was not detected above the MTCA Method B cleanup level of 16 µg/L in any well sampled during 2022. Groundwater samples from three of the monitoring wells (MTS-2, MTS-4, and TVR-1) had TCE concentrations above the 5 µg/L MTCA Method A cleanup level during one or both of the sampling events. TCE was either not detected above the LOD or was detected below the cleanup level during the 2022 Spring and Fall events in samples from four monitoring wells (MTS-1, TVR-3, TVR-6, and TVR-7). Overall, the TCE concentrations reported in groundwater are not significantly elevated. The highest TCE concentration in 2022 was reported

in well MTS-2 at 9.90 J µg/L (Spring). Historical concentration graphs are included in Appendix B.

Consistent with historical data, TCE and cis-DCE were not detected in samples collected from the Pomona and PAIC domestic production wells during 2022 sampling events.

3.3.2 Statistical Results

TCE data from TVR/Old MATES wells were statistically analyzed as described in Appendix C. Histograms, linear regressions, and a Mann–Kendall Correlation scatter plots are included in Appendix C. Results from the statistical analyses of the data are compiled in Table 6 and summarized below:

- Statistically significant downward trends for TCE concentrations were observed in all seven TVR/Old MATES wells with detected concentrations of TCE (MTS-1, MTS-2, MTS-4, TVR-1, TVR-3, TVR-6, and TVR-7).

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4. CONCLUSIONS AND RECOMMENDATIONS

4.1 FORMER FTP SITE

Groundwater levels and flow direction beneath the FTP site in Spring and Fall 2022 were consistent with observations from previous years.

Concentrations of TPH-G, TPH-D, and TPH-O in samples from well FTP-1 continue to be detected above MTCA Method A cleanup levels. The consistently elevated concentrations suggest a residual contaminant source near the top of the weathered basalt. It is recommended that monitoring at FTP-1 continue in accordance with the UFP-QAPP (EA 2019) as updated by the 2019 Groundwater Monitoring Report (EA 2020). TPH concentrations near FTP-1 are localized and do not appear to be migrating. Samples from downgradient wells FTP-14, FTP-15, and FTP-16 were last collected in March 2020. The 2020 results were below the MTCA Method A Cleanup Levels and generally consistent with historical data, therefore, sampling was discontinued at these wells with Ecology concurrence.

Total polycyclic aromatic hydrocarbons (PAHs) were 95 µg/L (Spring) and 4.741 µg/L (Fall) in samples collected from FTP-1. As discussed in Sections 2.2 and 3.2.1.4, the incorrect analytical method was used in Spring 2022 (noted on Tables 3 and 4), resulting in elevated LODs for the total PAH constituents. No PAHs were detected above the elevated LODs in Spring 2022 and accordingly, these elevated LODs were used in the total PAH calculation. The calculated total PAH value was consistent with historical values. Additionally, there is no cleanup level defined for total PAHs.

In Fall 2022, carcinogenic PAHs (cPAHs) were detected in field duplicate sample YTC-FTP-1A-20220926. In accordance with the UFP-QAPP, a total TEC of benzo(a)pyrene was calculated. The result was 0.165 J µg/L, which exceeds the MTCA Method A cleanup level of 0.1 µg/L. However, cPAHs were not identified above the applicable LODs in the primary sample of this field duplicate pair (YTC-FTP-1-20220926). A high RPD was observed for numerous PAHs in the field duplicate sample pair YTC-FTP-1-20220926 and YTC-FTP-1A-20220926 (see Section 3.1). These results have been flagged as estimated. The high RPD indicates a possible precision error and warrants further investigation. A field duplicate pair will be collected from this location again in 2023, and the results will be evaluated for variations. It is worth noting that although cPAHs were not detected above the LOD in the primary sample, total PAH concentrations were calculated for both the primary and duplicate sample. The total PAH concentrations were comparable, 4.741 µg/L in the primary sample and 3.354 J µg/L in the duplicate sample.

As stated above, the incorrect analytical methods were inadvertently selected on the Laboratory Chain of Custody in Spring 2022 for cPAHs and vinyl chloride, which resulted in increased LODs for the analytes. For two of the analytes (i.e., vinyl chloride and benzo(a)pyrene), the elevated LOD exceeded the PAL. Vinyl Chloride and cPAHs were analyzed by EPA Method

8260D SIM and 8270E SIM, respectively, during the Fall sampling event. These methods will also be used during future sampling events.

4.2 TVR/OLD MATES

Groundwater levels and flow direction beneath TVR/Old MATES in Spring and Fall 2022 were consistent with observations from previous years.

Since TCE concentrations are trending downward in samples collected from TVR/Old MATES monitoring wells, installing additional monitoring wells (per the 2017 periodic 5-year review [Regional Planning and Environmental Center, Fort Worth District, U.S. Army Corps of Engineers 2017]) is not warranted at this time. It is recommended that the sampling of the active TVR/OLD MATES monitoring wells continues in accordance with the UFP-QAPP (EA 2019) as updated by the 2019 Groundwater Monitoring Report (EA 2020).

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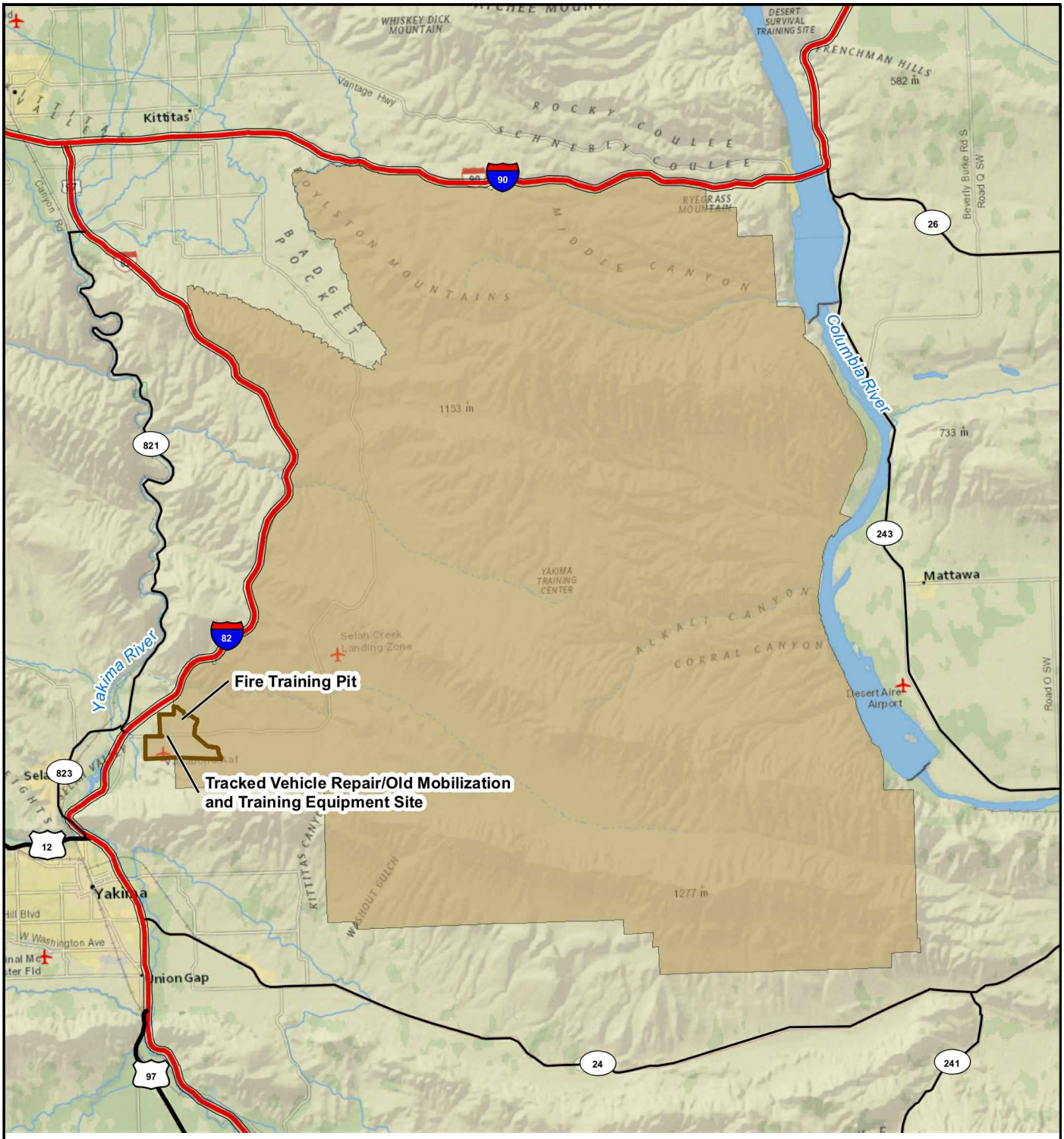
FIGURES



LEGEND

- Yakima Training Center
- Cantonment Area Boundary
- Interstate
- State Route
- US Route

DESIGNED BY	INNOVEX-ERRG Joint Venture	FIGURE 1
Innovex Environmental		Yakima Training Center Location Map
Anna Jordan	1800 Sutter Street, Suite 860 Concord, CA 94520	
DRAWN BY		
ICD		
October 23, 2022		

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Yakima Training Center
Yakima, WASHINGTON

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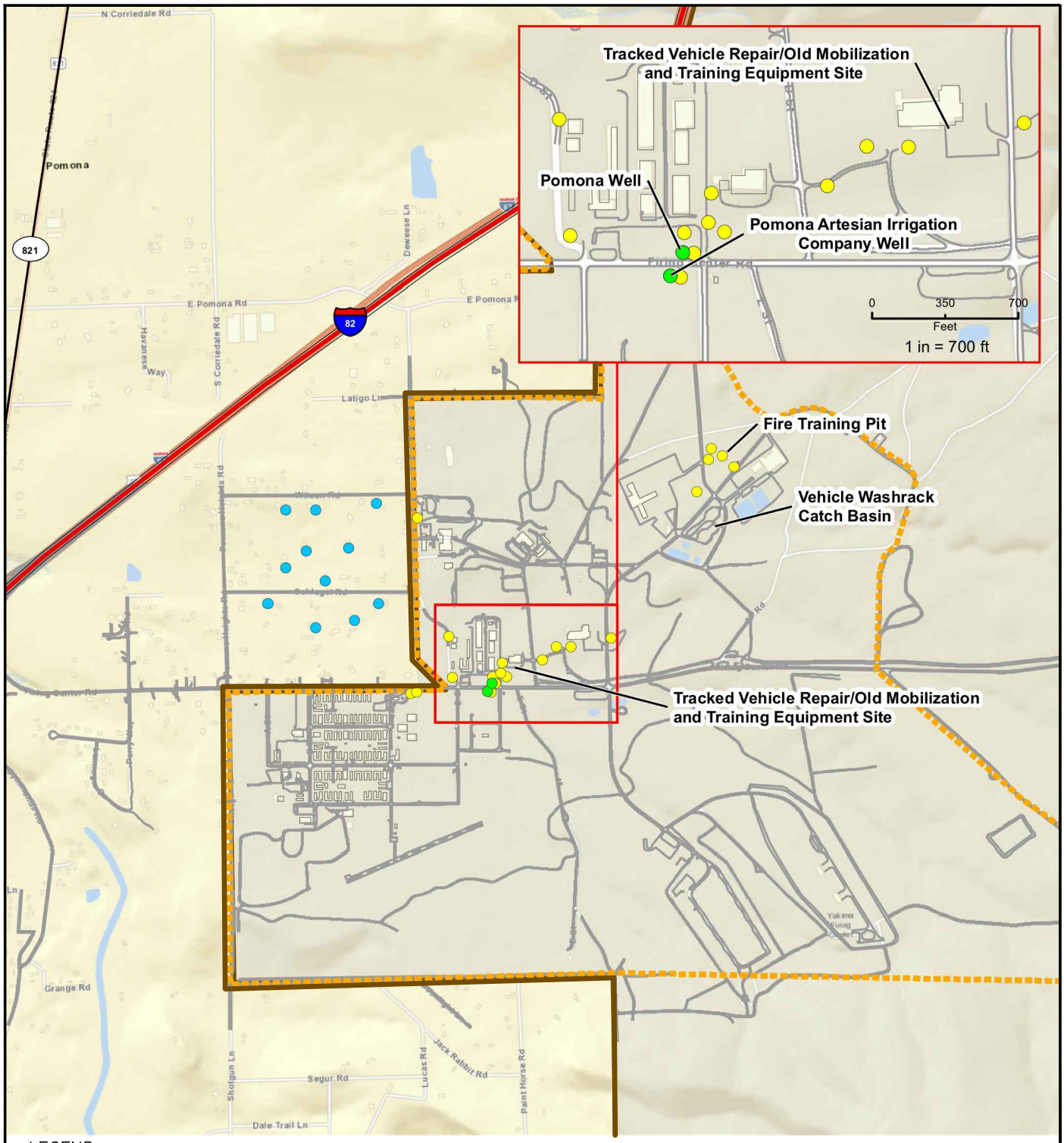

LEGEND

- Yakima Training Center
- Cantonment Area Boundary
- Building
- Monitoring Wells
- Residential Drinking Water Well
- Water Supply Well
- Interstate
- State Route
- US Route

DESIGNED BY	INNOVEX-ERRG Joint Venture	FIGURE 2
Innovex Environmental		Site Locations Map
Anna Jordan		
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ICD	Concord, CA 94520	
November 22, 2022		Yakima Training Center Yakima, WASHINGTON

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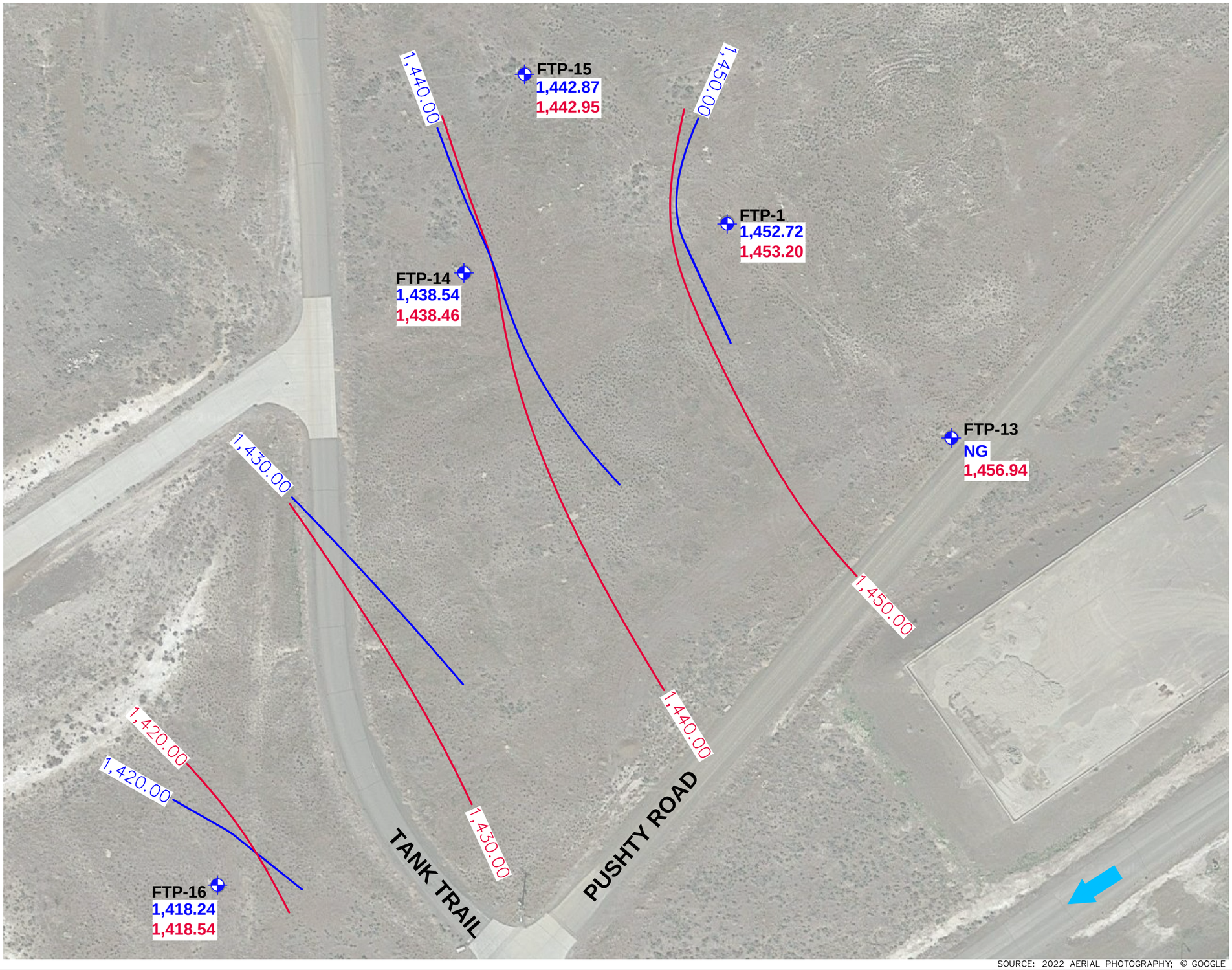

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LEGEND

FTP-1	MONITORING WELL LOCATION
1,452.72	SPRING 2022 GROUNDWATER ELEVATION (ft AMSL)
1,450.00	SPRING 2022 GROUNDWATER ELEVATION CONTOUR (ft AMSL)
1,453.20	FALL 2022 GROUNDWATER ELEVATION (ft AMSL)
1,450.00	FALL 2022 GROUNDWATER ELEVATION CONTOUR (ft AMSL)
	CONTOUR INTERVAL=10.00 FEET
	GENERAL GROUNDWATER FLOW DIRECTION
NG	NOT GAUGED

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Innovex Environmental
Anna Jordan
DRAWN BY
ICD
October 31, 2022

Figure 3
Former Fire Training Pit
Spring/Fall Groundwater Elevation Contours
2022 Annual Groundwater Monitoring Report

Yakima Training Center
Yakima, WASHINGTON

INNOVEX-ERRG Joint Venture

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SCALE IN FEET

LEGEND

FTP-1	MONITORING WELL LOCATION
518	SPRING 2022 TPH–G CONCENTRATION (µg/L)
14,300	SPRING 2022 TPH–D CONCENTRATION (µg/L)
1,520	SPRING 2022 TPH–O CONCENTRATION (µg/L)
NS	NOT SAMPLED
µg/L	MICROGRAMS PER LITER
	MTCA METHOD A EXCEEDANCES ARE BOLDED

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November 22, 2022

Figure 4
Former Fire Training Pit Spring Total Petroleum Hydrocarbon Concentrations

2022 Annual Groundwater Monitoring Report

Yakima Training Center
Yakima, WASHINGTON

INNOVEX-ERRG Joint Venture

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YTC_22Q4_1_I.DWG

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SCALE IN FEET

LEGEND

FTP-1	MONITORING WELL LOCATION
1,000	FALL 2022 TPH-G CONCENTRATION (µg/L)
11,300	FALL 2022 TPH-D CONCENTRATION (µg/L)
1,330	FALL 2022 TPH-O CONCENTRATION (µg/L)
NS	NOT SAMPLED
J	ESTIMATED CONCENTRATION
J+	ESTIMATED CONCENTRATION BUT RESULT MAY BE BIASED HIGH
µg/L	MICROGRAMS PER LITER
	MTCA METHOD A EXCEEDANCES ARE BOLDED

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November 22, 2022

Figure 5
Former Fire Training Pit
Fall Total Petroleum Hydrocarbon Concentrations
2022 Annual Groundwater Monitoring Report
Yakima Training Center
Yakima, WASHINGTON

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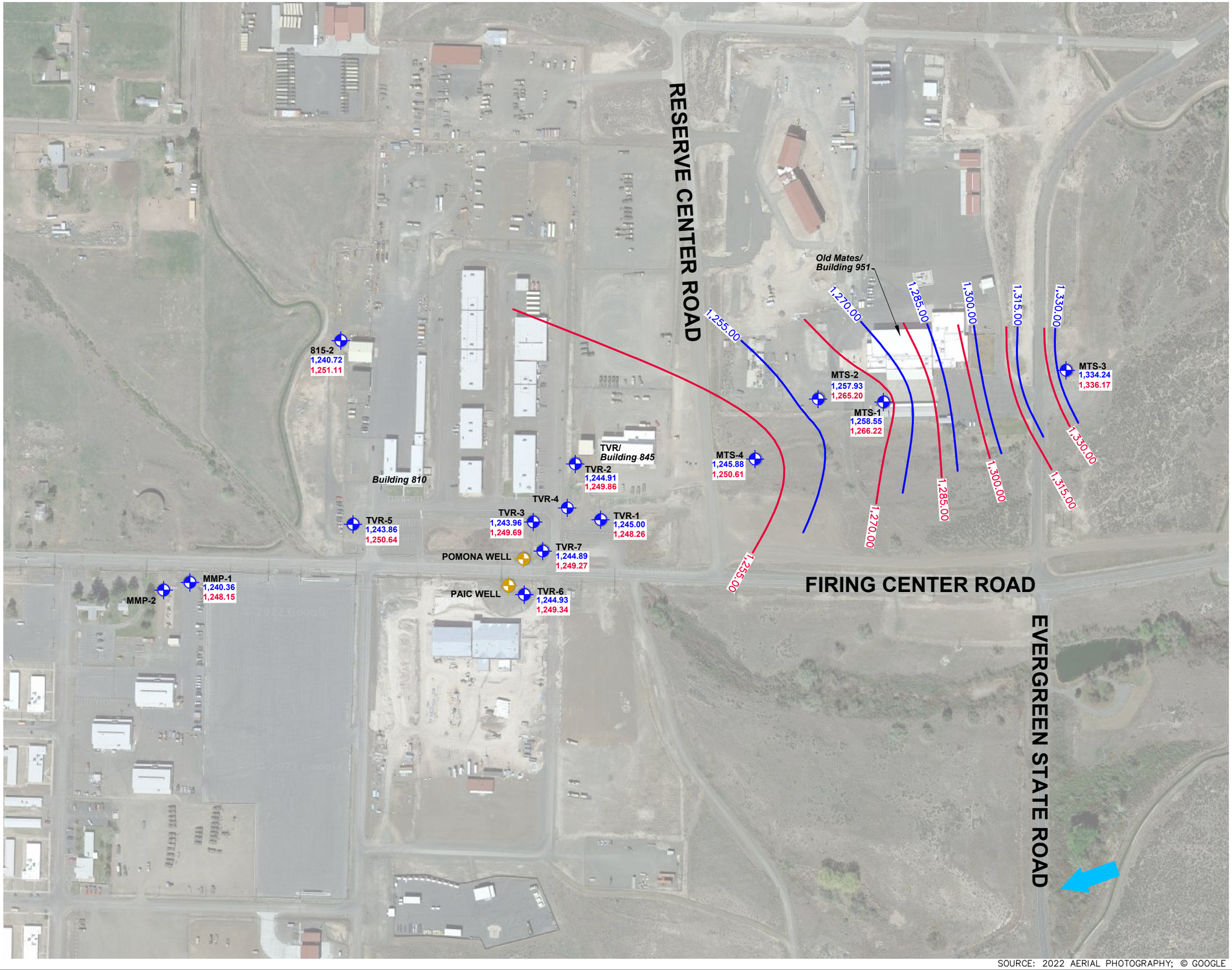

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LEGEND

FTP-1	MONITORING WELL LOCATION
PAIC WELL	PRODUCTION WELL LOCATION
1,334.24	SPRING 2022 GROUNDWATER ELEVATION (ft AMSL)
1,300.00	SPRING 2022 GROUNDWATER ELEVATION CONTOUR (ft AMSL)
1,336.17	FALL 2022 GROUNDWATER ELEVATION (ft AMSL)
1,300.00	FALL 2022 GROUNDWATER ELEVATION CONTOUR (ft AMSL)
	CONTOUR INTERVAL=15.00 FEET
	GENERAL GROUNDWATER FLOW DIRECTION

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Anna Jordan
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ICD
November 22, 2022

Figure 6
TVR/OLDMates Area Spring/Fall Groundwater Elevation Contours
2022 Annual Groundwater Monitoring Report
Yakima Training Center
Yakima, WASHINGTON

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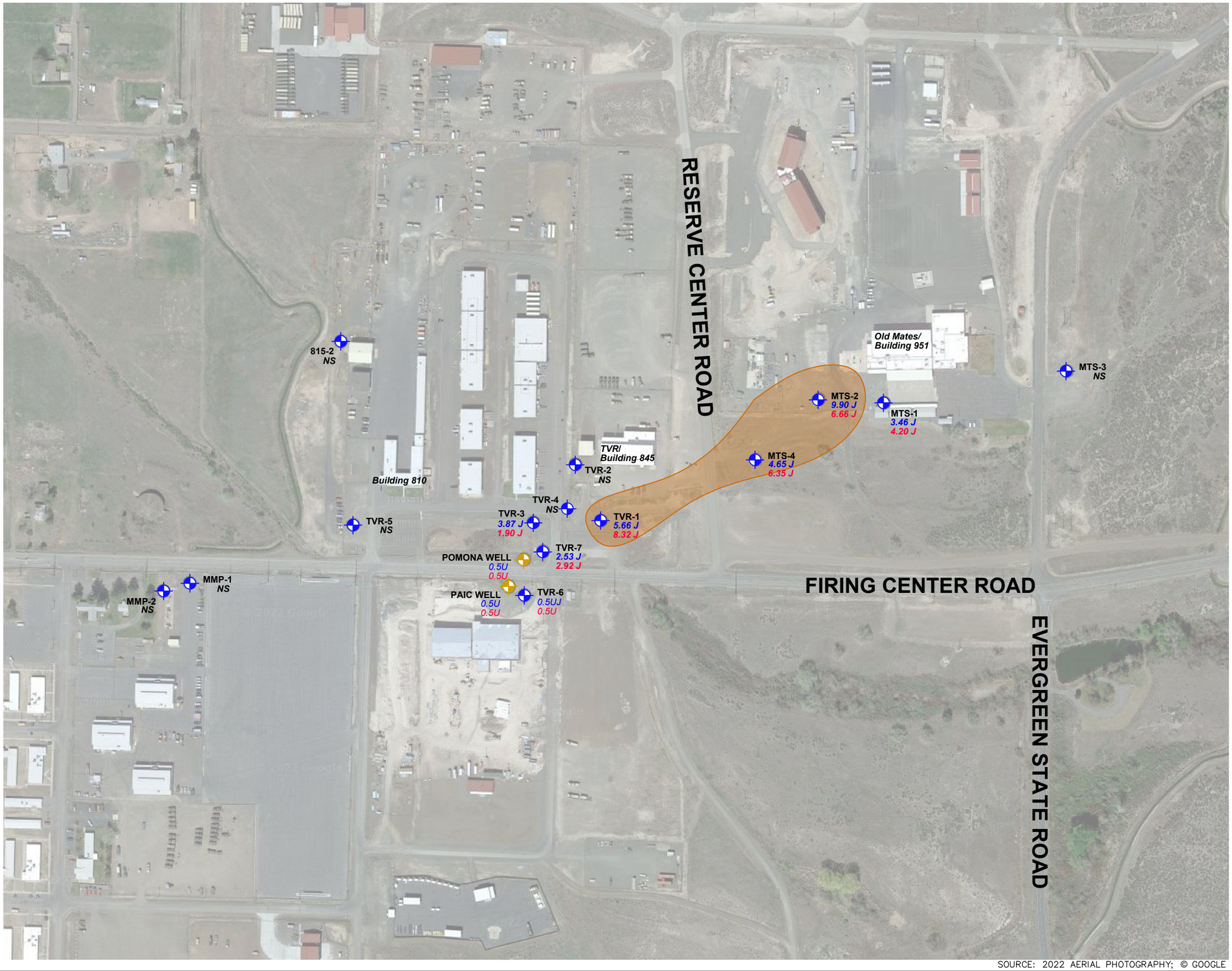

SOURCE: 2022 AERIAL PHOTOGRAPHY; © GOOGLE

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SCALE IN FEET

LEGEND

FTP-1	MONITORING WELL LOCATION
PAIC WELL	PRODUCTION WELL LOCATION
9.99	SPRING 2022 TCE CONCENTRATION (µg/L)
6.66	FALL 2022 TCE CONCENTRATION (µg/L)
NS	NOT SAMPLED
µg/L	MICROGRAMS PER LITER
U	ANALYTE NOT DETECTED ABOVE INDICATED LABORATORY LIMIT OF DETECTION (LOD)
J	ESTIMATED CONCENTRATION
	INFERRED 5 µg/L TCE CONCENTRATION CONTOUR
	MTCA METHOD A EXCEEDANCES ARE BOLDED

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Innovex Environmental
Anna Jordan
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ICD
November 22, 2022

Figure 7
TVR/OLDMates Area Spring/Fall TCE Concentrations
2022 Annual Groundwater Monitoring Report
Yakima Training Center Yakima, WASHINGTON

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TABLES

Table 1
Monitoring Well Construction Details
Fire Training Pit and TVR/Old MATES, Yakima Training Center, Washington

Well ID	Elevation at TOC (ft AMSL)	Ground Surface Elevation (ft AMSL)	Easting UTM (m)	Northing UTM (m)	Total Depth (ft)	Screen Interval (ft bgs)
Fire Training Pit Monitoring Wells						
FTP-1	1,467.72	1,464.59	695828.3	5173198.0	21.00	8 – 18
FTP-13	1,473.07	1,470.96	695878.5	5173153.0	25.00	10 – 20
FTP-14	1,457.48	1,455.35	695771.4	5173185.2	22.00	12 – 22
FTP-15	1,460.88	1,458.72	695783.1	5173228.9	20.00	10 – 20
FTP-16	1,444.81	1,442.68	695722.0	5173050.7	30.00	20 – 30
TVR/Old Mates Monitoring Wells						
815-2	1,304.28	1,301.86	694687.7	5172445.5	132.00	115 – 130
MMP-1	1,301.37	1,298.39	694553.4	5172215.3	100.50	88 – 98
MMP-2	1,301.31	1,298.55	694529.6	5172207.9	75.50	64 – 74
MRC-2	1,312.11	1,309.64	694558.9	5172939.9	113.50	101 – 111
MTS-1	1,361.02	1,359.05	695196.9	5172404.6	127.00	115 – 125
MTS-2	1,351.88	1,348.79	695135.9	5172405.4	113.00	101 – 111
MTS-3	1,362.36	1,362.62	695366.1	5172439.6	72.00	62 – 72
MTS-4	1,331.88	1,332.14	695078.6	5172347.7	97.00	82 – 97
TVR-1	1,320.17	1,317.32	694936.0	5172286.6	105.00	93 – 103
TVR-2	1,317.56	1,314.18	694910.0	5172337.7	95.00	83 – 93
TVR-3	1,310.60	1,310.86	694872.9	5172282.5	158.00	143 – 158
TVR-5	1,302.04	1,299.42	694704.2	5172275.0	142.00	132 – 142
TVR-6	1,310.06	1,310.30	694866.4	5172214.0	139.00	139 – 149
TVR-7	1,310.95	1,311.63	694882.5	5172255.6	140.00	140 – 150

Notes:

ft AMSL = feet above mean sea level

ft bgs = feet below ground surface

ID = identification

m = meter

TOC = top-of-casing

UTM = Universal Transverse Mercator

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Table 2
Depth-to-Water Measurements and Chemical of Concern Concentrations
Fire Training Pit, Yakima Training Center, Washington

Well ID TOC (ft AMSL)	Date	DTW (ft bgs)	Groundwater Elevation (ft AMSL)	TPH-G (µg/L)	TPH-D (µg/L)	TPH-O (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
MTCA Method A Cleanup Level				800	500	500	5	1,000	700	1,000
FTP-1	1-Mar-93	–	–	–	**2,600,000J**	**3,500**	50U	50U	**60.0**	**1,100.0**
1467.72	1-Jul-99	13.00	1454.72	**2,300**	**34,000J**	**1598J**	**7.5**	**0.074J**	**4.4**	**16.66J**
	1-Nov-00	11.40	1456.32	**8,300**	**140,000J**	**450**	**7.7**	**4.7J**	**3.0J**	**41.2J**
	1-May-01	14.21	1453.51	**6,800**	**750,000J**	**3540J**	3.7U	0.77U	1.6U	**52.0**
	30-Jan-04	12.93	1454.79	**3,900**	**4,400**	**193**	**10.6**	0.5U	**3.8**	**9.4**
	22-Mar-05	13.61	1454.11	**4,110**	**10,500**	**116**	**13.0**	2.5U	**4.6**	**2.8**
	22-Aug-05	13.43	1454.29	**25,100**	**40,000**	**218**	**22.5**	5U	**7.2**	10U
	21-Mar-06	15.53	1452.19	1,000U	**45,000**	**238**	5U	5U	5U	10U
	8-Aug-06	11.54	1456.18	**2,600**	**25,000**	**93**	**6.3**	1U	**3.6**	**1.3**
	21-Mar-07	15.59	1452.13	**2,300**	**35,500**	**150**	**4.0**	0.5U	**2.0**	**0.7**
	19-Sep-07	12.49	1455.23	**1,300**	**19,000**	**190**	**7.1**	0.5U	**3.4**	**2.5**
	18-Mar-08	13.21	1454.51	**5,120**	**11,400**	500U	**11.3**	**1.2**	**5.5**	**5.5**
Duplicate	18-Mar-08	13.21	1454.51	**4,830**	**8,230**	500U	–	–	–	–
	19-Sep-08	12.24	1455.48	**4,270**	**4,350**	500U	**10.9**	0.5U	**4.6**	**3.0**
Duplicate	19-Sep-08	12.24	1455.48	**4,480**	**5,000**	500U	-	–	–	–
	23-Mar-09	13.72	1454.00	**2,200**	**32,900**	500U	**5.7**	0.5U	**3.3**	**2.6**
Duplicate	23-Mar-09	13.72	1454.00	**1,950**	**28,800**	500U	–	–	–	–
	23-Sep-09	12.90	1454.82	**2,940**	**8,690**	500U	**10.7**	0.5U	**6.1**	**4.0**
Duplicate	23-Sep-09	12.90	1454.82	**2,940**	–	–	–	–	–	–
	16-Mar-10	13.82	1453.90	**1,800**	**20,000**	**5,500**	**6.6**	1U	**3.8**	**3.5**
Duplicate	16-Mar-10	13.82	1453.90	**1,800**	**19,000**	**5,400**	–	–	–	–
	28-Sep-10	11.33	1456.39	**2,800**	**35,000**	**11,000**	**9.4**	0.5U	**4.4**	**0.6**
Duplicate	28-Sep-10	11.33	1456.39	**2,600**	**28,000**	**11,000**	–	–	–	–
	22-Mar-11	13.00	1454.72	**1,900**	**23,000**	**4,600**	**4.7**	0.5U	**3.7**	**0.7**

Table 2
Depth-to-Water Measurements and Chemical of Concern Concentrations
Fire Training Pit, Yakima Training Center, Washington

Well ID TOC (ft AMSL)	Date	DTW (ft bgs)	Groundwater Elevation (ft AMSL)	TPH-G (µg/L)	TPH-D (µg/L)	TPH-O (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
MTCA Method A Cleanup Level				800	500	500	5	1,000	700	1,000
FTP-1 (cont.)	21-Sep-11	11.34	1456.38	**1,500**	**17,000**	**5,600**	**7.4**	0.5U	**4.7**	**1.4**
1467.72	27-Mar-12	13.27	1454.45	**5,400**	**38,000**	**5,700**	**3.8**	0.5U	**3.8**	**0.9**
	20-Aug-12	11.21	1456.51	**1,100**	**30,000**	**13,000**	**6.5**	0.5U	**5.0**	**1.6**
	20-Mar-13	13.54	1454.18	**7,600**	**110,000**	**7,900**	**3.7**	**0.2**	**4.5**	**0.8**
	25-Sep-13	13.52	1454.20	**2,200**	**28,000**	**1,700**	**5.4**	**0.2**	**5.9**	**1.5**
	11-Mar-14	14.25	1453.47	**2,000**	**14,000**	**1,700**	**3.4**	**0.2**	**4.5**	**0.95**
	22-Sep-14	13.60	1454.12	**1,100**	**22,000**	**3,400**	**6.4**	**0.22J**	**6.6**	**1.49**
	19-Mar-15	14.00	1453.72	**2,000**	**17,000**	**2,000**	**4.3**	**0.26J**	**4.9**	**1.38**
	22-Sep-15	13.16	1454.56	**1,300**	**13,000**	**2,600**	**6.0**	**0.41J**	**6.0**	**1.51**
	16-Mar-16	14.03	1453.69	**710Y**	**17,000**	**2,800**	**3.1**	**0.52**	**3.5**	**0.18J**
Duplicate	16-Mar-16	14.03	1453.69	**680Y**	**14,000**	**2,700**	**2.9**	**0.25J**	**3.4**	**0.18J**
	21-Sep-16	11.59	1456.13	**1,500**	**30,000**	**5,500**	**5.1**	**0.16J**	**5.9**	**0.23J**
	29-Mar-17	13.60	1454.12	**930**	**17,000**	**2,400**	**1.3**	**0.14J**	**2.5**	**0.36J**
	12-Sep-17	10.96	1456.76	**1,000**	**35,000**	**4,000**	**4.1**	**0.54**	**6.4**	**0.78J**
	28-Mar-18	13.33	1454.39	**1,100Y**	**9,700Y**	**1900L**	**3.0**	**0.3J**	**5.0J**	**0.57**
	12-Sep-18	12.76	1454.96	**1,260**	**9,200Y**	**1,500**	**2.8**	**0.28**	**5.6**	**0.73**
	21-Mar-19	14.12	1453.60	**1,130**	**24,000Y**	**2,900L**	**2.2**	**1.0**	**3.4**	**0.44J**
	23-Sep-19	12.78	1454.94	**1,150**	**8,600Y**	**900L**	**2.2**	**0.34J**	**3.8**	**0.52**
Duplicate	23-Sep-19	12.78	1454.94	**1,170**	**9,200Y**	**1,100L**	**2.2**	**0.35J**	**3.7**	**0.65J**
	18-Mar-20	13.68	1454.04	**2,470**	**37,000Y**	**2,700JL**	**1.6**	**0.17J**	**1.5**	**0.73J**
Duplicate	18-Mar-20	13.68	1454.04	**2,890**	**34,000Y**	**2,500L**	**1.6**	**0.16J**	**1.2**	**0.47J**
	10-Sep-20	13.87	1453.85	**1,510**	**30,000Y**	**2,500L**	**3.5**	**0.29UJ**	**3.5**	**0.15J**
	16-Mar-21	15.08	1452.64	**1320J**	**13,000J**	**1,300J**	**2.7**	**0.23J**	**3.2J**	**0.15J**
Duplicate	16-Mar-21	15.08	1452.64	**1360J**	**32,000J**	**2600J**	**2.9**	**0.22J**	**4.0J**	**0.16J**

Table 2
Depth-to-Water Measurements and Chemical of Concern Concentrations
Fire Training Pit, Yakima Training Center, Washington

Well ID TOC (ft AMSL)	Date	DTW (ft bgs)	Groundwater Elevation (ft AMSL)	TPH-G (µg/L)	TPH-D (µg/L)	TPH-O (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
MTCA Method A Cleanup Level				800	500	500	5	1,000	700	1,000
FTP-1 (cont.)	8-Sep-21	14.34	1453.38	**1,040**	**6,900J**	**920J**	**1.6**	**0.30UJ**	**2.4**	**0.12J**
	14-Mar-22	15.00	1452.72	**518**	**14,300**	**1,520**	0.500 U	0.600 U	**1.50**	**0.460**
	26-Sep-22	14.52	1453.20	**1,000J+**	**11,300J**	**1,330J+**	**0.614**	0.600 U	**2.03J**	**0.379J**
Duplicate	26-Sep-22	14.52	1453.20	**3,840J+**	**11,500J**	**1,770J+**	**0.584**	0.600 U	**2.02J**	**0.432J**
FTP-13	1-Jul-99	16.25	1456.82	100U	240U	**1**	0.4U	0.4U	0.4U	1.2U
1473.07	1-Nov-00	16.79	1456.28	ND	240U	0.19U	0.4U	0.4U	0.4U	1.2U
	1-May-01	16.65	1456.42	100U	240U	0.192U	0.4U	0.4U	0.4U	1.2U
	30-Jan-04	15.50	1457.57	100U	100U	0.7U	0.5U	0.5U	0.5U	1U
	22-Mar-05	16.71	1456.36	100U	100U	1U	0.5U	0.5U	0.5U	1U
	22-Aug-05	16.80	1456.27	–	–	–	–	–	–	–
	21-Mar-06	12.66	1460.41	100U	100U	1U	0.5U	0.5U	0.5U	1U
	8-Aug-06	12.57	1460.50	–	–	–	–	–	–	–
	21-Mar-07	14.22	1458.85	250U	100U	1.5U	0.5U	0.5U	0.5U	1U
	19-Sep-07	15.14	1457.93	–	–	–	–	–	–	–
	18-Mar-08	15.05	1458.02	–	–	–	–	–	–	–
	19-Sep-08	15.54	1457.53	–	–	–	–	–	–	–
	23-Mar-09	16.06	1457.01	–	–	–	–	–	–	–
	23-Sep-09	15.15	1457.92	–	–	–	–	–	–	–
	16-Mar-10	14.72	1458.35	–	–	–	–	–	–	–
	28-Sep-10	11.85	1461.22	–	–	–	–	–	–	–
	22-Mar-11	13.02	1460.05	–	–	–	–	–	–	–
	21-Sep-11	12.22	1460.85	–	–	–	–	–	–	–
	27-Mar-12	13.85	1459.22	–	–	–	–	–	–	–
	20-Aug-12	11.27	1461.80	–	–	–	–	–	–	–

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Fire Training Pit, Yakima Training Center, Washington

Well ID TOC (ft AMSL)	Date	DTW (ft bgs)	Groundwater Elevation (ft AMSL)	TPH-G (µg/L)	TPH-D (µg/L)	TPH-O (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
MTCA Method A Cleanup Level				800	500	500	5	1,000	700	1,000
FTP-13 (cont.)	20-Mar-13	13.90	1459.17	–	–	–	–	–	–	–
1473.07	25-Sep-13	13.47	1459.60	–	–	–	–	–	–	–
	11-Mar-14	16.50	1456.57	–	–	–	–	–	–	–
	22-Sep-14	–	---	–	–	–	–	–	–	–
	19-Mar-15	14.32	1458.75	–	–	–	–	–	–	–
	22-Sep-15	–	---	–	–	–	–	–	–	–
	16-Mar-16	11.72	1461.35	–	–	–	–	–	–	–
	21-Sep-16	11.59	1461.48	–	–	–	–	–	–	–
	29-Mar-17	12.45	1460.62	–	–	–	–	–	–	–
	12-Sep-17	11.45	1461.62	–	–	–	–	–	–	–
	28-Mar-18	14.66	1458.41	–	–	–	–	–	–	–
	12-Sep-18	15.07	1458.00	–	–	–	–	–	–	–
	21-Mar-19	14.12	1458.95	–	–	–	–	–	–	–
	23-Sep-19	12.90	1460.17	–	–	–	–	–	–	–
	17-Mar-20	12.84	1460.23	–	–	–	–	–	–	–
	9-Sep-20	15.08	1457.99	–	–	–	–	–	–	–
	16-Mar-21	16.61	1456.46	–	–	–	–	–	–	–
	8-Sep-21	16.56	1456.51	–	–	–	–	–	–	–
	14-Mar-22	---	---	–	–	–	–	–	–	–
	26-Sep-22	16.13	1456.94	–	–	–	–	–	–	–

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Fire Training Pit, Yakima Training Center, Washington

Well ID TOC (ft AMSL)	Date	DTW (ft bgs)	Groundwater Elevation (ft AMSL)	TPH-G (µg/L)	TPH-D (µg/L)	TPH-O (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
MTCA Method A Cleanup Level				800	500	500	5	1,000	700	1,000
FTP-14	1-Jul-99	17.63	1439.85	100U	**480J**	0.192U	0.4U	0.4U	0.4U	1.2U
1457.48	1-Nov-00	18.28	1439.20	100U	240U	0.19U	0.4U	**0.028J**	0.4U	1.2U
	1-May-01	18.69	1438.79	2,100U	**170J**	0.19U	0.4U	0.4U	0.4U	1.2U
	30-Jan-04	17.46	1440.02	100U	100U	0.7U	0.5U	0.5U	0.5U	1U
	22-Mar-05	17.83	1439.65	**310**	**400**	1U	0.5U	0.5U	0.5U	1U
	22-Aug-05	18.02	1439.46	**260**	**330**	1U	0.5U	0.5U	0.5U	1U
	21-Mar-06	17.92	1439.56	1,000U	**400**	1U	0.5U	0.5U	0.5U	1U
	8-Aug-06	17.49	1439.99	**200**	–	–	0.5U	0.5U	0.5U	1U
	21-Mar-07	17.59	1439.89	250U	100U	1.5U	0.5U	0.5U	0.5U	1U
	19-Sep-07	17.47	1440.01	500U	**250**	1.5U	0.5U	0.5U	0.5U	1U
	18-Mar-08	17.70	1439.78	**210**	**261**	500U	–	–	–	–
	19-Sep-08	17.58	1439.90	500U	100U	500U	–	–	–	–
	23-Mar-09	17.81	1439.67	500U	–	–	–	–	–	–
	23-Sep-09	17.84	1439.64	500U	**209**	500U	–	–	–	–
	16-Mar-10	18.00	1439.48	**53**	**290**	**440**	–	–	–	–
	28-Sep-10	17.68	1439.80	**55**	**350**	**330**	–	–	–	–
	22-Mar-11	17.65	1439.83	**57**	**350**	240U	–	–	–	–
	21-Sep-11	17.64	1439.84	50U	–	–	–	–	–	–
	27-Mar-12	17.68	1439.80	**50**	**420**	**420**	–	–	–	–
	20-Aug-12	16.93	1440.55	**59**	**170**	**240**	–	–	–	–
	20-Mar-13	17.86	1439.62	250U	**150**	200U	–	–	–	–
	25-Sep-13	18.94	1438.54	250U	**240**	200U	–	–	–	–
	11-Mar-14	18.20	1439.28	250U	**250**	200U	–	–	–	–
Duplicate	11-Mar-14	18.20	1439.28	250U	**240**	200U	–	–	–	–

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MTCA Method A Cleanup Level				800	500	500	5	1,000	700	1,000
FTP-14 (cont.)	22-Sep-14	18.60	1438.88	**22**	**290**	**360**	–	–	–	–
1457.48	19-Mar-15	18.76	1438.72	**83J**	**190**	**120J**	–	–	–	–
	22-Sep-15	18.81	1438.67	**46J**	**210**	**110**	–	–	–	–
	16-Mar-16	18.62	1438.86	**31**	**230**	**130**	–	–	–	–
	21-Sep-16	17.89	1439.59	**21J**	**170**	**160**	–	–	–	–
	29-Mar-17	18.15	1439.33	**50J**	**170J**	**90J**	–	–	–	–
	12-Sep-17	17.64	1439.84	**37J**	**220**	**110**	–	–	–	–
	11-Apr-18	18.25	1439.23	**19J**	**230**	**160**	–	–	–	–
	11-Apr-18	18.25	1439.23	**14J**	**220**	**150**	–	–	–	–
	12-Sep-18	18.25	1439.23	**32.7J**	**200**	**160**	–	–	–	–
	21-Mar-19	18.46	1439.02	**23.4J**	**350Y**	**250J**	–	–	–	–
	23-Sep-19	18.46	1439.02	–	–	–	–	–	–	–
	17-Mar-20	18.52	1438.96	**14.5J**	**140Y**	**85J**	–	–	–	–
	9-Sep-20	18.68	1438.80	–	–	–	–	–	–	–
	16-Mar-21	18.80	1438.68	–	–	–	–	–	–	–
	8-Sep-21	18.91	1438.57	–	–	–	–	–	–	–
	14-Mar-22	18.94	1438.54	–	–	–	–	–	–	–
	26-Sep-22	19.02	1438.46	–	–	–	–	–	–	–

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MTCA Method A Cleanup Level				800	500	500	5	1,000	700	1,000
FTP-15	1-Jul-99	16.68	1444.20	100U	240U	0	0.4U	0.4U	0.4U	1.2U
1460.88	1-Nov-00	18.00	1442.88	100U	240U	0.19U	0.4U	**0.052J**	0.4U	**0.042J**
	1-May-01	17.98	1442.90	100U	240U	0.192U	0.4U	0.4U	0.4U	1.2U
	30-Jan-04	16.58	1444.30	100U	100U	0.7U	0.5U	0.5U	0.5U	1U
	22-Mar-05	17.89	1442.99	100U	100U	1U	0.5U	0.5U	0.5U	1U
	22-Aug-05	17.91	1442.97	100U	100U	1U	0.5U	0.5U	0.5U	1U
	21-Mar-06	17.93	1442.95	100U	100U	–	0.5U	0.5U	0.5U	1U
	8-Aug-06	16.79	1444.09	100U	100U	–	0.5U	0.5U	0.5U	1U
	21-Mar-07	17.91	1442.97	250U	100U	1.5U	0.5U	0.5U	0.5U	1U
	19-Sep-07	16.93	1443.95	500U	100U	–	0.5U	0.5U	0.5U	1U
	18-Mar-08	17.95	1442.93	100U	100U	500U	–	–	–	–
	19-Sep-08	17.31	1443.57	500U	100U	500U	–	–	–	–
	23-Mar-09	17.97	1442.91	500U	100U	500U	–	–	–	–
	23-Sep-09	17.87	1443.01	500U	100U	500U	–	–	–	–
	16-Mar-10	17.96	1442.92	50U	100U	240U	–	–	–	–
	28-Sep-10	16.62	1444.26	50U	**180**	**440**	–	–	–	–
	22-Mar-11	17.85	1443.03	50U	120U	240U	–	–	–	–
Duplicate	22-Mar-11	17.85	1443.03	50U	120U	240U	–	–	–	–
	21-Sep-11	16.81	1444.07	50U	–	–	–	–	–	–
	27-Mar-12	17.45	1443.43	50U	**150**	**370**	–	–	–	–
	20-Aug-12	16.03	1444.85	**150**	**120**	240U	–	–	–	–
Duplicate	20-Aug-12	16.03	1444.85	50U	**120**	240U	–	–	–	–

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MTCA Method A Cleanup Level				800	500	500	5	1,000	700	1,000
FTP-15 (cont.)	20-Mar-13	16.77	1444.11	250U	**130**	200U	–	–	–	–
1460.88	25-Sep-13	16.62	1444.26	250U	100U	200U	–	–	–	–
Duplicate	25-Sep-13	16.62	1444.26	250U	**110**	200U	–	–	–	–
	11-Mar-14	17.80	1443.08	250U	100U	200U	–	–	–	–
	22-Sep-14	18.30	1442.58	**14J**	**46J**	**110J**	–	–	–	–
	19-Mar-15	17.91	1442.97	250U	**55J**	**180J**	–	–	–	–
	22-Sep-15	16.22	1444.66	250U	**46J**	**80J**	–	–	–	–
	16-Mar-16	17.92	1442.96	250U	**55J**	**130**	–	–	–	–
	21-Sep-16	14.60	1446.28	250U	**150**	**210**	–	–	–	–
	29-Mar-17	16.66	1444.22	**14J**	**130J**	**120J**	–	–	–	–
	12-Sep-17	12.27	1448.61	**15J**	**210**	**130**	–	–	–	–
	11-Apr-18	14.88	1446.00	25U	**190**	**180**	–	–	–	–
	12-Sep-18	14.58	1446.30	**16.7**	**170**	**190**	–	–	–	–
	21-Mar-19	17.40	1443.48	**12.6J**	**130J**	**160J**	–	–	–	–
	23-Sep-19	16.23	1444.65	–	–	–	–	–	–	–
	17-Mar-20	17.22	1443.66	**17.4J**	**94Y**	**340Z**	–	–	–	–
	9-Sep-20	17.29	1443.59	–	–	–	–	–	–	–
	16-Mar-21	17.96	1442.92	–	–	–	–	–	–	–
	8-Sep-21	17.56	1443.32	–	–	–	–	–	–	–
	14-Mar-22	18.01	1442.87	–	–	–	–	–	–	–
	26-Sep-22	17.93	1442.95	–	–	–	–	–	–	–

Table 2
Depth-to-Water Measurements and Chemical of Concern Concentrations
Fire Training Pit, Yakima Training Center, Washington

Well ID TOC (ft AMSL)	Date	DTW (ft bgs)	Groundwater Elevation (ft AMSL)	TPH-G (µg/L)	TPH-D (µg/L)	TPH-O (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
MTCA Method A Cleanup Level				800	500	500	5	1,000	700	1,000
FTP-16	1-Jul-99	26.32	1418.52	100U	**360J**	**2**	0.4U	0.4U	0.4U	1.2U
1444.81	1-Nov-00	26.51	1418.33	100U	**210J**	0.19U	0.4U	**0.064J**	0.4U	**0.043J**
	1-May-01	26.41	1418.43	100U	240U	0.188U	0.4U	0.4U	0.4U	1.2U
	30-Jan-04	26.34	1418.50	100U	100U	0.7U	0.5U	0.5U	0.5U	1U
	22-Mar-05	26.77	1418.07	100U	100U	1U	0.5U	0.5U	0.5U	1U
	22-Aug-05	26.49	1418.35	100U	100U	1U	0.5U	0.5U	0.5U	1U
	21-Mar-06	26.05	1418.79	100U	100U	1U	0.5U	0.5U	0.5U	1U
	8-Aug-06	26.11	1418.73	100U	**200**	1U	0.5U	0.5U	0.5U	1U
	21-Mar-07	26.15	1418.69	250U	100U	1.5U	0.5U	0.5U	0.5U	1U
	19-Sep-07	26.12	1418.72	500U	100U	–	0.5U	0.5U	0.5U	1U
	18-Mar-08	26.09	1418.75	100U	100U	500U	–	–	–	–
	19-Sep-08	26.18	1418.66	500U	100U	500U	–	–	–	–
	23-Mar-09	26.20	1418.64	500U	100U	500U	–	–	–	–
	23-Sep-09	26.28	1418.56	500U	**140**	500U	–	–	–	–
	16-Mar-10	26.25	1418.59	50U	**180**	**470**	–	–	–	–
	28-Sep-10	26.05	1418.79	50U	**320**	**450**	–	–	–	–
	22-Mar-11	26.15	1418.69	50U	**310**	240U	–	–	–	–
	21-Sep-11	26.16	1418.68	50U	–	–	–	–	–	–
	27-Mar-12	26.15	1418.69	50U	**280**	**470**	–	–	–	–
	20-Aug-12	25.93	1418.91	50U	**200**	**350**	–	–	–	–
	20-Mar-13	26.29	1418.55	250U	**130**	200U	–	–	–	–
	25-Sep-13	26.50	1418.34	250U	**160**	200U	–	–	–	–

Table 2
Depth-to-Water Measurements and Chemical of Concern Concentrations
Fire Training Pit, Yakima Training Center, Washington

Well ID TOC (ft AMSL)	Date	DTW (ft bgs)	Groundwater Elevation (ft AMSL)	TPH-G (µg/L)	TPH-D (µg/L)	TPH-O (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
MTCA Method A Cleanup Level				800	500	500	5	1,000	700	1,000
FTP-16 (cont.)	11-Mar-14	26.30	1418.54	250U	**150**	200U	–	–	–	–
1444.81	22-Sep-14	26.35	1418.49	250U	**290**	**180**	–	–	–	–
	19-Mar-15	26.19	1418.65	250U	**110J**	**76J**	–	–	–	–
	22-Sep-15	26.09	1418.75	250U	**300**	540	–	–	–	–
	16-Mar-16	26.12	1418.72	250U	**200**	–	–	–	–	–
	21-Sep-16	26.00	1418.84	250U	**160**	–	–	–	–	–
	29-Mar-17	26.33	1418.51	250U	**130J**	**120J**	–	–	–	–
Duplicate	29-Mar-17	26.33	1418.51	250U	**120J**	**100J**	–	–	–	–
	12-Sep-17	25.97	1418.87	250U	**190**	**160**	–	–	–	–
	11-Apr-18	26.07	1418.77	25U	**170**	**200**	–	–	–	–
	12-Sep-18	26.20	1418.64	**12.9**	**180**	**210**	–	–	–	–
	21-Mar-19	26.22	1418.62	**15.6J**	**200J**	**290J**	–	–	–	–
	23-Sep-19	26.20	1418.64	–	–	–	–	–	–	–
	18-Mar-20	26.25	1418.59	**15.2J**	**110Y**	**210Z**	–	–	–	–
	9-Sep-20	26.46	1418.38	–	–	–	–	–	–	–
FTP-16 (cont.)	16-Mar-21	26.42	1418.42	–	–	–	–	–	–	–

Table 2
Depth-to-Water Measurements and Chemical of Concern Concentrations
Fire Training Pit, Yakima Training Center, Washington

Well ID TOC (ft AMSL)	Date	DTW (ft bgs)	Groundwater Elevation (ft AMSL)	TPH-G (µg/L)	TPH-D (µg/L)	TPH-O (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
MTCA Method A Cleanup Level				800	500	500	5	1,000	700	1,000
1444.81	8-Sep-21	26.47	1418.37	–	–	–	–	–	–	–
	14-Mar-22	26.57	1418.27	–	–	–	–	–	–	–
	26-Sep-22	26.27	1418.57	–	–	–	–	–	–	–

Notes: Please refer to laboratory reports for analytical methods used.

ID = identification

TOC (ft AMSL) = top-of-casing elevation (feet above mean sea level)

DTW = depth-to-water

ft bgs = feet below ground surface

ft AMSL = feet above mean sea level

TPH-G = total petroleum hydrocarbons – gasoline range

TPH-D = total petroleum hydrocarbons – diesel range

TPH-O = total petroleum hydrocarbons – heavy oil range

µg/L = micrograms per liter

–	Not applicable, not sampled
BOLD	Analyte detected above laboratory reporting limit.
SHADE	Analyte detected above Model Toxics Control Act (MTCA) cleanup level.

J = estimated concentration

J+ = the result was an estimated quantity, but the result may be biased high

L = The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.

ND = non-detect

U = Analyte not detected above laboratory practical quantitation limit (PQL). Beginning in 2018, value listed is the reporting limit.

Y = The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.

Z = The chromatographic fingerprint does not resemble a petroleum product.

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Table 3
Selected VOC, PAH, and PCB Concentrations
Fire Training Pit, Yakima Training Center, Washington

Well ID	Date	TCE (µg/L)	cis-DCE (µg/L)	Vinyl Chloride (µg/L)	Methylene Chloride (µg/L)	Bis-(2-ethylhexyl) phthalate (µg/L)	Fluorene (µg/L)	Total Naphthalenes[1] (µg/L)	Total PCBs (µg/L)
MTCA Method A Cleanup Level		5	–	0.2	5	–	–	160	0.1
MTCA Standard Method B Cleanup Level		–	70	–	–	6	640	–	–
FTP-1	1-Mar-93	50U	50U	100U	**110B,J**	**270B,J**	–	905U	70U
	1-Jul-99	**0.066J**	0.4U	0.4U	0.4U	**29J**	**7,600J**	**0.243J**	23.1U
	1-Nov-00	**32J**	70J	ND	**3.7J**	ND	**11,000J**	1.774U	ND
	1-May-01	4U	4U	4U	4U	**54J**	**46,000**	**5.02J**	0.81U
	30-Jan-04	0.5U	0.5U	0.5U	**1.3**	**6.0**	**48,300**	0.362U	–
	22-Mar-05	2.5U	2.5U	2.5U	12.5U	**1.0**	500U	0.905U	–
	22-Aug-05	5U	5U	5U	25U	0.5U	500U	0.905U	–
	21-Mar-06	5U	5U	5U	25U	5U	500U	9.05U	–
	8-Aug-06	1U	1U	1U	5U	**2.4**	500U	0.905U	–
	21-Mar-07	0.5U	0.5U	0.5U	2.5U	**3.6**	10,000U	**0.1**	–
	19-Sep-07	0.5U	0.5U	0.5U	2.5U	**2.7**	500U	0.905U	–
	18-Mar-08	0.5U	0.5U	0.5U	2.5U	10U	1,000U	**118.2**	
	19-Sep-08	0.5U	0.5U	0.5U	2.5U	–	500U	**52.6**	–
	23-Mar-09	0.5U	0.5U	0.5U	2.5U	–	**9.1**	**93.2**	–
Duplicate	23-Mar-09	0.5U	0.5U	0.5U	2.5U	–	–	–	–
	23-Sep-09	0.5U	0.5U	0.5U	2.5U	15U	**5.4**	**121.1**	–
Duplicate	23-Sep-09	0.5U	0.5U	0.5U	2.5U	15U	-	-	–
	16-Mar-10	0.5U	0.5U	0.5U	2.5U	15U	**3.3**	**13.9**	–
	28-Sep-10	0.5U	0.5U	0.5U	2.5U	–	**8.3**	**238**	–
	22-Mar-11	0.5U	0.5U	0.5U	2.5U	ND	**6.1**	**56.6**	–
	21-Sep-11	0.5U	0.5U	0.5U	2.5U	0.96U	**4.2**	**120**	–
	27-Mar-12	0.5U	0.5U	0.5U	0.5U	**5.6**	**10**	**66**	–
	20-Aug-12	0.5U	0.5U	0.5U	0.5U	14U	**5.5**	**242**	–

Table 3
Selected VOC, PAH, and PCB Concentrations
Fire Training Pit, Yakima Training Center, Washington

Well ID	Date	TCE (µg/L)	cis-DCE (µg/L)	Vinyl Chloride (µg/L)	Methylene Chloride (µg/L)	Bis-(2-ethylhexyl) phthalate (µg/L)	Fluorene (µg/L)	Total Naphthalenes[1] (µg/L)	Total PCBs (µg/L)
MTCA Method A Cleanup Level		5	–	0.2	5	–	–	160	0.1
MTCA Standard Method B Cleanup Level		–	70	–	–	6	640	–	–
FTP-1 (cont.)	20-Mar-13	0.2U	0.2U	0.2U	1.0U	**6.3**	**27**	**94**	–
	25-Sep-13	0.2U	0.2U	0.2U	1U	3U	**11**	**260**	–
	11-Mar-14	0.2U	0.2U	0.2U	1U	9U	**5.8**	**112**	–
	22-Sep-14	**0.11J**	0.5U	0.5U	2U	10U	**7.8**	**154**	–
	19-Mar-15	**0.12J**	0.2U	0.1U	0.2U	**4.9J**	**8.9J**	**105**	–
	22-Sep-15	**0.17J**	0.2U	0.1U	**0.12J**	2U	**9.4J**	**218**	–
	16-Mar-16	**0.13J**	0.2U	0.5U	2U	10U	**6.9J**	**111**	–
	21-Sep-16	**0.18J**	.02U	0.5U	2U	9.9U	**7.9J**	**57**	–
	29-Mar-17	**0.11J**	.02U	0.5U	2U	10U	10U	10U	–
	12-Sep-17	**0.10J**	.02U	0.5U	2U	**8.2J**	**9.9J**	**84**	–
	28-Mar-18	0.2U	0.2U	0.1U	0.2U	2.0U	**3.8J**	**82.3**	–
	12-Sep-18	0.2U	0.2U	0.1U	0.2U	1.9U	**5.1**	**242**	–
	21-Mar-19	0.2U	0.2U	0.1U	0.2U	20U	**6.5J**	**60J**	–
	23-Sep-19	0.1U	0.2U	0.1U	**0.10J**	1.0U	**6.6J**	**147**	–
Duplicate	23-Sep-19	0.1U	0.2U	0.1U	0.2U	1.0U	**5.9J**	**121**	–
	18-Mar-20	0.1U	0.2U	0.1U	0.2U	**5.0J**	**12J**	**72J**	–
Duplicate	18-Mar-20	0.1U	0.2U	0.1U	0.2U	3.8U	**2.9J**	**13J**	–
	10-Sep-20	0.1U	0.2U	0.1U	0.2U	2.2J	**9.9J**	**104J**	–
	16-Mar-21	0.1U	0.2U	0.1U	0.2U	1.2J	**3.1J**	**60**	–
Duplicate	16-Mar-21	0.1U	0.2U	0.1U	0.2U	1.5J	**7.2J**	**60**	–
	8-Sep-21	0.1U	0.2U	0.15U	0.20U	0.75U	**2.8J**	**28**	–
	14-Mar-22	0.500UJ	0.500U	0.500U^	2.00U	2.00U	5.00U	15.0 U	–

Table 3
Selected VOC, PAH, and PCB Concentrations
Fire Training Pit, Yakima Training Center, Washington

Well ID	Date	TCE (µg/L)	cis-DCE (µg/L)	Vinyl Chloride (µg/L)	Methylene Chloride (µg/L)	Bis-(2-ethylhexyl) phthalate (µg/L)	Fluorene (µg/L)	Total Naphthalenes[1] (µg/L)	Total PCBs (µg/L)
MTCA Method A Cleanup Level		5	–	0.2	5	–	–	160	0.1
MTCA Standard Method B Cleanup Level		–	70	–	–	6	640	–	–
FTP-1 (cont.)	26-Sep-22	0.500U	0.500U	**0.00859J+**	2.00U	**3.83J**	**1.36J**	**2.612J**	–
Duplicate	26-Sep-22	0.500U	0.500U	**0.00748J+**	2.00U	2.10UJ	**0.665J**	**0.7823J**	–
FTP-13	1-Mar-93	-	-	-	-	6.3	–	–	-
	1-Jul-99	0.4U	0.4U	0.4U	0.4U	0.5U	240J	0.172U	0.665U
	1-Nov-00	0.4U	0.4U	0.4U	0.4U	–	ND	0.172U	ND
	1-May-01	0.4U	0.4U	0.4U	0.4U	0.5U	480U	0.174U	0.076U
	30-Jan-04	0.5U	0.5U	0.5U	0.5U	–	500U	0.362U	–
	22-Mar-05	0.5U	0.5U	0.5U	2.5U	0.5U	500U	0.905U	–
	22-Aug-05	–	–	–	–	–	–	–	–
	21-Mar-06	0.5U	0.5U	0.5U	2.5U	0.96U	500U	0.905U	–
	8-Aug-06	–	–	–	–	9.5U	–	–	–
	21-Mar-07	0.5U	0.5U	0.5U	2.5U	0.95U	500U	**0.1**	–
FTP-14	1-Mar-93	–	–	–	–	9.2	–	–	–
	1-Jul-99	0.4U	0.4U	0.4U	0.4U	**5.2**	**480**	0.174U	0.665U
	1-Nov-00	ND	ND	ND	ND	**0.8**	480U	0.172U	0.076U
	1-May-01	0.4U	0.4U	0.4U	0.4U	0.5U	480U	0.172U	0.0766U
	30-Jan-04	0.5U	0.5U	0.5U	0.5U	–	900	0.362U	–
	22-Mar-05	0.5U	0.5U	0.5U	2.5U	**2.3**	500U	0.905U	–
	22-Aug-05	0.5U	0.5U	0.5U	2.5U	30	500U	0.905U	–
	21-Mar-06	0.5U	0.5U	0.5U	2.5U	–	500U	0.905U	–
	8-Aug-06	0.5U	0.5U	0.5U	2.5U	**2.1J**	–	–	–
	21-Mar-07	0.5U	0.5U	0.5U	2.5U	9.5U	500U	0.905U	
	19-Sep-07	0.5U	0.5U	0.5U	2.5U	0.96U	500U	0.905U	

Table 3
Selected VOC, PAH, and PCB Concentrations
Fire Training Pit, Yakima Training Center, Washington

Well ID	Date	TCE (µg/L)	cis-DCE (µg/L)	Vinyl Chloride (µg/L)	Methylene Chloride (µg/L)	Bis-(2-ethylhexyl) phthalate (µg/L)	Fluorene (µg/L)	Total Naphthalenes[1] (µg/L)	Total PCBs (µg/L)
MTCA Method A Cleanup Level		5	–	0.2	5	–	–	160	0.1
MTCA Standard Method B Cleanup Level		–	70	–	–	6	640	–	–
FTP-15	1-Mar-93	–	–	–	–	**1.4**			
	1-Jul-99	0.4U	0.4U	0.4U	0.4U	**1.2**	**250J**	0.172U	0.665U
	1-Nov-00	ND	ND	ND	ND	**1.0**	480U	0.172U	0.076U
	1-May-01	0.4U	0.4U	0.4U	0.4U	–	470U	0.174U	0.076U
	30-Jan-04	0.5U	0.5U	0.5U	0.5U	–	**500**	0.362U	–
	22-Mar-05	0.5U	0.5U	0.5U	2.5U	**2.3**	500U	0.905U	–
	22-Aug-05	0.5U	0.5U	0.5U	2.5U	–	500U	0.905U	–
	21-Mar-06	0.5U	0.5U	0.5U	2.5U	–	**600**	–	–
	8-Aug-06	0.5U	0.5U	0.5U	2.5U	**0.9J**	500U	–	–
	21-Mar-07	0.5U	0.5U	0.5U	2.5U	ND	500U	0.905U	–
	19-Sep-07	0.5U	0.5U	0.5U	2.5U	**0.63J**	500U	–	–
FTP-16	1-Mar-93	–	–	–	–	**1.8**	–	–	–
	1-Jul-99	0.4U	0.4U	0.4U	0.4U	**1.5**	**600J**	0.172U	0.665U
	1-Nov-00	ND	0.4U	ND	ND	**0.8**	480U	0.172U	0.076U
	1-May-01	0.4U	0.4U	0.4U	0.4U	0.5U	470U	0.170U	0.0754U
	30-Jan-04	0.5U	0.5U	0.5U	0.5U	0.5U	**500**	0.362U	–
	22-Mar-05	0.5U	0.5U	0.5U	2.5U	**1.8**	500U	0.905U	–
	22-Aug-05	0.5U	0.5U	0.5U	2.5U	–	500U	0.905U	–
	21-Mar-06	0.5U	0.5U	0.5U	2.5U	–	500U	0.905U	–

Table 3
Selected VOC, PAH, and PCB Concentrations
Fire Training Pit, Yakima Training Center, Washington

Well ID	Date	TCE (µg/L)	cis-DCE (µg/L)	Vinyl Chloride (µg/L)	Methylene Chloride (µg/L)	Bis-(2-ethylhexyl) phthalate (µg/L)	Fluorene (µg/L)	Total Naphthalenes[1] (µg/L)	Total PCBs (µg/L)
MTCA Method A Cleanup Level		5	–	0.2	5	–	–	160	0.1
MTCA Standard Method B Cleanup Level		–	70	–	–	6	640	–	–
FTP-16 (cont.)	8-Aug-06	0.5U	0.5U	0.5U	2.5U	–	500U	0.905U	–
	21-Mar-07	0.5U	0.5U	0.5U	2.5U	–	500U	**0.1**	–
	19-Sep-07	0.5U	0.5U	0.5U	2.5U	–	500U	–	–

Notes:

Please refer to laboratory reports for analytical methods used.

VOCs = Volatile Organic Compounds

PAHs = polycyclic aromatic hydrocarbon

PCBs = polychlorinated biphenyls

ID = identification

TCE = trichloroethylene

cis-DCE = cis 1,2-dichloroetheylene

µg/L = micrograms per liter

BOLD Analyte detected above laboratory reporting limit.

SHADE Analyte detected above Model Toxics Control Act (MTCA) cleanup level.

(1) total naphthalenes = total of naphthalene and 2-methyl naphthalene.

– = Not applicable, not sampled

B = The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC Standards.

J = estimated concentration

J+ = the result was an estimated quantity, but the result may be biased high

ND = non-detect

U = Analyte not detected above laboratory limit of detection (LOD). Beginning in 2018, value listed is the reporting limit.

^ = EPA Method 8260D was used instead of Method 8260D SIM during Spring 2022, resulting in an elevated LOD.

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Table 4
Carcinogenic PAH and Total PAH Concentrations
Fire Training Pit, Yakima Training Center, Washington

Well ID	Date	Benzo(a) anthracene	Benzo(a) pyrene (µg/L)	Benzo(b) fluoranthene (µg/L)	Benzo(k) fluoranthene (µg/L)	Chrysene (µg/L)	Dibenz(a,h) anthracene (µg/L)	Indeno(1,2,3-cd) pyrene (µg/L)	TEC Total[1] (µg/L)	Total PAHs[2] (µg/L)
MTCA Method A Cleanup Level		–	0.1	–	–	–	–	–	0.1	–
TEF		0.1	1	0.1	0.1	0.01	0.1	0.1	–	–
FTP-1	1-Mar-93	–	–	–	–	–	–	–	–	**1,100.0**
	1-Jul-99	–	–	–	–	–	–	–	–	**140J**
	1-Nov-00	–	–	–	–	–	–	–	–	**33.0**
	1-May-01	–	–	–	–	–	–	–	–	**450J**
	30-Jan-04	–	–	–	–	–	–	–	–	**9.1**
	22-Mar-05	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	ND	**5.0**
	22-Aug-05	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	ND	**5.7**
	21-Mar-06	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	ND	**33.4**
	8-Aug-06	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	ND	**4.9**
	21-Mar-07	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	**0.5**	**0.05**	**5.9**
	19-Sep-07	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	ND	**6.4**
	18-Mar-08	10U	10U	10U	10U	10U	10U	10U	ND	**89.6**
	19-Sep-08	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	ND	**158.8**
	23-Mar-09	0.1U	0.1U	0.1U	0.1U	**0.54**	0.1U	0.1U	**0.005**	**135.8**
	23-Sep-09	0.1U	0.1U	0.1U	0.1U	0.1U	0.1U	0.1U	ND	**117.2**
	16-Mar-10	0.29U	0.19U	0.39U	0.29U	0.19U	0.29U	0.29U	ND	**107.2**
	28-Sep-10	0.29U	0.19U	0.39U	0.29U	**0.38**	0.29U	0.29U	**0.004**	**333.8**
	22-Mar-11	0.29U	0.19U	0.39U	0.29U	0.19U	0.29U	0.29U	ND	**269.5**
	21-Sep-11	0.28U	0.19U	0.38U	0.28U	0.19U	0.28U	0.28U	ND	**176.3**
	27-Mar-12	0.1U	0.1U	0.1U	0.1U	**0.64**	0.1U	0.1U	**0.01**	**246.14**
	20-Aug-12	0.29U	0.19U	0.38U	0.29U	0.19U	0.29U	0.29U	ND	**265.25**
	20-Mar-13	3.3U	3.3U	17U	17U	3.3U	3.3U	3.3U	ND	**165.43**
	25-Sep-13	1U	1U	5U	5U	1U	1U	1U	ND	**326.30**
	11-Mar-14	3U	3U	15U	15U	3U	3U	3U	ND	**248.40**

Table 4
Carcinogenic PAH and Total PAH Concentrations
Fire Training Pit, Yakima Training Center, Washington

Well ID	Date	Benzo(a) anthracene	Benzo(a) pyrene (µg/L)	Benzo(b) fluoranthene (µg/L)	Benzo(k) fluoranthene (µg/L)	Chrysene (µg/L)	Dibenz(a,h) anthracene (µg/L)	Indeno(1,2,3-cd) pyrene (µg/L)	TEC Total[1] (µg/L)	Total PAHs[2] (µg/L)
MTCA Method A Cleanup Level		–	0.1	–	–	–	–	–	0.1	–
TEF		0.1	1	0.1	0.1	0.01	0.1	0.1	–	–
FTP-1 (cont.)	22-Sep-14	10U	10U	10U	10U	10U	10U	10U	ND	**177.80**
	19-Mar-15	10U	10U	10U	10U	10U	10U	10U	ND	**140.1**
	22-Sep-15	10U	10U	10U	10U	10U	10U	10U	ND	**251**
	16-Mar-16	10U	10U	10U	10U	10U	10U	10U	ND	**124.5**
	21-Sep-16	9.9U	9.9U	9.9U	9.9U	9.9U	9.9U	9.9U	ND	**84.4**
	29-Mar-17	10U	10U	10U	10U	10U	10U	10U	ND	**ND**
	12-Sep-17	10U	10U	10U	10U	10U	10U	10U	ND	**126.1**
	28-Mar-18	0.63U	1.1U	0.62U	0.88U	0.84U	0.79U	0.72U	ND	**79.34J**
	12-Sep-18	0.63U	1.1U	0.62U	0.88U	0.84U	0.79U	0.72U	ND	**172.68J**
	21-Mar-19	6.1U	10U	6.0U	8.5U	8.1U	7.7U	7.0U	ND	**158.5J**
	23-Sep-19	0.50U	1.0U	1.0U	1.0U	0.50U	1.0U	1.0U	ND	**164.48J**
Duplicate	23-Sep-19	0.50U	1.0U	1.0U	1.0U	0.50U	1.0U	1.0U	ND	**136.51J**
	18-Mar-20	2.5U	3.8UJ	5.0U	3.8UJ	2.5U	3.8U	3.8U	ND	**125.6J**
Duplicate	18-Mar-20	2.5U	3.8U	5.0U	3.8U	2.5U	3.8U	3.8U	ND	**59.6J**
	10-Sep-20	0.52J	1.5UJ	2.0UJ	1.5UJ	1.0UJ	1.5UJ	1.5UJ	ND	**132.72J**
	16-Mar-21	0.51U	0.77U	1.0U	0.77U	0.51J	0.77U	0.77U	ND	**73.15**
	16-Mar-21	0.25J	0.75U	1.0U	0.75U	0.5U	0.75U	0.75U	ND	**73.15**
	8-Sep-21	0.5U	0.75U	1.0U	0.75U	0.5U	0.75U	0.75U	ND	**37.25**
	14-Mar-22	5U^	5U^	5U^	5U^	5U^	5U^	5U^	ND	**95^**
	26-Sep-22	0.05U	0.05U	0.05U	0.125U	0.05U	0.05U	0.04U	ND	**4.741**
Duplicate	26-Sep-22	**0.121J**	**0.111J**	**0.106J**	0.125U	**0.172J**	**0.127J**	**0.170J**	0.165J	**3.354J**

Table 4
Carcinogenic PAH and Total PAH Concentrations
Fire Training Pit, Yakima Training Center, Washington

Well ID	Date	Benzo(a) anthracene	Benzo(a) pyrene (µg/L)	Benzo(b) fluoranthene (µg/L)	Benzo(k) fluoranthene (µg/L)	Chrysene (µg/L)	Dibenz(a,h) anthracene (µg/L)	Indeno(1,2,3-cd) pyrene (µg/L)	TEC Total[(1)] (µg/L)	Total PAHs[(2)] (µg/L)
MTCA Method A Cleanup Level		–	0.1	–	–	–	–	–	0.1	–
TEF		0.1	1	0.1	0.1	0.01	0.1	0.1	–	–
FTP-13	1-Mar-93	–	–	–	–	–	–	–	–	–
	1-Jul-99	–	–	–	–	–	–	–	–	**0.1**
	1-Nov-00	–	–	–	–	–	–	–	–	ND
	1-May-01	–	–	–	–	–	–	–	–	0.096U
	30-Jan-04	–	–	–	–	–	–	–	–	0.2U
	22-Mar-05	–	–	–	–	–	–	–	–	0.5U
	22-Aug-05	–	–	–	–	–	–	–	–	–
	21-Mar-06	–	–	–	–	–	–	–	–	0.5U
	8-Aug-06	–	–	–	–	–	–	–	–	–
	21-Mar-07	–	–	–	–	–	–	–	–	0.5U
FTP-14	1-Mar-93	–	–	–	–	–	–	–	–	–
	1-Jul-99	–	–	–	–	–	–	–	–	0.096U
	1-Nov-00	–	–	–	–	–	–	–	–	0.095U
	1-May-01	–	–	–	–	–	–	–	–	0.095U
	30-Jan-04	–	–	–	–	–	–	–	–	0.2U
	22-Mar-05	–	–	–	–	–	–	–	–	0.5U
	22-Aug-05	–	–	–	–	–	–	–	–	0.5U
	21-Mar-06	–	–	–	–	–	–	–	–	0.5U
	8-Aug-06	–	–	–	–	–	–	–	–	–
	21-Mar-07	–	–	–	–	–	–	–	–	0.5U
	19-Sep-07	–	–	–	–	–	–	–	–	0.5U

Table 4
Carcinogenic PAH and Total PAH Concentrations
Fire Training Pit, Yakima Training Center, Washington

Well ID	Date	Benzo(a) anthracene	Benzo(a) pyrene (µg/L)	Benzo(b) fluoranthene (µg/L)	Benzo(k) fluoranthene (µg/L)	Chrysene (µg/L)	Dibenz(a,h) anthracene (µg/L)	Indeno(1,2,3-cd) pyrene (µg/L)	TEC Total[(1)] (µg/L)	Total PAHs[(2)] (µg/L)
MTCA Method A Cleanup Level		–	0.1	–	–	–	–	–	0.1	–
TEF		0.1	1	0.1	0.1	0.01	0.1	0.1	–	–
FTP-15	1-Mar-93	–	–	–	–	–	–	–	–	–
	1-Jul-99	–	–	–	–	–	–	–	–	0.095U
	1-Nov-00	–	–	–	–	–	–	–	–	0.095U
	1-May-01	–	–	–	–	–	–	–	–	0.096U
	30-Jan-04	–	–	–	–	–	–	–	–	0.2U
	22-Mar-05	–	–	–	–	–	–	–	–	0.5U
	22-Aug-05	–	–	–	–	–	–	–	–	0.5U
	21-Mar-06	–	–	–	–	–	–	–	–	–
	8-Aug-06	–	–	–	–	–	–	–	–	–
	21-Mar-07	–	–	–	–	–	–	–	–	0.5U
FTP-16	1-Mar-93	–	–	–	–	–	–	–	–	–
	1-Jul-99	–	–	–	–	–	–	–	–	0.095U
	1-Nov-00	–	–	–	–	–	–	–	–	0.095U
	1-May-01	–	–	–	–	–	–	–	–	0.094U
	30-Jan-04	–	–	–	–	–	–	–	–	0.2U
	22-Mar-05	–	–	–	–	–	–	–	–	0.5U
	22-Aug-05	–	–	–	–	–	–	–	–	0.5U

Table 4
Carcinogenic PAH and Total PAH Concentrations
Fire Training Pit, Yakima Training Center, Washington

Well ID	Date	Benzo(a) anthracene	Benzo(a) pyrene (µg/L)	Benzo(b) fluoranthene (µg/L)	Benzo(k) fluoranthene (µg/L)	Chrysene (µg/L)	Dibenz(a,h) anthracene (µg/L)	Indeno(1,2,3-cd) pyrene (µg/L)	TEC Total[(1)] (µg/L)	Total PAHs[(2)] (µg/L)
MTCA Method A Cleanup Level		–	0.1	–	–	–	–	–	0.1	–
TEF		0.1	1	0.1	0.1	0.01	0.1	0.1	–	–
FTP-16 (cont.)	21-Mar-06	–	–	–	–	–	–	–	–	0.5U
	8-Aug-06	–	–	–	–	–	–	–	–	0.5U
	21-Mar-07	–	–	–	–	–	–	–	–	0.5U

Notes:

Please refer to laboratory reports for analytical methods used.

PAHs = polycyclic aromatic hydrocarbon

ID = identification

µg/L = micrograms per liter

– = not applicable, not sampled

TTEC = total toxic equivalent concentration (TTEC) of cPAHs in benzo(a)pyrene, as defined by WAC Chapter 173-340-708(8)(e).

(1) TEC = (Benzo[a]anthrace*0.1) + benzo[a]pyrene + (benzo[b]fluoranthene*0.1) + (benzo[k]fluoranthene*0.1) + (chrysene*0.01) + (dibenz[a, h]anthracene*0.1) + (indeno[1,2,3-cd]pyrene*0.1).
Non-detects are not included in this calculation.

(2) Total PAHs includes naphthalene, 2-methylnaphthalene, acenaphthene. acenaphthylene, phenanthrene, anthracene, fluoranthene, pyrene, benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, indeno(123-cd)pyrene, dibenz(ah)anthracene, benzo(ghi)perylene. Beginning in 2018, non-detects are included in this total at the detection limit.

TEF – toxicity equivalency factor. Used to convert the concentration of a cPAH to an equivilent concentration of benzo(a)pyrene for a given sample. Defined by Table 708-2 in WAC Chapter 173-340-900.

BOLD = Analyte detected above laboratory reporting limit.

SHADE = Analyte detected above Model Toxics Control Act (MTCA) cleanup level.

ND = non-detect

U = Analyte not detected above laboratory LOD. Beginning in 2018, value listed is the reporting limit.

^ = EPA Method 8270E was used instead of Method 8270E SIM during Spring 2022, resulting in an elevated LOD.

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Table 5
Depth-to-Water Measurements; TCE and cis-1,2-DCE Concentrations
TVR/Old MATES, Yakima Training Center, Washington

Well ID TOC (ft AMSL)	Date	DTW (ft bgs)	Groundwater Elevation (ft AMSL)	TCE (µg/L)	cis-1,2-DCE (µg/L)
MTCA Method A Cleanup Level		–	–	**5**	–
MTCA Method B Cleanup Level		–	–	–	**16**
TVR-815-2	21-Mar-06	66.35	1,237.93	**2.40**	0.5U
1304.28	1-Aug-06	54.17	1,250.11	**3.30**	0.5U
	21-Mar-07	64.02	1,240.26	**1.80**	0.5U
	19-Sep-07	55.56	1,248.72	**3.20**	0.5U
	18-Mar-08	62.99	1,241.29	**1.14**	0.5U
	19-Sep-08	54.95	1,249.33	**1.94**	0.5U
	23-Mar-09	64.72	1,239.56	**2.03**	0.5U
	23-Sep-09	58.03	1,246.25	**1.06**	0.5U
	15-Mar-10	65.65	1,238.63	1U	1U
	28-Sep-10	52.22	1,252.06	**0.74**	0.5U
	21-Mar-11	60.85	1,243.43	**1.00**	0.5U
	21-Sep-11	48.42	1,255.86	**1.20**	0.5U
	28-Mar-12	60.20	1,244.08	**0.89**	0.5U
	20-Aug-12	46.48	1,257.80	**0.97**	0.5U
Duplicate	20-Aug-12	46.48	1,257.80	**0.99**	0.5U
	19-Mar-13	58.62	1,245.66	**0.67**	0.2U
Duplicate	19-Mar-13	58.62	1,245.66	**0.66**	0.2U
	26-Sep-13	54.37	1,249.91	**0.65**	0.2U
Duplicate	26-Sep-13	54.37	1,249.91	**0.72**	0.2U
	12-Mar-14	62.75	1,241.53	**0.45**	0.2U
	23-Sep-14	53.90	1,250.38	**1.60**	0.5U
	19-Mar-15	62.89	1,241.39	**0.75**	0.2U
	22-Sep-15	54.42	1,249.86	**1.1**	0.2U
	16-Mar-16	56.91	1,247.37	**0.83**	0.2U
	21-Sep-16	52.42	1,251.86	**0.68**	0.2U
	30-Mar-17	56.20	1,248.08	**0.61**	0.2U
	12-Sep-17	48.42	1,255.86	**0.64**	0.2U
	29-Mar-18	61.21	1,243.07	**0.51**	0.2U
	13-Sep-18	48.72	1,255.56	**1.0**	0.2U
	20-Mar-19	61.85	1,242.43	**0.54**	0.2U
	24-Sep-19	50.22	1,254.06	**0.66**	0.2U
	19-Mar-20	64.84	1,239.44	**0.26J**	0.2U
	9-Sep-20	49.50	1,254.78	–	–
	16-Mar-21	63.14	1,241.14	–	–
	8-Sep-21	48.30	1,255.98	–	–
	14-Mar-22	63.56	1,240.72	–	–
	27-Sep-22	53.71	1,250.57	–	–

Table 5
Depth-to-Water Measurements; TCE and cis-1,2-DCE Concentrations
TVR/Old MATES, Yakima Training Center, Washington

Well ID TOC (ft AMSL)	Date	DTW (ft bgs)	Groundwater Elevation (ft AMSL)	TCE (µg/L)	cis-1,2-DCE (µg/L)
MTCA Method A Cleanup Level		–	–	**5**	–
MTCA Method B Cleanup Level		–	–	–	**16**
MMP-1	1-Mar-93	–	1,239.41	5U	5U
1301.37	28-Feb-95	–	–	–	–
	1997	–	–	–	–
	1-Aug-99	–	–	–	–
	1-Jan-04	–	1,239.70	1U	1U
	23-Mar-05	66.24	1,235.13	0.5U	0.5U
	23-Aug-05	58.33	1,243.04	–	–
	21-Mar-06	64.27	1,237.10	0.5U	0.5U
	1-Aug-06	53.77	1,247.60	–	–
	21-Mar-07	62.02	1,239.35	0.5U	0.5U
	19-Sep-07	56.08	1,245.29	–	–
	18-Mar-08	61.12	1,240.25	0.5U	0.5U
	19-Sep-08	55.87	1,245.50	–	–
	23-Mar-09	62.83	1,238.54	0.5U	0.5U
	23-Sep-09	58.47	1,242.90	–	–
	15-Mar-10	63.37	1,238.00	1U	1U
	28-Sep-10	52.67	1,248.70	–	–
	21-Mar-11	59.02	1,242.35	0.5U	0.5U
	21-Sep-11	47.02	1,254.35	–	–
	28-Mar-12	57.83	1,243.54	0.5U	0.5U
	20-Aug-12	47.10	1,254.27	–	–
	19-Mar-13	55.90	1,245.47	0.2U	0.2U
	26-Sep-13	55.06	1,246.31	–	–
	12-Mar-14	59.80	1,241.57	0.2U	0.2U
	23-Sep-14	54.47	1,246.90	–	–
	19-Mar-15	60.04	1,241.33	–	–
	22-Sep-15	54.20	1,247.17	–	–
	16-Mar-16	55.50	1,245.87	–	–
	21-Sep-16	52.64	1,248.73	–	–
	30-Mar-17	55.45	1,245.92	–	–
	12-Sep-17	49.30	1,252.07	–	–
	29-Mar-18	59.52	1,241.85	**.10J**	0.2U
	13-Sep-18	50.55	1,250.82	0.2U	0.2U
	8-Apr-19	59.86	1,241.51	0.2U	0.2U
	24-Sep-19	50.12	1,251.25	–	–
	19-Mar-20	62.09	1,239.28	0.1U	0.2U
	9-Sep-20	50.36	1,251.01	–	–

Table 5
Depth-to-Water Measurements; TCE and cis-1,2-DCE Concentrations
TVR/Old MATES, Yakima Training Center, Washington

Well ID TOC (ft AMSL)	Date	DTW (ft bgs)	Groundwater Elevation (ft AMSL)	TCE (µg/L)	cis-1,2-DCE (µg/L)
MTCA Method A Cleanup Level		–	–	**5**	–
MTCA Method B Cleanup Level		–	–	–	**16**
MMP-1 (cont.)	16-Mar-21	60.82	1,240.55		
	8-Sep-21	47.98	1,253.39		
	14-Mar-22	61.01	1,240.36	–	–
	27-Sep-22	53.22	1,248.15	–	–
MMP-2	1-Mar-93	–	1,239.35	5U	5U
1301.31	28-Feb-95	–	–	–	–
	1997	–	–	–	–
	1-Aug-99	–	–	–	–
	1-Jan-04	–	1,239.50	0.5U	0.5U
	23-Mar-05	66.25	1,235.06	0.5U	0.5U
	23-Aug-05	59.75	1,241.56	–	–
	21-Mar-06	64.54	1,236.77	0.5U	0.5U
	1-Aug-06	55.69	1,245.62	–	–
	21-Mar-07	62.13	1,239.18	0.5U	0.5U
	19-Sep-07	57.12	1,244.19	–	–
	18-Mar-08	61.27	1,240.04	–	–
	19-Sep-08	56.95	1,244.36	–	–
	23-Mar-09	62.92	1,238.39	–	–
	23-Sep-09	59.23	1,242.08	–	–
	15-Mar-10	63.48	1,237.83	–	–
	28-Sep-10	54.22	1,247.09	–	–
	21-Mar-11	59.17	1,242.14	–	–
	21-Sep-11	50.44	1,250.87	–	–
	28-Mar-12	57.83	1,243.48	–	–
	20-Aug-12	48.51	1,252.80	–	–
	19-Mar-13	55.98	1,245.33	–	–
	26-Sep-13	–	–	–	–
	12-Mar-14	–	–	–	–
	23-Sep-14	55.70	1,245.61	–	–
	19-Mar-15	60.03	1,241.28	–	–
	22-Sep-15	55.90	1,245.41	–	–
	16-Mar-16	56.72	1,244.59	–	–
	21-Sep-16	55.05	1,246.26	–	–
	30-Mar-17	–	–	–	–
	12-Sep-17	–	–	–	–

Table 5
Depth-to-Water Measurements; TCE and cis-1,2-DCE Concentrations
TVR/Old MATES, Yakima Training Center, Washington

Well ID TOC (ft AMSL)	Date	DTW (ft bgs)	Groundwater Elevation (ft AMSL)	TCE (µg/L)	cis-1,2-DCE (µg/L)
MTCA Method A Cleanup Level		–	–	**5**	–
MTCA Method B Cleanup Level		–	–	–	**16**
MRC-2	1-Mar-93	–	1,236.27	5U	5U
1312.11	28-Feb-95	–	–	–	–
	1997	–	–	–	–
	1-Aug-99	–	–	–	–
	1-Jan-04	–	–	–	–
	23-Mar-05	81.82	1,230.29	–	–
	23-Aug-05	76.09	1,236.02	–	–
	21-Mar-06	–	–	–	–
	1-Aug-06	–	–	–	–
	21-Mar-07	–	–	0.5U [2]	0.5U [2]
	19-Sep-07	–	–	–	–
	18-Mar-08	74.59	1,237.52	0.5U	0.5U
	19-Sep-08	67.90	1,244.21	–	–
	23-Mar-09	75.90	1,236.21	0.5U	0.5U
	23-Sep-09	–	–	–	–
	16-Mar-10	77.38	1,234.73	1U	1U
	28-Sep-10	67.00	1,245.11	–	–
	21-Mar-11	73.20	1,238.91	0.5U	0.5U
	21-Sep-11	63.07	1,249.04	–	–
	28-Mar-12	72.42	1,239.69	0.5U	0.5U
	20-Aug-12	61.93	1,250.18	–	–
	19-Mar-13	71.36	1,240.75	–	–
	26-Sep-13	–	–	–	–
	12-Mar-14	–	–	–	–
	23-Sep-14	68.05	1,244.06	–	–
	19-Mar-15	75.27	1,236.84	–	–
	22-Sep-15	69.02	1,243.09	–	–
	16-Mar-16	–	–	–	–
	21-Sep-16	68.90	1,243.21	–	–
MTS-1	1-Mar-93	–	1,257.88	**7.90**	5U
1361.02	28-Feb-95	–	–	–	–
	1997	–	–	–	–
	1-Aug-99	–	–	–	–
	1-Jan-04	–	1,261.96	**5.60**	0.5U
	23-Mar-05	104.71	1,256.31	**7.60**	0.5U
	23-Aug-05	95.98	1,265.04	**4.60**	0.5U
	21-Mar-06	100.98	1,260.04	**6.30**	0.5U
	1-Aug-06	93.82	1,267.20	**7.50**	0.5U

Table 5
Depth-to-Water Measurements; TCE and cis-1,2-DCE Concentrations
TVR/Old MATES, Yakima Training Center, Washington

Well ID TOC (ft AMSL)	Date	DTW (ft bgs)	Groundwater Elevation (ft AMSL)	TCE (µg/L)	cis-1,2-DCE (µg/L)
MTCA Method A Cleanup Level		–	–	**5**	–
MTCA Method B Cleanup Level		–	–	–	**16**
MTS-1 (cont.)	21-Mar-07	99.62	1,261.40	**6.80**	0.5U
	19-Sep-07	94.08	1,266.94	**5.90**	0.5U
	18-Mar-08	99.36	1,261.66	**5.56**	0.5U
	19-Sep-08	95.47	1,265.55	**4.88**	0.5U
	23-Mar-09	100.72	1,260.30	**6.36**	0.5U
	23-Sep-09	94.90	1,266.12	**6.55**	0.5U
	16-Mar-10	99.92	1,261.10	**4.90**	1U
	28-Sep-10	91.30	1,269.72	**4.10**	0.5U
	21-Mar-11	96.35	1,264.67	**4.90**	0.5U
	21-Sep-11	91.44	1,269.58	**4.30**	0.5U
	28-Mar-12	95.98	1,265.04	**4.10**	0.5U
	20-Aug-12	91.38	1,269.64	**4.10**	0.5U
	19-Mar-13	95.43	1,265.59	**3.40**	0.2U
	26-Sep-13	93.85	1,267.17	**2.80**	0.2U
	12-Mar-14	97.35	1,263.67	**2.70**	0.2U
Duplicate	12-Mar-14	97.35	1,263.67	**2.80**	0.2U
	23-Sep-14	92.71	1,268.31	**3.50**	0.5U
	19-Mar-15	97.47	1,263.55	**3.8**	0.2U
	22-Sep-15	92.74	1,268.28	**4.0**	0.2U
	16-Mar-16	94.73	1,266.29	**3.7**	0.2U
	21-Sep-16	92.90	1,268.12	**3.2**	0.2U
	30-Mar-17	94.84	1,266.18	**3.5**	0.2U
	12-Sep-17	92.97	1,268.05	**3.5**	0.2U
	29-Mar-18	98.43	1,262.59	**3.7**	0.2U
	13-Sep-18	93.84	1,267.18	**3.0**	0.2U
	20-Mar-19	99.55	1,261.47	**3.7**	0.2U
	24-Sep-19	94.87	1,266.15	**3.6**	0.2U
	18-Mar-20	102.27	1,258.75	**3.2**	0.2U
	9-Sep-20	94.86	1,266.16	**2.9**	0.2U
	16-Mar-21	101.40	1,259.62	**3.3**	0.2U
	8-Sep-21	96.71	1,264.31	**3.2**	0.2U
	14-Mar-22	102.47	1,258.55	**3.46J**	0.5U
	26-Sep-22	94.80	1,266.22	**4.2J**	0.5U
MTS-2	1-Mar-93	–	1,256.80	**7.4**	5U
1351.88	28-Feb-95	–	–	–	–
	1997	–	–	–	–
	1-Aug-99	–	–	–	–

Table 5
Depth-to-Water Measurements; TCE and cis-1,2-DCE Concentrations
TVR/Old MATES, Yakima Training Center, Washington

Well ID TOC (ft AMSL)	Date	DTW (ft bgs)	Groundwater Elevation (ft AMSL)	TCE (µg/L)	cis-1,2-DCE (µg/L)
MTCA Method A Cleanup Level		–	–	**5**	–
MTCA Method B Cleanup Level		–	–	–	**16**
MTS-2 (cont.)	1-Jan-04	–	1,260.71	12.0	1U
	23-Mar-05	96.15	1,255.73	25.0	0.5U
	23-Aug-05	87.89	1,263.99	38.0	**0.50**
	21-Mar-06	92.33	1,259.55	28.0	**0.70**
	1-Aug-06	85.85	1,266.03	76.0	**1.90**
	21-Mar-07	90.96	1,260.92	32.0	**0.60**
	19-Sep-07	86.00	1,265.88	55.0	**1.40**
	18-Mar-08	90.68	1,261.20	18.6	**0.50**
	19-Sep-08	87.22	1,264.66	38.2	**1.26**
Duplicate	19-Sep-08	87.22	1,264.66	37.3	**1.21**
	23-Mar-09	92.07	1,259.81	28.2	**0.73**
	23-Sep-09	86.65	1,265.23	43.2	**1.01**
	16-Mar-10	91.22	1,260.66	16.0	1U
	28-Sep-10	83.75	1,268.13	6.3	0.5U
	21-Mar-11	87.70	1,264.18	7.4	0.5U
	21-Sep-11	83.79	1,268.09	**4.6**	0.5U
	28-Mar-12	87.26	1,264.62	**4.4**	0.5U
	20-Aug-12	83.67	1,268.21	6.5	0.5U
	19-Mar-13	86.76	1,265.12	6.8	0.2U
	26-Sep-13	85.65	1,266.23	5.6	0.2U
	12-Mar-14	88.60	1,263.28	8.4	0.2U
	23-Sep-14	84.68	1,267.20	24	**0.47J**
	19-Mar-15	88.66	1,263.22	8	**0.2J**
	22-Sep-15	89.81	1,262.07	11	**0.22J**
	16-Mar-16	86.13	1,265.75	6.9	**0.18J**
	21-Sep-16	84.79	1,267.09	5.0	**0.15**
	30-Mar-17	86.28	1,265.60	7.9	**0.18J**
	12-Sep-17	84.88	1,267.00	5.3	**0.12J**
	29-Mar-18	89.82	1,262.06	8.0	**0.19J**
	13-Sep-18	85.69	1,266.19	11.0	**0.19J**
	20-Mar-19	90.93	1,260.95	6.9	**0.14J**
	24-Sep-19	96.53	1,255.35	5.6	**0.13J**
	18-Mar-20	93.72	1,258.16	9.2	**0.19J**
	9-Sep-20	86.67	1,265.21	13.0	**0.59J**
	16-Mar-21	92.84	1,259.04	10.0	**0.26J**
	8-Sep-21	88.27	1,263.61	13.0	**0.38J**
	14-Mar-22	93.95	1,257.93	9.90J	0.5U
	26-Sep-22	86.68	1,265.20	6.66J	0.5U

Table 5
Depth-to-Water Measurements; TCE and cis-1,2-DCE Concentrations
TVR/Old MATES, Yakima Training Center, Washington

Well ID TOC (ft AMSL)	Date	DTW (ft bgs)	Groundwater Elevation (ft AMSL)	TCE (µg/L)	cis-1,2-DCE (µg/L)
MTCA Method A Cleanup Level		–	–	**5**	–
MTCA Method B Cleanup Level		–	–	–	**16**
MTS-3	23-Mar-05	29.14	1,333.22	0.5U	0.5U
1362.36	23-Aug-05	27.73	1,334.63	–	–
	21-Mar-06	29.00	1,333.36	0.5U	0.5U
	1-Aug-06	26.86	1,335.50	–	–
	21-Mar-07	28.90	1,333.46	0.5U	0.5U
	19-Sep-07	26.43	1,335.93	–	–
	18-Mar-08	28.67	1,333.69	–	–
	19-Sep-08	26.62	1,335.74	–	–
	23-Mar-09	28.70	1,333.66	–	–
	23-Sep-09	26.65	1,335.71	–	–
	16-Mar-10	28.74	1,333.62	–	–
	28-Sep-10	25.53	1,336.83	–	–
	21-Mar-11	27.58	1,334.78	–	–
	21-Sep-11	25.41	1,336.95	–	–
	28-Mar-12	27.60	1,334.76	–	–
	20-Aug-12	25.64	1,336.72	–	–
	19-Mar-13	27.87	1,334.49	–	–
	26-Sep-13	27.24	1,335.12	–	–
	12-Mar-14	28.50	1,333.86	–	–
	23-Sep-14	26.45	1,335.91	–	–
	19-Mar-15	28.03	1,334.33	–	–
	22-Sep-15	27.76	1,334.60	–	–
	16-Mar-16	27.95	1,334.41	–	–
	21-Sep-16	25.55	1,336.81	–	–
	30-Mar-17	27.65	1,334.71	–	–
	12-Sep-17	25.65	1,336.71	–	–
	29-Mar-18	28.19	1,334.17	–	–
	13-Sep-18	26.75	1,335.61	–	–
	20-Mar-19	27.57	1,334.79	–	–
	24-Sep-19	26.68	1,335.68	–	–
	18-Mar-20	27.86	1,334.50	–	–
	9-Sep-20	26.35	1,336.01	–	–
	16-Mar-21	28.12	1,334.24	–	–
	8-Sep-21	26.96	1,335.40	–	–
	14-Mar-22	28.12	1,334.24	–	–
	27-Sep-22	26.19	1,336.17	–	–

Table 5
Depth-to-Water Measurements; TCE and cis-1,2-DCE Concentrations
TVR/Old MATES, Yakima Training Center, Washington

Well ID TOC (ft AMSL)	Date	DTW (ft bgs)	Groundwater Elevation (ft AMSL)	TCE (µg/L)	cis-1,2-DCE (µg/L)
MTCA Method A Cleanup Level		–	–	**5**	–
MTCA Method B Cleanup Level		–	–	–	**16**
MTS-4	23-Mar-05	89.70	1,242.18	15.0	0.5U
1331.88	23-Aug-05	86.14	1,245.74	9.4	0.5U
	21-Mar-06	88.02	1,243.86	13.0	0.5U
	1-Aug-06	81.32	1,250.56	12.0	0.5U
	21-Mar-07	86.15	1,245.73	13.0	0.5U
	19-Sep-07	81.25	1,250.63	8.2	0.5U
	18-Mar-08	85.51	1,246.37	10.1	0.5U
	19-Sep-08	83.80	1,248.08	7.6	0.5U
	23-Mar-09	87.72	1,244.16	**0.52**	0.5U
	23-Sep-09	83.47	1,248.41	10.7	0.5U
	16-Mar-10	87.32	1,244.56	8.9	1U
	28-Sep-10	75.75	1,256.13	6.4	0.5U
	21-Mar-11	82.13	1,249.75	7.7	0.5U
	21-Sep-11	73.72	1,258.16	6.0	0.5U
	28-Mar-12	81.19	1,250.69	7.3	0.5U
	20-Aug-12	72.60	1,259.28	5.3	0.5U
	19-Mar-13	79.52	1,252.36	6.2	0.2U
	26-Sep-13	78.85	1,253.03	**4.9**	**0.23**
	12-Mar-14	83.70	1,248.18	5.4	0.2U
	23-Sep-14	79.06	1,252.82	5.6	**0.16J**
Duplicate	23-Sep-14	79.06	1,252.82	6.0	**0.18J**
	19-Mar-15	83.35	1,248.53	8.0	**0.25J**
	22-Sep-15	78.42	1,253.46	5.6	**0.18J**
	16-Mar-16	79.90	1,251.98	7.3	**0.27J**
	21-Sep-16	76.52	1,255.36	**-**	**0.19J**
	30-Mar-17	79.24	1,252.64	5.5	**0.21J**
	12-Sep-17	75.80	1,256.08	5.1	**0.17J**
	29-Mar-18	83.18	1,248.70	6.1J+	**0.19J**
	13-Sep-18	78.49	1,253.39	5.0	**0.19J**
	20-Mar-19	84.16	1,247.72	**4.5**	0.2U
	24-Sep-19	79.41	1,252.47	5.4	**0.25J**
	18-Mar-20	86.24	1,245.64	**4.3**	**0.14J**
	9-Sep-20	80.97	1,250.91	**4.1**	**0.19J**
	16-Mar-21	85.28	1,246.60	5.2	**0.16J**
	8-Sep-21	80.69	1,251.19	5.6	**0.30J**
	14-Mar-22	86.00	1,245.88	**4.65J**	0.5U
	26-Sep-22	81.27	1,250.61	6.35J	0.5U

Table 5
Depth-to-Water Measurements; TCE and cis-1,2-DCE Concentrations
TVR/Old MATES, Yakima Training Center, Washington

Well ID TOC (ft AMSL)	Date	DTW (ft bgs)	Groundwater Elevation (ft AMSL)	TCE (µg/L)	cis-1,2-DCE (µg/L)
MTCA Method A Cleanup Level		–	–	**5**	–
MTCA Method B Cleanup Level		–	–	–	**16**
TVR-1	1-Mar-93	–	1,246.81	**35.0**	5U
1320.17	28-Feb-95	–	–	–	–
	1997	–	–	–	–
	1-Aug-99	–	–	–	–
	1-Jan-04	–	1,245.50	**12.0**	0.5U
	23-Mar-05	78.98	1,241.19	**9.8**	0.5U
	23-Aug-05	75.48	1,244.69	**6.2**	0.5U
	21-Mar-06	71.17	1,249.00	**8.4**	0.5U
	1-Aug-06	71.43	1,248.74	**12.0**	0.5U
	21-Mar-07	75.32	1,244.85	**12.0**	0.5U
	19-Sep-07	71.34	1,248.83	**12.0**	0.5U
	18-Mar-08	74.63	1,245.54	**9.2**	0.5U
	19-Sep-08	73.52	1,246.65	**9.0**	0.5U
	23-Mar-09	76.76	1,243.41	**8.8**	0.5U
Duplicate	23-Mar-09	76.76	1,243.41	**9.0**	0.5U
	23-Sep-09	73.40	1,246.77	**8.6**	0.5U
	16-Mar-10	76.50	1,243.67	**5.8**	1U
	29-Sep-10	67.05	1,253.12	**3.2**	0.5U
	21-Mar-11	71.58	1,248.59	**6.9**	0.5U
	21-Sep-11	64.61	1,255.56	**8.7**	0.5U
	28-Mar-12	70.63	1,249.54	**7.3**	0.5U
	20-Aug-12	63.45	1,256.72	**7.9**	0.5U
	19-Mar-13	69.00	1,251.17	**6.8**	0.2U
	26-Sep-13	69.35	1,250.82	**5.9**	0.2U
	12-Mar-14	73.10	1,247.07	**5.4**	0.2U
	22-Sep-14	70.45	1,249.72	**4.7**	0.5U
	19-Mar-15	72.60	1,247.57	**4.5**	0.2U
	22-Sep-15	69.70	1,250.47	**3.8**	0.2U
	16-Mar-16	69.90	1,250.27	**5.7**	0.2U
	21-Sep-16	67.12	1,253.05	**6.1**	0.08J
	29-Mar-17	69.46	1,250.71	**7.0**	0.2U
	12-Sep-17	66.35	1,253.82	**8.3**	0.2U
	29-Mar-18	70.45	1,249.72	**7.5**	0.2U
	13-Sep-18	68.61	1,251.56	**8.1**	0.2U
	20-Mar-19	73.36	1,246.81	**7.3**	0.2U
	24-Sep-19	69.16	1,251.01	**7.0**	0.2U
	18-Mar-20	75.51	1,244.66	**7.0**	0.2U
	9-Sep-20	70.42	1,249.75	**7.4**	0.2U

Table 5
Depth-to-Water Measurements; TCE and cis-1,2-DCE Concentrations
TVR/Old MATES, Yakima Training Center, Washington

Well ID TOC (ft AMSL)	Date	DTW (ft bgs)	Groundwater Elevation (ft AMSL)	TCE (µg/L)	cis-1,2-DCE (µg/L)
MTCA Method A Cleanup Level		–	–	**5**	–
MTCA Method B Cleanup Level		–	–	–	**16**
TVR-1 (cont.)	16-Mar-21	74.50	1,245.67	**8.0**	0.2U
	8-Sep-21	69.94	1,250.23	**6.6**	0.2U
	14-Mar-22	75.17	1,245.00	**5.6J**	0.5U
Duplicate	14-Mar-22	75.17	1,245.00	**5.73J**	0.5U
	26-Sep-22	71.91	1,248.26	**8.32J**	0.5U
TVR-2	1-Mar-93	–	1,247.03	**14.0**	5U
1317.56	28-Feb-95	–	–	–	–
	1997	–	–	–	–
	1-Aug-99	–	–	–	–
	1-Jan-04	–	1,245.30	**3.60**	1U
	23-Mar-05	76.96	1,240.60	**4.40**	0.5U
	23-Aug-05	72.13	1,245.43	**3.40**	0.5U
	21-Mar-06	74.22	1,243.34	**3.30**	0.5U
	1-Aug-06	67.69	1,249.87	**2.90**	0.5U
	21-Mar-07	72.55	1,245.01	**2.60**	0.5U
	19-Sep-07	68.19	1,249.37	**1.70**	0.5U
	18-Mar-08	71.91	1,245.65	**3.37**	0.5U
	19-Sep-08	70.15	1,247.41	–	–
	23-Mar-09	74.10	1,243.46	**3.54**	0.5U
	23-Sep-09	70.50	1,247.06	–	–
	16-Mar-10	73.75	1,243.81	**3.20**	1U
	29-Sep-10	63.72	1,253.84	–	–
	21-Mar-11	68.75	1,248.81	**2.90**	0.5U
	21-Sep-11	60.89	1,256.67	–	–
	28-Mar-12	68.06	1,249.50	**2.8**	0.5U
	20-Aug-12	59.84	1,257.72	–	–
	19-Mar-13	66.52	1,251.04	**2.6**	0.2U
	26-Sep-13	66.35	1,251.21	–	–
	12-Mar-14	70.55	1,247.01	**2.1**	0.2U

Table 5
Depth-to-Water Measurements; TCE and cis-1,2-DCE Concentrations
TVR/Old MATES, Yakima Training Center, Washington

Well ID TOC (ft AMSL)	Date	DTW (ft bgs)	Groundwater Elevation (ft AMSL)	TCE (µg/L)	cis-1,2-DCE (µg/L)
MTCA Method A Cleanup Level		–	–	**5**	–
MTCA Method B Cleanup Level		–	–	–	**16**
TVR-2 (cont.)	22-Sep-14	67.58	1,249.98	–	–
	19-Mar-15	70.34	1,247.22	**2.6**	0.2U
	22-Sep-15	66.53	1,251.03	–	–
	16-Mar-16	66.40	1,251.16	**3.6**	0.2U
	21-Sep-16	63.96	1,253.60	–	–
	29-Mar-17	65.94	1,251.62	–	–
	12-Sep-17	66.46	1,251.10	–	–
	29-Mar-18	70.17	1,247.39	**2.3**	0.2U
	13-Sep-18	64.83	1,252.73	-	-
	20-Mar-19	70.59	1,246.97	**1.5**	0.2U
	24-Sep-19	65.34	1,252.22	-	-
	18-Mar-20	73.14	1,244.42	**2.4**	0.2U
	9-Sep-20	66.51	1,251.05	–	–
	16-Mar-21	71.81	1,245.75	–	–
	8-Sep-21	65.97	1,251.59	–	–
	14-Mar-22	72.65	1,244.91	–	–
	26-Sep-22	67.70	1,249.86	–	–
TVR-3	23-Mar-05	69.63	1,240.97	**43.0**	**1.3**
1310.60	23-Aug-05	64.98	1,245.62	**25.0**	0.5
	21-Mar-06	67.32	1,243.28	**26.0**	0.5U
	1-Aug-06	60.93	1,249.67	**17.0**	0.5U
	21-Mar-07	65.64	1,244.96	**33.0**	0.5U
	19-Sep-07	61.53	1,249.07	**15.0**	0.5U
	18-Mar-08	64.98	1,245.62	**21.0**	0.5U
	19-Sep-08	63.50	1,247.10	**10.0**	0.5U
	23-Mar-09	67.11	1,243.49	**14.8**	0.5U
	23-Sep-09	63.87	1,246.73	**14.3**	0.5U
Duplicate	23-Sep-09	63.87	1,246.73	**14.0**	0.5U
	16-Mar-10	66.83	1,243.77	**17.0**	1U
	29-Sep-10	57.00	1,253.60	**11.0**	0.5U
	21-Mar-11	61.80	1,248.80	**14.0**	0.5U
	21-Sep-11	54.07	1,256.53	**10.0**	0.5U
	28-Mar-12	61.20	1,249.40	**12.0**	0.5U
	20-Aug-12	53.12	1,257.48	**8.0**	0.5U
	19-Mar-13	59.52	1,251.08	**9.2**	0.2U
	26-Sep-13	59.65	1,250.95	**6.6**	0.2U
	12-Mar-14	63.50	1,247.10	**8.2**	0.2U
	22-Sep-14	60.90	1,249.70	**6.9**	**0.10J**

Table 5
Depth-to-Water Measurements; TCE and cis-1,2-DCE Concentrations
TVR/Old MATES, Yakima Training Center, Washington

Well ID TOC (ft AMSL)	Date	DTW (ft bgs)	Groundwater Elevation (ft AMSL)	TCE (µg/L)	cis-1,2-DCE (µg/L)
MTCA Method A Cleanup Level		–	–	**5**	–
MTCA Method B Cleanup Level		–	–	–	**16**
TVR-3 (cont.)	19-Mar-15	63.31	1,247.29	**7.7**	**0.17J**
	22-Sep-15	59.75	1,250.85	**8.4**	**0.12J**
	16-Mar-16	59.57	1,251.03	**7.5**	**0.14J**
	21-Sep-16	57.21	1,253.39	**4.9**	**0.13J**
	30-Mar-17	59.35	1,251.25	**6.1**	**0.11J**
	12-Sep-17	56.16	1,254.44	**2.9**	0.2U
	29-Mar-18	63.30	1,247.30	**6.7**	0.12J
Duplicate	29-Mar-18	63.30	1,247.30	**6.5**	0.12J
	13-Sep-18	58.00	1,252.60	**2.6**	0.2U
	20-Mar-19	63.60	1,247.00	**3.9**	0.2U
Duplicate	20-Mar-19	63.60	1,247.00	**4.1**	0.2U
	24-Sep-19	58.52	1,252.08	**1.9**	0.2U
Duplicate	24-Sep-19	58.52	1,252.08	**2.0**	0.2U
	18-Mar-20	66.22	1,244.38	**4.3**	0.2U
Duplicate	18-Mar-20	66.22	1,244.38	**4.5**	**0.14J**
	9-Sep-20	59.73	1,250.87	**2.1**	0.2U
Duplicate	9-Sep-20	59.73	1,250.87	**2.0**	0.2U
	16-Mar-21	64.91	1,245.69	**4.0**	**0.10J**
Duplicate	16-Mar-21	64.91	1,245.69	**3.8**	0.2U
	8-Sep-21	59.00	1,251.60	**2.2**	0.2U
Duplicate	8-Sep-21	59.00	1,251.60	**2.1**	0.2U
	14-Mar-22	66.64	1,243.96	**3.87J**	0.5 U
	26-Sep-22	60.91	1,249.69	**1.9J**	0.5 U
TVR-5	21-Mar-06	60.48	1,241.56	**1.6**	0.5U
1302.04	1-Aug-06	51.50	1,250.54	**1.0**	0.5U
	21-Mar-07	58.53	1,243.51	**1.2**	0.5U
	19-Sep-07	53.35	1,248.69	**1.1**	0.5U
	18-Mar-08	57.81	1,244.23	**1.0**	0.5U
	19-Sep-08	54.31	1,247.73	**1.2**	0.5U
	23-Mar-09	59.85	1,242.19	**1.2**	0.5U
	23-Sep-09	55.81	1,246.23	**16.0**	0.5U
	16-Mar-10	59.91	1,242.13	**3.5**	0.5U
Duplicate	16-Mar-10	59.91	1,242.13	**3.5**	0.5U
	28-Sep-10	48.53	1,253.51	**11.0**	0.5U
Duplicate	28-Sep-10	48.53	1,253.51	**11.0**	0.5U
	21-Mar-11	54.90	1,247.14	**2.4**	0.5U
Duplicate	21-Mar-11	54.90	1,247.14	**2.4**	0.5U

Table 5
Depth-to-Water Measurements; TCE and cis-1,2-DCE Concentrations
TVR/Old MATES, Yakima Training Center, Washington

Well ID TOC (ft AMSL)	Date	DTW (ft bgs)	Groundwater Elevation (ft AMSL)	TCE (µg/L)	cis-1,2-DCE (µg/L)
MTCA Method A Cleanup Level		–	–	**5**	–
MTCA Method B Cleanup Level		–	–	–	**16**
TVR-5 (cont.)	21-Sep-11	44.95	1,257.09	**0.7**	0.5U
Duplicate	21-Sep-11	44.95	1,257.09	**0.5**	0.5U
	28-Mar-12	54.25	1,247.79	**0.7**	0.5U
	28-Mar-12	54.25	1,247.79	**0.7**	0.5U
	20-Aug-12	44.17	1,257.87	0.5U	0.5U
	19-Mar-13	52.58	1,249.46	**0.4**	0.2U
	26-Sep-13	51.60	1,250.44	**3.7**	0.2U
	12-Mar-14	56.40	1,245.64	**0.4**	0.2U
	22-Sep-14	52.52	1,249.52	**6.6**	0.5U
	19-Mar-15	56.51	1,245.53	**0.8**	0.2U
	22-Sep-15	51.05	1,250.99	**4.4**	0.2U
	16-Mar-16	51.58	1,250.46	**0.49J**	0.2U
	21-Sep-16	48.73	1,253.31	**0.92**	0.2U
	31-Mar-17	51.05	1,250.99	**0.26J**	0.2U
	12-Sep-17	49.90	1,252.14	**0.12J**	0.2U
	29-Mar-18	56.38	1,245.66	**0.10J**	0.2U
	13-Sep-18	47.78	1,254.26	0.20U	0.2U
	20-Mar-19	56.24	1,245.80	0.20U	0.2U
	24-Sep-19	47.98	1,254.06	0.20U	0.2U
	18-Mar-20	59.22	1,242.82	0.1U	0.2U
	9-Sep-20	48.57	1,253.47	-	-
	16-Mar-21	57.70	1,244.34	-	-
	8-Sep-21	47.35	1,254.69	-	-
	14-Mar-22	58.18	1,252.42	-	-
	26-Sep-22	51.40	1,259.20	-	-
TVR-6	21-Mar-06	67.03	1,243.03	**6.8**	0.5U
1310.06	1-Aug-06	60.88	1,249.18	**7.7**	0.5U
	21-Mar-07	65.19	1,244.87	**5.0**	0.5U
	19-Sep-07	61.50	1,248.56	**2.8**	0.5U
	18-Mar-08	64.98	1,245.08	**2.9**	0.5U
	19-Sep-08	63.39	1,246.67	**1.7**	0.5U
	23-Mar-09	66.68	1,243.38	**2.2**	0.5U
	23-Sep-09	63.62	1,246.44	**10.6**	0.5U
	16-Mar-10	66.41	1,243.65	**4.6**	1U
	29-Sep-10	57.03	1,253.03	**13.0**	0.5U
	21-Mar-11	61.48	1,248.58	**11.0**	0.5U
	21-Sep-11	54.01	1,256.05	**5.2**	0.5U
	28-Mar-12	60.80	1,249.26	**4.2**	0.5U

Table 5
Depth-to-Water Measurements; TCE and cis-1,2-DCE Concentrations
TVR/Old MATES, Yakima Training Center, Washington

Well ID TOC (ft AMSL)	Date	DTW (ft bgs)	Groundwater Elevation (ft AMSL)	TCE (µg/L)	cis-1,2-DCE (µg/L)
MTCA Method A Cleanup Level		–	–	**5**	–
MTCA Method B Cleanup Level		–	–	–	**16**
TVR-6 (cont.)	20-Aug-12	53.26	1,256.80	**2.9**	0.5U
	19-Mar-13	59.07	1,250.99	**5.4**	0.2U
	25-Sep-13	58.65	1,251.41	**10.0**	0.2U
	12-Mar-14	62.80	1,247.26	**8.8**	0.2U
	23-Sep-14	59.94	1,250.12	**11.0**	**0.090J**
	19-Mar-15	62.61	1,247.45	**8.0**	0.2U
	22-Sep-15	59.50	1,250.56	**9.9**	0.2U
	16-Mar-16	59.49	1,250.57	**8.0J**	0.2U
	21-Mar-16	57.02	1,253.04	**5.9**	0.2U
	29-Mar-17	59.30	1,250.76	**4.7**	0.2U
	12-Sep-17	56.10	1,253.96	**1.7**	0.2U
	29-Mar-18	61.96	1,248.10	**2.8J+**	0.2U
	13-Sep-18	57.71	1,252.35	**1.2**	0.2U
	20-Mar-19	63.10	1,246.96	**1.1**	0.2U
	24-Sep-19	59.86	1,250.20	**0.37J**	0.2U
	18-Mar-20	65.68	1,244.38	**0.54**	0.2U
	10-Sep-20	59.26	1,250.80	**0.13J**	0.2U
	16-Mar-21	64.55	1,245.51	**0.37J**	0.2U
	8-Sep-21	58.49	1,251.57	**0.27J**	0.2U
	14-Mar-22	65.13	1,244.93	0.5UJ	0.5U
	26-Sep-22	60.72	1,249.88	0.5U	0.5U
TVR-7	21-Mar-06	67.89	1,243.06	**38.0**	**1.30**
1310.95	1-Aug-06	61.82	1,249.13	**43.0**	**1.00**
	21-Mar-07	66.10	1,244.85	**42.0**	**0.80**
	19-Sep-07	62.31	1,248.64	**32.0**	**0.60**
	18-Mar-08	65.45	1,245.50	**28.3**	**0.77**
Duplicate	18-Mar-08	65.45	1,245.50	**29.0**	**0.80**
	19-Sep-08	64.30	1,246.65	**20.7**	0.5U
	23-Mar-09	67.51	1,243.44	**21.6**	**0.56**
	23-Sep-09	64.39	1,246.56	**26.6**	0.5U
	16-Mar-10	67.29	1,243.66	**20.0**	1U

Table 5
Depth-to-Water Measurements; TCE and cis-1,2-DCE Concentrations
TVR/Old MATES, Yakima Training Center, Washington

Well ID TOC (ft AMSL)	Date	DTW (ft bgs)	Groundwater Elevation (ft AMSL)	TCE (µg/L)	cis-1,2-DCE (µg/L)
MTCA Method A Cleanup Level		–	–	**5**	–
MTCA Method B Cleanup Level		–	–	–	**16**
TVR-7 (cont.)	29-Sep-10	57.85	1,253.10	**21.0**	0.5U
1310.95	21-Mar-11	62.35	1,248.60	**21.0**	0.5U
	21-Sep-11	55.05	1,255.90	**18.0**	0.5U
	28-Mar-12	61.66	1,249.29	**15.0**	0.5U
	20-Aug-12	54.10	1,256.85	**13.0**	0.5U
	19-Mar-13	59.97	1,250.98	**0.4**	0.2U
	26-Sep-13	60.15	1,250.80	**9.8**	0.2U
	12-Mar-14	63.75	1,247.20	**6.2**	0.2U
	23-Sep-14	67.50	1,243.45	**12.0**	0.5U
	19-Mar-15	63.60	1,247.35	**10.0**	0.2U
Duplicate	19-Mar-15	63.60	1,247.35	**10.0**	0.2U
	22-Sep-15	60.45	1,250.50	**10.0**	0.2U
	16-Mar-16	60.43	1,250.52	**10.0**	0.2U
	21-Mar-16	57.92	1,253.03	**8.2**	0.2U
	30-Mar-17	60.27	1,250.68	**7.9**	0.2U
	12-Sep-17	57.04	1,253.91	**6.4**	0.2U
	29-Mar-18	63.17	1,247.78	**5.9**	0.2U
	13-Sep-18	58.87	1,252.08	**5.9**	0.2U
	20-Mar-19	64.04	1,246.91	**1.4**	0.2U
	24-Sep-19	59.42	1,251.53	**4.0**	0.2U
	18-Mar-20	66.49	1,244.46	**2.6**	0.2U
	9-Sep-20	60.60	1,250.35	**3.7**	0.2U
	16-Mar-21	65.34	1,245.61	**2.9**	0.2U
	8-Sep-21	59.88	1,251.07	**3.4**	0.2U
	14-Mar-22	66.06	1,244.89	**2.53J**	0.5 U
	26-Sep-22	61.68	1,248.92	**2.92J**	0.5 U
Marie Well	1-Mar-93	–	–	**1.20**	5U
PAIC Well	1-Mar-93	–	–	5U	5U
	28-Feb-95	–	–	0.1U	0.1U
	1997	–	–	0.5U	0.5U
	1-Aug-99	–	–	–	–

Table 5
Depth-to-Water Measurements; TCE and cis-1,2-DCE Concentrations
TVR/Old MATES, Yakima Training Center, Washington

Well ID TOC (ft AMSL)	Date	DTW (ft bgs)	Groundwater Elevation (ft AMSL)	TCE (µg/L)	cis-1,2-DCE (µg/L)
MTCA Method A Cleanup Level		–	–	**5**	–
MTCA Method B Cleanup Level		–	–	–	**16**
PAIC Well (cont.)	1-Jan-04	–	–	–	–
	23-Mar-05	–	–	–	–
	23-Aug-05	–	–	–	–
	21-Mar-06	–	–	0.5U	0.5U
	1-Aug-06	–	–	–	–
	21-Mar-07	–	–	0.5U	0.5U
	19-Sep-07	–	–	0.5U	0.5U
	18-Mar-08	–	–	0.5U	0.5U
	19-Sep-08	–	–	0.5U	0.5U
	23-Mar-09	–	–	0.5U	0.5U
	23-Sep-09	–	–	0.5U	0.5U
	15-Mar-10	–	–	1U	1U
	29-Sep-10	–	–	0.5U	0.5U
	21-Mar-11	–	–	0.5U	0.5U
	22-Sep-11	–	–	0.5U	0.5U
	28-Mar-12	–	–	0.5U	0.5U
	20-Aug-12	–	–	0.5U	0.5U
	20-Mar-13	–	–	0.2U	0.2U
	25-Sep-13	–	–	0.2U	0.2U
	12-Mar-14	–	–	0.2U	0.2U
	23-Sep-14	–	–	0.5U	0.5U
	19-Mar-15	–	–	0.1U	0.2U
	22-Sep-15	–	–	0.1U	0.2U
	16-Mar-16	–	–	0.1U	0.2U
	21-Sep-16	–	–	0.1U	0.2U
	30-Mar-17	–	–	0.1U	0.2U
	12-Sep-17	–	–	0.1U	0.2U
	29-Mar-18	–	–	0.2U	0.2U
	13-Sep-18	–	–	0.2U	0.2U
	20-Mar-19	–	–	0.2U	0.2U
	23-Sep-19	–	–	0.1U	0.2U
	18-Mar-20	–	–	0.1U	0.2U
	9-Sep-20	–	–	0.1U	0.2U
	16-Mar-21	–	–	0.1U	0.2U
	8-Sep-21	–	–	0.2U	0.2U
	14-Mar-22	–	–	0.5UJ	0.5U
	27-Sep-22	–	–	0.5U	0.5U

Table 5
Depth-to-Water Measurements; TCE and cis-1,2-DCE Concentrations
TVR/Old MATES, Yakima Training Center, Washington

Well ID TOC (ft AMSL)	Date	DTW (ft bgs)	Groundwater Elevation (ft AMSL)	TCE (µg/L)	cis-1,2-DCE (µg/L)
MTCA Method A Cleanup Level		–	–	**5**	–
MTCA Method B Cleanup Level		–	–	–	**16**
Pomona Well	1-Mar-91	–	–	ND	ND
	1-Aug-92	–	–	0.5U	0.5U
	1-Mar-93	–	–	5U	5U
	28-Feb-95	–	–	–	–
	1997	–	–	ND	ND
	1-Aug-99	–	–	0.5U	0.5U
	1-Jan-04	–	–	–	–
	23-Mar-05	–	–	–	–
	23-Aug-05	–	–	–	–
	21-Mar-06	–	–	0.5U	0.5U
	1-Aug-06	–	–	0.5U	0.5U
	21-Mar-07	–	–	0.5U	0.5U
	19-Sep-07	–	–	0.5U	0.5U
	18-Mar-08	–	–	–	–
	19-Sep-08	–	–	0.5U	0.5U
	23-Mar-09	–	–	0.5U	0.5U
	23-Sep-09	–	–	0.5U	0.5U
	16-Mar-10	–	–	1U	1U
	29-Sep-10	–	–	0.5U	0.5U
	21-Mar-11	–	–	0.5U	0.5U
	21-Sep-11	–	–	0.5U	0.5U
	28-Mar-12	–	–	0.5U	0.5U
	20-Aug-12	–	–	0.5U	0.5U
	19-Mar-13	–	–	0.2U	0.2U
	26-Sep-13	–	–	0.2U	0.2U
	12-Mar-14	–	–	0.2U	0.2U
	23-Sep-14	–	–	0.5U	0.5U
	19-Mar-15	–	–	0.1U	0.2U
	22-Sep-15	–	–	0.1U	0.2U
	16-Mar-16	–	–	0.1U	0.2U
	21-Sep-16	–	–	0.1U	0.2U
	30-Mar-17	–	–	0.1U	0.2U
	12-Sep-17	–	–	0.1U	0.2U
	29-Mar-18	–	–	0.2U	0.2U
	13-Sep-18	–	–	0.2U	0.2U
	21-Mar-19	–	–	0.2U	0.2U

Table 5
Depth-to-Water Measurements; TCE and cis-1,2-DCE Concentrations
TVR/Old MATES, Yakima Training Center, Washington

Well ID TOC (ft AMSL)	Date	DTW (ft bgs)	Groundwater Elevation (ft AMSL)	TCE (µg/L)	cis-1,2-DCE (µg/L)
MTCA Method A Cleanup Level		–	–	**5**	–
MTCA Method B Cleanup Level		–	–	–	**16**
Pomona Well (cont.)	24-Sep-19	–	–	0.1U	0.2U
	18-Mar-20	–	–	0.1U	0.2U
	9-Sep-20	–	–	0.1U	0.2U
	16-Mar-21	–	–	0.1U	0.2U
	8-Sep-21	–	–	0.2U	0.2U
	14-Mar-22	–	–	0.5UJ	0.5U
	27-Sep-22	–	–	0.5U	0.5U

Notes:

Please refer to laboratory reports for analytical methods used.

TCE = trichloroethylene

cis-DCE = cis 1,2-dichloroetheylene

ID = identification

TOC = top-of-casing elevation

DTW = depth-to-water

ft bgs = feet below ground surface

ft AMSL = feet above mean sea level

µg/L = micrograms per liter

– = not applicable, not sampled

BOLD = Analyte detected above laboratory LOD.

SHADE = Analyte detected above Model Toxics Control Act (MTCA) cleanup level.

J = estimated concentration

J+ = the result was an estimated quantity, but the result may be biased high

ND = non-detect

U = Analyte not detected above laboratory LOD. Beginning in 2018, value listed is the reporting limit.

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Table 6
FTP-1 and TVR/Old MATES Statistics
Fire Training Pit and TVR/Old MATES, Yakima Training Center, Washington

Site	Fire Training Pit			TVR / Old MATES															
Well ID	FTP-1			815-2	MMP-1	MMP-2	MRC-2	MTS-1	MTS-2	MTS-3	MTS-4	TVR-1	TVR-2	TVR-3	TVR-5	TVR-6	TVR-7	PAIC Well	Pomona Well
Compound	TPH-G	TPH-D	TPH-O	TCE	TCE	TCE	TCE	TCE	TCE	TCE	TCE	TCE	TCE	TCE	TCE	TCE	TCE	TCE	TCE
Descriptive Statistics																			
First Sample Date	30-Jan-04			21-Mar-06	1-Mar-93	1-Mar-93	1-Mar-93	1-Jan-04	1-Jan-04	23-Mar-05	23-Mar-05	1-Jan-04	1-Jan-04	23-Mar-05	21-Mar-06	21-Mar-06	21-Mar-06	1-Mar-93	1-Mar-91
Last Sample Date	26-Sep-22			19-Mar-20	19-Mar-20	12-Sep-17	21-Sep-16	26-Sep-22	26-Sep-22	21-Mar-07	26-Sep-22	26-Sep-22	19-Mar-20	26-Sep-22	19-Mar-20	27-Sep-22	26-Sep-22	26-Sep-22	26-Sep-22
Number of Samples	36			29	15	5	7	37	37	3	35	37	19	36	29	34	34	32	34
Number of Non-Detects	1	0	7	-	15	5	7	0	0	3	0	0	-	0	-	2	0	32	34
Sample Mean	2,823	23,632	2,705	-	-	P	-	4.39	16.80	-	7.03	7.54	-	10.92	-	4.76	14.01	-	-
Standard Deviation	4,114	18,510	3,013	-	-	-	-	1.35	16.06	-	2.98	2.17	-	9.21	-	3.84	11.94	-	-
Minimum Concentration	518	4,350	93	-	-	-	-	2.70	4.40	-	0.52	3.20	-	1.90	-	0.13	0.40	-	-
Maximum Concentration	25,100	110,000	13,000	-	-	-	-	7.60	76.00	-	15.00	12.00	-	43.00	-	13.00	43.00	-	-
Date*	22-Aug-05	20-Mar-13	20-Aug-12	-	-	-	-	23-Mar-05	1-Aug-06	-	23-Mar-05	19-Sep-07	-	23-Mar-05	-	28-Sep-10	1-Aug-06	-	-
Distribution of Data																			
P Value	<0.0001	<0.0001	<0.0001	-	-	-	-	0.0013	<0.0001	-	0.006	0.122	-	0.0001	-	0.0124	0.0011	-	-
Normally Distributed?	No	No	No	-	-	-	-	No	No	-	No	Yes	-	No	-	No	No	-	-
Log P Value	0.0126	0.5425	0.0963	-	-	-	-	0.0444	0.0002	-	<0.0001	-	-	0.6574	-	0.0051	0.147	-	-
Log Normally Distributed?	No	Yes	Yes	-	-	-	-	No	No	-	No	-	-	Yes	-	No	Yes	-	-
Trend Analysis (Linear Regression)																			
Linear Regression P Value	-	0.7473	0.001	-	-	-	-	-	-	-	-	0.0042	-	<0.0001	-	-	<0.0001	-	-
Slope	-	-1.90E-05	3.52E-04	-	-	-	-	-	-	-	-	-5.02E-04	-	-3.99E-04	-	-	-4.64E-04	-	-
Trend**	-	Down	Up	-	-	-	-	-	-	-	-	Down	-	Down	-	-	Down	-	-
Statistically Significant?	-	No	Yes	-	-	-	-	-	-	-	-	Yes	-	Yes	-	-	Yes	-	-
Trend Analysis (Mann-Kendall Test for Trend)																			
Tau Statistic	-0.441	-	-	-	-	-	-	-0.599	-0.282	-	-0.563	-	-	-	-	-0.413	-	-	-
Two Tailed P Value	0.00002	-	-	-	-	-	-	<0.0001	0.0144	-	<0.0001	-	-	-	-	0.0006	-	-	-
Trend	Down	-	-	-	-	-	-	Down	Down	-	Down	-	-	-	-	Down	-	-	-
Statistically Significant?	Yes	-	-	-	-	-	-	Yes	Yes	-	Yes	-	-	-	-	Yes	-	-	-

Notes:

***** = Date sample with highest concentration of TCE was collected from monitoring well

****** = Trend for entire dataset not taking discontinuities into consideration

TPH-G – gasoline range total petroleum hydrocarbons in micrograms per liter

TPH-D – diesel range total petroleum hydrocarbons in micrograms per liter

TPH-O – heavy oil range total petroleum hydrocarbons in micrograms per liter

TCE – trichloroethylene in micrograms per liter

- = Not applicable; analysis not performed. Statistical analysis not performed on datasets composed of greater than 50% non-detects.

Distribution of Data - Data was tested for normal distribution using the Shapiro-Wilk test for normality. P values were generated by the Shapiro-Wilk test; P values equal to or less than 0.05 were not considered normally distributed. Logarithmic transformation was performed on datasets not considered normally distributed and again tested for normality using the Shapiro-Wilk test.

Trend Analysis (Linear Regression) - Performed on datasets considered normally or log-normally distributed. Trends with a P Value of less than 0.05 were considered statistically significant.

Trend Analysis (Mann-Kendall Test for Trend) - Performed on datasets not considered normally or log-normally distributed (non-parametric data). Trends with a Two-Tailed P Value of less than 0.05 or greater than 0.95 were considered statistically significant.

Additional discussion of statistical approach is included in Appendix B.

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APPENDIX A COMPLETED FIELD FORMS AND LABORATORY ANALYTICAL REPORTS

3/14/22 YTC

*arrived @ 9

*checked in @ Range Ops & headed to LPL

*MW-7 DTW: N/A (dry)
bottom of well @ 105.92'
monument locked, cap in good shape

*MW-5 DTW: N/A (dry)
bottom of well @ 101'

*MW-6 & MW-4 are behind a locked gate
-called Public Works, Scott will come to let us in
-he arrived @ 10^{00}

*MW-6 DTW: 39.73'
Grundfos won't work (won't turn on)
So we're bailing
bailed 5 gallons (3 well volumes)
1045 YTC-MW-06-20220314

*MW-04 DTW: 67.27
4 inch total depth: 128.65'
-can't bail this one & pump doesn't work

*YTC-TVR-3 DTW: 66.64' 4"
1140 sample YTC-TVR-3-20220314

YTC TVR-7 DTW 66.06' 2"
1155 YTC-TVR-7-20220314

3/14/22 YTC

Pomona & PATC wells are locked, called O&M Mgr (Steve) & left a message.

* TVR-1 DTW: 75.17' bollards bent & conc. pad cracked
1205 YTC-TVR-1-20220314
1205 dupe TVR-1b

*TVR-2 DTW: 72.65'
has PDBs in well.
concrete pad broken

*TVR-6 DTW: 65.13'
1220 sample YTC-TVR-6-20220314

*1210 called Nellie Miles for help w/ Pomona & PATC well access
-Frank w/ Public Works will come let us in
1225 YTC-Pomona-20220314

*TVR-5 DTW: 58.18'
Has PDB in well - Not locked

*MMP-1 DTW: 61.01'
Has PDB in well - Not Locked

*815-2 DTW: 63.56'
SAME here as MMP-1 & TVR-5

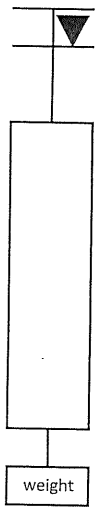
Rite in the Rain

3/14/22 YTC

* MTS-4 DTW: 86.00'
1315 sample YTC-MTS-4-20220314
* MTS-1 DTW: 102.47'
1330 sample YTC-MTS-1-20220314
* MTS-2 DTW: 93.95
1335 sample YTC-MTS-2-20220314
* MTS-3 DTW: 28.12'
* FTP-1 DTW: 15.00'
1410 sample YTC-FTP-1-20220314
no lock on monument, sheen on water mod odor
* FTP-14 DTW 18.94'
* FTP-15 DTW: 18.01' no lock
* FTP-16 DTW: 26.57' no lock
* Lyndon Rogers w/ PAIC called back @1420 & said he can be here in 10 minutes to open that well for us
* 1430 YTC-PAIC-20220314
* 1445 mobed off base for FedEx

Passive Diffusion Bag Sampling Form

Well Identification: YTC-TVR-3



Total Well Depth: 157.63

Site Location: TVR-Old MATES
Project Number: 20506
Well Diameter: 4"
PDB Installation Date: 9/8/21
PDB Installation Time: -
DTW at Installation: 59.00

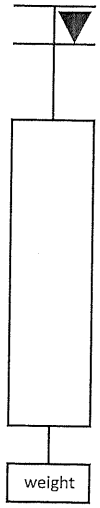
Sample Information

Sample No: YTC-TVR-3-20220314
Sample Date: 3/14/22
DTW at Sampling: 66.64'
Sample Time: 1140
Sampled By: AJ/HC
Biofilm Present: Yes / (No)
New PDB Deployed : (Yes) / No

Well Condition

Well Monument Locked?: Yes / (No)
Monument Condition: Good / (Fair) / Poor
Water Inside Monument?: Yes / (No)
Casing Plug Locked: Yes / (No)
Casing Plug Condition: Good / (Fair) / Poor
Comments:
missing 2 bolts
gasket present

Well Identification: TVR-7



Total Well Depth: 149.45

Site Location: TVR-Old MATES
Project Number: 20506
Well Diameter: 2"
PDB Installation Date: 9/8/21
PDB Installation Time: -
DTW at Installation: 59.88

Sample Information

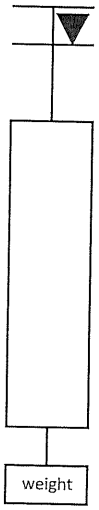
Sample No: YTC-TVR-7-20220314
Sample Date: 3/14/22
DTW at Sampling: 66.06'
Sample Time: 1155
Sampled By: HC/AJ
Biofilm Present: Yes / (No)
New PDB Deployed : (Yes) / No

Well Condition

Well Monument Locked?: Yes / (No)
Monument Condition: Good / (Fair) / Poor
Water Inside Monument?: Yes / (No)
Casing Plug Locked: Yes / No (N/A)
Casing Plug Condition: Good / Fair / Poor (N/A)
Comments:
no bolts, no plug

Passive Diffusion Bag Sampling Form

Well Identification: TVR-1



Total Well Depth: 106.43

Site Location: TVR - Old MATES
Project Number: 205006
Well Diameter: 2"
PDB Installation Date: 9/8/21
PDB Installation Time: —
DTW at Installation: 69.94

Sample Information

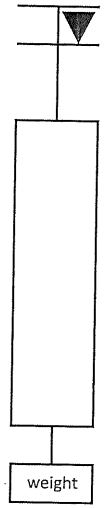
Sample No: ~~1b~~-20220314 / YTC-TVR-1-20220314
Sample Date: 3/14/22
DTW at Sampling: 75.17
Sample Time: 1205
Sampled By: HC/AJ
Biofilm Present: Yes / (No)
New PDB Deployed : (Yes) / No

Well Condition

Well Monument Locked?: (Yes) / No
Monument Condition: Good / (Fair) / Poor
Water Inside Monument?: Yes / (No)
Casing Plug Locked: Yes / No (N/A)
Casing Plug Condition: Good / Fair / Poor (N/A)
Comments:

dupe → 1b-20220314 @ 1205.
no plug, bollards bent, concrete pad cracked

Well Identification: TVR-6



Total Well Depth: 148.71

Site Location: TVR - Old MATES
Project Number: 205006
Well Diameter: 2"
PDB Installation Date: 9/9/21
PDB Installation Time: —
DTW at Installation: 58.49

Sample Information

Sample No: YTC-TVR-6-20220314
Sample Date: 3/14/22
DTW at Sampling: 65.13
Sample Time: 1220
Sampled By: HC/AJ
Biofilm Present: Yes / (No)
New PDB Deployed : (Yes) / No

Well Condition

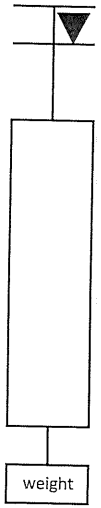
Well Monument Locked?: Yes / (No)
Monument Condition: Good / (Fair) / Poor
Water Inside Monument?: Yes / (No)
Casing Plug Locked: Yes / No (N/A)
Casing Plug Condition: Good / Fair / Poor (N/A)
Comments:

no bolts, gasket present

*PAIC contact has keys to this well

Passive Diffusion Bag Sampling Form

Well Identification: MTS - 4



Total Well Depth: 96.65

Site Location: TVR - OLD MATES
Project Number: 20506
Well Diameter: 4"
PDB Installation Date: 9/8/21
PDB Installation Time: —
DTW at Installation: 88.69

Sample Information

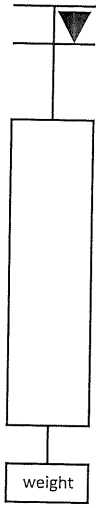
Sample No: YTC-MTS-4-20220314
Sample Date: 3/14/22
DTW at Sampling: 86.00
Sample Time: 1315
Sampled By: HC/AJ
Biofilm Present: Yes / (No)
New PDB Deployed : (Yes) / No

Well Condition

Well Monument Locked?: Yes / (No)
Monument Condition: (Good) / Fair / Poor
Water Inside Monument?: Yes / (No)
Casing Plug Locked: Yes / (No)
Casing Plug Condition: Good / (Fair) / Poor
Comments:

no bolts, gasket present

Well Identification: MTS - 1



Total Well Depth: 127.71

Site Location: TVR OLD MATES
Project Number: 20506
Well Diameter: 4"
PDB Installation Date: 9/8/21
PDB Installation Time: —
DTW at Installation: 96.71

Sample Information

Sample No: YTC-MTS-1-20220314
Sample Date: 3/14/22
DTW at Sampling: 102.47
Sample Time: 1330
Sampled By: HC/AJ
Biofilm Present: Yes / (No)
New PDB Deployed : (Yes) / No

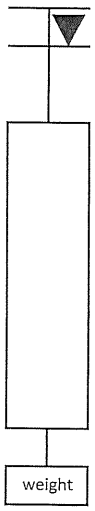
Well Condition

Well Monument Locked?: (Yes) / No
Monument Condition: (Good) / Fair / Poor
Water Inside Monument?: Yes / (No)
Casing Plug Locked: Yes / No (N/A)
Casing Plug Condition: Good / Fair / Poor (N/A)
Comments:

no plug

Passive Diffusion Bag Sampling Form

Well Identification: MTS-2



Site Location: IVR - OLD MATES
Project Number: 20506
Well Diameter: 4"
PDB Installation Date: 9/8/21
PDB Installation Time: —
DTW at Installation 88.27

Sample Information

Sample No: YTC-MTS-2-202203K
Sample Date: 3/14/22
DTW at Sampling: 93.95
Sample Time: 1335
Sampled By: HC (AJ)
Biofilm Present: Yes / (No)
New PDB Deployed : (Yes) / No

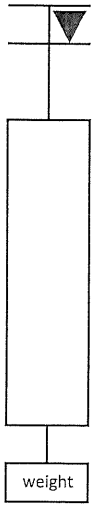
Total Well Depth: 113.4

Well Condition

Well Monument Locked?: (Yes) / No
Monument Condition: (Good) / Fair / Poor
Water Inside Monument?: Yes / (No)
Casing Plug Locked: Yes / No N/A
Casing Plug Condition: Good / Fair / Poor N/A
Comments:

no plug

Well Identification: _____



Site Location:
Project Number:
Well Diameter:
PDB Installation Date:
PDB Installation Time:
DTW at Installation

Sample Information

Sample No:
Sample Date:
DTW at Sampling:
Sample Time:
Sampled By:
Biofilm Present: Yes / No
New PDB Deployed : Yes / No

Total Well Depth:

Well Condition

Well Monument Locked?: Yes / No
Monument Condition: Good / Fair / Poor
Water Inside Monument?: Yes / No
Casing Plug Locked: Yes / No
Casing Plug Condition: Good / Fair / Poor
Comments:

YTC-IRP & LPL 9/26/22

*arrived @ 1130 A. Jordan / H. Carter

*Scott met us at the landfill to open gate

MW-6 - 2 inch well

*DTW: 39.69 TD: 50.8'

started purging @ 12[10]. empty @ 1212

~2.5 gallons

*MW-4 -4 inch well

DTW: 67.41

TD: 125.3

* started purging @ 1235

*MW-7

DTW (dry) TD: 105.95

*MW-5

DTW (dry) TD: 101'

*mobed to wash rack to dump purge water

*FTP-1

purged 2 gal w/ pump, then pump overhead. Used the bailer to finish bailing

Rite in the Rain

9/26/22

* sampled FTP-1 @ 1500 w/ bailer (MS/MSD & dupes)

* FTP-15
  DTW: 17.93, TD: 22.6

* FTP-14
  DTW: 19.02 TD: 22.7

* FTP-13
  DTW: 16.13

* FTP-16
  DTW: 26.27

* mobed to TVR/Old Mates

* TVR-7
  YTZ-TVR-7-20220926 @ 1530

* TVR-3
  YTZ-TVR-3-20220926 @ 1545

* TVR-1-
  YTZ-TVR-1-20220926 @ 1555

9/26/22

* MTS-2
  YTZ-MTS-2-20220926 @ 1610

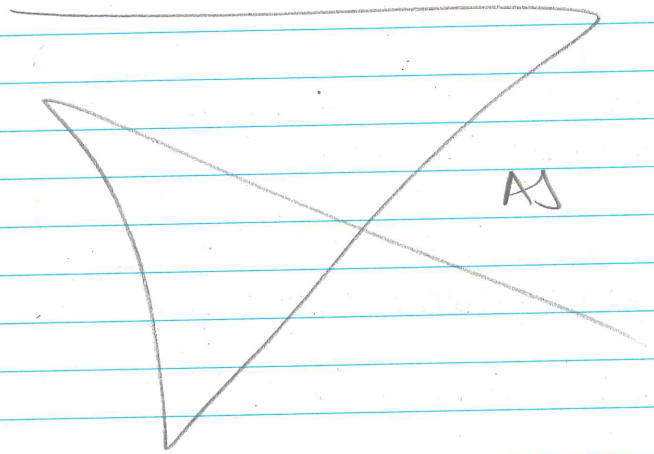
* MTS-4
  YTZ-MTS-4-20220926 @ 1620

* MTS-1
  YTZ-MTS-1-20220926 @ 1630

* mobed to wash rack to dump FTP-1 purge water

* left to get ice

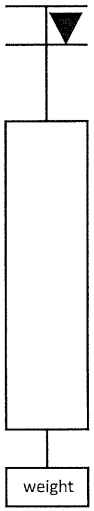
* left site at 1650



Passive Diffusion Bag Sampling Form

YTC

Well Identification: MTS-1



Site Location: YTC
Project Number: 20506
Well Diameter: 2"
PDB Installation Date: 3/14/22
PDB Installation Time: –
DTW at Installation: 102.47

Sample Information

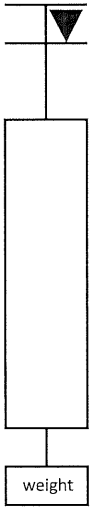
Sample No: YTC-MTS1-20220926
Sample Date: 9/26/2022
DTW at Sampling: 94.8
Sample Time: 1630
Sampled By: H.C /A.J
Biofilm Present: Yes / (No)
New PDB Deployed : (Yes) / No

Total Well Depth: 147

Well Condition

Well Monument Locked?: (Yes) / No
Monument Condition: (Good) / Fair / Poor
Water Inside Monument?: Yes / (No)
Casing Plug Locked: Yes / No (N/A)
Casing Plug Condition: Good / Fair / Poor (N/A)
Comments: no plug present

Well Identification: MTS-2



Site Location: YTC
Project Number: 20506
Well Diameter: 2"
PDB Installation Date: 3/14/22
PDB Installation Time: –
DTW at Installation: 93.95

Sample Information

Sample No: YTC-MTS2-20220926
Sample Date: 9/26/2022
DTW at Sampling: ~~94.85~~ 86.68
Sample Time: 1610
Sampled By: HC/AM
Biofilm Present: Yes / (No)
New PDB Deployed : (Yes) / No

Total Well Depth: 115.35

Well Condition

Well Monument Locked?: (Yes) / No
Monument Condition: (Good) / Fair / Poor
Water Inside Monument?: Yes / (No)
Casing Plug Locked: Yes / No (N/A)
Casing Plug Condition: Good / Fair / Poor (N/A)
Comments: no plug present

Well Identification: MTS-4

Site Location: YTC
Project Number: 20506
Well Diameter: 4"
PDB Installation Date: 3/14/22
PDB Installation Time: —
DTW at Installation 86.0

Sample Information

Sample No: YTC-MTS4-20220926
Sample Date: 9/26/2022
DTW at Sampling: 81.27
Sample Time: 1620
Sampled By: HC/AJ
Biofilm Present: Yes / (No)
New PDB Deployed : (Yes) / No

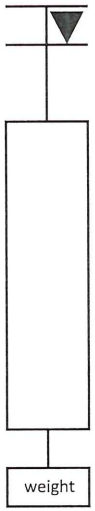
Total Well Depth: 96.6

Well Condition

Well Monument Locked?: Yes / (No)
Monument Condition: (Good) / Fair / Poor
Water Inside Monument?: Yes / (No)
Casing Plug Locked: Yes / (No)
Casing Plug Condition: Good / (Fair) / Poor
Comments:

5 1/2 VOAs
0/3 bolts, gasket,

Well Identification: TVR-1



Site Location: YTC
Project Number: 20506
Well Diameter: 2"
PDB Installation Date: 3/14/22
PDB Installation Time: —
DTW at Installation 75.17

Sample Information

Sample No: YTC-TVR1-20220926
Sample Date: 9/26/2022
DTW at Sampling: 71.91
Sample Time: 1555
Sampled By: HC/AJ
Biofilm Present: Yes / (No)
New PDB Deployed : (Yes) / No

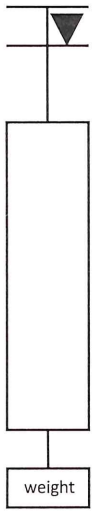
Total Well Depth: 106.6

Well Condition

Well Monument Locked?: (Yes) / No
Monument Condition: Good / (Fair) / Poor
Water Inside Monument?: Yes / (No)
Casing Plug Locked: Yes / No (N/A)
Casing Plug Condition: Good / Fair / Poor (N/A)
Comments: no plug present

5 VOCs
bollards bent, conc. pad cracked

Well Identification: TVR-3



Site Location: YTC
Project Number: 20506
Well Diameter: 4"
PDB Installation Date: 3/14/22
PDB Installation Time: —
DTW at Installation 66.64

Sample Information

Sample No: YTC-TVR3-20220926
Sample Date: 9/26/2022
DTW at Sampling: 60.91
Sample Time: 1545
Sampled By: HC/AJ
Biofilm Present: Yes / (No)
New PDB Deployed : (Yes) / No 2

Total Well Depth: 106

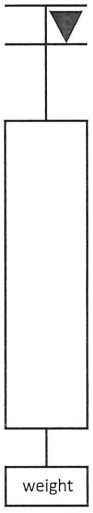
Well Condition

Well Monument Locked?: Yes / (No)
Monument Condition: Good / (Fair) / Poor
Water Inside Monument?: Yes / (No)
Casing Plug Locked: Yes / (No)
Casing Plug Condition: Good / (Fair) / Poor
Comments:

+/3 bolts, gasket present

5.9 VOAs

Well Identification: TVR-6



Site Location: YTC
Project Number: 20506
Well Diameter: 2"
PDB Installation Date: 3/14/22
PDB Installation Time: —
DTW at Installation 65.13

Sample Information

Sample No: YTC-TVR6-20220927
Sample Date: 9/27/2022
DTW at Sampling: 60.72
Sample Time: 1140
Sampled By: HC/AJ
Biofilm Present: Yes / (No)
New PDB Deployed : (Yes) / No

Total Well Depth: 149.8

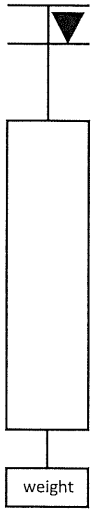
Well Condition

Well Monument Locked?: Yes / (No)
Monument Condition: Good / (Fair) / Poor
Water Inside Monument?: Yes / (No)
Casing Plug Locked: Yes / No (N/A)
Casing Plug Condition: Good / Fair / Poor (N/A)
Comments:

0/3 bolts, gasket

* PAIC contact has key to this well location

Well Identification: TVR-7



Total Well Depth: 149.6

Site Location: YTC
Project Number: 20506
Well Diameter: 2"
PDB Installation Date: 3/14/22
PDB Installation Time: —
DTW at Installation: 66.06

Sample Information

Sample No: YTC-TVR7-20220926
Sample Date: 9/26/2022
DTW at Sampling: 61.68
Sample Time: 1530
Sampled By: HC/AM
Biofilm Present: Yes / (No)
New PDB Deployed : (Yes) / No

Well Condition

Well Monument Locked?: Yes / (No)
Monument Condition: Good / (Fair) / Poor
Water Inside Monument?: Yes / (No)
Casing Plug Locked: Yes / No (N/A)
Casing Plug Condition: Good / Fair / Poor (N/A)
Comments:

5 1/2 VOAs
0/3 bolts, gasket, no plug

INNOVEX
ENVIRONMENTAL MANAGEMENT, INC.

Project Number:	20506
Project Name:	YTC
Well Name:	FTP-1
Date:	9/26/22

Sampler's Name:	H. Carter / A. Jordan		
Purge Method:	submersible pump / bailer	Sample Equipment:	bailer
Site conditions/weather:	Upper 80's sunny		
Well Diameter (in.):	4"	LNAPL thickness:	-
Depth to Water (ft.):	14.52	DNAPL thickness:	-
Well Depth (ft.):	23.75	Volume in Well (gallons):	
Water Column Ht (ft):		Volume to be purged:	
Screened Interval:		Volume purged:	

WELL CASING VOLUMES (Gal/ft)

1" = 0.41 / 2.0" = 0.16 / 4" = 0.65 / 6" = 1.47 / 8" = 2.61

Time Interval	Volume Purged (gal.)	Temperature (°C) ± 3%	Conductivity (µS/cm) ±10 if <1,000 or ±20 if >1,000 µS/cm	D.O. (mg/L) if<1 mg/L ±0.05 , or >1 mg/L then ±0.2	pH ± 0.1	ORP ± 10 mv	Turbidity (NTU) ± 5% or <20 NTUs	TDS
1355	1.25	17.7	1.159	7.1	7.02	-95.8	27.35	
1400	2.5	19.10	1.147	5.5	7.00	-96.7	13.00	
—pump overheated								
used a bailer to purge								

Wait for 80% well volume recovery prior to sampling

Calculate 80% of original well volume

Original height of water column (_____) x 0.8 = (_____) - Well Depth = (_____) depth to water

Sample Name:	YTC FTP-1-20220926
Duplicate Name:	YTC-FTP-1A-20220926
Sample Time:	1500
Duplicate Time:	1505

MS/MSD

Well condition:

no lock, plug 4" well, old bailer in place

Notes:

black when it came out, cleared up after ~1/2 gallon. Strong odor

ANALYTICAL REPORT

March 25, 2022

INNOVEX/ERRG Joint Venture - Redmond, WA

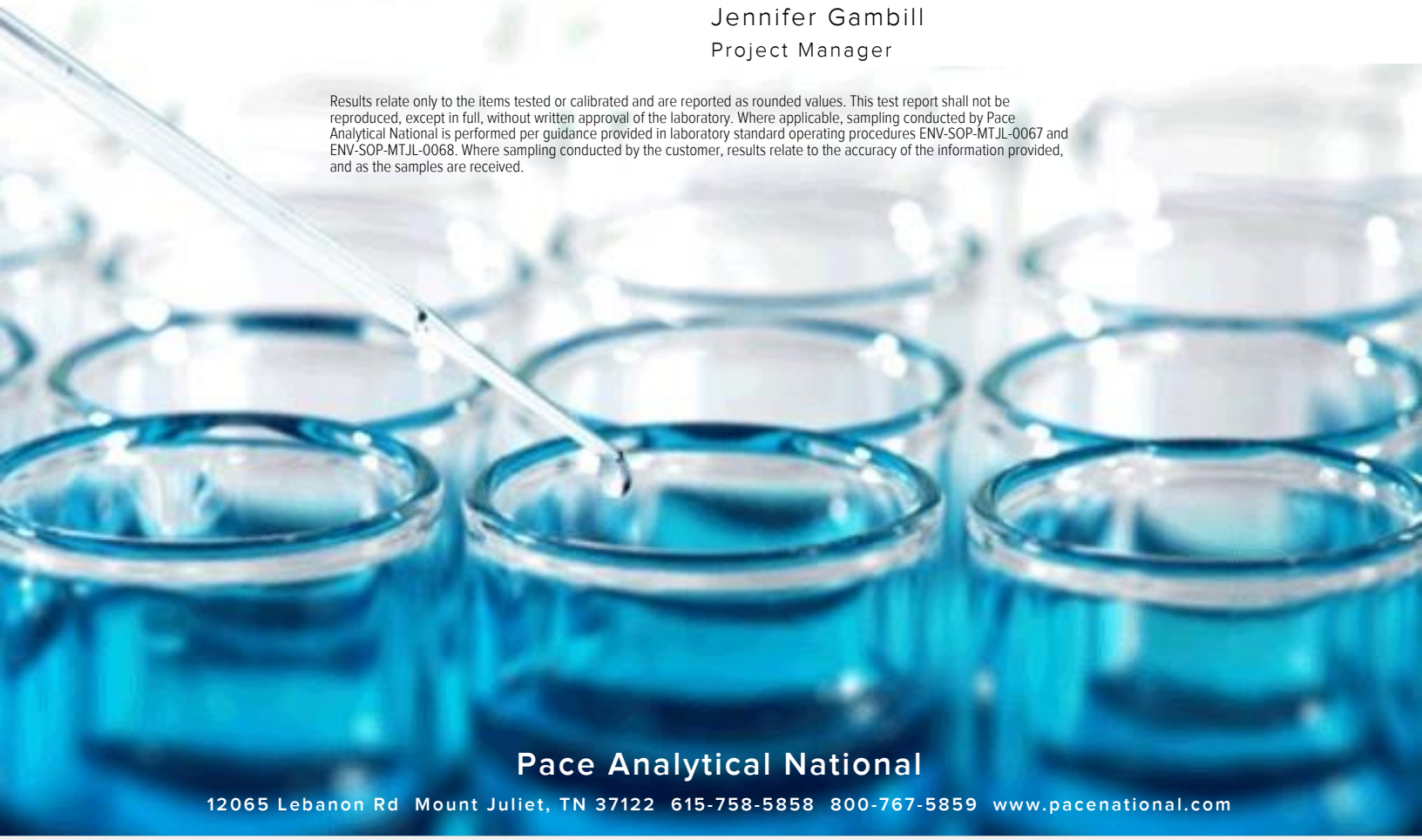
Sample Delivery Group:	L1471599
Samples Received:	03/15/2022
Project Number:	20506
Description:	JBLM-YTC

Report To:

Anna Jordan
16310 NE 80th St.
Ste 300
Redmond, WA 98052

Entire Report Reviewed By:

Jennifer Gambill
Project Manager



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YTC-TVR-3-20220314 L1471599-01 GW

Collected by: HC/AJ | Collected date/time: 03/14/22 11:40 | Received date/time: 03/15/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1833960	1	03/17/22 15:35	03/17/22 15:35	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1834518	1	03/18/22 16:02	03/18/22 16:02	JAH	Mt. Juliet, TN

YTC-TVR-7-20220314 L1471599-02 GW

Collected by: HC/AJ | Collected date/time: 03/14/22 11:55 | Received date/time: 03/15/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1833960	1	03/17/22 15:55	03/17/22 15:55	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1834518	1	03/18/22 16:22	03/18/22 16:22	JAH	Mt. Juliet, TN

YTC-TVR-1-20220314 L1471599-03 GW

Collected by: HC/AJ | Collected date/time: 03/14/22 12:05 | Received date/time: 03/15/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1833960	1	03/17/22 16:15	03/17/22 16:15	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1834518	1	03/18/22 16:43	03/18/22 16:43	JAH	Mt. Juliet, TN

YTC-TVR-1B-20220314 L1471599-04 GW

Collected by: HC/AJ | Collected date/time: 03/14/22 12:05 | Received date/time: 03/15/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1833960	1	03/17/22 16:36	03/17/22 16:36	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1834518	1	03/18/22 17:03	03/18/22 17:03	JAH	Mt. Juliet, TN

YTC-TVR-6-20220314 L1471599-05 GW

Collected by: HC/AJ | Collected date/time: 03/14/22 12:20 | Received date/time: 03/15/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1833960	1	03/17/22 16:56	03/17/22 16:56	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1834518	1	03/18/22 17:23	03/18/22 17:23	JAH	Mt. Juliet, TN

YTC-POMONA-20220314 L1471599-06 GW

Collected by: HC/AJ | Collected date/time: 03/14/22 12:25 | Received date/time: 03/15/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1833960	1	03/17/22 17:16	03/17/22 17:16	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1834518	1	03/18/22 17:44	03/18/22 17:44	JAH	Mt. Juliet, TN

YTC-MTS-4-20220314 L1471599-07 GW

Collected by: HC/AJ | Collected date/time: 03/14/22 13:15 | Received date/time: 03/15/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1833960	1	03/17/22 17:37	03/17/22 17:37	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1834518	1	03/18/22 18:44	03/18/22 18:44	JAH	Mt. Juliet, TN

YTC-MTS-1-20220314 L1471599-08 GW

Collected by: HC/AJ | Collected date/time: 03/14/22 13:30 | Received date/time: 03/15/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1833960	1	03/17/22 17:57	03/17/22 17:57	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1834518	1	03/18/22 19:05	03/18/22 19:05	JAH	Mt. Juliet, TN

YTC-MTS-2-20220314 L1471599-09 GW

Collected by: HC/AJ | Collected date/time: 03/14/22 13:35 | Received date/time: 03/15/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1833960	1	03/17/22 18:17	03/17/22 18:17	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1834518	1	03/18/22 19:25	03/18/22 19:25	JAH	Mt. Juliet, TN

YTC-FTP-1-20220314 L1471599-10 GW

Collected by: HC/AJ | Collected date/time: 03/14/22 14:10 | Received date/time: 03/15/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1834448	1	03/18/22 10:41	03/18/22 10:41	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1833960	1	03/17/22 18:38	03/17/22 18:38	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1834518	1	03/18/22 19:46	03/18/22 19:46	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1834084	1	03/19/22 01:55	03/19/22 21:39	DMG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1834084	10	03/19/22 01:55	03/22/22 04:31	DMG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1833072	1	03/17/22 06:22	03/18/22 09:00	ADF	Mt. Juliet, TN

YTC-PAIC-20220314 L1471599-11 GW

Collected by: HC/AJ | Collected date/time: 03/14/22 14:30 | Received date/time: 03/15/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1833960	1	03/17/22 18:58	03/17/22 18:58	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1834518	1	03/18/22 20:06	03/18/22 20:06	JAH	Mt. Juliet, TN

CASE NARRATIVE

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.

Jennifer Gambill
Project Manager

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

Analyte	CAS #	Result mg/l	Qualifier	DL mg/l	LOD mg/l	LOQ mg/l	Dilution	Analysis date / time	Batch
Acetone	67-64-1	0.0250	C4 U	0.0113	0.0250	0.0500	1	03/17/2022 15:35	WG1833960
Benzene	71-43-2	0.000500	U	0.0000941	0.000500	0.00100	1	03/17/2022 15:35	WG1833960
Bromobenzene	108-86-1	0.000500	U	0.000118	0.000500	0.00100	1	03/17/2022 15:35	WG1833960
Bromochloromethane	74-97-5	0.000500	U	0.000128	0.000500	0.00100	1	03/17/2022 15:35	WG1833960
Bromodichloromethane	75-27-4	0.000500	U	0.000136	0.000500	0.00100	1	03/17/2022 15:35	WG1833960
Bromoform	75-25-2	0.000500	U	0.000129	0.000500	0.00100	1	03/17/2022 15:35	WG1833960
Bromomethane	74-83-9	0.00200	U	0.000605	0.00200	0.00500	1	03/17/2022 15:35	WG1833960
n-Butylbenzene	104-51-8	0.000500	U	0.000157	0.000500	0.00100	1	03/17/2022 15:35	WG1833960
sec-Butylbenzene	135-98-8	0.000500	U	0.000125	0.000500	0.00100	1	03/17/2022 15:35	WG1833960
tert-Butylbenzene	98-06-6	0.000500	U	0.000127	0.000500	0.00100	1	03/17/2022 15:35	WG1833960
Carbon disulfide	75-15-0	0.000500	U	0.0000960	0.000500	0.00100	1	03/17/2022 15:35	WG1833960
Carbon tetrachloride	56-23-5	0.000500	U	0.000128	0.000500	0.00100	1	03/17/2022 15:35	WG1833960
Chlorobenzene	108-90-7	0.000500	U	0.000116	0.000500	0.00100	1	03/17/2022 15:35	WG1833960
Chlorodibromomethane	124-48-1	0.000500	U	0.000140	0.000500	0.00100	1	03/17/2022 15:35	WG1833960
Chloroethane	75-00-3	0.00200	U	0.000192	0.00200	0.00500	1	03/17/2022 15:35	WG1833960
Chloroform	67-66-3	0.00200	U	0.000111	0.00200	0.00500	1	03/17/2022 15:35	WG1833960
Chloromethane	74-87-3	0.00200	U	0.000960	0.00200	0.00400	1	03/17/2022 15:35	WG1833960
2-Chlorotoluene	95-49-8	0.000500	U	0.000106	0.000500	0.00100	1	03/18/2022 16:02	WG1834518
4-Chlorotoluene	106-43-4	0.000500	U	0.000114	0.000500	0.00100	1	03/17/2022 15:35	WG1833960
1,2-Dibromoethane	106-93-4	0.000500	U	0.000126	0.000500	0.00100	1	03/17/2022 15:35	WG1833960
1,2-Dibromo-3-Chloropropane	96-12-8	0.00200	C4 U	0.000276	0.00200	0.00500	1	03/17/2022 15:35	WG1833960
Dibromomethane	74-95-3	0.000500	U	0.000122	0.000500	0.00100	1	03/17/2022 15:35	WG1833960
1,2-Dichlorobenzene	95-50-1	0.000500	U	0.000107	0.000500	0.00100	1	03/17/2022 15:35	WG1833960
1,3-Dichlorobenzene	541-73-1	0.000500	U	0.000110	0.000500	0.00100	1	03/17/2022 15:35	WG1833960
1,4-Dichlorobenzene	106-46-7	0.000500	U	0.000120	0.000500	0.00100	1	03/17/2022 15:35	WG1833960
Dichlorodifluoromethane	75-71-8	0.00200	U	0.000374	0.00200	0.00500	1	03/17/2022 15:35	WG1833960
1,1-Dichloroethane	75-34-3	0.000500	U	0.000100	0.000500	0.00100	1	03/17/2022 15:35	WG1833960
1,2-Dichloroethane	107-06-2	0.000500	U	0.0000819	0.000500	0.00100	1	03/17/2022 15:35	WG1833960
1,1-Dichloroethene	75-35-4	0.000500	U	0.000188	0.000500	0.00100	1	03/17/2022 15:35	WG1833960
cis-1,2-Dichloroethene	156-59-2	0.000500	U	0.000126	0.000500	0.00100	1	03/17/2022 15:35	WG1833960
trans-1,2-Dichloroethene	156-60-5	0.000500	U	0.000149	0.000500	0.00100	1	03/17/2022 15:35	WG1833960
1,2-Dichloropropane	78-87-5	0.000500	U	0.000149	0.000500	0.00100	1	03/17/2022 15:35	WG1833960
1,3-Dichloropropane	142-28-9	0.000500	U	0.000110	0.000500	0.00100	1	03/17/2022 15:35	WG1833960
2,2-Dichloropropane	594-20-7	0.000500	U	0.000161	0.000500	0.00100	1	03/17/2022 15:35	WG1833960
1,1-Dichloropropene	563-58-6	0.000500	U	0.000142	0.000500	0.00100	1	03/17/2022 15:35	WG1833960
cis-1,3-Dichloropropene	10061-01-5	0.000500	U	0.000111	0.000500	0.00100	1	03/17/2022 15:35	WG1833960
trans-1,3-Dichloropropene	10061-02-6	0.000500	U	0.000118	0.000500	0.00100	1	03/17/2022 15:35	WG1833960
1,3-Dichloropropene	542-75-6	0.000500	J4 U	0.000118	0.000500	0.00100	1	03/17/2022 15:35	WG1833960
TOTAL 1,3-Dichloropropene		0.000500	U	0.000118	0.000500	0.00100	1	03/18/2022 16:02	WG1834518
Ethylbenzene	100-41-4	0.000500	U	0.000137	0.000500	0.00100	1	03/17/2022 15:35	WG1833960
Hexachloro-1,3-butadiene	87-68-3	0.000750	U	0.000337	0.000750	0.00150	1	03/17/2022 15:35	WG1833960
2-Hexanone	591-78-6	0.000750	U	0.000787	0.000750	0.0100	1	03/17/2022 15:35	WG1833960
Isopropylbenzene	98-82-8	0.000500	U	0.000105	0.000500	0.00100	1	03/17/2022 15:35	WG1833960
p-Isopropyltoluene	99-87-6	0.000500	U	0.000120	0.000500	0.00100	1	03/17/2022 15:35	WG1833960
2-Butanone (MEK)	78-93-3	0.00500	U	0.00119	0.00500	0.0100	1	03/17/2022 15:35	WG1833960
Methylene Chloride	75-09-2	0.00200	U	0.000430	0.00200	0.00500	1	03/17/2022 15:35	WG1833960
4-Methyl-2-pentanone (MIBK)	108-10-1	0.00500	U	0.000478	0.00500	0.0100	1	03/17/2022 15:35	WG1833960
n-Propylbenzene	103-65-1	0.000500	U	0.0000993	0.000500	0.00100	1	03/18/2022 16:02	WG1834518
Styrene	100-42-5	0.000500	U	0.000118	0.000500	0.00100	1	03/17/2022 15:35	WG1833960
1,1,1,2-Tetrachloroethane	630-20-6	0.000500	U	0.000147	0.000500	0.00100	1	03/17/2022 15:35	WG1833960
1,1,2,2-Tetrachloroethane	79-34-5	0.000500	U	0.000133	0.000500	0.00100	1	03/18/2022 16:02	WG1834518
Tetrachloroethene	127-18-4	0.00600	U	0.000300	0.00600	0.0120	1	03/17/2022 15:35	WG1833960
Toluene	108-88-3	0.000600	U	0.000278	0.000600	0.00120	1	03/17/2022 15:35	WG1833960
1,2,3-Trichlorobenzene	87-61-6	0.000500	U	0.000230	0.000500	0.00100	1	03/17/2022 15:35	WG1833960
1,2,4-Trichlorobenzene	120-82-1	0.00100	U	0.000481	0.00100	0.00200	1	03/17/2022 15:35	WG1833960
1,2,4-Trimethylbenzene	95-63-6	0.00100	U	0.000322	0.00100	0.00200	1	03/17/2022 15:35	WG1833960

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

Analyte	CAS #	Result	Qualifier	DL	LOD	LOQ	Dilution	Analysis	Batch
		mg/l		mg/l	mg/l	mg/l		date / time	
1,3,5-Trimethylbenzene	108-67-8	0.000500	U	0.000104	0.000500	0.00100	1	03/17/2022 15:35	WG1833960
1,1,1-Trichloroethane	71-55-6	0.000500	U	0.000149	0.000500	0.00100	1	03/17/2022 15:35	WG1833960
1,1,2-Trichloroethane	79-00-5	0.000500	U	0.000158	0.000500	0.00100	1	03/17/2022 15:35	WG1833960
Trichloroethene	79-01-6	0.00387		0.000190	0.000500	0.00100	1	03/17/2022 15:35	WG1833960
Trichlorofluoromethane	75-69-4	0.00200	U	0.000160	0.00200	0.00500	1	03/17/2022 15:35	WG1833960
1,2,3-Trichloropropane	96-18-4	0.00100	U	0.000237	0.00100	0.00250	1	03/18/2022 16:02	WG1834518
Vinyl chloride	75-01-4	0.000500	U	0.000234	0.000500	0.00100	1	03/17/2022 15:35	WG1833960
o-Xylene	95-47-6	0.000500	U	0.000174	0.000500	0.00100	1	03/17/2022 15:35	WG1833960
m&p-Xylene	1330-20-7	0.000500	U	0.000430	0.000500	0.00200	1	03/17/2022 15:35	WG1833960
Xylenes, Total	1330-20-7	0.00150	U	0.000174	0.00150	0.00300	1	03/17/2022 15:35	WG1833960
(S) Toluene-d8	*2037-26-5*	*111*				*89.0-112*		*03/17/2022 15:35*	WG1833960
(S) Toluene-d8	*2037-26-5*	*101*				*89.0-112*		*03/18/2022 16:02*	WG1834518
(S) 4-Bromofluorobenzene	*460-00-4*	*101*				*85.0-114*		*03/17/2022 15:35*	WG1833960
(S) 4-Bromofluorobenzene	*460-00-4*	*99.4*				*85.0-114*		*03/18/2022 16:02*	WG1834518
(S) 1,2-Dichloroethane-d4	*17060-07-0*	*99.1*				*81.0-118*		*03/17/2022 15:35*	WG1833960
(S) 1,2-Dichloroethane-d4	*17060-07-0*	*95.2*				*81.0-118*		*03/18/2022 16:02*	WG1834518

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

Analyte	CAS #	Result mg/l	Qualifier	DL mg/l	LOD mg/l	LOQ mg/l	Dilution	Analysis date / time	Batch
Acetone	67-64-1	0.0250	C4 U	0.0113	0.0250	0.0500	1	03/17/2022 15:55	WG1833960
Benzene	71-43-2	0.000500	U	0.0000941	0.000500	0.00100	1	03/17/2022 15:55	WG1833960
Bromobenzene	108-86-1	0.000500	U	0.000118	0.000500	0.00100	1	03/17/2022 15:55	WG1833960
Bromochloromethane	74-97-5	0.000500	U	0.000128	0.000500	0.00100	1	03/17/2022 15:55	WG1833960
Bromodichloromethane	75-27-4	0.000500	U	0.000136	0.000500	0.00100	1	03/17/2022 15:55	WG1833960
Bromoform	75-25-2	0.000500	U	0.000129	0.000500	0.00100	1	03/17/2022 15:55	WG1833960
Bromomethane	74-83-9	0.00200	U	0.000605	0.00200	0.00500	1	03/17/2022 15:55	WG1833960
n-Butylbenzene	104-51-8	0.000500	U	0.000157	0.000500	0.00100	1	03/17/2022 15:55	WG1833960
sec-Butylbenzene	135-98-8	0.000500	U	0.000125	0.000500	0.00100	1	03/17/2022 15:55	WG1833960
tert-Butylbenzene	98-06-6	0.000500	U	0.000127	0.000500	0.00100	1	03/17/2022 15:55	WG1833960
Carbon disulfide	75-15-0	0.000500	U	0.0000960	0.000500	0.00100	1	03/17/2022 15:55	WG1833960
Carbon tetrachloride	56-23-5	0.000500	U	0.000128	0.000500	0.00100	1	03/17/2022 15:55	WG1833960
Chlorobenzene	108-90-7	0.000500	U	0.000116	0.000500	0.00100	1	03/17/2022 15:55	WG1833960
Chlorodibromomethane	124-48-1	0.000500	U	0.000140	0.000500	0.00100	1	03/17/2022 15:55	WG1833960
Chloroethane	75-00-3	0.00200	U	0.000192	0.00200	0.00500	1	03/17/2022 15:55	WG1833960
Chloroform	67-66-3	0.00200	U	0.000111	0.00200	0.00500	1	03/17/2022 15:55	WG1833960
Chloromethane	74-87-3	0.00200	U	0.000960	0.00200	0.00400	1	03/17/2022 15:55	WG1833960
2-Chlorotoluene	95-49-8	0.000500	U	0.000106	0.000500	0.00100	1	03/18/2022 16:22	WG1834518
4-Chlorotoluene	106-43-4	0.000500	U	0.000114	0.000500	0.00100	1	03/17/2022 15:55	WG1833960
1,2-Dibromoethane	106-93-4	0.000500	U	0.000126	0.000500	0.00100	1	03/17/2022 15:55	WG1833960
1,2-Dibromo-3-Chloropropane	96-12-8	0.00200	C4 U	0.000276	0.00200	0.00500	1	03/17/2022 15:55	WG1833960
Dibromomethane	74-95-3	0.000500	U	0.000122	0.000500	0.00100	1	03/17/2022 15:55	WG1833960
1,2-Dichlorobenzene	95-50-1	0.000500	U	0.000107	0.000500	0.00100	1	03/17/2022 15:55	WG1833960
1,3-Dichlorobenzene	541-73-1	0.000500	U	0.000110	0.000500	0.00100	1	03/17/2022 15:55	WG1833960
1,4-Dichlorobenzene	106-46-7	0.000500	U	0.000120	0.000500	0.00100	1	03/17/2022 15:55	WG1833960
Dichlorodifluoromethane	75-71-8	0.00200	U	0.000374	0.00200	0.00500	1	03/17/2022 15:55	WG1833960
1,1-Dichloroethane	75-34-3	0.000500	U	0.000100	0.000500	0.00100	1	03/17/2022 15:55	WG1833960
1,2-Dichloroethane	107-06-2	0.000500	U	0.0000819	0.000500	0.00100	1	03/17/2022 15:55	WG1833960
1,1-Dichloroethene	75-35-4	0.000500	U	0.000188	0.000500	0.00100	1	03/17/2022 15:55	WG1833960
cis-1,2-Dichloroethene	156-59-2	0.000500	U	0.000126	0.000500	0.00100	1	03/17/2022 15:55	WG1833960
trans-1,2-Dichloroethene	156-60-5	0.000500	U	0.000149	0.000500	0.00100	1	03/17/2022 15:55	WG1833960
1,2-Dichloropropane	78-87-5	0.000500	U	0.000149	0.000500	0.00100	1	03/17/2022 15:55	WG1833960
1,3-Dichloropropane	142-28-9	0.000500	U	0.000110	0.000500	0.00100	1	03/17/2022 15:55	WG1833960
2,2-Dichloropropane	594-20-7	0.000500	U	0.000161	0.000500	0.00100	1	03/17/2022 15:55	WG1833960
1,1-Dichloropropene	563-58-6	0.000500	U	0.000142	0.000500	0.00100	1	03/17/2022 15:55	WG1833960
cis-1,3-Dichloropropene	10061-01-5	0.000500	U	0.000111	0.000500	0.00100	1	03/17/2022 15:55	WG1833960
trans-1,3-Dichloropropene	10061-02-6	0.000500	U	0.000118	0.000500	0.00100	1	03/17/2022 15:55	WG1833960
1,3-Dichloropropene	542-75-6	0.000500	J4 U	0.000118	0.000500	0.00100	1	03/17/2022 15:55	WG1833960
TOTAL 1,3-Dichloropropene		0.000500	U	0.000118	0.000500	0.00100	1	03/18/2022 16:22	WG1834518
Ethylbenzene	100-41-4	0.000500	U	0.000137	0.000500	0.00100	1	03/17/2022 15:55	WG1833960
Hexachloro-1,3-butadiene	87-68-3	0.000750	U	0.000337	0.000750	0.00150	1	03/17/2022 15:55	WG1833960
2-Hexanone	591-78-6	0.000750	U	0.000787	0.000750	0.0100	1	03/17/2022 15:55	WG1833960
Isopropylbenzene	98-82-8	0.000500	U	0.000105	0.000500	0.00100	1	03/17/2022 15:55	WG1833960
p-Isopropyltoluene	99-87-6	0.000500	U	0.000120	0.000500	0.00100	1	03/17/2022 15:55	WG1833960
2-Butanone (MEK)	78-93-3	0.00500	U	0.00119	0.00500	0.0100	1	03/17/2022 15:55	WG1833960
Methylene Chloride	75-09-2	0.00200	U	0.000430	0.00200	0.00500	1	03/17/2022 15:55	WG1833960
4-Methyl-2-pentanone (MIBK)	108-10-1	0.00500	U	0.000478	0.00500	0.0100	1	03/17/2022 15:55	WG1833960
n-Propylbenzene	103-65-1	0.000500	U	0.0000993	0.000500	0.00100	1	03/18/2022 16:22	WG1834518
Styrene	100-42-5	0.000500	U	0.000118	0.000500	0.00100	1	03/17/2022 15:55	WG1833960
1,1,1,2-Tetrachloroethane	630-20-6	0.000500	U	0.000147	0.000500	0.00100	1	03/17/2022 15:55	WG1833960
1,1,2,2-Tetrachloroethane	79-34-5	0.000500	U	0.000133	0.000500	0.00100	1	03/18/2022 16:22	WG1834518
Tetrachloroethene	127-18-4	0.00600	U	0.000300	0.00600	0.0120	1	03/17/2022 15:55	WG1833960
Toluene	108-88-3	0.000600	U	0.000278	0.000600	0.00120	1	03/17/2022 15:55	WG1833960
1,2,3-Trichlorobenzene	87-61-6	0.000500	U	0.000230	0.000500	0.00100	1	03/17/2022 15:55	WG1833960
1,2,4-Trichlorobenzene	120-82-1	0.00100	U	0.000481	0.00100	0.00200	1	03/17/2022 15:55	WG1833960
1,2,4-Trimethylbenzene	95-63-6	0.00100	U	0.000322	0.00100	0.00200	1	03/17/2022 15:55	WG1833960

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

Analyte	CAS #	Result	Qualifier	DL	LOD	LOQ	Dilution	Analysis	Batch
		mg/l		mg/l	mg/l	mg/l		date / time	
1,3,5-Trimethylbenzene	108-67-8	0.000500	U	0.000104	0.000500	0.00100	1	03/17/2022 15:55	WG1833960
1,1,1-Trichloroethane	71-55-6	0.000500	U	0.000149	0.000500	0.00100	1	03/17/2022 15:55	WG1833960
1,1,2-Trichloroethane	79-00-5	0.000500	U	0.000158	0.000500	0.00100	1	03/17/2022 15:55	WG1833960
Trichloroethene	79-01-6	0.00253		0.000190	0.000500	0.00100	1	03/17/2022 15:55	WG1833960
Trichlorofluoromethane	75-69-4	0.00200	U	0.000160	0.00200	0.00500	1	03/17/2022 15:55	WG1833960
1,2,3-Trichloropropane	96-18-4	0.00100	U	0.000237	0.00100	0.00250	1	03/18/2022 16:22	WG1834518
Vinyl chloride	75-01-4	0.000500	U	0.000234	0.000500	0.00100	1	03/17/2022 15:55	WG1833960
o-Xylene	95-47-6	0.000500	U	0.000174	0.000500	0.00100	1	03/17/2022 15:55	WG1833960
m&p-Xylene	1330-20-7	0.000500	U	0.000430	0.000500	0.00200	1	03/17/2022 15:55	WG1833960
Xylenes, Total	1330-20-7	0.00150	U	0.000174	0.00150	0.00300	1	03/17/2022 15:55	WG1833960
(S) Toluene-d8	*2037-26-5*	*112*				*89.0-112*		*03/17/2022 15:55*	WG1833960
(S) Toluene-d8	*2037-26-5*	*104*				*89.0-112*		*03/18/2022 16:22*	WG1834518
(S) 4-Bromofluorobenzene	*460-00-4*	*101*				*85.0-114*		*03/17/2022 15:55*	WG1833960
(S) 4-Bromofluorobenzene	*460-00-4*	*99.8*				*85.0-114*		*03/18/2022 16:22*	WG1834518
(S) 1,2-Dichloroethane-d4	*17060-07-0*	*106*				*81.0-118*		*03/17/2022 15:55*	WG1833960
(S) 1,2-Dichloroethane-d4	*17060-07-0*	*94.1*				*81.0-118*		*03/18/2022 16:22*	WG1834518

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

Analyte	CAS #	Result mg/l	Qualifier	DL mg/l	LOD mg/l	LOQ mg/l	Dilution	Analysis date / time	Batch
Acetone	67-64-1	0.0250	C4 U	0.0113	0.0250	0.0500	1	03/17/2022 16:15	WG1833960
Benzene	71-43-2	0.000500	U	0.0000941	0.000500	0.00100	1	03/17/2022 16:15	WG1833960
Bromobenzene	108-86-1	0.000500	U	0.000118	0.000500	0.00100	1	03/17/2022 16:15	WG1833960
Bromochloromethane	74-97-5	0.000500	U	0.000128	0.000500	0.00100	1	03/17/2022 16:15	WG1833960
Bromodichloromethane	75-27-4	0.000500	U	0.000136	0.000500	0.00100	1	03/17/2022 16:15	WG1833960
Bromoform	75-25-2	0.000500	U	0.000129	0.000500	0.00100	1	03/17/2022 16:15	WG1833960
Bromomethane	74-83-9	0.00200	U	0.000605	0.00200	0.00500	1	03/17/2022 16:15	WG1833960
n-Butylbenzene	104-51-8	0.000500	U	0.000157	0.000500	0.00100	1	03/17/2022 16:15	WG1833960
sec-Butylbenzene	135-98-8	0.000500	U	0.000125	0.000500	0.00100	1	03/17/2022 16:15	WG1833960
tert-Butylbenzene	98-06-6	0.000500	U	0.000127	0.000500	0.00100	1	03/17/2022 16:15	WG1833960
Carbon disulfide	75-15-0	0.000500	U	0.0000960	0.000500	0.00100	1	03/17/2022 16:15	WG1833960
Carbon tetrachloride	56-23-5	0.000500	U	0.000128	0.000500	0.00100	1	03/17/2022 16:15	WG1833960
Chlorobenzene	108-90-7	0.000500	U	0.000116	0.000500	0.00100	1	03/17/2022 16:15	WG1833960
Chlorodibromomethane	124-48-1	0.000500	U	0.000140	0.000500	0.00100	1	03/17/2022 16:15	WG1833960
Chloroethane	75-00-3	0.00200	U	0.000192	0.00200	0.00500	1	03/17/2022 16:15	WG1833960
Chloroform	67-66-3	0.00200	U	0.000111	0.00200	0.00500	1	03/17/2022 16:15	WG1833960
Chloromethane	74-87-3	0.00200	U	0.000960	0.00200	0.00400	1	03/17/2022 16:15	WG1833960
2-Chlorotoluene	95-49-8	0.000500	U	0.000106	0.000500	0.00100	1	03/18/2022 16:43	WG1834518
4-Chlorotoluene	106-43-4	0.000500	U	0.000114	0.000500	0.00100	1	03/17/2022 16:15	WG1833960
1,2-Dibromoethane	106-93-4	0.000500	U	0.000126	0.000500	0.00100	1	03/17/2022 16:15	WG1833960
1,2-Dibromo-3-Chloropropane	96-12-8	0.00200	C4 U	0.000276	0.00200	0.00500	1	03/17/2022 16:15	WG1833960
Dibromomethane	74-95-3	0.000500	U	0.000122	0.000500	0.00100	1	03/17/2022 16:15	WG1833960
1,2-Dichlorobenzene	95-50-1	0.000500	U	0.000107	0.000500	0.00100	1	03/17/2022 16:15	WG1833960
1,3-Dichlorobenzene	541-73-1	0.000500	U	0.000110	0.000500	0.00100	1	03/17/2022 16:15	WG1833960
1,4-Dichlorobenzene	106-46-7	0.000500	U	0.000120	0.000500	0.00100	1	03/17/2022 16:15	WG1833960
Dichlorodifluoromethane	75-71-8	0.00200	U	0.000374	0.00200	0.00500	1	03/17/2022 16:15	WG1833960
1,1-Dichloroethane	75-34-3	0.000500	U	0.000100	0.000500	0.00100	1	03/17/2022 16:15	WG1833960
1,2-Dichloroethane	107-06-2	0.000500	U	0.0000819	0.000500	0.00100	1	03/17/2022 16:15	WG1833960
1,1-Dichloroethene	75-35-4	0.000500	U	0.000188	0.000500	0.00100	1	03/17/2022 16:15	WG1833960
cis-1,2-Dichloroethene	156-59-2	0.000500	U	0.000126	0.000500	0.00100	1	03/17/2022 16:15	WG1833960
trans-1,2-Dichloroethene	156-60-5	0.000500	U	0.000149	0.000500	0.00100	1	03/17/2022 16:15	WG1833960
1,2-Dichloropropane	78-87-5	0.000500	U	0.000149	0.000500	0.00100	1	03/17/2022 16:15	WG1833960
1,3-Dichloropropane	142-28-9	0.000500	U	0.000110	0.000500	0.00100	1	03/17/2022 16:15	WG1833960
2,2-Dichloropropane	594-20-7	0.000500	U	0.000161	0.000500	0.00100	1	03/17/2022 16:15	WG1833960
1,1-Dichloropropene	563-58-6	0.000500	U	0.000142	0.000500	0.00100	1	03/17/2022 16:15	WG1833960
cis-1,3-Dichloropropene	10061-01-5	0.000500	U	0.000111	0.000500	0.00100	1	03/17/2022 16:15	WG1833960
trans-1,3-Dichloropropene	10061-02-6	0.000500	U	0.000118	0.000500	0.00100	1	03/17/2022 16:15	WG1833960
1,3-Dichloropropene	542-75-6	0.000500	J4 U	0.000118	0.000500	0.00100	1	03/17/2022 16:15	WG1833960
TOTAL 1,3-Dichloropropene		0.000500	U	0.000118	0.000500	0.00100	1	03/18/2022 16:43	WG1834518
Ethylbenzene	100-41-4	0.000500	U	0.000137	0.000500	0.00100	1	03/17/2022 16:15	WG1833960
Hexachloro-1,3-butadiene	87-68-3	0.000750	U	0.000337	0.000750	0.00150	1	03/17/2022 16:15	WG1833960
2-Hexanone	591-78-6	0.000750	U	0.000787	0.000750	0.0100	1	03/17/2022 16:15	WG1833960
Isopropylbenzene	98-82-8	0.000500	U	0.000105	0.000500	0.00100	1	03/17/2022 16:15	WG1833960
p-Isopropyltoluene	99-87-6	0.000500	U	0.000120	0.000500	0.00100	1	03/17/2022 16:15	WG1833960
2-Butanone (MEK)	78-93-3	0.00500	U	0.00119	0.00500	0.0100	1	03/17/2022 16:15	WG1833960
Methylene Chloride	75-09-2	0.00200	U	0.000430	0.00200	0.00500	1	03/17/2022 16:15	WG1833960
4-Methyl-2-pentanone (MIBK)	108-10-1	0.00500	U	0.000478	0.00500	0.0100	1	03/17/2022 16:15	WG1833960
n-Propylbenzene	103-65-1	0.000500	U	0.0000993	0.000500	0.00100	1	03/18/2022 16:43	WG1834518
Styrene	100-42-5	0.000500	U	0.000118	0.000500	0.00100	1	03/17/2022 16:15	WG1833960
1,1,1,2-Tetrachloroethane	630-20-6	0.000500	U	0.000147	0.000500	0.00100	1	03/17/2022 16:15	WG1833960
1,1,2,2-Tetrachloroethane	79-34-5	0.000500	U	0.000133	0.000500	0.00100	1	03/18/2022 16:43	WG1834518
Tetrachloroethene	127-18-4	0.00600	U	0.000300	0.00600	0.0120	1	03/17/2022 16:15	WG1833960
Toluene	108-88-3	0.000600	U	0.000278	0.000600	0.00120	1	03/17/2022 16:15	WG1833960
1,2,3-Trichlorobenzene	87-61-6	0.000500	U	0.000230	0.000500	0.00100	1	03/17/2022 16:15	WG1833960
1,2,4-Trichlorobenzene	120-82-1	0.00100	U	0.000481	0.00100	0.00200	1	03/17/2022 16:15	WG1833960
1,2,4-Trimethylbenzene	95-63-6	0.00100	U	0.000322	0.00100	0.00200	1	03/17/2022 16:15	WG1833960

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

Analyte	CAS #	Result	Qualifier	DL	LOD	LOQ	Dilution	Analysis	Batch
		mg/l		mg/l	mg/l	mg/l		date / time	
1,3,5-Trimethylbenzene	108-67-8	0.000500	U	0.000104	0.000500	0.00100	1	03/17/2022 16:15	WG1833960
1,1,1-Trichloroethane	71-55-6	0.000500	U	0.000149	0.000500	0.00100	1	03/17/2022 16:15	WG1833960
1,1,2-Trichloroethane	79-00-5	0.000500	U	0.000158	0.000500	0.00100	1	03/17/2022 16:15	WG1833960
Trichloroethene	79-01-6	0.00566		0.000190	0.000500	0.00100	1	03/17/2022 16:15	WG1833960
Trichlorofluoromethane	75-69-4	0.00200	U	0.000160	0.00200	0.00500	1	03/17/2022 16:15	WG1833960
1,2,3-Trichloropropane	96-18-4	0.00100	U	0.000237	0.00100	0.00250	1	03/18/2022 16:43	WG1834518
Vinyl chloride	75-01-4	0.000500	U	0.000234	0.000500	0.00100	1	03/17/2022 16:15	WG1833960
o-Xylene	95-47-6	0.000500	U	0.000174	0.000500	0.00100	1	03/17/2022 16:15	WG1833960
m&p-Xylene	1330-20-7	0.000500	U	0.000430	0.000500	0.00200	1	03/17/2022 16:15	WG1833960
Xylenes, Total	1330-20-7	0.00150	U	0.000174	0.00150	0.00300	1	03/17/2022 16:15	WG1833960
(S) Toluene-d8	*2037-26-5*	*110*				*89.0-112*		*03/17/2022 16:15*	WG1833960
(S) Toluene-d8	*2037-26-5*	*103*				*89.0-112*		*03/18/2022 16:43*	WG1834518
(S) 4-Bromofluorobenzene	*460-00-4*	*99.6*				*85.0-114*		*03/17/2022 16:15*	WG1833960
(S) 4-Bromofluorobenzene	*460-00-4*	*101*				*85.0-114*		*03/18/2022 16:43*	WG1834518
(S) 1,2-Dichloroethane-d4	*17060-07-0*	*101*				*81.0-118*		*03/17/2022 16:15*	WG1833960
(S) 1,2-Dichloroethane-d4	*17060-07-0*	*94.8*				*81.0-118*		*03/18/2022 16:43*	WG1834518

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

Analyte	CAS #	Result mg/l	Qualifier	DL mg/l	LOD mg/l	LOQ mg/l	Dilution	Analysis date / time	Batch
Acetone	67-64-1	0.0250	C4 U	0.0113	0.0250	0.0500	1	03/17/2022 16:36	WG1833960
Benzene	71-43-2	0.000500	U	0.0000941	0.000500	0.00100	1	03/17/2022 16:36	WG1833960
Bromobenzene	108-86-1	0.000500	U	0.000118	0.000500	0.00100	1	03/17/2022 16:36	WG1833960
Bromochloromethane	74-97-5	0.000500	U	0.000128	0.000500	0.00100	1	03/17/2022 16:36	WG1833960
Bromodichloromethane	75-27-4	0.000500	U	0.000136	0.000500	0.00100	1	03/17/2022 16:36	WG1833960
Bromoform	75-25-2	0.000500	U	0.000129	0.000500	0.00100	1	03/17/2022 16:36	WG1833960
Bromomethane	74-83-9	0.00200	U	0.000605	0.00200	0.00500	1	03/17/2022 16:36	WG1833960
n-Butylbenzene	104-51-8	0.000500	U	0.000157	0.000500	0.00100	1	03/17/2022 16:36	WG1833960
sec-Butylbenzene	135-98-8	0.000500	U	0.000125	0.000500	0.00100	1	03/17/2022 16:36	WG1833960
tert-Butylbenzene	98-06-6	0.000500	U	0.000127	0.000500	0.00100	1	03/17/2022 16:36	WG1833960
Carbon disulfide	75-15-0	0.000500	U	0.0000960	0.000500	0.00100	1	03/17/2022 16:36	WG1833960
Carbon tetrachloride	56-23-5	0.000500	U	0.000128	0.000500	0.00100	1	03/17/2022 16:36	WG1833960
Chlorobenzene	108-90-7	0.000500	U	0.000116	0.000500	0.00100	1	03/17/2022 16:36	WG1833960
Chlorodibromomethane	124-48-1	0.000500	U	0.000140	0.000500	0.00100	1	03/17/2022 16:36	WG1833960
Chloroethane	75-00-3	0.00200	U	0.000192	0.00200	0.00500	1	03/17/2022 16:36	WG1833960
Chloroform	67-66-3	0.00200	U	0.000111	0.00200	0.00500	1	03/17/2022 16:36	WG1833960
Chloromethane	74-87-3	0.00200	U	0.000960	0.00200	0.00400	1	03/17/2022 16:36	WG1833960
2-Chlorotoluene	95-49-8	0.000500	U	0.000106	0.000500	0.00100	1	03/18/2022 17:03	WG1834518
4-Chlorotoluene	106-43-4	0.000500	U	0.000114	0.000500	0.00100	1	03/17/2022 16:36	WG1833960
1,2-Dibromoethane	106-93-4	0.000500	U	0.000126	0.000500	0.00100	1	03/17/2022 16:36	WG1833960
1,2-Dibromo-3-Chloropropane	96-12-8	0.00200	C4 U	0.000276	0.00200	0.00500	1	03/17/2022 16:36	WG1833960
Dibromomethane	74-95-3	0.000500	U	0.000122	0.000500	0.00100	1	03/17/2022 16:36	WG1833960
1,2-Dichlorobenzene	95-50-1	0.000500	U	0.000107	0.000500	0.00100	1	03/17/2022 16:36	WG1833960
1,3-Dichlorobenzene	541-73-1	0.000500	U	0.000110	0.000500	0.00100	1	03/17/2022 16:36	WG1833960
1,4-Dichlorobenzene	106-46-7	0.000500	U	0.000120	0.000500	0.00100	1	03/17/2022 16:36	WG1833960
Dichlorodifluoromethane	75-71-8	0.00200	U	0.000374	0.00200	0.00500	1	03/17/2022 16:36	WG1833960
1,1-Dichloroethane	75-34-3	0.000500	U	0.000100	0.000500	0.00100	1	03/17/2022 16:36	WG1833960
1,2-Dichloroethane	107-06-2	0.000500	U	0.0000819	0.000500	0.00100	1	03/17/2022 16:36	WG1833960
1,1-Dichloroethene	75-35-4	0.000500	U	0.000188	0.000500	0.00100	1	03/17/2022 16:36	WG1833960
cis-1,2-Dichloroethene	156-59-2	0.000500	U	0.000126	0.000500	0.00100	1	03/17/2022 16:36	WG1833960
trans-1,2-Dichloroethene	156-60-5	0.000500	U	0.000149	0.000500	0.00100	1	03/17/2022 16:36	WG1833960
1,2-Dichloropropane	78-87-5	0.000500	U	0.000149	0.000500	0.00100	1	03/17/2022 16:36	WG1833960
1,3-Dichloropropane	142-28-9	0.000500	U	0.000110	0.000500	0.00100	1	03/17/2022 16:36	WG1833960
2,2-Dichloropropane	594-20-7	0.000500	U	0.000161	0.000500	0.00100	1	03/17/2022 16:36	WG1833960
1,1-Dichloropropene	563-58-6	0.000500	U	0.000142	0.000500	0.00100	1	03/17/2022 16:36	WG1833960
cis-1,3-Dichloropropene	10061-01-5	0.000500	U	0.000111	0.000500	0.00100	1	03/17/2022 16:36	WG1833960
trans-1,3-Dichloropropene	10061-02-6	0.000500	U	0.000118	0.000500	0.00100	1	03/17/2022 16:36	WG1833960
1,3-Dichloropropene	542-75-6	0.000500	J4 U	0.000118	0.000500	0.00100	1	03/17/2022 16:36	WG1833960
TOTAL 1,3-Dichloropropene		0.000500	U	0.000118	0.000500	0.00100	1	03/18/2022 17:03	WG1834518
Ethylbenzene	100-41-4	0.000500	U	0.000137	0.000500	0.00100	1	03/17/2022 16:36	WG1833960
Hexachloro-1,3-butadiene	87-68-3	0.000750	U	0.000337	0.000750	0.00150	1	03/17/2022 16:36	WG1833960
2-Hexanone	591-78-6	0.000750	U	0.000787	0.000750	0.0100	1	03/17/2022 16:36	WG1833960
Isopropylbenzene	98-82-8	0.000500	U	0.000105	0.000500	0.00100	1	03/17/2022 16:36	WG1833960
p-Isopropyltoluene	99-87-6	0.000500	U	0.000120	0.000500	0.00100	1	03/17/2022 16:36	WG1833960
2-Butanone (MEK)	78-93-3	0.00500	U	0.00119	0.00500	0.0100	1	03/17/2022 16:36	WG1833960
Methylene Chloride	75-09-2	0.00200	U	0.000430	0.00200	0.00500	1	03/17/2022 16:36	WG1833960
4-Methyl-2-pentanone (MIBK)	108-10-1	0.00500	U	0.000478	0.00500	0.0100	1	03/17/2022 16:36	WG1833960
n-Propylbenzene	103-65-1	0.000500	U	0.0000993	0.000500	0.00100	1	03/18/2022 17:03	WG1834518
Styrene	100-42-5	0.000500	U	0.000118	0.000500	0.00100	1	03/17/2022 16:36	WG1833960
1,1,1,2-Tetrachloroethane	630-20-6	0.000500	U	0.000147	0.000500	0.00100	1	03/17/2022 16:36	WG1833960
1,1,2,2-Tetrachloroethane	79-34-5	0.000500	U	0.000133	0.000500	0.00100	1	03/18/2022 17:03	WG1834518
Tetrachloroethene	127-18-4	0.00600	U	0.000300	0.00600	0.0120	1	03/17/2022 16:36	WG1833960
Toluene	108-88-3	0.000600	U	0.000278	0.000600	0.00120	1	03/17/2022 16:36	WG1833960
1,2,3-Trichlorobenzene	87-61-6	0.000500	U	0.000230	0.000500	0.00100	1	03/17/2022 16:36	WG1833960
1,2,4-Trichlorobenzene	120-82-1	0.00100	U	0.000481	0.00100	0.00200	1	03/17/2022 16:36	WG1833960
1,2,4-Trimethylbenzene	95-63-6	0.00100	U	0.000322	0.00100	0.00200	1	03/17/2022 16:36	WG1833960

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

Analyte	CAS #	Result	Qualifier	DL	LOD	LOQ	Dilution	Analysis	Batch
		mg/l		mg/l	mg/l	mg/l		date / time	
1,3,5-Trimethylbenzene	108-67-8	0.000500	U	0.000104	0.000500	0.00100	1	03/17/2022 16:36	WG1833960
1,1,1-Trichloroethane	71-55-6	0.000500	U	0.000149	0.000500	0.00100	1	03/17/2022 16:36	WG1833960
1,1,2-Trichloroethane	79-00-5	0.000500	U	0.000158	0.000500	0.00100	1	03/17/2022 16:36	WG1833960
Trichloroethene	79-01-6	0.00573		0.000190	0.000500	0.00100	1	03/17/2022 16:36	WG1833960
Trichlorofluoromethane	75-69-4	0.00200	U	0.000160	0.00200	0.00500	1	03/17/2022 16:36	WG1833960
1,2,3-Trichloropropane	96-18-4	0.00100	U	0.000237	0.00100	0.00250	1	03/18/2022 17:03	WG1834518
Vinyl chloride	75-01-4	0.000500	U	0.000234	0.000500	0.00100	1	03/17/2022 16:36	WG1833960
o-Xylene	95-47-6	0.000500	U	0.000174	0.000500	0.00100	1	03/17/2022 16:36	WG1833960
m&p-Xylene	1330-20-7	0.000500	U	0.000430	0.000500	0.00200	1	03/17/2022 16:36	WG1833960
Xylenes, Total	1330-20-7	0.00150	U	0.000174	0.00150	0.00300	1	03/17/2022 16:36	WG1833960
(S) Toluene-d8	*2037-26-5*	*108*				*89.0-112*		*03/17/2022 16:36*	WG1833960
(S) Toluene-d8	*2037-26-5*	*104*				*89.0-112*		*03/18/2022 17:03*	WG1834518
(S) 4-Bromofluorobenzene	*460-00-4*	*99.4*				*85.0-114*		*03/17/2022 16:36*	WG1833960
(S) 4-Bromofluorobenzene	*460-00-4*	*99.5*				*85.0-114*		*03/18/2022 17:03*	WG1834518
(S) 1,2-Dichloroethane-d4	*17060-07-0*	*100*				*81.0-118*		*03/17/2022 16:36*	WG1833960
(S) 1,2-Dichloroethane-d4	*17060-07-0*	*95.9*				*81.0-118*		*03/18/2022 17:03*	WG1834518

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

Analyte	CAS #	Result mg/l	Qualifier	DL mg/l	LOD mg/l	LOQ mg/l	Dilution	Analysis date / time	Batch
Acetone	67-64-1	0.0250	C4 U	0.0113	0.0250	0.0500	1	03/17/2022 16:56	WG1833960
Benzene	71-43-2	0.000500	U	0.0000941	0.000500	0.00100	1	03/17/2022 16:56	WG1833960
Bromobenzene	108-86-1	0.000500	U	0.000118	0.000500	0.00100	1	03/17/2022 16:56	WG1833960
Bromochloromethane	74-97-5	0.000500	U	0.000128	0.000500	0.00100	1	03/17/2022 16:56	WG1833960
Bromodichloromethane	75-27-4	0.000500	U	0.000136	0.000500	0.00100	1	03/17/2022 16:56	WG1833960
Bromoform	75-25-2	0.000500	U	0.000129	0.000500	0.00100	1	03/17/2022 16:56	WG1833960
Bromomethane	74-83-9	0.00200	U	0.000605	0.00200	0.00500	1	03/17/2022 16:56	WG1833960
n-Butylbenzene	104-51-8	0.000500	U	0.000157	0.000500	0.00100	1	03/17/2022 16:56	WG1833960
sec-Butylbenzene	135-98-8	0.000500	U	0.000125	0.000500	0.00100	1	03/17/2022 16:56	WG1833960
tert-Butylbenzene	98-06-6	0.000500	U	0.000127	0.000500	0.00100	1	03/17/2022 16:56	WG1833960
Carbon disulfide	75-15-0	0.000500	U	0.0000960	0.000500	0.00100	1	03/17/2022 16:56	WG1833960
Carbon tetrachloride	56-23-5	0.000500	U	0.000128	0.000500	0.00100	1	03/17/2022 16:56	WG1833960
Chlorobenzene	108-90-7	0.000500	U	0.000116	0.000500	0.00100	1	03/17/2022 16:56	WG1833960
Chlorodibromomethane	124-48-1	0.000500	U	0.000140	0.000500	0.00100	1	03/17/2022 16:56	WG1833960
Chloroethane	75-00-3	0.00200	U	0.000192	0.00200	0.00500	1	03/17/2022 16:56	WG1833960
Chloroform	67-66-3	0.00200	U	0.000111	0.00200	0.00500	1	03/17/2022 16:56	WG1833960
Chloromethane	74-87-3	0.00200	U	0.000960	0.00200	0.00400	1	03/17/2022 16:56	WG1833960
2-Chlorotoluene	95-49-8	0.000500	U	0.000106	0.000500	0.00100	1	03/18/2022 17:23	WG1834518
4-Chlorotoluene	106-43-4	0.000500	U	0.000114	0.000500	0.00100	1	03/17/2022 16:56	WG1833960
1,2-Dibromoethane	106-93-4	0.000500	U	0.000126	0.000500	0.00100	1	03/17/2022 16:56	WG1833960
1,2-Dibromo-3-Chloropropane	96-12-8	0.00200	C4 U	0.000276	0.00200	0.00500	1	03/17/2022 16:56	WG1833960
Dibromomethane	74-95-3	0.000500	U	0.000122	0.000500	0.00100	1	03/17/2022 16:56	WG1833960
1,2-Dichlorobenzene	95-50-1	0.000500	U	0.000107	0.000500	0.00100	1	03/17/2022 16:56	WG1833960
1,3-Dichlorobenzene	541-73-1	0.000500	U	0.000110	0.000500	0.00100	1	03/17/2022 16:56	WG1833960
1,4-Dichlorobenzene	106-46-7	0.000500	U	0.000120	0.000500	0.00100	1	03/17/2022 16:56	WG1833960
Dichlorodifluoromethane	75-71-8	0.00200	U	0.000374	0.00200	0.00500	1	03/17/2022 16:56	WG1833960
1,1-Dichloroethane	75-34-3	0.000500	U	0.000100	0.000500	0.00100	1	03/17/2022 16:56	WG1833960
1,2-Dichloroethane	107-06-2	0.000500	U	0.0000819	0.000500	0.00100	1	03/17/2022 16:56	WG1833960
1,1-Dichloroethene	75-35-4	0.000500	U	0.000188	0.000500	0.00100	1	03/17/2022 16:56	WG1833960
cis-1,2-Dichloroethene	156-59-2	0.000500	U	0.000126	0.000500	0.00100	1	03/17/2022 16:56	WG1833960
trans-1,2-Dichloroethene	156-60-5	0.000500	U	0.000149	0.000500	0.00100	1	03/17/2022 16:56	WG1833960
1,2-Dichloropropane	78-87-5	0.000500	U	0.000149	0.000500	0.00100	1	03/17/2022 16:56	WG1833960
1,3-Dichloropropane	142-28-9	0.000500	U	0.000110	0.000500	0.00100	1	03/17/2022 16:56	WG1833960
2,2-Dichloropropane	594-20-7	0.000500	U	0.000161	0.000500	0.00100	1	03/17/2022 16:56	WG1833960
1,1-Dichloropropene	563-58-6	0.000500	U	0.000142	0.000500	0.00100	1	03/17/2022 16:56	WG1833960
cis-1,3-Dichloropropene	10061-01-5	0.000500	U	0.000111	0.000500	0.00100	1	03/17/2022 16:56	WG1833960
trans-1,3-Dichloropropene	10061-02-6	0.000500	U	0.000118	0.000500	0.00100	1	03/17/2022 16:56	WG1833960
1,3-Dichloropropene	542-75-6	0.000500	J4 U	0.000118	0.000500	0.00100	1	03/17/2022 16:56	WG1833960
TOTAL 1,3-Dichloropropene		0.000500	U	0.000118	0.000500	0.00100	1	03/18/2022 17:23	WG1834518
Ethylbenzene	100-41-4	0.000500	U	0.000137	0.000500	0.00100	1	03/17/2022 16:56	WG1833960
Hexachloro-1,3-butadiene	87-68-3	0.000750	U	0.000337	0.000750	0.00150	1	03/17/2022 16:56	WG1833960
2-Hexanone	591-78-6	0.000750	U	0.000787	0.000750	0.0100	1	03/17/2022 16:56	WG1833960
Isopropylbenzene	98-82-8	0.000500	U	0.000105	0.000500	0.00100	1	03/17/2022 16:56	WG1833960
p-Isopropyltoluene	99-87-6	0.000500	U	0.000120	0.000500	0.00100	1	03/17/2022 16:56	WG1833960
2-Butanone (MEK)	78-93-3	0.00500	U	0.00119	0.00500	0.0100	1	03/17/2022 16:56	WG1833960
Methylene Chloride	75-09-2	0.00200	U	0.000430	0.00200	0.00500	1	03/17/2022 16:56	WG1833960
4-Methyl-2-pentanone (MIBK)	108-10-1	0.00500	U	0.000478	0.00500	0.0100	1	03/17/2022 16:56	WG1833960
n-Propylbenzene	103-65-1	0.000500	U	0.0000993	0.000500	0.00100	1	03/18/2022 17:23	WG1834518
Styrene	100-42-5	0.000500	U	0.000118	0.000500	0.00100	1	03/17/2022 16:56	WG1833960
1,1,1,2-Tetrachloroethane	630-20-6	0.000500	U	0.000147	0.000500	0.00100	1	03/17/2022 16:56	WG1833960
1,1,2,2-Tetrachloroethane	79-34-5	0.000500	U	0.000133	0.000500	0.00100	1	03/18/2022 17:23	WG1834518
Tetrachloroethene	127-18-4	0.00600	U	0.000300	0.00600	0.0120	1	03/17/2022 16:56	WG1833960
Toluene	108-88-3	0.000600	U	0.000278	0.000600	0.00120	1	03/17/2022 16:56	WG1833960
1,2,3-Trichlorobenzene	87-61-6	0.000500	U	0.000230	0.000500	0.00100	1	03/17/2022 16:56	WG1833960
1,2,4-Trichlorobenzene	120-82-1	0.00100	U	0.000481	0.00100	0.00200	1	03/17/2022 16:56	WG1833960
1,2,4-Trimethylbenzene	95-63-6	0.00100	U	0.000322	0.00100	0.00200	1	03/17/2022 16:56	WG1833960

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

Analyte	CAS #	Result	Qualifier	DL	LOD	LOQ	Dilution	Analysis	Batch
		mg/l		mg/l	mg/l	mg/l		date / time	
1,3,5-Trimethylbenzene	108-67-8	0.000500	U	0.000104	0.000500	0.00100	1	03/17/2022 16:56	WG1833960
1,1,1-Trichloroethane	71-55-6	0.000500	U	0.000149	0.000500	0.00100	1	03/17/2022 16:56	WG1833960
1,1,2-Trichloroethane	79-00-5	0.000500	U	0.000158	0.000500	0.00100	1	03/17/2022 16:56	WG1833960
Trichloroethene	79-01-6	0.000435	J	0.000190	0.000500	0.00100	1	03/17/2022 16:56	WG1833960
Trichlorofluoromethane	75-69-4	0.00200	U	0.000160	0.00200	0.00500	1	03/17/2022 16:56	WG1833960
1,2,3-Trichloropropane	96-18-4	0.00100	U	0.000237	0.00100	0.00250	1	03/18/2022 17:23	WG1834518
Vinyl chloride	75-01-4	0.000500	U	0.000234	0.000500	0.00100	1	03/17/2022 16:56	WG1833960
o-Xylene	95-47-6	0.000500	U	0.000174	0.000500	0.00100	1	03/17/2022 16:56	WG1833960
m&p-Xylene	1330-20-7	0.000500	U	0.000430	0.000500	0.00200	1	03/17/2022 16:56	WG1833960
Xylenes, Total	1330-20-7	0.00150	U	0.000174	0.00150	0.00300	1	03/17/2022 16:56	WG1833960
(S) Toluene-d8	*2037-26-5*	*108*				*89.0-112*		*03/17/2022 16:56*	WG1833960
(S) Toluene-d8	*2037-26-5*	*104*				*89.0-112*		*03/18/2022 17:23*	WG1834518
(S) 4-Bromofluorobenzene	*460-00-4*	*99.6*				*85.0-114*		*03/17/2022 16:56*	WG1833960
(S) 4-Bromofluorobenzene	*460-00-4*	*101*				*85.0-114*		*03/18/2022 17:23*	WG1834518
(S) 1,2-Dichloroethane-d4	*17060-07-0*	*100*				*81.0-118*		*03/17/2022 16:56*	WG1833960
(S) 1,2-Dichloroethane-d4	*17060-07-0*	*95.1*				*81.0-118*		*03/18/2022 17:23*	WG1834518

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

Analyte	CAS #	Result mg/l	Qualifier	DL mg/l	LOD mg/l	LOQ mg/l	Dilution	Analysis date / time	Batch
Acetone	67-64-1	0.0250	C4 U	0.0113	0.0250	0.0500	1	03/17/2022 17:16	WG1833960
Benzene	71-43-2	0.000500	U	0.0000941	0.000500	0.00100	1	03/17/2022 17:16	WG1833960
Bromobenzene	108-86-1	0.000500	U	0.000118	0.000500	0.00100	1	03/17/2022 17:16	WG1833960
Bromochloromethane	74-97-5	0.000500	U	0.000128	0.000500	0.00100	1	03/17/2022 17:16	WG1833960
Bromodichloromethane	75-27-4	0.000500	U	0.000136	0.000500	0.00100	1	03/17/2022 17:16	WG1833960
Bromoform	75-25-2	0.000500	U	0.000129	0.000500	0.00100	1	03/17/2022 17:16	WG1833960
Bromomethane	74-83-9	0.00200	U	0.000605	0.00200	0.00500	1	03/17/2022 17:16	WG1833960
n-Butylbenzene	104-51-8	0.000500	U	0.000157	0.000500	0.00100	1	03/17/2022 17:16	WG1833960
sec-Butylbenzene	135-98-8	0.000500	U	0.000125	0.000500	0.00100	1	03/17/2022 17:16	WG1833960
tert-Butylbenzene	98-06-6	0.000500	U	0.000127	0.000500	0.00100	1	03/17/2022 17:16	WG1833960
Carbon disulfide	75-15-0	0.000500	U	0.0000960	0.000500	0.00100	1	03/17/2022 17:16	WG1833960
Carbon tetrachloride	56-23-5	0.000500	U	0.000128	0.000500	0.00100	1	03/17/2022 17:16	WG1833960
Chlorobenzene	108-90-7	0.000500	U	0.000116	0.000500	0.00100	1	03/17/2022 17:16	WG1833960
Chlorodibromomethane	124-48-1	0.000500	U	0.000140	0.000500	0.00100	1	03/17/2022 17:16	WG1833960
Chloroethane	75-00-3	0.00200	U	0.000192	0.00200	0.00500	1	03/17/2022 17:16	WG1833960
Chloroform	67-66-3	0.00200	U	0.000111	0.00200	0.00500	1	03/17/2022 17:16	WG1833960
Chloromethane	74-87-3	0.00200	U	0.000960	0.00200	0.00400	1	03/17/2022 17:16	WG1833960
2-Chlorotoluene	95-49-8	0.000500	U	0.000106	0.000500	0.00100	1	03/18/2022 17:44	WG1834518
4-Chlorotoluene	106-43-4	0.000500	U	0.000114	0.000500	0.00100	1	03/17/2022 17:16	WG1833960
1,2-Dibromoethane	106-93-4	0.000500	U	0.000126	0.000500	0.00100	1	03/17/2022 17:16	WG1833960
1,2-Dibromo-3-Chloropropane	96-12-8	0.00200	C4 U	0.000276	0.00200	0.00500	1	03/17/2022 17:16	WG1833960
Dibromomethane	74-95-3	0.000500	U	0.000122	0.000500	0.00100	1	03/17/2022 17:16	WG1833960
1,2-Dichlorobenzene	95-50-1	0.000500	U	0.000107	0.000500	0.00100	1	03/17/2022 17:16	WG1833960
1,3-Dichlorobenzene	541-73-1	0.000500	U	0.000110	0.000500	0.00100	1	03/17/2022 17:16	WG1833960
1,4-Dichlorobenzene	106-46-7	0.000500	U	0.000120	0.000500	0.00100	1	03/17/2022 17:16	WG1833960
Dichlorodifluoromethane	75-71-8	0.00200	U	0.000374	0.00200	0.00500	1	03/17/2022 17:16	WG1833960
1,1-Dichloroethane	75-34-3	0.000500	U	0.000100	0.000500	0.00100	1	03/17/2022 17:16	WG1833960
1,2-Dichloroethane	107-06-2	0.000500	U	0.0000819	0.000500	0.00100	1	03/17/2022 17:16	WG1833960
1,1-Dichloroethene	75-35-4	0.000500	U	0.000188	0.000500	0.00100	1	03/17/2022 17:16	WG1833960
cis-1,2-Dichloroethene	156-59-2	0.000500	U	0.000126	0.000500	0.00100	1	03/17/2022 17:16	WG1833960
trans-1,2-Dichloroethene	156-60-5	0.000500	U	0.000149	0.000500	0.00100	1	03/17/2022 17:16	WG1833960
1,2-Dichloropropane	78-87-5	0.000500	U	0.000149	0.000500	0.00100	1	03/17/2022 17:16	WG1833960
1,3-Dichloropropane	142-28-9	0.000500	U	0.000110	0.000500	0.00100	1	03/17/2022 17:16	WG1833960
2,2-Dichloropropane	594-20-7	0.000500	U	0.000161	0.000500	0.00100	1	03/17/2022 17:16	WG1833960
1,1-Dichloropropene	563-58-6	0.000500	U	0.000142	0.000500	0.00100	1	03/17/2022 17:16	WG1833960
cis-1,3-Dichloropropene	10061-01-5	0.000500	U	0.000111	0.000500	0.00100	1	03/17/2022 17:16	WG1833960
trans-1,3-Dichloropropene	10061-02-6	0.000500	U	0.000118	0.000500	0.00100	1	03/17/2022 17:16	WG1833960
1,3-Dichloropropene	542-75-6	0.000500	J4 U	0.000118	0.000500	0.00100	1	03/17/2022 17:16	WG1833960
TOTAL 1,3-Dichloropropene		0.000500	U	0.000118	0.000500	0.00100	1	03/18/2022 17:44	WG1834518
Ethylbenzene	100-41-4	0.000500	U	0.000137	0.000500	0.00100	1	03/17/2022 17:16	WG1833960
Hexachloro-1,3-butadiene	87-68-3	0.000750	U	0.000337	0.000750	0.00150	1	03/17/2022 17:16	WG1833960
2-Hexanone	591-78-6	0.000750	U	0.000787	0.000750	0.0100	1	03/17/2022 17:16	WG1833960
Isopropylbenzene	98-82-8	0.000500	U	0.000105	0.000500	0.00100	1	03/17/2022 17:16	WG1833960
p-Isopropyltoluene	99-87-6	0.000500	U	0.000120	0.000500	0.00100	1	03/17/2022 17:16	WG1833960
2-Butanone (MEK)	78-93-3	0.00500	U	0.00119	0.00500	0.0100	1	03/17/2022 17:16	WG1833960
Methylene Chloride	75-09-2	0.00200	U	0.000430	0.00200	0.00500	1	03/17/2022 17:16	WG1833960
4-Methyl-2-pentanone (MIBK)	108-10-1	0.00500	U	0.000478	0.00500	0.0100	1	03/17/2022 17:16	WG1833960
n-Propylbenzene	103-65-1	0.000500	U	0.0000993	0.000500	0.00100	1	03/18/2022 17:44	WG1834518
Styrene	100-42-5	0.000500	U	0.000118	0.000500	0.00100	1	03/17/2022 17:16	WG1833960
1,1,1,2-Tetrachloroethane	630-20-6	0.000500	U	0.000147	0.000500	0.00100	1	03/17/2022 17:16	WG1833960
1,1,2,2-Tetrachloroethane	79-34-5	0.000500	U	0.000133	0.000500	0.00100	1	03/18/2022 17:44	WG1834518
Tetrachloroethene	127-18-4	0.00600	U	0.000300	0.00600	0.0120	1	03/17/2022 17:16	WG1833960
Toluene	108-88-3	0.000600	U	0.000278	0.000600	0.00120	1	03/17/2022 17:16	WG1833960
1,2,3-Trichlorobenzene	87-61-6	0.000500	U	0.000230	0.000500	0.00100	1	03/17/2022 17:16	WG1833960
1,2,4-Trichlorobenzene	120-82-1	0.00100	U	0.000481	0.00100	0.00200	1	03/17/2022 17:16	WG1833960
1,2,4-Trimethylbenzene	95-63-6	0.00100	U	0.000322	0.00100	0.00200	1	03/17/2022 17:16	WG1833960

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

Analyte	CAS #	Result	Qualifier	DL	LOD	LOQ	Dilution	Analysis	Batch
		mg/l		mg/l	mg/l	mg/l		date / time	
1,3,5-Trimethylbenzene	108-67-8	0.000500	U	0.000104	0.000500	0.00100	1	03/17/2022 17:16	WG1833960
1,1,1-Trichloroethane	71-55-6	0.000500	U	0.000149	0.000500	0.00100	1	03/17/2022 17:16	WG1833960
1,1,2-Trichloroethane	79-00-5	0.000500	U	0.000158	0.000500	0.00100	1	03/17/2022 17:16	WG1833960
Trichloroethene	79-01-6	0.000500	U	0.000190	0.000500	0.00100	1	03/17/2022 17:16	WG1833960
Trichlorofluoromethane	75-69-4	0.00200	U	0.000160	0.00200	0.00500	1	03/17/2022 17:16	WG1833960
1,2,3-Trichloropropane	96-18-4	0.00100	U	0.000237	0.00100	0.00250	1	03/18/2022 17:44	WG1834518
Vinyl chloride	75-01-4	0.000500	U	0.000234	0.000500	0.00100	1	03/17/2022 17:16	WG1833960
o-Xylene	95-47-6	0.000500	U	0.000174	0.000500	0.00100	1	03/17/2022 17:16	WG1833960
m&p-Xylene	1330-20-7	0.000500	U	0.000430	0.000500	0.00200	1	03/17/2022 17:16	WG1833960
Xylenes, Total	1330-20-7	0.00150	U	0.000174	0.00150	0.00300	1	03/17/2022 17:16	WG1833960
(S) Toluene-d8	*2037-26-5*	*109*				*89.0-112*		*03/17/2022 17:16*	WG1833960
(S) Toluene-d8	*2037-26-5*	*103*				*89.0-112*		*03/18/2022 17:44*	WG1834518
(S) 4-Bromofluorobenzene	*460-00-4*	*99.6*				*85.0-114*		*03/17/2022 17:16*	WG1833960
(S) 4-Bromofluorobenzene	*460-00-4*	*100*				*85.0-114*		*03/18/2022 17:44*	WG1834518
(S) 1,2-Dichloroethane-d4	*17060-07-0*	*104*				*81.0-118*		*03/17/2022 17:16*	WG1833960
(S) 1,2-Dichloroethane-d4	*17060-07-0*	*95.9*				*81.0-118*		*03/18/2022 17:44*	WG1834518

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

Analyte	CAS #	Result mg/l	Qualifier	DL mg/l	LOD mg/l	LOQ mg/l	Dilution	Analysis date / time	Batch
Acetone	67-64-1	0.0250	C4 U	0.0113	0.0250	0.0500	1	03/17/2022 17:37	WG1833960
Benzene	71-43-2	0.000500	U	0.0000941	0.000500	0.00100	1	03/17/2022 17:37	WG1833960
Bromobenzene	108-86-1	0.000500	U	0.000118	0.000500	0.00100	1	03/17/2022 17:37	WG1833960
Bromochloromethane	74-97-5	0.000500	U	0.000128	0.000500	0.00100	1	03/17/2022 17:37	WG1833960
Bromodichloromethane	75-27-4	0.000500	U	0.000136	0.000500	0.00100	1	03/17/2022 17:37	WG1833960
Bromoform	75-25-2	0.000500	U	0.000129	0.000500	0.00100	1	03/17/2022 17:37	WG1833960
Bromomethane	74-83-9	0.00200	U	0.000605	0.00200	0.00500	1	03/17/2022 17:37	WG1833960
n-Butylbenzene	104-51-8	0.000500	U	0.000157	0.000500	0.00100	1	03/17/2022 17:37	WG1833960
sec-Butylbenzene	135-98-8	0.000500	U	0.000125	0.000500	0.00100	1	03/17/2022 17:37	WG1833960
tert-Butylbenzene	98-06-6	0.000500	U	0.000127	0.000500	0.00100	1	03/17/2022 17:37	WG1833960
Carbon disulfide	75-15-0	0.000500	U	0.0000960	0.000500	0.00100	1	03/17/2022 17:37	WG1833960
Carbon tetrachloride	56-23-5	0.000500	U	0.000128	0.000500	0.00100	1	03/17/2022 17:37	WG1833960
Chlorobenzene	108-90-7	0.000500	U	0.000116	0.000500	0.00100	1	03/17/2022 17:37	WG1833960
Chlorodibromomethane	124-48-1	0.000500	U	0.000140	0.000500	0.00100	1	03/17/2022 17:37	WG1833960
Chloroethane	75-00-3	0.00200	U	0.000192	0.00200	0.00500	1	03/17/2022 17:37	WG1833960
Chloroform	67-66-3	0.00200	U	0.000111	0.00200	0.00500	1	03/17/2022 17:37	WG1833960
Chloromethane	74-87-3	0.00200	U	0.000960	0.00200	0.00400	1	03/17/2022 17:37	WG1833960
2-Chlorotoluene	95-49-8	0.000500	U	0.000106	0.000500	0.00100	1	03/18/2022 18:44	WG1834518
4-Chlorotoluene	106-43-4	0.000500	U	0.000114	0.000500	0.00100	1	03/17/2022 17:37	WG1833960
1,2-Dibromoethane	106-93-4	0.000500	U	0.000126	0.000500	0.00100	1	03/17/2022 17:37	WG1833960
1,2-Dibromo-3-Chloropropane	96-12-8	0.00200	C4 U	0.000276	0.00200	0.00500	1	03/17/2022 17:37	WG1833960
Dibromomethane	74-95-3	0.000500	U	0.000122	0.000500	0.00100	1	03/17/2022 17:37	WG1833960
1,2-Dichlorobenzene	95-50-1	0.000500	U	0.000107	0.000500	0.00100	1	03/17/2022 17:37	WG1833960
1,3-Dichlorobenzene	541-73-1	0.000500	U	0.000110	0.000500	0.00100	1	03/17/2022 17:37	WG1833960
1,4-Dichlorobenzene	106-46-7	0.000500	U	0.000120	0.000500	0.00100	1	03/17/2022 17:37	WG1833960
Dichlorodifluoromethane	75-71-8	0.00200	U	0.000374	0.00200	0.00500	1	03/17/2022 17:37	WG1833960
1,1-Dichloroethane	75-34-3	0.000500	U	0.000100	0.000500	0.00100	1	03/17/2022 17:37	WG1833960
1,2-Dichloroethane	107-06-2	0.000500	U	0.0000819	0.000500	0.00100	1	03/17/2022 17:37	WG1833960
1,1-Dichloroethene	75-35-4	0.000500	U	0.000188	0.000500	0.00100	1	03/17/2022 17:37	WG1833960
cis-1,2-Dichloroethene	156-59-2	0.000500	U	0.000126	0.000500	0.00100	1	03/17/2022 17:37	WG1833960
trans-1,2-Dichloroethene	156-60-5	0.000500	U	0.000149	0.000500	0.00100	1	03/17/2022 17:37	WG1833960
1,2-Dichloropropane	78-87-5	0.000500	U	0.000149	0.000500	0.00100	1	03/17/2022 17:37	WG1833960
1,3-Dichloropropane	142-28-9	0.000500	U	0.000110	0.000500	0.00100	1	03/17/2022 17:37	WG1833960
2,2-Dichloropropane	594-20-7	0.000500	U	0.000161	0.000500	0.00100	1	03/17/2022 17:37	WG1833960
1,1-Dichloropropene	563-58-6	0.000500	U	0.000142	0.000500	0.00100	1	03/17/2022 17:37	WG1833960
cis-1,3-Dichloropropene	10061-01-5	0.000500	U	0.000111	0.000500	0.00100	1	03/17/2022 17:37	WG1833960
trans-1,3-Dichloropropene	10061-02-6	0.000500	U	0.000118	0.000500	0.00100	1	03/17/2022 17:37	WG1833960
1,3-Dichloropropene	542-75-6	0.000500	J4 U	0.000118	0.000500	0.00100	1	03/17/2022 17:37	WG1833960
TOTAL 1,3-Dichloropropene		0.000500	U	0.000118	0.000500	0.00100	1	03/18/2022 18:44	WG1834518
Ethylbenzene	100-41-4	0.000500	U	0.000137	0.000500	0.00100	1	03/17/2022 17:37	WG1833960
Hexachloro-1,3-butadiene	87-68-3	0.000750	U	0.000337	0.000750	0.00150	1	03/17/2022 17:37	WG1833960
2-Hexanone	591-78-6	0.000750	U	0.000787	0.000750	0.0100	1	03/17/2022 17:37	WG1833960
Isopropylbenzene	98-82-8	0.000500	U	0.000105	0.000500	0.00100	1	03/17/2022 17:37	WG1833960
p-Isopropyltoluene	99-87-6	0.000500	U	0.000120	0.000500	0.00100	1	03/17/2022 17:37	WG1833960
2-Butanone (MEK)	78-93-3	0.00500	U	0.00119	0.00500	0.0100	1	03/17/2022 17:37	WG1833960
Methylene Chloride	75-09-2	0.00200	U	0.000430	0.00200	0.00500	1	03/17/2022 17:37	WG1833960
4-Methyl-2-pentanone (MIBK)	108-10-1	0.00500	U	0.000478	0.00500	0.0100	1	03/17/2022 17:37	WG1833960
n-Propylbenzene	103-65-1	0.000500	U	0.0000993	0.000500	0.00100	1	03/18/2022 18:44	WG1834518
Styrene	100-42-5	0.000500	U	0.000118	0.000500	0.00100	1	03/17/2022 17:37	WG1833960
1,1,1,2-Tetrachloroethane	630-20-6	0.000500	U	0.000147	0.000500	0.00100	1	03/17/2022 17:37	WG1833960
1,1,2,2-Tetrachloroethane	79-34-5	0.000500	U	0.000133	0.000500	0.00100	1	03/18/2022 18:44	WG1834518
Tetrachloroethene	127-18-4	0.00600	U	0.000300	0.00600	0.0120	1	03/17/2022 17:37	WG1833960
Toluene	108-88-3	0.000600	U	0.000278	0.000600	0.00120	1	03/17/2022 17:37	WG1833960
1,2,3-Trichlorobenzene	87-61-6	0.000500	U	0.000230	0.000500	0.00100	1	03/17/2022 17:37	WG1833960
1,2,4-Trichlorobenzene	120-82-1	0.00100	U	0.000481	0.00100	0.00200	1	03/17/2022 17:37	WG1833960
1,2,4-Trimethylbenzene	95-63-6	0.00100	U	0.000322	0.00100	0.00200	1	03/17/2022 17:37	WG1833960

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

Analyte	CAS #	Result	Qualifier	DL	LOD	LOQ	Dilution	Analysis	Batch
		mg/l		mg/l	mg/l	mg/l		date / time	
1,3,5-Trimethylbenzene	108-67-8	0.000500	U	0.000104	0.000500	0.00100	1	03/17/2022 17:37	WG1833960
1,1,1-Trichloroethane	71-55-6	0.000500	U	0.000149	0.000500	0.00100	1	03/17/2022 17:37	WG1833960
1,1,2-Trichloroethane	79-00-5	0.000500	U	0.000158	0.000500	0.00100	1	03/17/2022 17:37	WG1833960
Trichloroethene	79-01-6	0.00465		0.000190	0.000500	0.00100	1	03/17/2022 17:37	WG1833960
Trichlorofluoromethane	75-69-4	0.00200	U	0.000160	0.00200	0.00500	1	03/17/2022 17:37	WG1833960
1,2,3-Trichloropropane	96-18-4	0.00100	U	0.000237	0.00100	0.00250	1	03/18/2022 18:44	WG1834518
Vinyl chloride	75-01-4	0.000500	U	0.000234	0.000500	0.00100	1	03/17/2022 17:37	WG1833960
o-Xylene	95-47-6	0.000500	U	0.000174	0.000500	0.00100	1	03/17/2022 17:37	WG1833960
m&p-Xylene	1330-20-7	0.000500	U	0.000430	0.000500	0.00200	1	03/17/2022 17:37	WG1833960
Xylenes, Total	1330-20-7	0.00150	U	0.000174	0.00150	0.00300	1	03/17/2022 17:37	WG1833960
(S) Toluene-d8	*2037-26-5*	*112*				*89.0-112*		*03/17/2022 17:37*	WG1833960
(S) Toluene-d8	*2037-26-5*	*103*				*89.0-112*		*03/18/2022 18:44*	WG1834518
(S) 4-Bromofluorobenzene	*460-00-4*	*100*				*85.0-114*		*03/17/2022 17:37*	WG1833960
(S) 4-Bromofluorobenzene	*460-00-4*	*99.1*				*85.0-114*		*03/18/2022 18:44*	WG1834518
(S) 1,2-Dichloroethane-d4	*17060-07-0*	*98.8*				*81.0-118*		*03/17/2022 17:37*	WG1833960
(S) 1,2-Dichloroethane-d4	*17060-07-0*	*95.3*				*81.0-118*		*03/18/2022 18:44*	WG1834518

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

Analyte	CAS #	Result mg/l	Qualifier	DL mg/l	LOD mg/l	LOQ mg/l	Dilution	Analysis date / time	Batch
Acetone	67-64-1	0.0250	C4 U	0.0113	0.0250	0.0500	1	03/17/2022 17:57	WG1833960
Benzene	71-43-2	0.000500	U	0.0000941	0.000500	0.00100	1	03/17/2022 17:57	WG1833960
Bromobenzene	108-86-1	0.000500	U	0.000118	0.000500	0.00100	1	03/17/2022 17:57	WG1833960
Bromochloromethane	74-97-5	0.000500	U	0.000128	0.000500	0.00100	1	03/17/2022 17:57	WG1833960
Bromodichloromethane	75-27-4	0.000500	U	0.000136	0.000500	0.00100	1	03/17/2022 17:57	WG1833960
Bromoform	75-25-2	0.000500	U	0.000129	0.000500	0.00100	1	03/17/2022 17:57	WG1833960
Bromomethane	74-83-9	0.00200	U	0.000605	0.00200	0.00500	1	03/17/2022 17:57	WG1833960
n-Butylbenzene	104-51-8	0.000500	U	0.000157	0.000500	0.00100	1	03/17/2022 17:57	WG1833960
sec-Butylbenzene	135-98-8	0.000500	U	0.000125	0.000500	0.00100	1	03/17/2022 17:57	WG1833960
tert-Butylbenzene	98-06-6	0.000500	U	0.000127	0.000500	0.00100	1	03/17/2022 17:57	WG1833960
Carbon disulfide	75-15-0	0.000500	U	0.0000960	0.000500	0.00100	1	03/17/2022 17:57	WG1833960
Carbon tetrachloride	56-23-5	0.000500	U	0.000128	0.000500	0.00100	1	03/17/2022 17:57	WG1833960
Chlorobenzene	108-90-7	0.000500	U	0.000116	0.000500	0.00100	1	03/17/2022 17:57	WG1833960
Chlorodibromomethane	124-48-1	0.000500	U	0.000140	0.000500	0.00100	1	03/17/2022 17:57	WG1833960
Chloroethane	75-00-3	0.00200	U	0.000192	0.00200	0.00500	1	03/17/2022 17:57	WG1833960
Chloroform	67-66-3	0.00200	U	0.000111	0.00200	0.00500	1	03/17/2022 17:57	WG1833960
Chloromethane	74-87-3	0.00200	U	0.000960	0.00200	0.00400	1	03/17/2022 17:57	WG1833960
2-Chlorotoluene	95-49-8	0.000500	U	0.000106	0.000500	0.00100	1	03/18/2022 19:05	WG1834518
4-Chlorotoluene	106-43-4	0.000500	U	0.000114	0.000500	0.00100	1	03/17/2022 17:57	WG1833960
1,2-Dibromoethane	106-93-4	0.000500	U	0.000126	0.000500	0.00100	1	03/17/2022 17:57	WG1833960
1,2-Dibromo-3-Chloropropane	96-12-8	0.00200	C4 U	0.000276	0.00200	0.00500	1	03/17/2022 17:57	WG1833960
Dibromomethane	74-95-3	0.000500	U	0.000122	0.000500	0.00100	1	03/17/2022 17:57	WG1833960
1,2-Dichlorobenzene	95-50-1	0.000500	U	0.000107	0.000500	0.00100	1	03/17/2022 17:57	WG1833960
1,3-Dichlorobenzene	541-73-1	0.000500	U	0.000110	0.000500	0.00100	1	03/17/2022 17:57	WG1833960
1,4-Dichlorobenzene	106-46-7	0.000500	U	0.000120	0.000500	0.00100	1	03/17/2022 17:57	WG1833960
Dichlorodifluoromethane	75-71-8	0.00200	U	0.000374	0.00200	0.00500	1	03/17/2022 17:57	WG1833960
1,1-Dichloroethane	75-34-3	0.000500	U	0.000100	0.000500	0.00100	1	03/17/2022 17:57	WG1833960
1,2-Dichloroethane	107-06-2	0.000500	U	0.0000819	0.000500	0.00100	1	03/17/2022 17:57	WG1833960
1,1-Dichloroethene	75-35-4	0.000500	U	0.000188	0.000500	0.00100	1	03/17/2022 17:57	WG1833960
cis-1,2-Dichloroethene	156-59-2	0.000500	U	0.000126	0.000500	0.00100	1	03/17/2022 17:57	WG1833960
trans-1,2-Dichloroethene	156-60-5	0.000500	U	0.000149	0.000500	0.00100	1	03/17/2022 17:57	WG1833960
1,2-Dichloropropane	78-87-5	0.000500	U	0.000149	0.000500	0.00100	1	03/17/2022 17:57	WG1833960
1,3-Dichloropropane	142-28-9	0.000500	U	0.000110	0.000500	0.00100	1	03/17/2022 17:57	WG1833960
2,2-Dichloropropane	594-20-7	0.000500	U	0.000161	0.000500	0.00100	1	03/17/2022 17:57	WG1833960
1,1-Dichloropropene	563-58-6	0.000500	U	0.000142	0.000500	0.00100	1	03/17/2022 17:57	WG1833960
cis-1,3-Dichloropropene	10061-01-5	0.000500	U	0.000111	0.000500	0.00100	1	03/17/2022 17:57	WG1833960
trans-1,3-Dichloropropene	10061-02-6	0.000500	U	0.000118	0.000500	0.00100	1	03/17/2022 17:57	WG1833960
1,3-Dichloropropene	542-75-6	0.000500	J4 U	0.000118	0.000500	0.00100	1	03/17/2022 17:57	WG1833960
TOTAL 1,3-Dichloropropene		0.000500	U	0.000118	0.000500	0.00100	1	03/18/2022 19:05	WG1834518
Ethylbenzene	100-41-4	0.000500	U	0.000137	0.000500	0.00100	1	03/17/2022 17:57	WG1833960
Hexachloro-1,3-butadiene	87-68-3	0.000750	U	0.000337	0.000750	0.00150	1	03/17/2022 17:57	WG1833960
2-Hexanone	591-78-6	0.000750	U	0.000787	0.000750	0.0100	1	03/17/2022 17:57	WG1833960
Isopropylbenzene	98-82-8	0.000500	U	0.000105	0.000500	0.00100	1	03/17/2022 17:57	WG1833960
p-Isopropyltoluene	99-87-6	0.000500	U	0.000120	0.000500	0.00100	1	03/17/2022 17:57	WG1833960
2-Butanone (MEK)	78-93-3	0.00500	U	0.00119	0.00500	0.0100	1	03/17/2022 17:57	WG1833960
Methylene Chloride	75-09-2	0.00200	U	0.000430	0.00200	0.00500	1	03/17/2022 17:57	WG1833960
4-Methyl-2-pentanone (MIBK)	108-10-1	0.00500	U	0.000478	0.00500	0.0100	1	03/17/2022 17:57	WG1833960
n-Propylbenzene	103-65-1	0.000500	U	0.0000993	0.000500	0.00100	1	03/18/2022 19:05	WG1834518
Styrene	100-42-5	0.000500	U	0.000118	0.000500	0.00100	1	03/17/2022 17:57	WG1833960
1,1,1,2-Tetrachloroethane	630-20-6	0.000500	U	0.000147	0.000500	0.00100	1	03/17/2022 17:57	WG1833960
1,1,2,2-Tetrachloroethane	79-34-5	0.000500	U	0.000133	0.000500	0.00100	1	03/18/2022 19:05	WG1834518
Tetrachloroethene	127-18-4	0.00600	U	0.000300	0.00600	0.0120	1	03/17/2022 17:57	WG1833960
Toluene	108-88-3	0.000600	U	0.000278	0.000600	0.00120	1	03/17/2022 17:57	WG1833960
1,2,3-Trichlorobenzene	87-61-6	0.000500	U	0.000230	0.000500	0.00100	1	03/17/2022 17:57	WG1833960
1,2,4-Trichlorobenzene	120-82-1	0.00100	U	0.000481	0.00100	0.00200	1	03/17/2022 17:57	WG1833960
1,2,4-Trimethylbenzene	95-63-6	0.00100	U	0.000322	0.00100	0.00200	1	03/17/2022 17:57	WG1833960

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

Analyte	CAS #	Result	Qualifier	DL	LOD	LOQ	Dilution	Analysis	Batch
		mg/l		mg/l	mg/l	mg/l		date / time	
1,3,5-Trimethylbenzene	108-67-8	0.000500	U	0.000104	0.000500	0.00100	1	03/17/2022 17:57	WG1833960
1,1,1-Trichloroethane	71-55-6	0.000500	U	0.000149	0.000500	0.00100	1	03/17/2022 17:57	WG1833960
1,1,2-Trichloroethane	79-00-5	0.000500	U	0.000158	0.000500	0.00100	1	03/17/2022 17:57	WG1833960
Trichloroethene	79-01-6	0.00346		0.000190	0.000500	0.00100	1	03/17/2022 17:57	WG1833960
Trichlorofluoromethane	75-69-4	0.00200	U	0.000160	0.00200	0.00500	1	03/17/2022 17:57	WG1833960
1,2,3-Trichloropropane	96-18-4	0.00100	U	0.000237	0.00100	0.00250	1	03/18/2022 19:05	WG1834518
Vinyl chloride	75-01-4	0.000500	U	0.000234	0.000500	0.00100	1	03/17/2022 17:57	WG1833960
o-Xylene	95-47-6	0.000500	U	0.000174	0.000500	0.00100	1	03/17/2022 17:57	WG1833960
m&p-Xylene	1330-20-7	0.000500	U	0.000430	0.000500	0.00200	1	03/17/2022 17:57	WG1833960
Xylenes, Total	1330-20-7	0.00150	U	0.000174	0.00150	0.00300	1	03/17/2022 17:57	WG1833960
(S) Toluene-d8	*2037-26-5*	*108*				*89.0-112*		*03/17/2022 17:57*	WG1833960
(S) Toluene-d8	*2037-26-5*	*102*				*89.0-112*		*03/18/2022 19:05*	WG1834518
(S) 4-Bromofluorobenzene	*460-00-4*	*98.4*				*85.0-114*		*03/17/2022 17:57*	WG1833960
(S) 4-Bromofluorobenzene	*460-00-4*	*98.0*				*85.0-114*		*03/18/2022 19:05*	WG1834518
(S) 1,2-Dichloroethane-d4	*17060-07-0*	*101*				*81.0-118*		*03/17/2022 17:57*	WG1833960
(S) 1,2-Dichloroethane-d4	*17060-07-0*	*95.4*				*81.0-118*		*03/18/2022 19:05*	WG1834518

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

Analyte	CAS #	Result mg/l	Qualifier	DL mg/l	LOD mg/l	LOQ mg/l	Dilution	Analysis date / time	Batch
Acetone	67-64-1	0.0250	C4 U	0.0113	0.0250	0.0500	1	03/17/2022 18:17	WG1833960
Benzene	71-43-2	0.000500	U	0.0000941	0.000500	0.00100	1	03/17/2022 18:17	WG1833960
Bromobenzene	108-86-1	0.000500	U	0.000118	0.000500	0.00100	1	03/17/2022 18:17	WG1833960
Bromochloromethane	74-97-5	0.000500	U	0.000128	0.000500	0.00100	1	03/17/2022 18:17	WG1833960
Bromodichloromethane	75-27-4	0.000500	U	0.000136	0.000500	0.00100	1	03/17/2022 18:17	WG1833960
Bromoform	75-25-2	0.000500	U	0.000129	0.000500	0.00100	1	03/17/2022 18:17	WG1833960
Bromomethane	74-83-9	0.00200	U	0.000605	0.00200	0.00500	1	03/17/2022 18:17	WG1833960
n-Butylbenzene	104-51-8	0.000500	U	0.000157	0.000500	0.00100	1	03/17/2022 18:17	WG1833960
sec-Butylbenzene	135-98-8	0.000500	U	0.000125	0.000500	0.00100	1	03/17/2022 18:17	WG1833960
tert-Butylbenzene	98-06-6	0.000500	U	0.000127	0.000500	0.00100	1	03/17/2022 18:17	WG1833960
Carbon disulfide	75-15-0	0.000500	U	0.0000960	0.000500	0.00100	1	03/17/2022 18:17	WG1833960
Carbon tetrachloride	56-23-5	0.000500	U	0.000128	0.000500	0.00100	1	03/17/2022 18:17	WG1833960
Chlorobenzene	108-90-7	0.000500	U	0.000116	0.000500	0.00100	1	03/17/2022 18:17	WG1833960
Chlorodibromomethane	124-48-1	0.000500	U	0.000140	0.000500	0.00100	1	03/17/2022 18:17	WG1833960
Chloroethane	75-00-3	0.00200	U	0.000192	0.00200	0.00500	1	03/17/2022 18:17	WG1833960
Chloroform	67-66-3	0.00200	U	0.000111	0.00200	0.00500	1	03/17/2022 18:17	WG1833960
Chloromethane	74-87-3	0.00200	U	0.000960	0.00200	0.00400	1	03/17/2022 18:17	WG1833960
2-Chlorotoluene	95-49-8	0.000500	U	0.000106	0.000500	0.00100	1	03/18/2022 19:25	WG1834518
4-Chlorotoluene	106-43-4	0.000500	U	0.000114	0.000500	0.00100	1	03/17/2022 18:17	WG1833960
1,2-Dibromoethane	106-93-4	0.000500	U	0.000126	0.000500	0.00100	1	03/17/2022 18:17	WG1833960
1,2-Dibromo-3-Chloropropane	96-12-8	0.00200	C4 U	0.000276	0.00200	0.00500	1	03/17/2022 18:17	WG1833960
Dibromomethane	74-95-3	0.000500	U	0.000122	0.000500	0.00100	1	03/17/2022 18:17	WG1833960
1,2-Dichlorobenzene	95-50-1	0.000500	U	0.000107	0.000500	0.00100	1	03/17/2022 18:17	WG1833960
1,3-Dichlorobenzene	541-73-1	0.000500	U	0.000110	0.000500	0.00100	1	03/17/2022 18:17	WG1833960
1,4-Dichlorobenzene	106-46-7	0.000500	U	0.000120	0.000500	0.00100	1	03/17/2022 18:17	WG1833960
Dichlorodifluoromethane	75-71-8	0.00200	U	0.000374	0.00200	0.00500	1	03/17/2022 18:17	WG1833960
1,1-Dichloroethane	75-34-3	0.000500	U	0.000100	0.000500	0.00100	1	03/17/2022 18:17	WG1833960
1,2-Dichloroethane	107-06-2	0.000500	U	0.0000819	0.000500	0.00100	1	03/17/2022 18:17	WG1833960
1,1-Dichloroethene	75-35-4	0.000500	U	0.000188	0.000500	0.00100	1	03/17/2022 18:17	WG1833960
cis-1,2-Dichloroethene	156-59-2	0.000301	J	0.000126	0.000500	0.00100	1	03/17/2022 18:17	WG1833960
trans-1,2-Dichloroethene	156-60-5	0.000500	U	0.000149	0.000500	0.00100	1	03/17/2022 18:17	WG1833960
1,2-Dichloropropane	78-87-5	0.000500	U	0.000149	0.000500	0.00100	1	03/17/2022 18:17	WG1833960
1,3-Dichloropropane	142-28-9	0.000500	U	0.000110	0.000500	0.00100	1	03/17/2022 18:17	WG1833960
2,2-Dichloropropane	594-20-7	0.000500	U	0.000161	0.000500	0.00100	1	03/17/2022 18:17	WG1833960
1,1-Dichloropropene	563-58-6	0.000500	U	0.000142	0.000500	0.00100	1	03/17/2022 18:17	WG1833960
cis-1,3-Dichloropropene	10061-01-5	0.000500	U	0.000111	0.000500	0.00100	1	03/17/2022 18:17	WG1833960
trans-1,3-Dichloropropene	10061-02-6	0.000500	U	0.000118	0.000500	0.00100	1	03/17/2022 18:17	WG1833960
1,3-Dichloropropene	542-75-6	0.000500	J4 U	0.000118	0.000500	0.00100	1	03/17/2022 18:17	WG1833960
TOTAL 1,3-Dichloropropene		0.000500	U	0.000118	0.000500	0.00100	1	03/18/2022 19:25	WG1834518
Ethylbenzene	100-41-4	0.000500	U	0.000137	0.000500	0.00100	1	03/17/2022 18:17	WG1833960
Hexachloro-1,3-butadiene	87-68-3	0.000750	U	0.000337	0.000750	0.00150	1	03/17/2022 18:17	WG1833960
2-Hexanone	591-78-6	0.000750	U	0.000787	0.000750	0.0100	1	03/17/2022 18:17	WG1833960
Isopropylbenzene	98-82-8	0.000500	U	0.000105	0.000500	0.00100	1	03/17/2022 18:17	WG1833960
p-Isopropyltoluene	99-87-6	0.000500	U	0.000120	0.000500	0.00100	1	03/17/2022 18:17	WG1833960
2-Butanone (MEK)	78-93-3	0.00500	U	0.00119	0.00500	0.0100	1	03/17/2022 18:17	WG1833960
Methylene Chloride	75-09-2	0.00200	U	0.000430	0.00200	0.00500	1	03/17/2022 18:17	WG1833960
4-Methyl-2-pentanone (MIBK)	108-10-1	0.00500	U	0.000478	0.00500	0.0100	1	03/17/2022 18:17	WG1833960
n-Propylbenzene	103-65-1	0.000500	U	0.0000993	0.000500	0.00100	1	03/18/2022 19:25	WG1834518
Styrene	100-42-5	0.000500	U	0.000118	0.000500	0.00100	1	03/17/2022 18:17	WG1833960
1,1,1,2-Tetrachloroethane	630-20-6	0.000500	U	0.000147	0.000500	0.00100	1	03/17/2022 18:17	WG1833960
1,1,2,2-Tetrachloroethane	79-34-5	0.000500	U	0.000133	0.000500	0.00100	1	03/18/2022 19:25	WG1834518
Tetrachloroethene	127-18-4	0.00600	U	0.000300	0.00600	0.0120	1	03/17/2022 18:17	WG1833960
Toluene	108-88-3	0.000600	U	0.000278	0.000600	0.00120	1	03/17/2022 18:17	WG1833960
1,2,3-Trichlorobenzene	87-61-6	0.000500	U	0.000230	0.000500	0.00100	1	03/17/2022 18:17	WG1833960
1,2,4-Trichlorobenzene	120-82-1	0.00100	U	0.000481	0.00100	0.00200	1	03/17/2022 18:17	WG1833960
1,2,4-Trimethylbenzene	95-63-6	0.00100	U	0.000322	0.00100	0.00200	1	03/17/2022 18:17	WG1833960

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

Analyte	CAS #	Result	Qualifier	DL	LOD	LOQ	Dilution	Analysis	Batch
		mg/l		mg/l	mg/l	mg/l		date / time	
1,3,5-Trimethylbenzene	108-67-8	0.000500	U	0.000104	0.000500	0.00100	1	03/17/2022 18:17	WG1833960
1,1,1-Trichloroethane	71-55-6	0.000500	U	0.000149	0.000500	0.00100	1	03/17/2022 18:17	WG1833960
1,1,2-Trichloroethane	79-00-5	0.000500	U	0.000158	0.000500	0.00100	1	03/17/2022 18:17	WG1833960
Trichloroethene	79-01-6	0.00990		0.000190	0.000500	0.00100	1	03/17/2022 18:17	WG1833960
Trichlorofluoromethane	75-69-4	0.00200	U	0.000160	0.00200	0.00500	1	03/17/2022 18:17	WG1833960
1,2,3-Trichloropropane	96-18-4	0.00100	U	0.000237	0.00100	0.00250	1	03/18/2022 19:25	WG1834518
Vinyl chloride	75-01-4	0.000500	U	0.000234	0.000500	0.00100	1	03/17/2022 18:17	WG1833960
o-Xylene	95-47-6	0.000500	U	0.000174	0.000500	0.00100	1	03/17/2022 18:17	WG1833960
m&p-Xylene	1330-20-7	0.000500	U	0.000430	0.000500	0.00200	1	03/17/2022 18:17	WG1833960
Xylenes, Total	1330-20-7	0.00150	U	0.000174	0.00150	0.00300	1	03/17/2022 18:17	WG1833960
(S) Toluene-d8	*2037-26-5*	*112*				*89.0-112*		*03/17/2022 18:17*	WG1833960
(S) Toluene-d8	*2037-26-5*	*104*				*89.0-112*		*03/18/2022 19:25*	WG1834518
(S) 4-Bromofluorobenzene	*460-00-4*	*96.7*				*85.0-114*		*03/17/2022 18:17*	WG1833960
(S) 4-Bromofluorobenzene	*460-00-4*	*98.6*				*85.0-114*		*03/18/2022 19:25*	WG1834518
(S) 1,2-Dichloroethane-d4	*17060-07-0*	*100*				*81.0-118*		*03/17/2022 18:17*	WG1833960
(S) 1,2-Dichloroethane-d4	*17060-07-0*	*96.2*				*81.0-118*		*03/18/2022 19:25*	WG1834518

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	CAS #	Result mg/l	Qualifier	DL mg/l	LOD mg/l	LOQ mg/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	TPH C6 - C12	0.518		0.0316	0.0670	0.134	1	03/18/2022 10:41	WG1834448
(S) a,a,a-Trifluorotoluene(FID)	*98-08-8*	*98.1*				*78.0-120*		*03/18/2022 10:41*	WG1834448

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

Analyte	CAS #	Result mg/l	Qualifier	DL mg/l	LOD mg/l	LOQ mg/l	Dilution	Analysis date / time	Batch
Acetone	67-64-1	0.0250	C4 U	0.0113	0.0250	0.0500	1	03/17/2022 18:38	WG1833960
Benzene	71-43-2	0.000413	J	0.0000941	0.000500	0.00100	1	03/17/2022 18:38	WG1833960
Bromobenzene	108-86-1	0.000500	U	0.000118	0.000500	0.00100	1	03/17/2022 18:38	WG1833960
Bromochloromethane	74-97-5	0.000500	U	0.000128	0.000500	0.00100	1	03/17/2022 18:38	WG1833960
Bromodichloromethane	75-27-4	0.000500	U	0.000136	0.000500	0.00100	1	03/17/2022 18:38	WG1833960
Bromoform	75-25-2	0.000500	U	0.000129	0.000500	0.00100	1	03/17/2022 18:38	WG1833960
Bromomethane	74-83-9	0.00200	U	0.000605	0.00200	0.00500	1	03/17/2022 18:38	WG1833960
n-Butylbenzene	104-51-8	0.000890	J	0.000157	0.000500	0.00100	1	03/17/2022 18:38	WG1833960
sec-Butylbenzene	135-98-8	0.000811	J	0.000125	0.000500	0.00100	1	03/17/2022 18:38	WG1833960
tert-Butylbenzene	98-06-6	0.000500	U	0.000127	0.000500	0.00100	1	03/17/2022 18:38	WG1833960
Carbon disulfide	75-15-0	0.000500	U	0.0000960	0.000500	0.00100	1	03/17/2022 18:38	WG1833960
Carbon tetrachloride	56-23-5	0.000500	U	0.000128	0.000500	0.00100	1	03/17/2022 18:38	WG1833960
Chlorobenzene	108-90-7	0.000500	U	0.000116	0.000500	0.00100	1	03/17/2022 18:38	WG1833960
Chlorodibromomethane	124-48-1	0.000500	U	0.000140	0.000500	0.00100	1	03/17/2022 18:38	WG1833960
Chloroethane	75-00-3	0.00200	U	0.000192	0.00200	0.00500	1	03/17/2022 18:38	WG1833960
Chloroform	67-66-3	0.00200	U	0.000111	0.00200	0.00500	1	03/17/2022 18:38	WG1833960
Chloromethane	74-87-3	0.00200	U	0.000960	0.00200	0.00400	1	03/17/2022 18:38	WG1833960
2-Chlorotoluene	95-49-8	0.000500	U	0.000106	0.000500	0.00100	1	03/18/2022 19:46	WG1834518
4-Chlorotoluene	106-43-4	0.000500	U	0.000114	0.000500	0.00100	1	03/17/2022 18:38	WG1833960
1,2-Dibromoethane	106-93-4	0.000500	U	0.000126	0.000500	0.00100	1	03/17/2022 18:38	WG1833960
1,2-Dibromo-3-Chloropropane	96-12-8	0.00200	C4 U	0.000276	0.00200	0.00500	1	03/17/2022 18:38	WG1833960
Dibromomethane	74-95-3	0.000500	U	0.000122	0.000500	0.00100	1	03/17/2022 18:38	WG1833960
1,2-Dichlorobenzene	95-50-1	0.000472	J	0.000107	0.000500	0.00100	1	03/17/2022 18:38	WG1833960
1,3-Dichlorobenzene	541-73-1	0.000500	U	0.000110	0.000500	0.00100	1	03/17/2022 18:38	WG1833960
1,4-Dichlorobenzene	106-46-7	0.000500	U	0.000120	0.000500	0.00100	1	03/17/2022 18:38	WG1833960
Dichlorodifluoromethane	75-71-8	0.00200	U	0.000374	0.00200	0.00500	1	03/17/2022 18:38	WG1833960
1,1-Dichloroethane	75-34-3	0.000500	U	0.000100	0.000500	0.00100	1	03/17/2022 18:38	WG1833960
1,2-Dichloroethane	107-06-2	0.000500	U	0.0000819	0.000500	0.00100	1	03/17/2022 18:38	WG1833960
1,1-Dichloroethene	75-35-4	0.000500	U	0.000188	0.000500	0.00100	1	03/17/2022 18:38	WG1833960
cis-1,2-Dichloroethene	156-59-2	0.000500	U	0.000126	0.000500	0.00100	1	03/17/2022 18:38	WG1833960
trans-1,2-Dichloroethene	156-60-5	0.000500	U	0.000149	0.000500	0.00100	1	03/17/2022 18:38	WG1833960
1,2-Dichloropropane	78-87-5	0.000500	U	0.000149	0.000500	0.00100	1	03/17/2022 18:38	WG1833960
1,3-Dichloropropane	142-28-9	0.000500	U	0.000110	0.000500	0.00100	1	03/17/2022 18:38	WG1833960
2,2-Dichloropropane	594-20-7	0.000500	U	0.000161	0.000500	0.00100	1	03/17/2022 18:38	WG1833960
1,1-Dichloropropene	563-58-6	0.000500	U	0.000142	0.000500	0.00100	1	03/17/2022 18:38	WG1833960
cis-1,3-Dichloropropene	10061-01-5	0.000500	U	0.000111	0.000500	0.00100	1	03/17/2022 18:38	WG1833960
trans-1,3-Dichloropropene	10061-02-6	0.000500	U	0.000118	0.000500	0.00100	1	03/17/2022 18:38	WG1833960
1,3-Dichloropropene	542-75-6	0.000500	J4 U	0.000118	0.000500	0.00100	1	03/17/2022 18:38	WG1833960
TOTAL 1,3-Dichloropropene		0.000500	U	0.000118	0.000500	0.00100	1	03/18/2022 19:46	WG1834518
Ethylbenzene	100-41-4	0.00150		0.000137	0.000500	0.00100	1	03/17/2022 18:38	WG1833960
Hexachloro-1,3-butadiene	87-68-3	0.000750	U	0.000337	0.000750	0.00150	1	03/17/2022 18:38	WG1833960
2-Hexanone	591-78-6	0.000750	U	0.000787	0.000750	0.0100	1	03/17/2022 18:38	WG1833960
Isopropylbenzene	98-82-8	0.00141		0.000105	0.000500	0.00100	1	03/17/2022 18:38	WG1833960
p-Isopropyltoluene	99-87-6	0.00190		0.000120	0.000500	0.00100	1	03/17/2022 18:38	WG1833960
2-Butanone (MEK)	78-93-3	0.00500	U	0.00119	0.00500	0.0100	1	03/17/2022 18:38	WG1833960
Methylene Chloride	75-09-2	0.00200	U	0.000430	0.00200	0.00500	1	03/17/2022 18:38	WG1833960
4-Methyl-2-pentanone (MIBK)	108-10-1	0.00500	U	0.000478	0.00500	0.0100	1	03/17/2022 18:38	WG1833960
n-Propylbenzene	103-65-1	0.00187		0.0000993	0.000500	0.00100	1	03/18/2022 19:46	WG1834518

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

Analyte	CAS #	Result mg/l	Qualifier	DL mg/l	LOD mg/l	LOQ mg/l	Dilution	Analysis date / time	Batch
Styrene	100-42-5	0.000500	U	0.000118	0.000500	0.00100	1	03/17/2022 18:38	WG1833960
1,1,1,2-Tetrachloroethane	630-20-6	0.000500	U	0.000147	0.000500	0.00100	1	03/17/2022 18:38	WG1833960
1,1,2,2-Tetrachloroethane	79-34-5	0.000500	U	0.000133	0.000500	0.00100	1	03/18/2022 19:46	WG1834518
Tetrachloroethene	127-18-4	0.00600	U	0.000300	0.00600	0.0120	1	03/17/2022 18:38	WG1833960
Toluene	108-88-3	0.000600	U	0.000278	0.000600	0.00120	1	03/17/2022 18:38	WG1833960
1,2,3-Trichlorobenzene	87-61-6	0.000500	U	0.000230	0.000500	0.00100	1	03/17/2022 18:38	WG1833960
1,2,4-Trichlorobenzene	120-82-1	0.00100	U	0.000481	0.00100	0.00200	1	03/17/2022 18:38	WG1833960
1,2,4-Trimethylbenzene	95-63-6	0.0252		0.000322	0.00100	0.00200	1	03/17/2022 18:38	WG1833960
1,3,5-Trimethylbenzene	108-67-8	0.000500	U	0.000104	0.000500	0.00100	1	03/17/2022 18:38	WG1833960
1,1,1-Trichloroethane	71-55-6	0.000500	U	0.000149	0.000500	0.00100	1	03/17/2022 18:38	WG1833960
1,1,2-Trichloroethane	79-00-5	0.000500	U	0.000158	0.000500	0.00100	1	03/17/2022 18:38	WG1833960
Trichloroethene	79-01-6	0.000500	U	0.000190	0.000500	0.00100	1	03/17/2022 18:38	WG1833960
Trichlorofluoromethane	75-69-4	0.00200	U	0.000160	0.00200	0.00500	1	03/17/2022 18:38	WG1833960
1,2,3-Trichloropropane	96-18-4	0.00100	U	0.000237	0.00100	0.00250	1	03/18/2022 19:46	WG1834518
Vinyl chloride	75-01-4	0.000500	U	0.000234	0.000500	0.00100	1	03/17/2022 18:38	WG1833960
o-Xylene	95-47-6	0.000460	J	0.000174	0.000500	0.00100	1	03/17/2022 18:38	WG1833960
m&p-Xylene	1330-20-7	0.000500	U	0.000430	0.000500	0.00200	1	03/17/2022 18:38	WG1833960
Xylenes, Total	1330-20-7	0.000460	J	0.000174	0.00150	0.00300	1	03/17/2022 18:38	WG1833960
(S) Toluene-d8	*2037-26-5*	*111*				*89.0-112*		*03/17/2022 18:38*	WG1833960
(S) Toluene-d8	*2037-26-5*	*101*				*89.0-112*		*03/18/2022 19:46*	WG1834518
(S) 4-Bromofluorobenzene	*460-00-4*	*98.6*				*85.0-114*		*03/17/2022 18:38*	WG1833960
(S) 4-Bromofluorobenzene	*460-00-4*	*101*				*85.0-114*		*03/18/2022 19:46*	WG1834518
(S) 1,2-Dichloroethane-d4	*17060-07-0*	*96.1*				*81.0-118*		*03/17/2022 18:38*	WG1833960
(S) 1,2-Dichloroethane-d4	*17060-07-0*	*95.7*				*81.0-118*		*03/18/2022 19:46*	WG1834518

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	CAS #	Result mg/l	Qualifier	DL mg/l	LOD mg/l	LOQ mg/l	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	68334-30-5	14.3		0.333	0.750	1.50	10	03/22/2022 04:31	WG1834084
Residual Range Organics (RRO)	RRO	1.52		0.0833	0.167	0.334	1	03/19/2022 21:39	WG1834084
(S) o-Terphenyl	*84-15-1*	*92.1*				*31.0-160*		*03/22/2022 04:31*	WG1834084
(S) o-Terphenyl	*84-15-1*	*94.7*				*31.0-160*		*03/19/2022 21:39*	WG1834084

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

Analyte	CAS #	Result mg/l	Qualifier	DL mg/l	LOD mg/l	LOQ mg/l	Dilution	Analysis date / time	Batch
Anthracene	120-12-7	0.00500	U	0.0000800	0.00500	0.00100	1	03/18/2022 09:00	WG1833072
Benzyl alcohol	100-51-6	0.00500	U	0.000563	0.00500	0.0100	1	03/18/2022 09:00	WG1833072
Benzo(k)fluoranthene	207-08-9	0.00500	U	0.000120	0.00500	0.00100	1	03/18/2022 09:00	WG1833072
Benzo(g,h,i)perylene	191-24-2	0.00500	U	0.000121	0.00500	0.00100	1	03/18/2022 09:00	WG1833072
Benzo(b)fluoranthene	205-99-2	0.00500	U	0.000130	0.00500	0.00100	1	03/18/2022 09:00	WG1833072
Benzo(a)pyrene	50-32-8	0.00500	U	0.0000380	0.00500	0.00100	1	03/18/2022 09:00	WG1833072
Bis(2-chlorethoxy)methane	111-91-1	0.00500	U	0.000116	0.00500	0.0100	1	03/18/2022 09:00	WG1833072
Benzo(a)anthracene	56-55-3	0.00500	U	0.0000200	0.00500	0.00100	1	03/18/2022 09:00	WG1833072
Acenaphthylene	208-96-8	0.00500	U	0.0000920	0.00500	0.00100	1	03/18/2022 09:00	WG1833072
Bis(2-chloroethyl)ether	111-44-4	0.00500	U	0.000137	0.00500	0.0100	1	03/18/2022 09:00	WG1833072
Benzoic acid	65-85-0	0.00500	J3 U	0.00170	0.00500	0.0500	1	03/18/2022 09:00	WG1833072
2,2-Oxybis(1-Chloropropane)	108-60-1	0.00500	U	0.000210	0.00500	0.0100	1	03/18/2022 09:00	WG1833072
Acenaphthene	83-32-9	0.000783	J	0.0000880	0.00500	0.00100	1	03/18/2022 09:00	WG1833072
4-Bromophenyl-phenylether	101-55-3	0.00500	U	0.0000877	0.00500	0.0100	1	03/18/2022 09:00	WG1833072
Carbazole	86-74-8	0.00500	U	0.000111	0.00500	0.0100	1	03/18/2022 09:00	WG1833072
Chrysene	218-01-9	0.00500	U	0.000130	0.00500	0.00100	1	03/18/2022 09:00	WG1833072
4-Chloroaniline	106-47-8	0.00500	J3 U	0.000234	0.00500	0.0100	1	03/18/2022 09:00	WG1833072
2-Chloronaphthalene	91-58-7	0.000500	U	0.0000648	0.000500	0.00100	1	03/18/2022 09:00	WG1833072
4-Chlorophenyl-phenylether	7005-72-3	0.00500	U	0.0000926	0.00500	0.0100	1	03/18/2022 09:00	WG1833072

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

Analyte	CAS #	Result	Qualifier	DL	LOD	LOQ	Dilution	Analysis	Batch
		mg/l		mg/l	mg/l	mg/l		date / time	
Dibenz(a,h)anthracene	53-70-3	0.00500	U	0.0000640	0.00500	0.00100	1	03/18/2022 09:00	WG1833072
Dibenzofuran	132-64-9	0.00500	U	0.0000970	0.00500	0.0100	1	03/18/2022 09:00	WG1833072
3,3-Dichlorobenzidine	91-94-1	0.00500	U	0.000212	0.00500	0.0100	1	03/18/2022 09:00	WG1833072
2,4-Dinitrotoluene	121-14-2	0.00500	U	0.0000983	0.00500	0.0100	1	03/18/2022 09:00	WG1833072
2,6-Dinitrotoluene	606-20-2	0.00500	U	0.000250	0.00500	0.0100	1	03/18/2022 09:00	WG1833072
Fluoranthene	206-44-0	0.00500	U	0.000102	0.00500	0.00100	1	03/18/2022 09:00	WG1833072
Fluorene	86-73-7	0.00109		0.0000840	0.00500	0.00100	1	03/18/2022 09:00	WG1833072
Hexachlorobenzene	118-74-1	0.000500	U	0.0000755	0.000500	0.00100	1	03/18/2022 09:00	WG1833072
Hexachlorocyclopentadiene	77-47-4	0.00500	U	0.0000598	0.00500	0.0100	1	03/18/2022 09:00	WG1833072
Hexachloroethane	67-72-1	0.00500	U	0.000127	0.00500	0.0100	1	03/18/2022 09:00	WG1833072
Indeno(1,2,3-cd)pyrene	193-39-5	0.00500	U	0.000279	0.00500	0.00120	1	03/18/2022 09:00	WG1833072
Isophorone	78-59-1	0.00500	U	0.000143	0.00500	0.0100	1	03/18/2022 09:00	WG1833072
2-Nitroaniline	88-74-4	0.00500	U	0.000102	0.00500	0.0100	1	03/18/2022 09:00	WG1833072
3-Nitroaniline	99-09-2	0.00500	U	0.0000860	0.00500	0.0100	1	03/18/2022 09:00	WG1833072
4-Nitroaniline	100-01-6	0.00500	U	0.0000910	0.00500	0.0100	1	03/18/2022 09:00	WG1833072
Naphthalene	91-20-3	0.00129	B	0.000159	0.00500	0.00100	1	03/18/2022 09:00	WG1833072
Nitrobenzene	98-95-3	0.00500	U	0.000297	0.00500	0.0100	1	03/18/2022 09:00	WG1833072
n-Nitrosodimethylamine	62-75-9	0.00500	U	0.000998	0.00500	0.0100	1	03/18/2022 09:00	WG1833072
n-Nitrosodiphenylamine	86-30-6	0.00500	U	0.00237	0.00500	0.0100	1	03/18/2022 09:00	WG1833072
n-Nitrosodi-n-propylamine	621-64-7	0.00500	U	0.000261	0.00500	0.0100	1	03/18/2022 09:00	WG1833072
Benzylbutyl phthalate	85-68-7	0.00200	U	0.000765	0.00200	0.00400	1	03/18/2022 09:00	WG1833072
Bis(2-Ethylhexyl)phthalate	117-81-7	0.00200	U	0.000895	0.00200	0.00400	1	03/18/2022 09:00	WG1833072
Di-n-butyl phthalate	84-74-2	0.00150	U	0.000453	0.00150	0.00300	1	03/18/2022 09:00	WG1833072
Diethyl phthalate	84-66-2	0.00150	U	0.000287	0.00150	0.00300	1	03/18/2022 09:00	WG1833072
Dimethyl phthalate	131-11-3	0.00150	U	0.000260	0.00150	0.00300	1	03/18/2022 09:00	WG1833072
Di-n-octyl phthalate	117-84-0	0.00200	U	0.000932	0.00200	0.00400	1	03/18/2022 09:00	WG1833072
1,2,4-Trichlorobenzene	120-82-1	0.00500	U	0.0000698	0.00500	0.0100	1	03/18/2022 09:00	WG1833072
4-Chloro-3-methylphenol	59-50-7	0.00500	U	0.000131	0.00500	0.0100	1	03/18/2022 09:00	WG1833072
2-Chlorophenol	95-57-8	0.00500	U	0.000133	0.00500	0.0100	1	03/18/2022 09:00	WG1833072
2,4-Dichlorophenol	120-83-2	0.00500	U	0.000102	0.00500	0.0100	1	03/18/2022 09:00	WG1833072
2,4-Dimethylphenol	105-67-9	0.00500	U	0.0000636	0.00500	0.0100	1	03/18/2022 09:00	WG1833072
4,6-Dinitro-2-methylphenol	534-52-1	0.00500	U	0.00112	0.00500	0.0100	1	03/18/2022 09:00	WG1833072
2,4-Dinitrophenol	51-28-5	0.0150	U	0.00593	0.0150	0.0300	1	03/18/2022 09:00	WG1833072
1-Methylnaphthalene	90-12-0	0.00248		0.000117	0.0150	0.00100	1	03/18/2022 09:00	WG1833072
2-Methylnaphthalene	91-57-6	0.0150	U	0.000117	0.0150	0.00100	1	03/18/2022 09:00	WG1833072
2-Methylphenol	95-48-7	0.0150	U	0.0000920	0.0150	0.0100	1	03/18/2022 09:00	WG1833072
3&4-Methyl Phenol	3&4-Methyl Phenol	0.0150	U	0.000168	0.0150	0.0100	1	03/18/2022 09:00	WG1833072
2-Nitrophenol	88-75-5	0.00500	U	0.000117	0.00500	0.0100	1	03/18/2022 09:00	WG1833072
4-Nitrophenol	100-02-7	0.00500	U	0.000143	0.00500	0.0100	1	03/18/2022 09:00	WG1833072
Pentachlorophenol	87-86-5	0.00500	U	0.000313	0.00500	0.0100	1	03/18/2022 09:00	WG1833072
Phenanthrene	85-01-8	0.00500	U	0.000112	0.00500	0.00100	1	03/18/2022 09:00	WG1833072
Phenol	108-95-2	0.0100	U	0.00433	0.0100	0.0200	1	03/18/2022 09:00	WG1833072
Pyrene	129-00-0	0.000195	J	0.000107	0.0100	0.00100	1	03/18/2022 09:00	WG1833072
2,4,5-Trichlorophenol	95-95-4	0.0100	U	0.000109	0.0100	0.0100	1	03/18/2022 09:00	WG1833072
2,4,6-Trichlorophenol	88-06-2	0.00500	U	0.000100	0.00500	0.0100	1	03/18/2022 09:00	WG1833072
(S) 2-Fluorophenol	*367-12-4*	*31.4*				*19.0-119*		*03/18/2022 09:00*	WG1833072
(S) Phenol-d5	*4165-62-2*	*23.9*				*10.0-67.0*		*03/18/2022 09:00*	WG1833072
(S) Nitrobenzene-d5	*4165-60-0*	*63.7*				*44.0-120*		*03/18/2022 09:00*	WG1833072
(S) 2-Fluorobiphenyl	*321-60-8*	*56.0*				*44.0-119*		*03/18/2022 09:00*	WG1833072
(S) 2,4,6-Tribromophenol	*118-79-6*	*65.9*				*43.0-140*		*03/18/2022 09:00*	WG1833072
(S) p-Terphenyl-d14	*1718-51-0*	*50.5*				*50.0-134*		*03/18/2022 09:00*	WG1833072

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

Analyte	CAS #	Result mg/l	Qualifier	DL mg/l	LOD mg/l	LOQ mg/l	Dilution	Analysis date / time	Batch
Acetone	67-64-1	0.0250	C4 U	0.0113	0.0250	0.0500	1	03/17/2022 18:58	WG1833960
Benzene	71-43-2	0.000500	U	0.0000941	0.000500	0.00100	1	03/17/2022 18:58	WG1833960
Bromobenzene	108-86-1	0.000500	U	0.000118	0.000500	0.00100	1	03/17/2022 18:58	WG1833960
Bromochloromethane	74-97-5	0.000500	U	0.000128	0.000500	0.00100	1	03/17/2022 18:58	WG1833960
Bromodichloromethane	75-27-4	0.000500	U	0.000136	0.000500	0.00100	1	03/17/2022 18:58	WG1833960
Bromoform	75-25-2	0.000500	U	0.000129	0.000500	0.00100	1	03/17/2022 18:58	WG1833960
Bromomethane	74-83-9	0.00200	U	0.000605	0.00200	0.00500	1	03/17/2022 18:58	WG1833960
n-Butylbenzene	104-51-8	0.000500	U	0.000157	0.000500	0.00100	1	03/17/2022 18:58	WG1833960
sec-Butylbenzene	135-98-8	0.000500	U	0.000125	0.000500	0.00100	1	03/17/2022 18:58	WG1833960
tert-Butylbenzene	98-06-6	0.000500	U	0.000127	0.000500	0.00100	1	03/17/2022 18:58	WG1833960
Carbon disulfide	75-15-0	0.000500	U	0.0000960	0.000500	0.00100	1	03/17/2022 18:58	WG1833960
Carbon tetrachloride	56-23-5	0.000500	U	0.000128	0.000500	0.00100	1	03/17/2022 18:58	WG1833960
Chlorobenzene	108-90-7	0.000500	U	0.000116	0.000500	0.00100	1	03/17/2022 18:58	WG1833960
Chlorodibromomethane	124-48-1	0.000500	U	0.000140	0.000500	0.00100	1	03/17/2022 18:58	WG1833960
Chloroethane	75-00-3	0.00200	U	0.000192	0.00200	0.00500	1	03/17/2022 18:58	WG1833960
Chloroform	67-66-3	0.00200	U	0.000111	0.00200	0.00500	1	03/17/2022 18:58	WG1833960
Chloromethane	74-87-3	0.00200	U	0.000960	0.00200	0.00400	1	03/17/2022 18:58	WG1833960
2-Chlorotoluene	95-49-8	0.000500	U	0.000106	0.000500	0.00100	1	03/18/2022 20:06	WG1834518
4-Chlorotoluene	106-43-4	0.000500	U	0.000114	0.000500	0.00100	1	03/17/2022 18:58	WG1833960
1,2-Dibromoethane	106-93-4	0.000500	U	0.000126	0.000500	0.00100	1	03/17/2022 18:58	WG1833960
1,2-Dibromo-3-Chloropropane	96-12-8	0.00200	C4 U	0.000276	0.00200	0.00500	1	03/17/2022 18:58	WG1833960
Dibromomethane	74-95-3	0.000500	U	0.000122	0.000500	0.00100	1	03/17/2022 18:58	WG1833960
1,2-Dichlorobenzene	95-50-1	0.000500	U	0.000107	0.000500	0.00100	1	03/17/2022 18:58	WG1833960
1,3-Dichlorobenzene	541-73-1	0.000500	U	0.000110	0.000500	0.00100	1	03/17/2022 18:58	WG1833960
1,4-Dichlorobenzene	106-46-7	0.000500	U	0.000120	0.000500	0.00100	1	03/17/2022 18:58	WG1833960
Dichlorodifluoromethane	75-71-8	0.00200	U	0.000374	0.00200	0.00500	1	03/17/2022 18:58	WG1833960
1,1-Dichloroethane	75-34-3	0.000500	U	0.000100	0.000500	0.00100	1	03/17/2022 18:58	WG1833960
1,2-Dichloroethane	107-06-2	0.000500	U	0.0000819	0.000500	0.00100	1	03/17/2022 18:58	WG1833960
1,1-Dichloroethene	75-35-4	0.000500	U	0.000188	0.000500	0.00100	1	03/17/2022 18:58	WG1833960
cis-1,2-Dichloroethene	156-59-2	0.000500	U	0.000126	0.000500	0.00100	1	03/17/2022 18:58	WG1833960
trans-1,2-Dichloroethene	156-60-5	0.000500	U	0.000149	0.000500	0.00100	1	03/17/2022 18:58	WG1833960
1,2-Dichloropropane	78-87-5	0.000500	U	0.000149	0.000500	0.00100	1	03/17/2022 18:58	WG1833960
1,3-Dichloropropane	142-28-9	0.000500	U	0.000110	0.000500	0.00100	1	03/17/2022 18:58	WG1833960
2,2-Dichloropropane	594-20-7	0.000500	U	0.000161	0.000500	0.00100	1	03/17/2022 18:58	WG1833960
1,1-Dichloropropene	563-58-6	0.000500	U	0.000142	0.000500	0.00100	1	03/17/2022 18:58	WG1833960
cis-1,3-Dichloropropene	10061-01-5	0.000500	U	0.000111	0.000500	0.00100	1	03/17/2022 18:58	WG1833960
trans-1,3-Dichloropropene	10061-02-6	0.000500	U	0.000118	0.000500	0.00100	1	03/17/2022 18:58	WG1833960
1,3-Dichloropropene	542-75-6	0.000500	J4 U	0.000118	0.000500	0.00100	1	03/17/2022 18:58	WG1833960
TOTAL 1,3-Dichloropropene		0.000500	U	0.000118	0.000500	0.00100	1	03/18/2022 20:06	WG1834518
Ethylbenzene	100-41-4	0.000500	U	0.000137	0.000500	0.00100	1	03/17/2022 18:58	WG1833960
Hexachloro-1,3-butadiene	87-68-3	0.000750	U	0.000337	0.000750	0.00150	1	03/17/2022 18:58	WG1833960
2-Hexanone	591-78-6	0.000750	U	0.000787	0.000750	0.0100	1	03/17/2022 18:58	WG1833960
Isopropylbenzene	98-82-8	0.000500	U	0.000105	0.000500	0.00100	1	03/17/2022 18:58	WG1833960
p-Isopropyltoluene	99-87-6	0.000500	U	0.000120	0.000500	0.00100	1	03/17/2022 18:58	WG1833960
2-Butanone (MEK)	78-93-3	0.00500	U	0.00119	0.00500	0.0100	1	03/17/2022 18:58	WG1833960
Methylene Chloride	75-09-2	0.00200	U	0.000430	0.00200	0.00500	1	03/17/2022 18:58	WG1833960
4-Methyl-2-pentanone (MIBK)	108-10-1	0.00500	U	0.000478	0.00500	0.0100	1	03/17/2022 18:58	WG1833960
n-Propylbenzene	103-65-1	0.000500	U	0.0000993	0.000500	0.00100	1	03/18/2022 20:06	WG1834518
Styrene	100-42-5	0.000500	U	0.000118	0.000500	0.00100	1	03/17/2022 18:58	WG1833960
1,1,1,2-Tetrachloroethane	630-20-6	0.000500	U	0.000147	0.000500	0.00100	1	03/17/2022 18:58	WG1833960
1,1,2,2-Tetrachloroethane	79-34-5	0.000500	U	0.000133	0.000500	0.00100	1	03/18/2022 20:06	WG1834518
Tetrachloroethene	127-18-4	0.00600	U	0.000300	0.00600	0.0120	1	03/17/2022 18:58	WG1833960
Toluene	108-88-3	0.000600	U	0.000278	0.000600	0.00120	1	03/17/2022 18:58	WG1833960
1,2,3-Trichlorobenzene	87-61-6	0.000500	U	0.000230	0.000500	0.00100	1	03/17/2022 18:58	WG1833960
1,2,4-Trichlorobenzene	120-82-1	0.00100	U	0.000481	0.00100	0.00200	1	03/17/2022 18:58	WG1833960
1,2,4-Trimethylbenzene	95-63-6	0.00100	U	0.000322	0.00100	0.00200	1	03/17/2022 18:58	WG1833960

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

Analyte	CAS #	Result	Qualifier	DL	LOD	LOQ	Dilution	Analysis	Batch
		mg/l		mg/l	mg/l	mg/l		date / time	
1,3,5-Trimethylbenzene	108-67-8	0.000500	U	0.000104	0.000500	0.00100	1	03/17/2022 18:58	WG1833960
1,1,1-Trichloroethane	71-55-6	0.000500	U	0.000149	0.000500	0.00100	1	03/17/2022 18:58	WG1833960
1,1,2-Trichloroethane	79-00-5	0.000500	U	0.000158	0.000500	0.00100	1	03/17/2022 18:58	WG1833960
Trichloroethene	79-01-6	0.000500	U	0.000190	0.000500	0.00100	1	03/17/2022 18:58	WG1833960
Trichlorofluoromethane	75-69-4	0.00200	U	0.000160	0.00200	0.00500	1	03/17/2022 18:58	WG1833960
1,2,3-Trichloropropane	96-18-4	0.00100	U	0.000237	0.00100	0.00250	1	03/18/2022 20:06	WG1834518
Vinyl chloride	75-01-4	0.000500	U	0.000234	0.000500	0.00100	1	03/17/2022 18:58	WG1833960
o-Xylene	95-47-6	0.000500	U	0.000174	0.000500	0.00100	1	03/17/2022 18:58	WG1833960
m&p-Xylene	1330-20-7	0.000500	U	0.000430	0.000500	0.00200	1	03/17/2022 18:58	WG1833960
Xylenes, Total	1330-20-7	0.00150	U	0.000174	0.00150	0.00300	1	03/17/2022 18:58	WG1833960
(S) Toluene-d8	*2037-26-5*	*110*				*89.0-112*		*03/17/2022 18:58*	WG1833960
(S) Toluene-d8	*2037-26-5*	*103*				*89.0-112*		*03/18/2022 20:06*	WG1834518
(S) 4-Bromofluorobenzene	*460-00-4*	*98.3*				*85.0-114*		*03/17/2022 18:58*	WG1833960
(S) 4-Bromofluorobenzene	*460-00-4*	*100*				*85.0-114*		*03/18/2022 20:06*	WG1834518
(S) 1,2-Dichloroethane-d4	*17060-07-0*	*99.7*				*81.0-118*		*03/17/2022 18:58*	WG1833960
(S) 1,2-Dichloroethane-d4	*17060-07-0*	*96.1*				*81.0-118*		*03/18/2022 20:06*	WG1834518

Method Blank (MB)

(MB) R3771576-3 03/18/22 09:05

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
Gasoline Range Organics-NWTPH	0.0670	U	0.0316	0.0670	0.134
(S) a,a,a-Trifluorotoluene(FID)	*96.1*				*78.0-120*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3771576-1 03/18/22 07:56 • (LCSD) R3771576-2 03/18/22 08:19

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Gasoline Range Organics-NWTPH	5.50	5.03	5.68	91.5	103	78.0-122			12.1	30
(S) a,a,a-Trifluorotoluene(FID)				*105*	*106*	*78.0-120*				

L1470365-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1470365-05 03/18/22 17:38 • (MS) R3771576-4 03/18/22 19:10 • (MSD) R3771576-5 03/18/22 19:32

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Gasoline Range Organics-NWTPH	5.50	0.0670	5.31	4.84	96.5	88.0	1	78.0-122			9.26	30
(S) a,a,a-Trifluorotoluene(FID)					*105*	*105*		*78.0-120*				

Method Blank (MB)

(MB) R3771254-3 03/17/22 10:29

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
Acetone	0.0250	U	0.0113	0.0250	0.0500
Benzene	0.000500	U	0.0000941	0.000500	0.00100
Bromobenzene	0.000500	U	0.000118	0.000500	0.00100
Bromochloromethane	0.000500	U	0.000128	0.000500	0.00100
Bromodichloromethane	0.000500	U	0.000136	0.000500	0.00100
Bromoform	0.000500	U	0.000129	0.000500	0.00100
Bromomethane	0.00200	U	0.000605	0.00200	0.00500
n-Butylbenzene	0.000500	U	0.000157	0.000500	0.00100
sec-Butylbenzene	0.000500	U	0.000125	0.000500	0.00100
tert-Butylbenzene	0.000500	U	0.000127	0.000500	0.00100
Carbon disulfide	0.000500	U	0.0000960	0.000500	0.00100
Carbon tetrachloride	0.000500	U	0.000128	0.000500	0.00100
Chlorobenzene	0.000500	U	0.000116	0.000500	0.00100
Chlorodibromomethane	0.000500	U	0.000140	0.000500	0.00100
Chloroethane	0.00200	U	0.000192	0.00200	0.00500
Chloroform	0.00200	U	0.000111	0.00200	0.00500
Chloromethane	0.00200	U	0.000960	0.00200	0.00400
4-Chlorotoluene	0.000500	U	0.000114	0.000500	0.00100
1,2-Dibromoethane	0.000500	U	0.000126	0.000500	0.00100
1,2-Dibromo-3-Chloropropane	0.00200	U	0.000276	0.00200	0.00500
Dibromomethane	0.000500	U	0.000122	0.000500	0.00100
1,2-Dichlorobenzene	0.000500	U	0.000107	0.000500	0.00100
1,3-Dichlorobenzene	0.000500	U	0.000110	0.000500	0.00100
1,4-Dichlorobenzene	0.000500	U	0.000120	0.000500	0.00100
Dichlorodifluoromethane	0.00200	U	0.000374	0.00200	0.00500
1,1-Dichloroethane	0.000500	U	0.000100	0.000500	0.00100
1,2-Dichloroethane	0.000500	U	0.0000819	0.000500	0.00100
1,1-Dichloroethene	0.000500	U	0.000188	0.000500	0.00100
cis-1,2-Dichloroethene	0.000500	U	0.000126	0.000500	0.00100
trans-1,2-Dichloroethene	0.000500	U	0.000149	0.000500	0.00100
1,2-Dichloropropane	0.000500	U	0.000149	0.000500	0.00100
1,3-Dichloropropane	0.000500	U	0.000110	0.000500	0.00100
2,2-Dichloropropane	0.000500	U	0.000161	0.000500	0.00100
1,1-Dichloropropene	0.000500	U	0.000142	0.000500	0.00100
cis-1,3-Dichloropropene	0.000500	U	0.000111	0.000500	0.00100
trans-1,3-Dichloropropene	0.000500	U	0.000118	0.000500	0.00100
1,3-Dichloropropene	0.000500	U	0.000118	0.000500	0.00100
Ethylbenzene	0.000500	U	0.000137	0.000500	0.00100
Hexachloro-1,3-butadiene	0.000750	U	0.000337	0.000750	0.00150
2-Hexanone	0.000750	U	0.000787	0.000750	0.0100

Method Blank (MB)

(MB) R3771254-3 03/17/22 10:29

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
Isopropylbenzene	0.000500	U	0.000105	0.000500	0.00100
p-Isopropyltoluene	0.000500	U	0.000120	0.000500	0.00100
2-Butanone (MEK)	0.00500	U	0.00119	0.00500	0.0100
Methylene Chloride	0.00200	U	0.000430	0.00200	0.00500
4-Methyl-2-pentanone (MIBK)	0.00500	U	0.000478	0.00500	0.0100
Styrene	0.000500	U	0.000118	0.000500	0.00100
1,1,1,2-Tetrachloroethane	0.000500	U	0.000147	0.000500	0.00100
Tetrachloroethene	0.00600	U	0.000300	0.00600	0.0120
Toluene	0.000600	U	0.000278	0.000600	0.00120
1,2,3-Trichlorobenzene	0.000500	U	0.000230	0.000500	0.00100
1,2,4-Trichlorobenzene	0.00100	U	0.000481	0.00100	0.00200
1,2,4-Trimethylbenzene	0.00100	U	0.000322	0.00100	0.00200
1,3,5-Trimethylbenzene	0.000500	U	0.000104	0.000500	0.00100
1,1,1-Trichloroethane	0.000500	U	0.000149	0.000500	0.00100
1,1,2-Trichloroethane	0.000500	U	0.000158	0.000500	0.00100
Trichloroethene	0.000500	U	0.000190	0.000500	0.00100
Trichlorofluoromethane	0.00200	U	0.000160	0.00200	0.00500
Vinyl chloride	0.000500	U	0.000234	0.000500	0.00100
o-Xylene	0.000500	U	0.000174	0.000500	0.00100
m&p-Xylenes	0.000500	U	0.000430	0.000500	0.00200
Xylenes, Total	0.00150	U	0.000174	0.00150	0.00300
(S) Toluene-d8	*110*				*89.0-112*
(S) 4-Bromofluorobenzene	*101*				*85.0-114*
(S) 1,2-Dichloroethane-d4	*103*				*81.0-118*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3771254-1 03/17/22 09:07 • (LCSD) R3771254-2 03/17/22 09:28

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.0250	0.0182	0.0189	72.8	75.6	39.0-160			3.77	20
Benzene	0.00500	0.00554	0.00538	111	108	79.0-120			2.93	20
Bromobenzene	0.00500	0.00416	0.00410	83.2	82.0	80.0-120			1.45	20
Bromochloromethane	0.00500	0.00515	0.00497	103	99.4	78.0-123			3.56	20
Bromodichloromethane	0.00500	0.00516	0.00506	103	101	79.0-125			1.96	20
Bromoform	0.00500	0.00417	0.00430	83.4	86.0	66.0-130			3.07	20
Bromomethane	0.00500	0.00552	0.00514	110	103	53.0-141			7.13	20
n-Butylbenzene	0.00500	0.00481	0.00468	96.2	93.6	75.0-128			2.74	20
sec-Butylbenzene	0.00500	0.00535	0.00509	107	102	77.0-126			4.98	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3771254-1 03/17/22 09:07 • (LCSD) R3771254-2 03/17/22 09:28

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
tert-Butylbenzene	0.00500	0.00481	0.00472	96.2	94.4	78.0-124			1.89	20
Carbon disulfide	0.00500	0.00453	0.00422	90.6	84.4	64.0-133			7.09	20
Carbon tetrachloride	0.00500	0.00505	0.00480	101	96.0	72.0-136			5.08	20
Chlorobenzene	0.00500	0.00536	0.00531	107	106	82.0-118			0.937	20
Chlorodibromomethane	0.00500	0.00460	0.00453	92.0	90.6	74.0-126			1.53	20
Chloroethane	0.00500	0.00598	0.00555	120	111	60.0-138			7.46	20
Chloroform	0.00500	0.00545	0.00527	109	105	79.0-124			3.36	20
Chloromethane	0.00500	0.00573	0.00561	115	112	50.0-139			2.12	20
4-Chlorotoluene	0.00500	0.00439	0.00431	87.8	86.2	78.0-122			1.84	20
1,2-Dibromoethane	0.00500	0.00517	0.00516	103	103	77.0-121			0.194	20
1,2-Dibromo-3-Chloropropane	0.00500	0.00371	0.00353	74.2	70.6	62.0-128			4.97	20
Dibromomethane	0.00500	0.00475	0.00489	95.0	97.8	79.0-123			2.90	20
1,2-Dichlorobenzene	0.00500	0.00554	0.00525	111	105	80.0-119			5.38	20
1,3-Dichlorobenzene	0.00500	0.00539	0.00532	108	106	80.0-119			1.31	20
1,4-Dichlorobenzene	0.00500	0.00568	0.00533	114	107	79.0-118			6.36	20
Dichlorodifluoromethane	0.00500	0.00490	0.00485	98.0	97.0	32.0-152			1.03	20
1,1-Dichloroethane	0.00500	0.00558	0.00550	112	110	77.0-125			1.44	20
1,2-Dichloroethane	0.00500	0.00535	0.00511	107	102	73.0-128			4.59	20
1,1-Dichloroethene	0.00500	0.00478	0.00453	95.6	90.6	71.0-131			5.37	20
cis-1,2-Dichloroethene	0.00500	0.00521	0.00508	104	102	78.0-123			2.53	20
trans-1,2-Dichloroethene	0.00500	0.00520	0.00500	104	100	75.0-124			3.92	20
1,2-Dichloropropane	0.00500	0.00510	0.00484	102	96.8	78.0-122			5.23	20
1,3-Dichloropropane	0.00500	0.00544	0.00535	109	107	80.0-119			1.67	20
2,2-Dichloropropane	0.00500	0.00474	0.00442	94.8	88.4	60.0-139			6.99	20
1,1-Dichloropropene	0.00500	0.00490	0.00464	98.0	92.8	79.0-125			5.45	20
cis-1,3-Dichloropropene	0.00500	0.00517	0.00498	103	99.6	75.0-124			3.74	20
trans-1,3-Dichloropropene	0.00500	0.00469	0.00465	93.8	93.0	73.0-127			0.857	20
1,3-Dichloropropene	0.00500	0.00986	0.00963	197	193	79.0-125	J4	J4	2.36	20
Ethylbenzene	0.00500	0.00502	0.00485	100	97.0	79.0-121			3.44	20
Hexachloro-1,3-butadiene	0.00500	0.00527	0.00517	105	103	66.0-134			1.92	20
2-Hexanone	0.0250	0.0224	0.0224	89.6	89.6	57.0-139			0.000	20
Isopropylbenzene	0.00500	0.00536	0.00532	107	106	72.0-131			0.749	20
p-Isopropyltoluene	0.00500	0.00518	0.00507	104	101	77.0-127			2.15	20
2-Butanone (MEK)	0.0250	0.0216	0.0224	86.4	89.6	56.0-143			3.64	20
Methylene Chloride	0.00500	0.00481	0.00476	96.2	95.2	74.0-124			1.04	20
4-Methyl-2-pentanone (MIBK)	0.0250	0.0246	0.0246	98.4	98.4	67.0-130			0.000	20
Styrene	0.00500	0.00442	0.00446	88.4	89.2	78.0-123			0.901	20
1,1,1,2-Tetrachloroethane	0.00500	0.00524	0.00513	105	103	78.0-124			2.12	20
Tetrachloroethene	0.00500	0.00465	0.00455	93.0	91.0	74.0-129			2.17	20
Toluene	0.00500	0.00541	0.00529	108	106	80.0-121			2.24	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3771254-1 03/17/22 09:07 • (LCSD) R3771254-2 03/17/22 09:28

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,2,3-Trichlorobenzene	0.00500	0.00510	0.00503	102	101	69.0-129			1.38	20
1,2,4-Trichlorobenzene	0.00500	0.00491	0.00511	98.2	102	69.0-130			3.99	20
1,2,4-Trimethylbenzene	0.00500	0.00497	0.00487	99.4	97.4	76.0-124			2.03	20
1,3,5-Trimethylbenzene	0.00500	0.00411	0.00403	82.2	80.6	75.0-124			1.97	20
1,1,1-Trichloroethane	0.00500	0.00485	0.00466	97.0	93.2	74.0-131			4.00	20
1,1,2-Trichloroethane	0.00500	0.00519	0.00511	104	102	80.0-119			1.55	20
Trichloroethene	0.00500	0.00501	0.00478	100	95.6	79.0-123			4.70	20
Trichlorofluoromethane	0.00500	0.00512	0.00486	102	97.2	65.0-141			5.21	20
Vinyl chloride	0.00500	0.00523	0.00518	105	104	58.0-137			0.961	20
o-Xylene	0.00500	0.00491	0.00482	98.2	96.4	78.0-122			1.85	20
m&p-Xylenes	0.0100	0.0105	0.0104	105	104	80.0-121			0.957	20
Xylenes, Total	0.0150	0.0154	0.0152	103	101	79.0-121			1.31	20
(S) Toluene-d8				*108*	*109*	*89.0-112*				
(S) 4-Bromofluorobenzene				*97.9*	*98.1*	*85.0-114*				
(S) 1,2-Dichloroethane-d4				*103*	*102*	*81.0-118*				

L1471916-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1471916-01 03/17/22 15:14 • (MS) R3771254-4 03/17/22 19:18 • (MSD) R3771254-5 03/17/22 19:39

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.625	0.851	1.16	0.978	49.4	20.3	25	39.0-160		J6	17.0	20
Benzene	0.125	0.0125	0.156	0.118	125	94.4	25	79.0-120	J5	J3	27.7	20
Bromobenzene	0.125	0.0125	0.109	0.0951	87.2	76.1	25	80.0-120		J6	13.6	20
Bromochloromethane	0.125	0.0125	0.134	0.118	107	94.4	25	78.0-123			12.7	20
Bromodichloromethane	0.125	0.0125	0.139	0.124	111	99.2	25	79.0-125			11.4	20
Bromoform	0.125	0.0125	0.117	0.109	93.6	87.2	25	66.0-130			7.08	20
Bromomethane	0.125	0.0500	0.132	0.106	106	84.8	25	53.0-141		J3	21.8	20
n-Butylbenzene	0.125	0.00570	0.133	0.108	102	81.8	25	75.0-128		J3	20.7	20
sec-Butylbenzene	0.125	0.0125	0.143	0.115	114	92.0	25	77.0-126		J3	21.7	20
tert-Butylbenzene	0.125	0.0125	0.130	0.104	104	83.2	25	78.0-124		J3	22.2	20
Carbon disulfide	0.125	0.00808	0.116	0.0850	86.3	61.5	25	64.0-133		J3 J6	30.8	20
Carbon tetrachloride	0.125	0.0125	0.137	0.0920	110	73.6	25	72.0-136		J3	39.3	20
Chlorobenzene	0.125	0.0125	0.155	0.123	124	98.4	25	82.0-118	J5	J3	23.0	20
Chlorodibromomethane	0.125	0.0125	0.125	0.113	100	90.4	25	74.0-126			10.1	20
Chloroethane	0.125	0.0500	0.166	0.122	133	97.6	25	60.0-138		J3	30.6	20
Chloroform	0.125	0.0500	0.151	0.120	121	96.0	25	79.0-124		J3	22.9	20
Chloromethane	0.125	0.0500	0.168	0.130	134	104	25	50.0-139		J3	25.5	20
4-Chlorotoluene	0.125	0.0125	0.119	0.0991	95.2	79.3	25	78.0-122			18.2	20

L1471916-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1471916-01 03/17/22 15:14 • (MS) R3771254-4 03/17/22 19:18 • (MSD) R3771254-5 03/17/22 19:39

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
1,2-Dibromoethane	0.125	0.0125	0.144	0.134	115	107	25	77.0-121			7.19	20
1,2-Dibromo-3-Chloropropane	0.125	0.0500	0.102	0.0985	81.6	78.8	25	62.0-128			3.49	20
Dibromomethane	0.125	0.0125	0.134	0.120	107	96.0	25	79.0-123			11.0	20
1,2-Dichlorobenzene	0.125	0.0125	0.150	0.128	120	102	25	80.0-119	J5		15.8	20
1,3-Dichlorobenzene	0.125	0.0125	0.146	0.125	117	100	25	80.0-119			15.5	20
1,4-Dichlorobenzene	0.125	0.0125	0.149	0.129	119	103	25	79.0-118	J5		14.4	20
Dichlorodifluoromethane	0.125	0.0500	0.140	0.106	112	84.8	25	32.0-152		J3	27.6	20
1,1-Dichloroethane	0.125	0.0125	0.158	0.117	126	93.6	25	77.0-125	J5	J3	29.8	20
1,2-Dichloroethane	0.125	0.0125	0.142	0.123	114	98.4	25	73.0-128			14.3	20
1,1-Dichloroethene	0.125	0.0125	0.129	0.0948	103	75.8	25	71.0-131		J3	30.6	20
cis-1,2-Dichloroethene	0.125	0.0125	0.140	0.113	112	90.4	25	78.0-123		J3	21.3	20
trans-1,2-Dichloroethene	0.125	0.0125	0.142	0.106	114	84.8	25	75.0-124		J3	29.0	20
1,2-Dichloropropane	0.125	0.0125	0.135	0.118	108	94.4	25	78.0-122			13.4	20
1,3-Dichloropropane	0.125	0.0125	0.148	0.142	118	114	25	80.0-119			4.14	20
2,2-Dichloropropane	0.125	0.0253	0.136	0.0853	88.6	48.0	25	60.0-139		J3 J6	45.8	20
1,1-Dichloropropene	0.125	0.0125	0.140	0.0973	112	77.8	25	79.0-125		J3 J6	36.0	20
cis-1,3-Dichloropropene	0.125	0.0125	0.140	0.119	112	95.2	25	75.0-124			16.2	20
trans-1,3-Dichloropropene	0.125	0.0125	0.129	0.120	103	96.0	25	73.0-127			7.23	20
1,3-Dichloropropene	0.125	0.0125	0.269	0.239	215	191	25	79.0-125	J5	J5	11.8	20
Ethylbenzene	0.125	0.0163	0.152	0.122	109	84.6	25	79.0-121		J3	21.9	20
Hexachloro-1,3-butadiene	0.125	0.0188	0.137	0.116	110	92.8	25	66.0-134			16.6	20
2-Hexanone	0.625	0.0188	0.685	0.691	110	111	25	57.0-139			0.872	20
Isopropylbenzene	0.125	0.0125	0.158	0.119	126	95.2	25	72.0-131		J3	28.2	20
p-Isopropyltoluene	0.125	0.0125	0.146	0.115	117	92.0	25	77.0-127		J3	23.8	20
2-Butanone (MEK)	0.625	0.246	0.872	0.819	140	131	25	56.0-143			6.27	20
Methylene Chloride	0.125	0.0500	0.130	0.107	104	85.6	25	74.0-124			19.4	20
4-Methyl-2-pentanone (MIBK)	0.625	0.0386	0.762	0.748	116	114	25	67.0-130			1.85	20
Styrene	0.125	0.0125	0.135	0.109	108	87.2	25	78.0-123		J3	21.3	20
1,1,1,2-Tetrachloroethane	0.125	0.0125	0.145	0.113	116	90.4	25	78.0-124		J3	24.8	20
Tetrachloroethene	0.125	0.150	0.136	0.0996	109	79.7	25	74.0-129		J3	30.9	20
Toluene	0.125	2.37	2.52	2.50	120	104	25	80.0-121			0.797	20
1,2,3-Trichlorobenzene	0.125	0.0125	0.144	0.125	115	100	25	69.0-129			14.1	20
1,2,4-Trichlorobenzene	0.125	0.0250	0.152	0.126	122	101	25	69.0-130			18.7	20
1,2,4-Trimethylbenzene	0.125	0.0103	0.145	0.121	108	88.6	25	76.0-124			18.0	20
1,3,5-Trimethylbenzene	0.125	0.00265	0.110	0.0892	85.9	69.2	25	75.0-124		J3 J6	20.9	20
1,1,1-Trichloroethane	0.125	0.0125	0.135	0.0939	108	75.1	25	74.0-131		J3	35.9	20
1,1,2-Trichloroethane	0.125	0.0125	0.147	0.132	118	106	25	80.0-119			10.8	20
Trichloroethene	0.125	0.0125	0.123	0.0978	98.4	78.2	25	79.0-123		J3 J6	22.8	20
Trichlorofluoromethane	0.125	0.0500	0.144	0.102	115	81.6	25	65.0-141		J3	34.1	20
Vinyl chloride	0.125	0.0125	0.155	0.111	124	88.8	25	58.0-137		J3	33.1	20

L1471916-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1471916-01 03/17/22 15:14 • (MS) R3771254-4 03/17/22 19:18 • (MSD) R3771254-5 03/17/22 19:39

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
o-Xylene	0.125	0.0164	0.153	0.121	109	83.7	25	78.0-122		J3	23.4	20
m&p-Xylene	0.250	0.0278	0.345	0.270	127	96.9	25	80.0-121	J5	J3	24.4	20
Xylenes, Total	0.375	0.0375	0.498	0.391	133	104	25	79.0-121	J5	J3	24.1	20
(S) Toluene-d8					*112*	*110*		*89.0-112*				
(S) 4-Bromofluorobenzene					*101*	*103*		*85.0-114*				
(S) 1,2-Dichloroethane-d4					*98.9*	*100*		*81.0-118*				

Sample Narrative:

OS: Lowest possible dilution due to sample foaming.

Method Blank (MB)

(MB) R3771769-4 03/18/22 10:37

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
2-Chlorotoluene	0.000500	U	0.000106	0.000500	0.00100
Total 1,3-Dichloropropene	0.000500	U	0.000118	0.000500	0.00100
n-Propylbenzene	0.000500	U	0.0000993	0.000500	0.00100
1,1,2,2-Tetrachloroethane	0.000500	U	0.000133	0.000500	0.00100
1,2,3-Trichloropropane	0.00100	U	0.000237	0.00100	0.00250
(S) Toluene-d8	*104*				*89.0-112*
(S) 4-Bromofluorobenzene	*99.6*				*85.0-114*
(S) 1,2-Dichloroethane-d4	*92.2*				*81.0-118*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3771769-1 03/18/22 08:54 • (LCSD) R3771769-2 03/18/22 09:14

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
2-Chlorotoluene	0.00500	0.00494	0.00512	98.8	102	79.0-122			3.58	20
n-Propylbenzene	0.00500	0.00513	0.00520	103	104	76.0-126			1.36	20
1,1,2,2-Tetrachloroethane	0.00500	0.00513	0.00528	103	106	71.0-121			2.88	20
1,2,3-Trichloropropane	0.00500	0.00553	0.00581	111	116	73.0-122			4.94	20
(S) Toluene-d8				*103*	*100*	*89.0-112*				
(S) 4-Bromofluorobenzene				*101*	*101*	*85.0-114*				
(S) 1,2-Dichloroethane-d4				*89.6*	*92.5*	*81.0-118*				

Method Blank (MB)

(MB) R3771905-1 03/19/22 20:16

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
Diesel Range Organics (DRO)	0.0750	U	0.0333	0.0750	0.150
Residual Range Organics (RRO)	0.167	U	0.0833	0.167	0.334
(S) o-Terphenyl	*73.5*				*31.0-160*

Laboratory Control Sample (LCS)

(LCS) R3771905-2 03/19/22 20:37

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Diesel Range Organics (DRO)	1.50	1.40	93.3	50.0-150	
(S) o-Terphenyl			*94.0*	*31.0-160*	

Method Blank (MB)

(MB) R3771468-3 03/18/22 01:11

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
Anthracene	0.00500	U	0.0000800	0.00500	0.00100
Benzyl Alcohol	0.00500	U	0.000563	0.00500	0.0100
Benzo(k)fluoranthene	0.00500	U	0.000120	0.00500	0.00100
Benzo(g,h,i)perylene	0.00500	U	0.000121	0.00500	0.00100
Benzo(b)fluoranthene	0.00500	U	0.000130	0.00500	0.00100
Benzo(a)pyrene	0.00500	U	0.0000380	0.00500	0.00100
Bis(2-chlorethoxy)methane	0.00500	U	0.000116	0.00500	0.0100
Benzo(a)anthracene	0.00500	U	0.0000200	0.00500	0.00100
Acenaphthylene	0.00500	U	0.0000920	0.00500	0.00100
Bis(2-chloroethyl)ether	0.00500	U	0.000137	0.00500	0.0100
Benzoic Acid	0.00500	U	0.00170	0.00500	0.0500
2,2-oxybis(1-chloropropane)	0.00500	U	0.000210	0.00500	0.0100
Acenaphthene	0.00500	U	0.0000880	0.00500	0.00100
4-Bromophenyl-phenylether	0.00500	U	0.0000877	0.00500	0.0100
Carbazole	0.00500	U	0.000111	0.00500	0.0100
Chrysene	0.00500	U	0.000130	0.00500	0.00100
4-Chloroaniline	0.00500	U	0.000234	0.00500	0.0100
2-Chloronaphthalene	0.000500	U	0.0000648	0.000500	0.00100
4-Chlorophenyl-phenylether	0.00500	U	0.0000926	0.00500	0.0100
Dibenz(a,h)anthracene	0.00500	U	0.0000640	0.00500	0.00100
Dibenzofuran	0.00500	U	0.0000970	0.00500	0.0100
3,3-Dichlorobenzidine	0.00500	U	0.000212	0.00500	0.0100
2,4-Dinitrotoluene	0.00500	U	0.0000983	0.00500	0.0100
2,6-Dinitrotoluene	0.00500	U	0.000250	0.00500	0.0100
Fluoranthene	0.00500	U	0.000102	0.00500	0.00100
Fluorene	0.00500	U	0.0000840	0.00500	0.00100
Hexachlorobenzene	0.000500	U	0.0000755	0.000500	0.00100
Hexachlorocyclopentadiene	0.00500	U	0.0000598	0.00500	0.0100
Hexachloroethane	0.00500	U	0.000127	0.00500	0.0100
Indeno(1,2,3-cd)pyrene	0.00500	U	0.000279	0.00500	0.00120
Isophorone	0.00500	U	0.000143	0.00500	0.0100
2-Nitroaniline	0.00500	U	0.000102	0.00500	0.0100
3-Nitroaniline	0.00500	U	0.0000860	0.00500	0.0100
4-Nitroaniline	0.00500	U	0.0000910	0.00500	0.0100
Naphthalene	0.000573	J	0.000159	0.00500	0.00100
Nitrobenzene	0.00500	U	0.000297	0.00500	0.0100
n-Nitrosodimethylamine	0.00500	U	0.000998	0.00500	0.0100
n-Nitrosodiphenylamine	0.00500	U	0.00237	0.00500	0.0100
n-Nitrosodi-n-propylamine	0.00500	U	0.000261	0.00500	0.0100
Benzylbutyl phthalate	0.00200	U	0.000765	0.00200	0.00400

Method Blank (MB)

(MB) R3771468-3 03/18/22 01:11

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
Bis(2-ethylhexyl)phthalate	0.00200	U	0.000895	0.00200	0.00400
Di-n-butyl phthalate	0.00150	U	0.000453	0.00150	0.00300
Diethyl phthalate	0.00150	U	0.000287	0.00150	0.00300
Dimethyl phthalate	0.00150	U	0.000260	0.00150	0.00300
Di-n-octyl phthalate	0.00200	U	0.000932	0.00200	0.00400
1,2,4-Trichlorobenzene	0.00500	U	0.0000698	0.00500	0.0100
4-Chloro-3-methylphenol	0.00500	U	0.000131	0.00500	0.0100
2-Chlorophenol	0.00500	U	0.000133	0.00500	0.0100
2,4-Dichlorophenol	0.00500	U	0.000102	0.00500	0.0100
2,4-Dimethylphenol	0.00500	U	0.0000636	0.00500	0.0100
4,6-Dinitro-2-methylphenol	0.00500	U	0.00112	0.00500	0.0100
2,4-Dinitrophenol	0.0150	U	0.00593	0.0150	0.0300
1-Methylnaphthalene	0.000231	J	0.000117	0.0150	0.00100
2-Methylnaphthalene	0.000479	J	0.000117	0.0150	0.00100
2-Methylphenol	0.0150	U	0.0000920	0.0150	0.0100
3&4-Methyl Phenol	0.0150	U	0.000168	0.0150	0.0100
2-Nitrophenol	0.00500	U	0.000117	0.00500	0.0100
4-Nitrophenol	0.00500	U	0.000143	0.00500	0.0100
Pentachlorophenol	0.00500	U	0.000313	0.00500	0.0100
Phenanthrene	0.00500	U	0.000112	0.00500	0.00100
Phenol	0.0100	U	0.00433	0.0100	0.0200
Pyrene	0.0100	U	0.000107	0.0100	0.00100
2,4,5-Trichlorophenol	0.0100	U	0.000109	0.0100	0.0100
2,4,6-Trichlorophenol	0.00500	U	0.000100	0.00500	0.0100
(S) 2-Fluorophenol	*43.1*				*19.0-119*
(S) Phenol-d5	*24.3*				*10.0-67.0*
(S) Nitrobenzene-d5	*78.9*				*44.0-120*
(S) 2-Fluorobiphenyl	*91.0*				*44.0-119*
(S) 2,4,6-Tribromophenol	*96.0*				*43.0-140*
(S) p-Terphenyl-d14	*93.7*				*50.0-134*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3771468-1 03/18/22 00:28 • (LCSD) R3771468-2 03/18/22 00:50

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Anthracene	0.0500	0.0488	0.0490	97.6	98.0	57.0-123			0.409	20
Benzyl Alcohol	0.0500	0.0308	0.0312	61.6	62.4	31.0-112			1.29	20
Benzo(k)fluoranthene	0.0500	0.0490	0.0493	98.0	98.6	57.0-129			0.610	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3771468-1 03/18/22 00:28 • (LCSD) R3771468-2 03/18/22 00:50

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzo(g,h,i)perylene	0.0500	0.0500	0.0497	100	99.4	50.0-134			0.602	20
Benzo(b)fluoranthene	0.0500	0.0478	0.0467	95.6	93.4	53.0-131			2.33	20
Benzo(a)pyrene	0.0500	0.0544	0.0537	109	107	54.0-128			1.30	20
Bis(2-chlorethoxy)methane	0.0500	0.0386	0.0392	77.2	78.4	48.0-120			1.54	20
Benzo(a)anthracene	0.0500	0.0497	0.0501	99.4	100	58.0-125			0.802	20
Acenaphthylene	0.0500	0.0506	0.0503	101	101	41.0-130			0.595	20
Bis(2-chloroethyl)ether	0.0500	0.0436	0.0391	87.2	78.2	43.0-118			10.9	20
Benzoic Acid	0.100	0.0199	0.0103	19.9	10.3	10.0-120		J3	63.6	20
2,2-oxybis(1-chloropropane)	0.0500	0.0407	0.0416	81.4	83.2	37.0-130			2.19	20
Acenaphthene	0.0500	0.0459	0.0456	91.8	91.2	47.0-122			0.656	20
4-Bromophenyl-phenylether	0.0500	0.0520	0.0531	104	106	55.0-124			2.09	20
Carbazole	0.0500	0.0478	0.0481	95.6	96.2	60.0-122			0.626	20
Chrysene	0.0500	0.0463	0.0466	92.6	93.2	59.0-123			0.646	20
4-Chloroaniline	0.0500	0.0259	0.0327	51.8	65.4	33.0-117		J3	23.2	20
2-Chloronaphthalene	0.0500	0.0463	0.0460	92.6	92.0	40.0-116			0.650	20
4-Chlorophenyl-phenylether	0.0500	0.0489	0.0491	97.8	98.2	53.0-121			0.408	20
Dibenz(a,h)anthracene	0.0500	0.0485	0.0479	97.0	95.8	51.0-134			1.24	20
Dibenzofuran	0.0500	0.0482	0.0481	96.4	96.2	53.0-118			0.208	20
3,3-Dichlorobenzidine	0.100	0.105	0.108	105	108	27.0-129			2.82	20
2,4-Dinitrotoluene	0.0500	0.0547	0.0545	109	109	57.0-128			0.366	20
2,6-Dinitrotoluene	0.0500	0.0507	0.0506	101	101	57.0-124			0.197	20
Fluoranthene	0.0500	0.0502	0.0506	100	101	57.0-128			0.794	20
Fluorene	0.0500	0.0478	0.0476	95.6	95.2	52.0-124			0.419	20
Hexachlorobenzene	0.0500	0.0516	0.0520	103	104	53.0-125			0.772	20
Hexachlorocyclopentadiene	0.0500	0.0314	0.0300	62.8	60.0	10.0-121			4.56	20
Hexachloroethane	0.0500	0.0415	0.0408	83.0	81.6	21.0-115			1.70	20
Indeno(1,2,3-cd)pyrene	0.0500	0.0507	0.0496	101	99.2	52.0-134			2.19	20
Isophorone	0.0500	0.0384	0.0390	76.8	78.0	42.0-124			1.55	20
2-Nitroaniline	0.0500	0.0512	0.0513	102	103	55.0-127			0.195	20
3-Nitroaniline	0.0500	0.0466	0.0471	93.2	94.2	41.0-128			1.07	20
4-Nitroaniline	0.0500	0.0483	0.0488	96.6	97.6	35.0-124			1.03	20
Naphthalene	0.0500	0.0394	0.0400	78.8	80.0	40.0-121			1.51	20
Nitrobenzene	0.0500	0.0369	0.0377	73.8	75.4	45.0-121			2.14	20
n-Nitrosodimethylamine	0.0500	0.0210	0.0206	42.0	41.2	10.0-121			1.92	20
n-Nitrosodiphenylamine	0.0500	0.0460	0.0456	92.0	91.2	51.0-123			0.873	20
n-Nitrosodi-n-propylamine	0.0500	0.0415	0.0432	83.0	86.4	49.0-119			4.01	20
Benzylbutyl phthalate	0.0500	0.0463	0.0472	92.6	94.4	53.0-134			1.93	20
Bis(2-ethylhexyl)phthalate	0.0500	0.0463	0.0461	92.6	92.2	55.0-135			0.433	20
Di-n-butyl phthalate	0.0500	0.0490	0.0496	98.0	99.2	59.0-127			1.22	20
Diethyl phthalate	0.0500	0.0471	0.0471	94.2	94.2	56.0-125			0.000	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3771468-1 03/18/22 00:28 • (LCSD) R3771468-2 03/18/22 00:50

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Dimethyl phthalate	0.0500	0.0479	0.0475	95.8	95.0	45.0-127			0.839	20
Di-n-octyl phthalate	0.0500	0.0438	0.0433	87.6	86.6	51.0-140			1.15	20
1,2,4-Trichlorobenzene	0.0500	0.0413	0.0421	82.6	84.2	29.0-116			1.92	20
4-Chloro-3-methylphenol	0.0500	0.0379	0.0380	75.8	76.0	52.0-119			0.263	20
2-Chlorophenol	0.0500	0.0385	0.0389	77.0	77.8	38.0-117			1.03	20
2,4-Dichlorophenol	0.0500	0.0407	0.0409	81.4	81.8	47.0-121			0.490	20
2,4-Dimethylphenol	0.0500	0.0344	0.0355	68.8	71.0	31.0-124			3.15	20
4,6-Dinitro-2-methylphenol	0.0500	0.0555	0.0558	111	112	44.0-137			0.539	20
2,4-Dinitrophenol	0.0500	0.0505	0.0474	101	94.8	23.0-143			6.33	20
1-Methylnaphthalene	0.0500	0.0415	0.0421	83.0	84.2	41.0-119			1.44	20
2-Methylnaphthalene	0.0500	0.0407	0.0410	81.4	82.0	40.0-121			0.734	20
2-Methylphenol	0.0500	0.0322	0.0323	64.4	64.6	30.0-117			0.310	20
3&4-Methyl Phenol	0.0500	0.0323	0.0328	64.6	65.6	29.0-110			1.54	20
2-Nitrophenol	0.0500	0.0442	0.0456	88.4	91.2	47.0-123			3.12	20
4-Nitrophenol	0.0500	0.0155	0.0150	31.0	30.0	10.0-120			3.28	20
Pentachlorophenol	0.0500	0.0483	0.0467	96.6	93.4	35.0-138			3.37	20
Phenanthrene	0.0500	0.0461	0.0464	92.2	92.8	59.0-120			0.649	20
Phenol	0.0500	0.0134	0.0135	26.8	27.0	10.0-120			0.744	20
Pyrene	0.0500	0.0470	0.0476	94.0	95.2	65.0-129			1.27	20
2,4,5-Trichlorophenol	0.0500	0.0504	0.0497	101	99.4	50.0-125			1.40	20
2,4,6-Trichlorophenol	0.0500	0.0498	0.0496	99.6	99.2	53.0-123			0.402	20
(S) 2-Fluorophenol				*43.8*	*44.4*	*19.0-119*				
(S) Phenol-d5				*25.9*	*26.1*	*10.0-67.0*				
(S) Nitrobenzene-d5				*67.6*	*69.0*	*44.0-120*				
(S) 2-Fluorobiphenyl				*94.3*	*94.0*	*44.0-119*				
(S) 2,4,6-Tribromophenol				*117*	*115*	*43.0-140*				
(S) p-Terphenyl-d14				*95.4*	*96.4*	*50.0-134*				

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

DL	Detection Limit.
LOD	Limit of Detection.
LOQ	Limit of Quantitation.
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.
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.
C4	The reported concentration is an estimate. The continuing calibration standard associated with this data responded low. Data is likely to show a low bias concerning the result.
J	The identification of the analyte is acceptable; the reported value is an estimate.
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.
U	Below Detectable Limits: Indicates that the analyte was not detected.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
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	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
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

* 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 Analytical.

Company Name/Address:
INNOVEX/ERRG Joint Venture - Redmond, WA
16310 NE 80th St.

Billing Information:
Accounts Payable
1800 Sutter Street
Concord, CA 94520

Pres Chk

Report to: **Anna Jordan** / Jennifer Sonnichsen

Email To: **anna.jordan@innovex.net** jennifer.sonnichsen@errg.com

Project Description: **JBLM-YTC**

City/State Collected: Yakima, WA

Please Circle: (PT) MT CT ET

Phone: 206-949-3010

Client Project # 20506

Lab Project # **IEJVRWA-JBLM-YTC**

Collected by (print): H. Carter / A. Jordan

Site/Facility ID #

P.O. #

Collected by (signature): Anna Jordan

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST be Notified)
___ Same Day (X) Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	*Anions,DODALK&ALKBI 125mlHDPE-NoPres	DOD8270,DOD8270PAHSI 100ml Amb NoPres	DODNH3 125mlHDPENaThioH2S04	DODNWTPHDXNOSGT 100ml Amb-HCl	DODNWTPHGX 40mlAmb HCl	DODTDS 1L-HDPE NoPres	DODTOC 250mlAmb-Septa-HCl	DODV8260 40mlAmb-HCl	DODV8260BTEX 40mlAmb-HCl	Metals: 250mlHDPE-HNO3	Remarks	Sample # (lab only)
YTC-TVR-3-20220314	grab	GW		3/14/22	1140	3								X				-01
YTC-TVR-7-20220314		GW			1155	3								X				-02
YTC-TVR-1-20220314		GW			1205	3								X				-03
YTC-TVR-1b-20220314		GW			1205	3								X				-04
YTC-TVR-6-20220314		GW			1220	3								X				-05
YTC-Porous-20220314		GW			1225	3								X				-06
YTC-MTS-4-20220314		GW			1315	3								X				-07
YTC-MTS-1-20220314		GW			1330	3								X				-08
YTC-MTS-2-20220314		GW			1335	3								X				-09
YTC-FTP-1-20220314		GW			1410	9		X	X	X	X			X				-10

Chain of Custody Page 1 of 1

Pace PEOPLE ADVANCING SCIENCE

MT JULIET, TN
12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1471599
D126

Acctnum: **IEJVRWA**
Template: **T204077**
Prelogin: **P905918**
PM: **3500 - Jennifer Gambill**
PB: **DP 2.21.22**
Shipped Via:

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:*48hr Hold / Anions: DODCHLORIDE,DODNITRATE,DODNITRITE

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS X FedEx __ Courier _____

Tracking # 543383821332

Sample Receipt Checklist
COC Seal Present/Intact: __NP__ Y __N
COC Signed/Accurate: X Y __N
Bottles arrive intact: X Y __N
Correct bottles used: X Y __N
Sufficient volume sent: X Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: X 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
Anna Jordan	3/14/22	1615		Ø	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: BAGS 4.5±0=4.5 Bottles Received: 39	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 03/15/22 Time: 0930	Hold: Condition: NCF / (OK)

Company Name/Address:
INNOVEX/ERRG Joint Venture - Redmond, WA
16310 NE 80th St.

Billing Information:
Accounts Payable
1800 Sutter Street
Concord, CA 94520

Pres Chk

Report to: **Anna Jordan** / Jennifer Sonnichsen

Email To: **anna.jordan@innovex.net**

Project Description: **JBLM-YTC**

City/State Collected:

Please Circle: PT MT CT ET

Phone: 206.949.3010

Client Project # 20506

Lab Project # **IEJVRWA-JBLM-YTC**

Collected by (print): H. Carter / A. Jordan

Site/Facility ID #

P.O. #

Collected by (signature): Anna Jordan

Immediately Packed on Ice N ___ Y 1

Rush? (Lab MUST Be Notified)
___ Same Day 9 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	*Anions,DODALK&ALKBI 125mlHDPE-NoPres	DOD8270,DOD8270PAHSI 100ml Amb NoPres	DODNH3 125mlHDPENaThioH2S04	DODNWTPHDXNOSGT 100ml Amb-HCl	DODNWTPHGX 40mlAmb HCl	DODTDS 1L-HDPE NoPres	DODTOC 250mlAmb-Septa-HCl	DODV8260 40mlAmb-HCl	DODV8260BTEX 40mlAmb-HCl	Metals: 250mlHDPE-HNO3	Remarks	Sample # (lab only)
YTC-PAIC-20220314	grab	GW		3/14/22	1430	3								X				-11
		GW																
		GW																
		GW																
		GW																
		GW																
		GW																
		GW																
		GW																
		GW																

Chain of Custody Page ___ of ___

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN
12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # 2147599

Table #

Acctnum: **IEJVRWA**
Template: **T204077**
Prelogin: **P905918**
PM: **3500 - Jennifer Gambill**
PB: DP 2.21.22

Shipped Via:

Remarks | Sample # (lab only)

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:*48hr Hold / Anions: DODCHLORIDE,DODNITRATE,DODNITRITE

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS X FedEx __ Courier _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP X Y __N
COC Signed/Accurate: X Y __N
Bottles arrive intact: X Y __N
Correct bottles used: X Y __N
Sufficient volume sent: X Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: X Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / (No) HCL / MeoH TBR
Anna Jordan	3/14/22	1615		Ø
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 0.4+0=4.4 °C Bottles Received: 39
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 03/15/22 Time: 0930

If preservation required by Login: Date/Time

Hold:

Condition: NCF / (OK)

DATA VALIDATION CHECKLIST – STAGE 2A

Site Name	JBLM	**Project Name**	Yakima Training Center – IRP Sites
Data Reviewer (signature and date)	Anna J Jordan 10/25/2022	**Technical Reviewer (signature and date)**	Mary K Holland 11/15/2022
Laboratory Report No.	L1471599	**Laboratory**	Pace Analytical
Analyses	DOD8270PAH, DODNWTPHDX, DODNWTPHGX, DODVOC8260		
Sample and Matrix	YTC-TVR-3-20220314 (GW) L1471599-01 YTC-TVR-7-20220314 (GW) L1471599-02 YTC-TVR-1-20220314 (GW) L1471599-03 YTC-TVR-1b-20220314 (GW) L1471599-04 YTC-TVR-6-20220314 (GW) L1471599-05 YTC-Pomona-20220314 (GW) L1471599-06 YTC-MTS-4-20220314 (GW) L1471599-07 YTC-MTS-1-20220314 (GW) L1471599-08 YTC-MTS-2-20220314 (GW) L1471599-09 YTC-FTP-1-20220314 (GW) L1471599-10 YTC-PAIC-20220314 (GW) L1471599-11		
Field Duplicate Pairs	YTC-TVR-1-20220314 and YTC-TVR-1b-20220314		
Field Blanks	No trip blank was identified in this SDG		

INTRODUCTION

This checklist summarizes the Stage 2A validation performed on the subject laboratory report, in accordance with the U.S. Environmental Protection Agency (EPA) Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use (January 2009). Analytical data were evaluated in general accordance with the EPA National Functional Guidelines for Organic and Inorganic Superfund Methods Data Review (November 2020).

OVERALL EVALUATION

DATA VALIDATION CHECKLIST – STAGE 2A

All results are usable with the qualifications described in this checklist.

Data completeness and verification

Within Criteria	Exceedance/Notes
Y	

Sample preservation, receipt, and holding times:

Within Criteria	Exceedance/Notes
Y	All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times.

Method Blanks:

Within Criteria	Exceedance/Notes
Y	Method blanks were analyzed as required by the methods. No contaminants were found in the method blanks.

Field Blanks:

Within Criteria	Exceedance/Notes
NA	No trip blank was analyzed

System monitoring compounds (surrogates and labeled compounds):

Within Criteria	Exceedance/Notes
NA	Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

MS/MSD:

Within Criteria	Exceedance/Notes
Y	Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on an associated project sample. Percent recoveries (%R) were within QC limits, except those listed below.

Analyte	MS %R	MSD %R	QC Limits	New Qualifier
Acetone	NA	20.3	39.0-160	J- (all detects) UJ (all non-detects)
Benzene	125	NA	79.0-120	J (all detects) No qualification (all non-detects)
Bromobenzene	NA	76.1	80.0-120	J- (all detects) UJ (all non-detects)
Carbon disulfide	NA	61.5	64.0-133	J (all detects) UJ (all non-detects)
1,2-Dichlorobenzene	120	NA	80.0-119	J (all detects) No qualification (all non-detects)
1,4-Dichlorobenzene	119	NA	79.0-118	J (all detects) No qualification (all non-detects)
2,2-Dichloropropane	NA	48.0	60.0-139	J- (all detects) UJ (all non-detects)
1,1-Dichloropropane	NA	77.8	79.0-125	J (all detects) UJ (all non-detects)
1,3-Dichloropropene	215	191	79.0-125	J (all detects) No qualification (all non-detects)

Analyte	MS %R	MSD %R	QC Limits	New Qualifier
1,3,5-Trimethylbenzene	NA	69.2	75.0-124	J (all detects) UJ (all non-detects)
Trichloroethene	NA	78.2	79.0-123	J (all detects) UJ (all non-detects)
m & p Xylenes	127	NA	80.0-121	J (all detects) No qualification (all non-detects)
Total Xylenes	133	NA	79.0-121	J (all detects) No qualification (all non-detects)

Laboratory control:

Within Criteria	Exceedance/Notes
Y	Laboratory control samples (LCS) and laboratory control sample duplicate (LCSD) sample analysis were performed. Percent recoveries (%R) and Relative percent differences (RPD) were within QC limits (<20%), except the following.

Analyte	LCS %R	LCSD %R	QC Limits	New Qualifier
1,3-Dichloropropene	197	193	79.0-125	J+ (all detects) No qualification (all non-detects)

Field duplicates:

Within Criteria	Exceedance/Notes
Y	Field duplicate sample analysis was performed. Relative percent differences (RPD) were within QC limits.

DATA VALIDATION CHECKLIST – STAGE 2A

Sample dilutions:

Within Criteria	Exceedance/Notes
Y	All samples were analyzed undiluted except for the following.

Lab Sample ID	Project Sample ID	Method	Analyte	Dilution
L1471599-10	YTC-FTP-1-20220314	NWTPHDX-NO SGT	Diesel Range Organics	10

Re-extraction and reanalysis:

Within Criteria	Exceedance/Notes
NA	

MDLs/RLs:

Within Criteria	Exceedance/Notes
Y	Detections between the LOD and MDL (if present) were qualified as not detected (flagged U).

Tentatively identified compounds:

Within Criteria	Exceedance/Notes
NA	

Other [none]:

Within Criteria	Exceedance/Notes
NA	

Overall Qualifications:

The following is a list of qualifiers and definitions that may be used for the validation of this data package:

U	The analyte was not detected; the concentration of the analyte is less than the limit of detection.
J	The reported result was an estimated value with unknown bias.
J+	The result was an estimated quantity, but the results may be biased high.
J-	The result was an estimated quantity, but the results may be biased low.
N	The analysis indicates the presence of an analyte for which there was presumptive evidence to make a “tentative identification”.
NJ	The analyte has been “tentatively identified” or “presumptively” as present and the associated numerical value was the estimated concentration in the sample.
UJ	The analyte was not detected and was reported as less than the LOD or as defined by the customer, however, the associated numerical value is approximate.
X	The presence or absence of the analyte cannot be substantiated by the data provided. Exclusion of the data is recommended.

ANALYTICAL REPORT

November 16, 2022

Revised Report

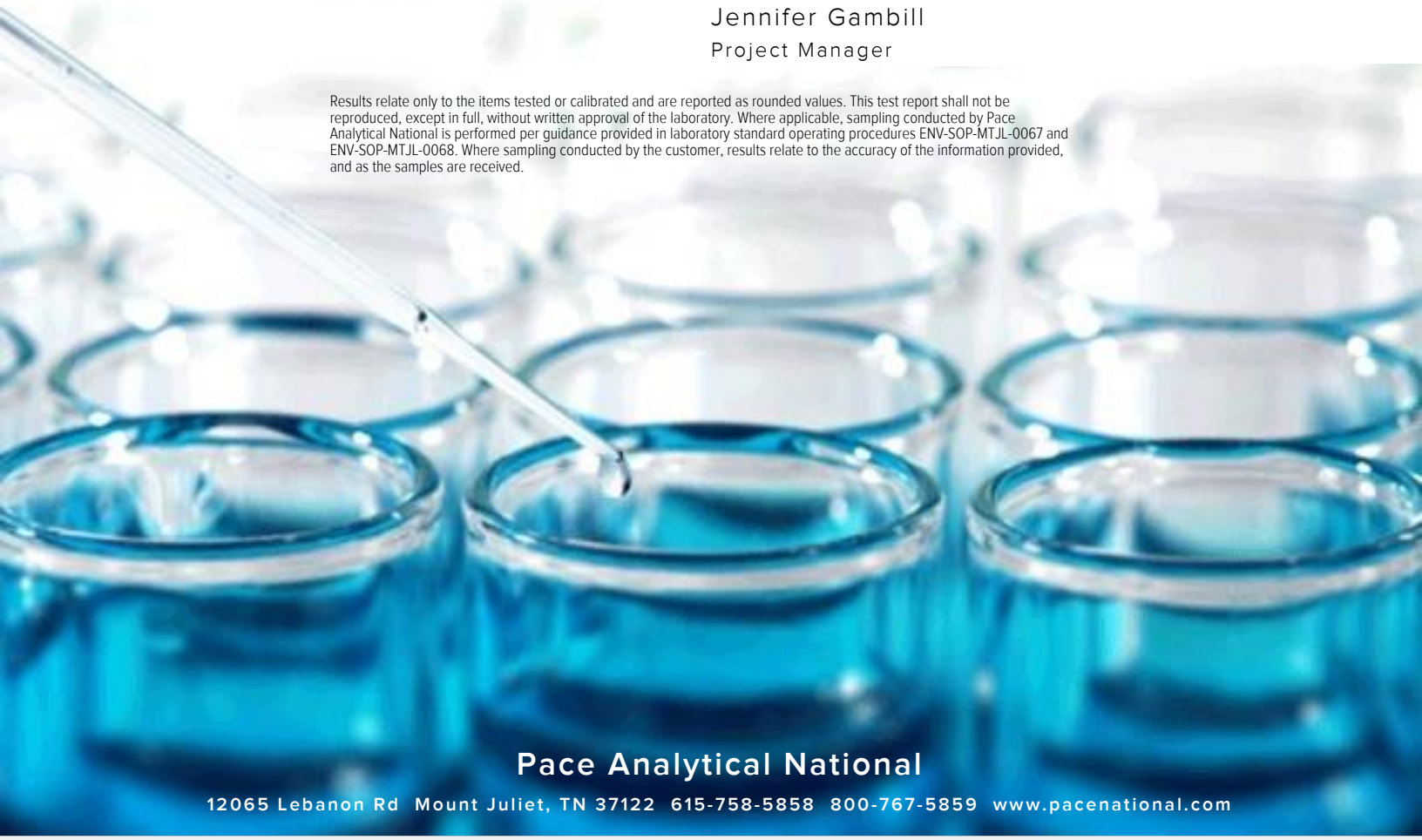
INNOVEX/ERRG Joint Venture - Redmond, WA

Sample Delivery Group:	L1540401
Samples Received:	09/28/2022
Project Number:	20506
Description:	JBLM-YTC
Site:	YTC-IRP
Report To:	Anna Jordan 16310 NE 80th St. Ste 104 Redmond, WA 98052

Entire Report Reviewed By:

Jennifer Gambill
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.



Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

TABLE OF CONTENTS

YTC-FTP-1-20220926 L1540401-01 GW

Collected by: AJ/HC | Collected date/time: 09/26/22 15:00 | Received date/time: 09/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1935408	1	10/01/22 08:10	10/01/22 08:10	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1935601	1	10/01/22 13:08	10/01/22 13:08	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1935909	1	10/04/22 02:36	10/04/22 02:36	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1933846	1	09/28/22 16:34	09/29/22 08:32	DMG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1933846	10	09/28/22 16:34	09/29/22 16:58	MAA	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1935556	1	10/03/22 06:34	10/04/22 14:27	DSH	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG1934353	1	10/01/22 05:23	10/02/22 10:59	JMB	Mt. Juliet, TN

YTC-FTP-1A-20220926 L1540401-02 GW

Collected by: AJ/HC | Collected date/time: 09/26/22 15:10 | Received date/time: 09/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1935408	1	10/01/22 08:30	10/01/22 08:30	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1935601	1	10/01/22 13:30	10/01/22 13:30	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1935909	1	10/04/22 02:57	10/04/22 02:57	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1933846	1	09/28/22 16:34	09/29/22 09:50	DMG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1933846	10	09/28/22 16:34	09/29/22 16:32	MAA	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1935556	1.05	10/03/22 06:34	10/04/22 15:32	DSH	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG1934353	1	10/01/22 05:23	10/02/22 11:53	JMB	Mt. Juliet, TN

YTC-MTS-1-20220926 L1540401-03 GW

Collected by: AJ/HC | Collected date/time: 09/26/22 16:30 | Received date/time: 09/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1935601	1	10/01/22 13:50	10/01/22 13:50	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1935909	1	10/04/22 03:19	10/04/22 03:19	JHH	Mt. Juliet, TN

YTC-MTS-2-20220926 L1540401-04 GW

Collected by: AJ/HC | Collected date/time: 09/26/22 16:10 | Received date/time: 09/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1935601	1	10/01/22 14:11	10/01/22 14:11	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1935909	1	10/04/22 03:40	10/04/22 03:40	JHH	Mt. Juliet, TN

YTC-MTS-4-20220926 L1540401-05 GW

Collected by: AJ/HC | Collected date/time: 09/26/22 16:20 | Received date/time: 09/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1935734	1	10/01/22 19:33	10/01/22 19:33	JAH	Mt. Juliet, TN

YTC-TVR-1-20220926 L1540401-06 GW

Collected by: AJ/HC | Collected date/time: 09/26/22 15:55 | Received date/time: 09/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1935734	1	10/01/22 19:52	10/01/22 19:52	JAH	Mt. Juliet, TN

YTC-TVR-3-20220926 L1540401-07 GW

Collected by: AJ/HC | Collected date/time: 09/26/22 15:45 | Received date/time: 09/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1935734	1	10/01/22 20:11	10/01/22 20:11	JAH	Mt. Juliet, TN

YTC-TVR-6-20220927 L1540401-08 GW

Collected by: AJ/HC | Collected date/time: 09/26/22 11:40 | Received date/time: 09/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1935734	1	10/01/22 20:30	10/01/22 20:30	JAH	Mt. Juliet, TN

YTC-TVR-7-20220926 L1540401-09 GW

Collected by: AJ/HC | Collected date/time: 09/26/22 15:30 | Received date/time: 09/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1935734	1	10/01/22 20:49	10/01/22 20:49	JAH	Mt. Juliet, TN

YTC-POMONA-20220927 L1540401-10 GW

Collected by: AJ/HC | Collected date/time: 09/27/22 11:15 | Received date/time: 09/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1935734	1	10/01/22 21:08	10/01/22 21:08	JAH	Mt. Juliet, TN

YTC-PAIC-20220927 L1540401-11 GW

Collected by: AJ/HC | Collected date/time: 09/27/22 11:00 | Received date/time: 09/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1935734	1	10/01/22 21:27	10/01/22 21:27	JAH	Mt. Juliet, TN

YTC-POMONAA-20220927 L1540401-12 GW

Collected by: AJ/HC | Collected date/time: 09/27/22 11:20 | Received date/time: 09/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1935734	1	10/01/22 21:46	10/01/22 21:46	JAH	Mt. Juliet, TN

YTC-PUMP-20220927 L1540401-13 GW

Collected by: AJ/HC | Collected date/time: 09/27/22 12:00 | Received date/time: 09/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1935408	1	10/01/22 08:50	10/01/22 08:50	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1935734	1	10/01/22 22:06	10/01/22 22:06	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1935840	2.5	10/04/22 16:43	10/05/22 11:54	HLJ	Mt. Juliet, TN

CASE NARRATIVE

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.

Jennifer Gambill
Project Manager

Report Revision History

Level II Report - Version 1: 10/06/22 17:51

Project Narrative

The following report has been revised to correct the sample IDs for L1540401-10 and -12 and to customize the VOC 8260 analyte list.

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	CAS #	Result mg/l	Qualifier	DL mg/l	LOD mg/l	LOQ mg/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	TPH C6 - C12	1.00		0.0316	0.0670	0.134	1	10/01/2022 08:10	WG1935408
(S) a,a,a-Trifluorotoluene(FID)	*98-08-8*	*91.8*				*78.0-120*		*10/01/2022 08:10*	WG1935408

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

Analyte	CAS #	Result mg/l	Qualifier	DL mg/l	LOD mg/l	LOQ mg/l	Dilution	Analysis date / time	Batch
Acetone	67-64-1	0.0152	B J	0.0113	0.0250	0.0500	1	10/04/2022 02:36	WG1935909
Benzene	71-43-2	0.000614	J J5	0.0000941	0.000500	0.00100	1	10/01/2022 13:08	WG1935601
Bromobenzene	108-86-1	0.000500	U	0.000118	0.000500	0.00100	1	10/01/2022 13:08	WG1935601
Bromochloromethane	74-97-5	0.000500	J5 U	0.000128	0.000500	0.00100	1	10/01/2022 13:08	WG1935601
Bromodichloromethane	75-27-4	0.000500	J5 U	0.000136	0.000500	0.00100	1	10/01/2022 13:08	WG1935601
Bromoform	75-25-2	0.000500	U	0.000129	0.000500	0.00100	1	10/01/2022 13:08	WG1935601
Bromomethane	74-83-9	0.00200	J5 U	0.000605	0.00200	0.00500	1	10/01/2022 13:08	WG1935601
n-Butylbenzene	104-51-8	0.00162		0.000157	0.000500	0.00100	1	10/01/2022 13:08	WG1935601
sec-Butylbenzene	135-98-8	0.00149		0.000125	0.000500	0.00100	1	10/01/2022 13:08	WG1935601
tert-Butylbenzene	98-06-6	0.000171	J	0.000127	0.000500	0.00100	1	10/01/2022 13:08	WG1935601
Carbon disulfide	75-15-0	0.000121	J J5	0.0000960	0.000500	0.00100	1	10/01/2022 13:08	WG1935601
Carbon tetrachloride	56-23-5	0.000500	J5 U	0.000128	0.000500	0.00100	1	10/01/2022 13:08	WG1935601
Chlorobenzene	108-90-7	0.000500	J5 U	0.000116	0.000500	0.00100	1	10/01/2022 13:08	WG1935601
Chlorodibromomethane	124-48-1	0.000500	U	0.000140	0.000500	0.00100	1	10/01/2022 13:08	WG1935601
Chloroethane	75-00-3	0.00200	J5 U	0.000192	0.00200	0.00500	1	10/01/2022 13:08	WG1935601
Chloroform	67-66-3	0.00200	J5 U	0.000111	0.00200	0.00500	1	10/01/2022 13:08	WG1935601
Chloromethane	74-87-3	0.00200	U	0.000960	0.00200	0.00400	1	10/04/2022 02:36	WG1935909
2-Chlorotoluene	95-49-8	0.000500	U	0.000106	0.000500	0.00100	1	10/01/2022 13:08	WG1935601
4-Chlorotoluene	106-43-4	0.000500	U	0.000114	0.000500	0.00100	1	10/01/2022 13:08	WG1935601
1,2-Dibromoethane	106-93-4	0.000500	J5 U	0.000126	0.000500	0.00100	1	10/01/2022 13:08	WG1935601
1,2-Dibromo-3-Chloropropane	96-12-8	0.00200	C4 U	0.000276	0.00200	0.00500	1	10/04/2022 02:36	WG1935909
Dibromomethane	74-95-3	0.000500	J5 U	0.000122	0.000500	0.00100	1	10/01/2022 13:08	WG1935601
1,2-Dichlorobenzene	95-50-1	0.000550	J J5	0.000107	0.000500	0.00100	1	10/01/2022 13:08	WG1935601
1,3-Dichlorobenzene	541-73-1	0.000500	J5 U	0.000110	0.000500	0.00100	1	10/01/2022 13:08	WG1935601
1,4-Dichlorobenzene	106-46-7	0.000500	J5 U	0.000120	0.000500	0.00100	1	10/01/2022 13:08	WG1935601
Dichlorodifluoromethane	75-71-8	0.00200	U	0.000374	0.00200	0.00500	1	10/01/2022 13:08	WG1935601
1,1-Dichloroethane	75-34-3	0.000500	J5 U	0.000100	0.000500	0.00100	1	10/01/2022 13:08	WG1935601
1,2-Dichloroethane	107-06-2	0.000500	J5 U	0.0000819	0.000500	0.00100	1	10/01/2022 13:08	WG1935601
1,1-Dichloroethene	75-35-4	0.000500	J5 U	0.000188	0.000500	0.00100	1	10/01/2022 13:08	WG1935601
cis-1,2-Dichloroethene	156-59-2	0.000500	J5 U	0.000126	0.000500	0.00100	1	10/01/2022 13:08	WG1935601
trans-1,2-Dichloroethene	156-60-5	0.000500	J5 U	0.000149	0.000500	0.00100	1	10/01/2022 13:08	WG1935601
1,2-Dichloropropane	78-87-5	0.000500	J5 U	0.000149	0.000500	0.00100	1	10/01/2022 13:08	WG1935601
1,3-Dichloropropane	142-28-9	0.000500	U	0.000110	0.000500	0.00100	1	10/01/2022 13:08	WG1935601
2,2-Dichloropropane	594-20-7	0.000500	J5 U	0.000161	0.000500	0.00100	1	10/01/2022 13:08	WG1935601
1,1-Dichloropropene	563-58-6	0.000500	J5 U	0.000142	0.000500	0.00100	1	10/01/2022 13:08	WG1935601
cis-1,3-Dichloropropene	10061-01-5	0.000500	U	0.000111	0.000500	0.00100	1	10/01/2022 13:08	WG1935601
trans-1,3-Dichloropropene	10061-02-6	0.000500	U	0.000118	0.000500	0.00100	1	10/01/2022 13:08	WG1935601
TOTAL 1,3-Dichloropropene		0.000500	U	0.000118	0.000500	0.00100	1	10/01/2022 13:08	WG1935601
Ethylbenzene	100-41-4	0.00203	J5	0.000137	0.000500	0.00100	1	10/01/2022 13:08	WG1935601
Hexachloro-1,3-butadiene	87-68-3	0.000750	U	0.000337	0.000750	0.00150	1	10/04/2022 02:36	WG1935909
2-Hexanone	591-78-6	0.000750	U	0.000787	0.000750	0.0100	1	10/01/2022 13:08	WG1935601
Isopropylbenzene	98-82-8	0.00252	J5	0.000105	0.000500	0.00100	1	10/01/2022 13:08	WG1935601
p-Isopropyltoluene	99-87-6	0.00245		0.000120	0.000500	0.00100	1	10/01/2022 13:08	WG1935601
2-Butanone (MEK)	78-93-3	0.00500	U	0.00119	0.00500	0.0100	1	10/01/2022 13:08	WG1935601
Methylene Chloride	75-09-2	0.00200	J5 U	0.000430	0.00200	0.00500	1	10/01/2022 13:08	WG1935601
4-Methyl-2-pentanone (MIBK)	108-10-1	0.00500	U	0.000478	0.00500	0.0100	1	10/04/2022 02:36	WG1935909
n-Propylbenzene	103-65-1	0.00263		0.0000993	0.000500	0.00100	1	10/01/2022 13:08	WG1935601
Styrene	100-42-5	0.000500	J5 U	0.000118	0.000500	0.00100	1	10/01/2022 13:08	WG1935601

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

Analyte	CAS #	Result mg/l	Qualifier	DL mg/l	LOD mg/l	LOQ mg/l	Dilution	Analysis date / time	Batch
1,1,1,2-Tetrachloroethane	630-20-6	0.000500	J5 U	0.000147	0.000500	0.00100	1	10/01/2022 13:08	WG1935601
1,1,2,2-Tetrachloroethane	79-34-5	0.000500	U	0.000133	0.000500	0.00100	1	10/01/2022 13:08	WG1935601
Tetrachloroethene	127-18-4	0.000600	J5 U	0.000300	0.000600	0.00120	1	10/01/2022 13:08	WG1935601
Toluene	108-88-3	0.000600	J5 U	0.000278	0.000600	0.00120	1	10/01/2022 13:08	WG1935601
1,2,3-Trichlorobenzene	87-61-6	0.000500	J4 U	0.000230	0.000500	0.00100	1	10/01/2022 13:08	WG1935601
1,2,4-Trichlorobenzene	120-82-1	0.00100	U	0.000481	0.00100	0.00200	1	10/04/2022 02:36	WG1935909
1,2,4-Trimethylbenzene	95-63-6	0.0300		0.000322	0.00100	0.00200	1	10/01/2022 13:08	WG1935601
1,3,5-Trimethylbenzene	108-67-8	0.000500	U	0.000104	0.000500	0.00100	1	10/01/2022 13:08	WG1935601
1,1,1-Trichloroethane	71-55-6	0.000500	J5 U	0.000149	0.000500	0.00100	1	10/01/2022 13:08	WG1935601
1,1,2-Trichloroethane	79-00-5	0.000500	J5 U	0.000158	0.000500	0.00100	1	10/01/2022 13:08	WG1935601
Trichloroethene	79-01-6	0.000500	J5 U	0.000190	0.000500	0.00100	1	10/01/2022 13:08	WG1935601
Trichlorofluoromethane	75-69-4	0.00200	U	0.000160	0.00200	0.00500	1	10/04/2022 02:36	WG1935909
1,2,3-Trichloropropane	96-18-4	0.00100	U	0.000237	0.00100	0.00250	1	10/01/2022 13:08	WG1935601
o-Xylene	95-47-6	0.000379	J J5	0.000174	0.000500	0.00100	1	10/01/2022 13:08	WG1935601
m&p-Xylene	1330-20-7	0.000500	J5 U	0.000430	0.000500	0.00200	1	10/01/2022 13:08	WG1935601
Xylenes, Total	1330-20-7	0.000379	J J5	0.000174	0.00150	0.00300	1	10/01/2022 13:08	WG1935601
(S) Toluene-d8	*2037-26-5*	*101*				*89.0-112*		*10/01/2022 13:08*	WG1935601
(S) Toluene-d8	*2037-26-5*	*101*				*89.0-112*		*10/04/2022 02:36*	WG1935909
(S) 4-Bromofluorobenzene	*460-00-4*	*106*				*85.0-114*		*10/01/2022 13:08*	WG1935601
(S) 4-Bromofluorobenzene	*460-00-4*	*111*				*85.0-114*		*10/04/2022 02:36*	WG1935909
(S) 1,2-Dichloroethane-d4	*17060-07-0*	*99.2*				*81.0-118*		*10/01/2022 13:08*	WG1935601
(S) 1,2-Dichloroethane-d4	*17060-07-0*	*115*				*81.0-118*		*10/04/2022 02:36*	WG1935909

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	CAS #	Result mg/l	Qualifier	DL mg/l	LOD mg/l	LOQ mg/l	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	68334-30-5	11.3		0.333	0.750	1.50	10	09/29/2022 16:58	WG1933846
Residual Range Organics (RRO)	RRO	1.33		0.0833	0.167	0.334	1	09/29/2022 08:32	WG1933846
(S) o-Terphenyl	*84-15-1*	*86.5*				*31.0-160*		*09/29/2022 08:32*	WG1933846
(S) o-Terphenyl	*84-15-1*	*81.5*				*31.0-160*		*09/29/2022 16:58*	WG1933846

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

Analyte	CAS #	Result mg/l	Qualifier	DL mg/l	LOD mg/l	LOQ mg/l	Dilution	Analysis date / time	Batch
Benzoic acid	65-85-0	0.00500	J3 U	0.00170	0.00500	0.0500	1	10/04/2022 14:27	WG1935556
Benzyl alcohol	100-51-6	0.00500	U	0.000563	0.00500	0.0100	1	10/04/2022 14:27	WG1935556
Bis(2-chlorethoxy)methane	111-91-1	0.00500	U	0.000116	0.00500	0.0100	1	10/04/2022 14:27	WG1935556
Bis(2-chloroethyl)ether	111-44-4	0.00500	U	0.000137	0.00500	0.0100	1	10/04/2022 14:27	WG1935556
2,2-Oxybis(1-Chloropropane)	108-60-1	0.00500	U	0.000210	0.00500	0.0100	1	10/04/2022 14:27	WG1935556
4-Bromophenyl-phenylether	101-55-3	0.00500	J6 U	0.0000877	0.00500	0.0100	1	10/04/2022 14:27	WG1935556
Carbazole	86-74-8	0.00500	U	0.000111	0.00500	0.0100	1	10/04/2022 14:27	WG1935556
4-Chloroaniline	106-47-8	0.00500	J3 J6 U	0.000234	0.00500	0.0100	1	10/04/2022 14:27	WG1935556
2-Chloronaphthalene	91-58-7	0.000500	U	0.0000648	0.000500	0.00100	1	10/04/2022 14:27	WG1935556
4-Chlorophenyl-phenylether	7005-72-3	0.00500	J6 U	0.0000926	0.00500	0.0100	1	10/04/2022 14:27	WG1935556
Dibenzofuran	132-64-9	0.00500	J6 U	0.0000970	0.00500	0.0100	1	10/04/2022 14:27	WG1935556
3,3-Dichlorobenzidine	91-94-1	0.00500	J3 J6 U	0.000212	0.00500	0.0100	1	10/04/2022 14:27	WG1935556
2,4-Dinitrotoluene	121-14-2	0.00500	U	0.0000983	0.00500	0.0100	1	10/04/2022 14:27	WG1935556
2,6-Dinitrotoluene	606-20-2	0.00500	U	0.000250	0.00500	0.0100	1	10/04/2022 14:27	WG1935556
Hexachlorobenzene	118-74-1	0.000500	J6 U	0.0000755	0.000500	0.00100	1	10/04/2022 14:27	WG1935556
Hexachlorocyclopentadiene	77-47-4	0.00500	U	0.0000598	0.00500	0.0100	1	10/04/2022 14:27	WG1935556
Hexachloroethane	67-72-1	0.00500	U	0.000127	0.00500	0.0100	1	10/04/2022 14:27	WG1935556
Isophorone	78-59-1	0.00500	U	0.000143	0.00500	0.0100	1	10/04/2022 14:27	WG1935556
2-Nitroaniline	88-74-4	0.00500	U	0.000102	0.00500	0.0100	1	10/04/2022 14:27	WG1935556
3-Nitroaniline	99-09-2	0.00500	J3 J6 U	0.0000860	0.00500	0.0100	1	10/04/2022 14:27	WG1935556
4-Nitroaniline	100-01-6	0.00500	U	0.0000910	0.00500	0.0100	1	10/04/2022 14:27	WG1935556

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

Analyte	CAS #	Result mg/l	Qualifier	DL mg/l	LOD mg/l	LOQ mg/l	Dilution	Analysis date / time	Batch
Nitrobenzene	98-95-3	0.00500	U	0.000297	0.00500	0.0100	1	10/04/2022 14:27	WG1935556
n-Nitrosodimethylamine	62-75-9	0.00500	U	0.000998	0.00500	0.0100	1	10/04/2022 14:27	WG1935556
n-Nitrosodiphenylamine	86-30-6	0.00500	U	0.00237	0.00500	0.0100	1	10/04/2022 14:27	WG1935556
n-Nitrosodi-n-propylamine	621-64-7	0.00500	U	0.000261	0.00500	0.0100	1	10/04/2022 14:27	WG1935556
Benzylbutyl phthalate	85-68-7	0.00200	U	0.000765	0.00200	0.00400	1	10/04/2022 14:27	WG1935556
Bis(2-Ethylhexyl)phthalate	117-81-7	0.00383	J J6	0.000895	0.00200	0.00400	1	10/04/2022 14:27	WG1935556
Di-n-butyl phthalate	84-74-2	0.00150	J6 U	0.000453	0.00150	0.00300	1	10/04/2022 14:27	WG1935556
Diethyl phthalate	84-66-2	0.00150	J6 U	0.000287	0.00150	0.00300	1	10/04/2022 14:27	WG1935556
Dimethyl phthalate	131-11-3	0.00150	U	0.000260	0.00150	0.00300	1	10/04/2022 14:27	WG1935556
Di-n-octyl phthalate	117-84-0	0.00200	J6 U	0.000932	0.00200	0.00400	1	10/04/2022 14:27	WG1935556
1,2,4-Trichlorobenzene	120-82-1	0.00500	U	0.0000698	0.00500	0.0100	1	10/04/2022 14:27	WG1935556
4-Chloro-3-methylphenol	59-50-7	0.00500	U	0.000131	0.00500	0.0100	1	10/04/2022 14:27	WG1935556
2-Chlorophenol	95-57-8	0.00500	U	0.000133	0.00500	0.0100	1	10/04/2022 14:27	WG1935556
2,4-Dichlorophenol	120-83-2	0.00500	U	0.000102	0.00500	0.0100	1	10/04/2022 14:27	WG1935556
2,4-Dimethylphenol	105-67-9	0.00500	U	0.0000636	0.00500	0.0100	1	10/04/2022 14:27	WG1935556
4,6-Dinitro-2-methylphenol	534-52-1	0.00500	U	0.00112	0.00500	0.0100	1	10/04/2022 14:27	WG1935556
2,4-Dinitrophenol	51-28-5	0.0150	J3 U	0.00593	0.0150	0.0300	1	10/04/2022 14:27	WG1935556
2-Methylphenol	95-48-7	0.0150	U	0.0000920	0.0150	0.0100	1	10/04/2022 14:27	WG1935556
3&4-Methyl Phenol	3&4-Methyl Phenol	0.0150	U	0.000168	0.0150	0.0100	1	10/04/2022 14:27	WG1935556
2-Nitrophenol	88-75-5	0.00500	U	0.000117	0.00500	0.0100	1	10/04/2022 14:27	WG1935556
4-Nitrophenol	100-02-7	0.00500	U	0.000143	0.00500	0.0100	1	10/04/2022 14:27	WG1935556
Pentachlorophenol	87-86-5	0.00500	U	0.000313	0.00500	0.0100	1	10/04/2022 14:27	WG1935556
Phenol	108-95-2	0.0100	U	0.00433	0.0100	0.0200	1	10/04/2022 14:27	WG1935556
2,4,5-Trichlorophenol	95-95-4	0.0100	U	0.000109	0.0100	0.0100	1	10/04/2022 14:27	WG1935556
2,4,6-Trichlorophenol	88-06-2	0.00500	U	0.000100	0.00500	0.0100	1	10/04/2022 14:27	WG1935556
(S) 2-Fluorophenol	*367-12-4*	*26.5*				*19.0-119*		*10/04/2022 14:27*	WG1935556
(S) Phenol-d5	*4165-62-2*	*16.9*				*10.0-67.0*		*10/04/2022 14:27*	WG1935556
(S) Nitrobenzene-d5	*4165-60-0*	*52.1*				*44.0-120*		*10/04/2022 14:27*	WG1935556
(S) 2-Fluorobiphenyl	*321-60-8*	*37.2*	J2			*44.0-119*		*10/04/2022 14:27*	WG1935556
(S) 2,4,6-Tribromophenol	*118-79-6*	*35.1*	J2			*43.0-140*		*10/04/2022 14:27*	WG1935556
(S) p-Terphenyl-d14	*1718-51-0*	*27.7*	J2			*50.0-134*		*10/04/2022 14:27*	WG1935556

Sample Narrative:

L1540401-01 WG1935556: Surrogate recovery within historical limits.

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	CAS #	Result mg/l	Qualifier	DL mg/l	LOD mg/l	LOQ mg/l	Dilution	Analysis date / time	Batch
Anthracene	120-12-7	0.0000500	J3 J6 U	0.0000190	0.0000500	0.000100	1	10/02/2022 10:59	WG1934353
Acenaphthene	83-32-9	0.000861	J3 J6	0.0000190	0.0000500	0.000100	1	10/02/2022 10:59	WG1934353
Acenaphthylene	208-96-8	0.0000500	J6 U	0.0000170	0.0000500	0.000100	1	10/02/2022 10:59	WG1934353
Benzo(a)anthracene	56-55-3	0.0000239	J J6	0.0000200	0.0000500	0.000100	1	10/02/2022 10:59	WG1934353
Benzo(a)pyrene	50-32-8	0.0000208	J J6	0.0000180	0.0000500	0.000100	1	10/02/2022 10:59	WG1934353
Benzo(b)fluoranthene	205-99-2	0.0000223	J J6	0.0000170	0.0000500	0.000100	1	10/02/2022 10:59	WG1934353
Benzo(g,h,i)perylene	191-24-2	0.0000183	J J3 J6	0.0000180	0.0000500	0.000100	1	10/02/2022 10:59	WG1934353
Benzo(k)fluoranthene	207-08-9	0.000125	J6 U	0.0000200	0.000125	0.000250	1	10/02/2022 10:59	WG1934353
Chrysene	218-01-9	0.0000383	J J6	0.0000180	0.0000500	0.000100	1	10/02/2022 10:59	WG1934353
Dibenz(a,h)anthracene	53-70-3	0.0000500	J3 J6 U	0.0000180	0.0000500	0.000100	1	10/02/2022 10:59	WG1934353
Fluoranthene	206-44-0	0.000102	B J3 J6	0.0000110	0.0000250	0.0000500	1	10/02/2022 10:59	WG1934353
Fluorene	86-73-7	0.00136	J3 J6	0.0000170	0.0000500	0.000100	1	10/02/2022 10:59	WG1934353
Indeno(1,2,3-cd)pyrene	193-39-5	0.0000400	J3 J6 U	0.0000180	0.0000400	0.0000800	1	10/02/2022 10:59	WG1934353
Naphthalene	91-20-3	0.00188	J6	0.000128	0.000500	0.00100	1	10/02/2022 10:59	WG1934353
Phenanthrene	85-01-8	0.000336	J3 J6	0.0000180	0.0000500	0.000100	1	10/02/2022 10:59	WG1934353
Pyrene	129-00-0	0.000265	J3 J6	0.0000170	0.0000500	0.000100	1	10/02/2022 10:59	WG1934353
1-Methylnaphthalene	90-12-0	0.00574	J6	0.0000200	0.000250	0.000500	1	10/02/2022 10:59	WG1934353

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	CAS #	Result mg/l	Qualifier	DL mg/l	LOD mg/l	LOQ mg/l	Dilution	Analysis date / time	Batch
2-Methylnaphthalene	91-57-6	0.000732	J6	0.0000280	0.000250	0.000500	1	10/02/2022 10:59	WG1934353
(S) Nitrobenzene-d5	*4165-60-0*	*69.5*				*55.0-111*		*10/02/2022 10:59*	WG1934353
(S) 2-Fluorobiphenyl	*321-60-8*	*41.6*	J2			*53.0-106*		*10/02/2022 10:59*	WG1934353
(S) p-Terphenyl-d14	*1718-51-0*	*19.7*	J2			*58.0-132*		*10/02/2022 10:59*	WG1934353
(S) 2-Methylnaphthalene-D10	*7297-45-2*	*63.7*				*50.0-150*		*10/02/2022 10:59*	WG1934353
(S) Fluoranthene-D10	*93951-69-0*	*33.1*	J2			*50.0-150*		*10/02/2022 10:59*	WG1934353

Sample Narrative:

L1540401-01 WG1934353: Surrogate failure due to matrix interference

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	CAS #	Result mg/l	Qualifier	DL mg/l	LOD mg/l	LOQ mg/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	TPH C6 - C12	3.84		0.0316	0.0670	0.134	1	10/01/2022 08:30	WG1935408
(S) a,a,a-Trifluorotoluene(FID)	*98-08-8*	*79.8*				*78.0-120*		*10/01/2022 08:30*	WG1935408

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

Analyte	CAS #	Result mg/l	Qualifier	DL mg/l	LOD mg/l	LOQ mg/l	Dilution	Analysis date / time	Batch
Acetone	67-64-1	0.0200	B J	0.0113	0.0250	0.0500	1	10/04/2022 02:57	WG1935909
Benzene	71-43-2	0.000584	J	0.0000941	0.000500	0.00100	1	10/01/2022 13:30	WG1935601
Bromobenzene	108-86-1	0.000500	U	0.000118	0.000500	0.00100	1	10/01/2022 13:30	WG1935601
Bromochloromethane	74-97-5	0.000500	U	0.000128	0.000500	0.00100	1	10/01/2022 13:30	WG1935601
Bromodichloromethane	75-27-4	0.000500	U	0.000136	0.000500	0.00100	1	10/01/2022 13:30	WG1935601
Bromoform	75-25-2	0.000500	U	0.000129	0.000500	0.00100	1	10/01/2022 13:30	WG1935601
Bromomethane	74-83-9	0.00200	U	0.000605	0.00200	0.00500	1	10/01/2022 13:30	WG1935601
n-Butylbenzene	104-51-8	0.00157		0.000157	0.000500	0.00100	1	10/01/2022 13:30	WG1935601
sec-Butylbenzene	135-98-8	0.00147		0.000125	0.000500	0.00100	1	10/01/2022 13:30	WG1935601
tert-Butylbenzene	98-06-6	0.000208	J	0.000127	0.000500	0.00100	1	10/01/2022 13:30	WG1935601
Carbon disulfide	75-15-0	0.000112	J	0.0000960	0.000500	0.00100	1	10/01/2022 13:30	WG1935601
Carbon tetrachloride	56-23-5	0.000500	U	0.000128	0.000500	0.00100	1	10/01/2022 13:30	WG1935601
Chlorobenzene	108-90-7	0.000500	U	0.000116	0.000500	0.00100	1	10/01/2022 13:30	WG1935601
Chlorodibromomethane	124-48-1	0.000500	U	0.000140	0.000500	0.00100	1	10/01/2022 13:30	WG1935601
Chloroethane	75-00-3	0.00200	U	0.000192	0.00200	0.00500	1	10/01/2022 13:30	WG1935601
Chloroform	67-66-3	0.00200	U	0.000111	0.00200	0.00500	1	10/01/2022 13:30	WG1935601
Chloromethane	74-87-3	0.00200	U	0.000960	0.00200	0.00400	1	10/04/2022 02:57	WG1935909
2-Chlorotoluene	95-49-8	0.000500	U	0.000106	0.000500	0.00100	1	10/01/2022 13:30	WG1935601
4-Chlorotoluene	106-43-4	0.000500	U	0.000114	0.000500	0.00100	1	10/01/2022 13:30	WG1935601
1,2-Dibromoethane	106-93-4	0.000500	U	0.000126	0.000500	0.00100	1	10/01/2022 13:30	WG1935601
1,2-Dibromo-3-Chloropropane	96-12-8	0.00200	C4 U	0.000276	0.00200	0.00500	1	10/04/2022 02:57	WG1935909
Dibromomethane	74-95-3	0.000500	U	0.000122	0.000500	0.00100	1	10/01/2022 13:30	WG1935601
1,2-Dichlorobenzene	95-50-1	0.000539	J	0.000107	0.000500	0.00100	1	10/01/2022 13:30	WG1935601
1,3-Dichlorobenzene	541-73-1	0.000500	U	0.000110	0.000500	0.00100	1	10/01/2022 13:30	WG1935601
1,4-Dichlorobenzene	106-46-7	0.000500	U	0.000120	0.000500	0.00100	1	10/01/2022 13:30	WG1935601
Dichlorodifluoromethane	75-71-8	0.00200	U	0.000374	0.00200	0.00500	1	10/01/2022 13:30	WG1935601
1,1-Dichloroethane	75-34-3	0.000500	U	0.000100	0.000500	0.00100	1	10/01/2022 13:30	WG1935601
1,2-Dichloroethane	107-06-2	0.000500	U	0.0000819	0.000500	0.00100	1	10/01/2022 13:30	WG1935601
1,1-Dichloroethene	75-35-4	0.000500	U	0.000188	0.000500	0.00100	1	10/01/2022 13:30	WG1935601
cis-1,2-Dichloroethene	156-59-2	0.000500	U	0.000126	0.000500	0.00100	1	10/01/2022 13:30	WG1935601
trans-1,2-Dichloroethene	156-60-5	0.000500	U	0.000149	0.000500	0.00100	1	10/01/2022 13:30	WG1935601
1,2-Dichloropropane	78-87-5	0.000500	U	0.000149	0.000500	0.00100	1	10/01/2022 13:30	WG1935601
1,3-Dichloropropane	142-28-9	0.000500	U	0.000110	0.000500	0.00100	1	10/01/2022 13:30	WG1935601
2,2-Dichloropropane	594-20-7	0.000500	U	0.000161	0.000500	0.00100	1	10/01/2022 13:30	WG1935601
1,1-Dichloropropene	563-58-6	0.000500	U	0.000142	0.000500	0.00100	1	10/01/2022 13:30	WG1935601
cis-1,3-Dichloropropene	10061-01-5	0.000500	U	0.000111	0.000500	0.00100	1	10/01/2022 13:30	WG1935601
trans-1,3-Dichloropropene	10061-02-6	0.000500	U	0.000118	0.000500	0.00100	1	10/01/2022 13:30	WG1935601
TOTAL 1,3-Dichloropropene		0.000500	U	0.000118	0.000500	0.00100	1	10/01/2022 13:30	WG1935601
Ethylbenzene	100-41-4	0.00202		0.000137	0.000500	0.00100	1	10/01/2022 13:30	WG1935601
Hexachloro-1,3-butadiene	87-68-3	0.000750	U	0.000337	0.000750	0.00150	1	10/04/2022 02:57	WG1935909
2-Hexanone	591-78-6	0.000750	U	0.000787	0.000750	0.0100	1	10/01/2022 13:30	WG1935601
Isopropylbenzene	98-82-8	0.00264		0.000105	0.000500	0.00100	1	10/01/2022 13:30	WG1935601
p-Isopropyltoluene	99-87-6	0.00245		0.000120	0.000500	0.00100	1	10/01/2022 13:30	WG1935601
2-Butanone (MEK)	78-93-3	0.00500	U	0.00119	0.00500	0.0100	1	10/01/2022 13:30	WG1935601
Methylene Chloride	75-09-2	0.00200	U	0.000430	0.00200	0.00500	1	10/01/2022 13:30	WG1935601
4-Methyl-2-pentanone (MIBK)	108-10-1	0.00500	U	0.000478	0.00500	0.0100	1	10/04/2022 02:57	WG1935909
n-Propylbenzene	103-65-1	0.00265		0.0000993	0.000500	0.00100	1	10/01/2022 13:30	WG1935601
Styrene	100-42-5	0.000500	U	0.000118	0.000500	0.00100	1	10/01/2022 13:30	WG1935601

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

Analyte	CAS #	Result mg/l	Qualifier	DL mg/l	LOD mg/l	LOQ mg/l	Dilution	Analysis date / time	Batch
1,1,1,2-Tetrachloroethane	630-20-6	0.000500	U	0.000147	0.000500	0.00100	1	10/01/2022 13:30	WG1935601
1,1,2,2-Tetrachloroethane	79-34-5	0.000500	U	0.000133	0.000500	0.00100	1	10/01/2022 13:30	WG1935601
Tetrachloroethene	127-18-4	0.000600	U	0.000300	0.000600	0.00120	1	10/01/2022 13:30	WG1935601
Toluene	108-88-3	0.000600	U	0.000278	0.000600	0.00120	1	10/01/2022 13:30	WG1935601
1,2,3-Trichlorobenzene	87-61-6	0.000500	J3 J4 U	0.000230	0.000500	0.00100	1	10/01/2022 13:30	WG1935601
1,2,4-Trichlorobenzene	120-82-1	0.00100	U	0.000481	0.00100	0.00200	1	10/04/2022 02:57	WG1935909
1,2,4-Trimethylbenzene	95-63-6	0.0297		0.000322	0.00100	0.00200	1	10/01/2022 13:30	WG1935601
1,3,5-Trimethylbenzene	108-67-8	0.000500	U	0.000104	0.000500	0.00100	1	10/01/2022 13:30	WG1935601
1,1,1-Trichloroethane	71-55-6	0.000500	U	0.000149	0.000500	0.00100	1	10/01/2022 13:30	WG1935601
1,1,2-Trichloroethane	79-00-5	0.000500	U	0.000158	0.000500	0.00100	1	10/01/2022 13:30	WG1935601
Trichloroethene	79-01-6	0.000500	U	0.000190	0.000500	0.00100	1	10/01/2022 13:30	WG1935601
Trichlorofluoromethane	75-69-4	0.00200	U	0.000160	0.00200	0.00500	1	10/04/2022 02:57	WG1935909
1,2,3-Trichloropropane	96-18-4	0.00100	U	0.000237	0.00100	0.00250	1	10/01/2022 13:30	WG1935601
o-Xylene	95-47-6	0.000432	J	0.000174	0.000500	0.00100	1	10/01/2022 13:30	WG1935601
m&p-Xylene	1330-20-7	0.000500	U	0.000430	0.000500	0.00200	1	10/01/2022 13:30	WG1935601
Xylenes, Total	1330-20-7	0.000432	J	0.000174	0.00150	0.00300	1	10/01/2022 13:30	WG1935601
(S) Toluene-d8	*2037-26-5*	*102*				*89.0-112*		*10/01/2022 13:30*	WG1935601
(S) Toluene-d8	*2037-26-5*	*106*				*89.0-112*		*10/04/2022 02:57*	WG1935909
(S) 4-Bromofluorobenzene	*460-00-4*	*113*				*85.0-114*		*10/01/2022 13:30*	WG1935601
(S) 4-Bromofluorobenzene	*460-00-4*	*110*				*85.0-114*		*10/04/2022 02:57*	WG1935909
(S) 1,2-Dichloroethane-d4	*17060-07-0*	*97.8*				*81.0-118*		*10/01/2022 13:30*	WG1935601
(S) 1,2-Dichloroethane-d4	*17060-07-0*	*118*				*81.0-118*		*10/04/2022 02:57*	WG1935909

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	CAS #	Result mg/l	Qualifier	DL mg/l	LOD mg/l	LOQ mg/l	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	68334-30-5	11.5		0.333	0.750	1.50	10	09/29/2022 16:32	WG1933846
Residual Range Organics (RRO)	RRO	1.77		0.0833	0.167	0.334	1	09/29/2022 09:50	WG1933846
(S) o-Terphenyl	*84-15-1*	*100*				*31.0-160*		*09/29/2022 16:32*	WG1933846
(S) o-Terphenyl	*84-15-1*	*82.0*				*31.0-160*		*09/29/2022 09:50*	WG1933846

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

Analyte	CAS #	Result mg/l	Qualifier	DL mg/l	LOD mg/l	LOQ mg/l	Dilution	Analysis date / time	Batch
Benzoic acid	65-85-0	0.00525	U	0.00179	0.00525	0.0525	1.05	10/04/2022 15:32	WG1935556
Benzyl alcohol	100-51-6	0.00525	U	0.000591	0.00525	0.0105	1.05	10/04/2022 15:32	WG1935556
Bis(2-chlorethoxy)methane	111-91-1	0.00525	U	0.000122	0.00525	0.0105	1.05	10/04/2022 15:32	WG1935556
Bis(2-chloroethyl)ether	111-44-4	0.00525	U	0.000144	0.00525	0.0105	1.05	10/04/2022 15:32	WG1935556
2,2-Oxybis(1-Chloropropane)	108-60-1	0.00525	U	0.000221	0.00525	0.0105	1.05	10/04/2022 15:32	WG1935556
4-Bromophenyl-phenylether	101-55-3	0.00525	U	0.0000921	0.00525	0.0105	1.05	10/04/2022 15:32	WG1935556
Carbazole	86-74-8	0.00193	J	0.000117	0.00525	0.0105	1.05	10/04/2022 15:32	WG1935556
4-Chloroaniline	106-47-8	0.00525	U	0.000246	0.00525	0.0105	1.05	10/04/2022 15:32	WG1935556
2-Chloronaphthalene	91-58-7	0.000525	U	0.0000680	0.000525	0.00105	1.05	10/04/2022 15:32	WG1935556
4-Chlorophenyl-phenylether	7005-72-3	0.00525	U	0.0000972	0.00525	0.0105	1.05	10/04/2022 15:32	WG1935556
Dibenzofuran	132-64-9	0.00248	J	0.000102	0.00525	0.0105	1.05	10/04/2022 15:32	WG1935556
3,3-Dichlorobenzidine	91-94-1	0.00525	U	0.000223	0.00525	0.0105	1.05	10/04/2022 15:32	WG1935556
2,4-Dinitrotoluene	121-14-2	0.00525	U	0.000103	0.00525	0.0105	1.05	10/04/2022 15:32	WG1935556
2,6-Dinitrotoluene	606-20-2	0.00525	U	0.000263	0.00525	0.0105	1.05	10/04/2022 15:32	WG1935556
Hexachlorobenzene	118-74-1	0.000525	U	0.0000793	0.000525	0.00105	1.05	10/04/2022 15:32	WG1935556
Hexachlorocyclopentadiene	77-47-4	0.00525	U	0.0000628	0.00525	0.0105	1.05	10/04/2022 15:32	WG1935556
Hexachloroethane	67-72-1	0.00525	U	0.000133	0.00525	0.0105	1.05	10/04/2022 15:32	WG1935556
Isophorone	78-59-1	0.00525	U	0.000150	0.00525	0.0105	1.05	10/04/2022 15:32	WG1935556
2-Nitroaniline	88-74-4	0.00525	U	0.000107	0.00525	0.0105	1.05	10/04/2022 15:32	WG1935556
3-Nitroaniline	99-09-2	0.00525	U	0.0000903	0.00525	0.0105	1.05	10/04/2022 15:32	WG1935556
4-Nitroaniline	100-01-6	0.00525	U	0.0000956	0.00525	0.0105	1.05	10/04/2022 15:32	WG1935556

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

Analyte	CAS #	Result mg/l	Qualifier	DL mg/l	LOD mg/l	LOQ mg/l	Dilution	Analysis date / time	Batch
Nitrobenzene	98-95-3	0.00525	U	0.000312	0.00525	0.0105	1.05	10/04/2022 15:32	WG1935556
n-Nitrosodimethylamine	62-75-9	0.00525	U	0.00105	0.00525	0.0105	1.05	10/04/2022 15:32	WG1935556
n-Nitrosodiphenylamine	86-30-6	0.00525	U	0.00249	0.00525	0.0105	1.05	10/04/2022 15:32	WG1935556
n-Nitrosodi-n-propylamine	621-64-7	0.00525	U	0.000274	0.00525	0.0105	1.05	10/04/2022 15:32	WG1935556
Benzylbutyl phthalate	85-68-7	0.00210	U	0.000803	0.00210	0.00420	1.05	10/04/2022 15:32	WG1935556
Bis(2-Ethylhexyl)phthalate	117-81-7	0.00210	U	0.000940	0.00210	0.00420	1.05	10/04/2022 15:32	WG1935556
Di-n-butyl phthalate	84-74-2	0.00158	U	0.000476	0.00158	0.00315	1.05	10/04/2022 15:32	WG1935556
Diethyl phthalate	84-66-2	0.00158	U	0.000301	0.00158	0.00315	1.05	10/04/2022 15:32	WG1935556
Dimethyl phthalate	131-11-3	0.00158	U	0.000273	0.00158	0.00315	1.05	10/04/2022 15:32	WG1935556
Di-n-octyl phthalate	117-84-0	0.00210	U	0.000979	0.00210	0.00420	1.05	10/04/2022 15:32	WG1935556
1,2,4-Trichlorobenzene	120-82-1	0.00525	U	0.0000733	0.00525	0.0105	1.05	10/04/2022 15:32	WG1935556
4-Chloro-3-methylphenol	59-50-7	0.00525	U	0.000138	0.00525	0.0105	1.05	10/04/2022 15:32	WG1935556
2-Chlorophenol	95-57-8	0.00525	U	0.000140	0.00525	0.0105	1.05	10/04/2022 15:32	WG1935556
2,4-Dichlorophenol	120-83-2	0.00525	U	0.000107	0.00525	0.0105	1.05	10/04/2022 15:32	WG1935556
2,4-Dimethylphenol	105-67-9	0.00525	U	0.0000668	0.00525	0.0105	1.05	10/04/2022 15:32	WG1935556
4,6-Dinitro-2-methylphenol	534-52-1	0.00525	U	0.00118	0.00525	0.0105	1.05	10/04/2022 15:32	WG1935556
2,4-Dinitrophenol	51-28-5	0.0158	U	0.00623	0.0158	0.0315	1.05	10/04/2022 15:32	WG1935556
2-Methylphenol	95-48-7	0.0158	U	0.0000966	0.0158	0.0105	1.05	10/04/2022 15:32	WG1935556
3&4-Methyl Phenol	3&4-Methyl Phenol	0.0158	U	0.000176	0.0158	0.0105	1.05	10/04/2022 15:32	WG1935556
2-Nitrophenol	88-75-5	0.00525	U	0.000123	0.00525	0.0105	1.05	10/04/2022 15:32	WG1935556
4-Nitrophenol	100-02-7	0.00525	U	0.000150	0.00525	0.0105	1.05	10/04/2022 15:32	WG1935556
Pentachlorophenol	87-86-5	0.00525	U	0.000329	0.00525	0.0105	1.05	10/04/2022 15:32	WG1935556
Phenol	108-95-2	0.0105	U	0.00455	0.0105	0.0210	1.05	10/04/2022 15:32	WG1935556
2,4,5-Trichlorophenol	95-95-4	0.0105	U	0.000114	0.0105	0.0105	1.05	10/04/2022 15:32	WG1935556
2,4,6-Trichlorophenol	88-06-2	0.00525	U	0.000105	0.00525	0.0105	1.05	10/04/2022 15:32	WG1935556
(S) 2-Fluorophenol	*367-12-4*	*43.1*				*19.0-119*		*10/04/2022 15:32*	WG1935556
(S) Phenol-d5	*4165-62-2*	*31.8*				*10.0-67.0*		*10/04/2022 15:32*	WG1935556
(S) Nitrobenzene-d5	*4165-60-0*	*66.2*				*44.0-120*		*10/04/2022 15:32*	WG1935556
(S) 2-Fluorobiphenyl	*321-60-8*	*55.3*				*44.0-119*		*10/04/2022 15:32*	WG1935556
(S) 2,4,6-Tribromophenol	*118-79-6*	*63.3*				*43.0-140*		*10/04/2022 15:32*	WG1935556
(S) p-Terphenyl-d14	*1718-51-0*	*48.6*	J2			*50.0-134*		*10/04/2022 15:32*	WG1935556

Sample Narrative:

L1540401-02 WG1935556: Surrogate recovery within historical limits.

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	CAS #	Result mg/l	Qualifier	DL mg/l	LOD mg/l	LOQ mg/l	Dilution	Analysis date / time	Batch
Anthracene	120-12-7	0.0000500	U	0.0000190	0.0000500	0.000100	1	10/02/2022 11:53	WG1934353
Acenaphthene	83-32-9	0.000610		0.0000190	0.0000500	0.000100	1	10/02/2022 11:53	WG1934353
Acenaphthylene	208-96-8	0.0000500	U	0.0000170	0.0000500	0.000100	1	10/02/2022 11:53	WG1934353
Benzo(a)anthracene	56-55-3	0.000121		0.0000200	0.0000500	0.000100	1	10/02/2022 11:53	WG1934353
Benzo(a)pyrene	50-32-8	0.000111		0.0000180	0.0000500	0.000100	1	10/02/2022 11:53	WG1934353
Benzo(b)fluoranthene	205-99-2	0.000106		0.0000170	0.0000500	0.000100	1	10/02/2022 11:53	WG1934353
Benzo(g,h,i)perylene	191-24-2	0.000168		0.0000180	0.0000500	0.000100	1	10/02/2022 11:53	WG1934353
Benzo(k)fluoranthene	207-08-9	0.000104	J	0.0000200	0.000125	0.000250	1	10/02/2022 11:53	WG1934353
Chrysene	218-01-9	0.000172		0.0000180	0.0000500	0.000100	1	10/02/2022 11:53	WG1934353
Dibenz(a,h)anthracene	53-70-3	0.000127		0.0000180	0.0000500	0.000100	1	10/02/2022 11:53	WG1934353
Fluoranthene	206-44-0	0.000165	B	0.0000110	0.0000250	0.0000500	1	10/02/2022 11:53	WG1934353
Fluorene	86-73-7	0.000665		0.0000170	0.0000500	0.000100	1	10/02/2022 11:53	WG1934353
Indeno(1,2,3-cd)pyrene	193-39-5	0.000170		0.0000180	0.0000400	0.0000800	1	10/02/2022 11:53	WG1934353
Naphthalene	91-20-3	0.000739	J	0.000128	0.000500	0.00100	1	10/02/2022 11:53	WG1934353
Phenanthrene	85-01-8	0.0000500	U	0.0000180	0.0000500	0.000100	1	10/02/2022 11:53	WG1934353
Pyrene	129-00-0	0.000361		0.0000170	0.0000500	0.000100	1	10/02/2022 11:53	WG1934353
1-Methylnaphthalene	90-12-0	0.000800		0.0000200	0.000250	0.000500	1	10/02/2022 11:53	WG1934353

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	CAS #	Result mg/l	Qualifier	DL mg/l	LOD mg/l	LOQ mg/l	Dilution	Analysis date / time	Batch
2-Methylnaphthalene	91-57-6	0.0000433	J	0.0000280	0.000250	0.000500	1	10/02/2022 11:53	WG1934353
(S) Nitrobenzene-d5	*4165-60-0*	*62.5*				*55.0-111*		*10/02/2022 11:53*	WG1934353
(S) 2-Fluorobiphenyl	*321-60-8*	*43.5*	J2			*53.0-106*		*10/02/2022 11:53*	WG1934353
(S) p-Terphenyl-d14	*1718-51-0*	*27.6*	J2			*58.0-132*		*10/02/2022 11:53*	WG1934353
(S) 2-Methylnaphthalene-D10	*7297-45-2*	*55.0*				*50.0-150*		*10/02/2022 11:53*	WG1934353
(S) Fluoranthene-D10	*93951-69-0*	*40.5*	J2			*50.0-150*		*10/02/2022 11:53*	WG1934353

Sample Narrative:

L1540401-02 WG1934353: Surrogate failure due to matrix interference

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

Analyte	CAS #	Result mg/l	Qualifier	DL mg/l	LOD mg/l	LOQ mg/l	Dilution	Analysis date / time	Batch
Acetone	67-64-1	0.0209	B J	0.0113	0.0250	0.0500	1	10/04/2022 03:19	WG1935909
Benzene	71-43-2	0.000500	U	0.0000941	0.000500	0.00100	1	10/01/2022 13:50	WG1935601
Bromobenzene	108-86-1	0.000500	U	0.000118	0.000500	0.00100	1	10/01/2022 13:50	WG1935601
Bromochloromethane	74-97-5	0.000500	U	0.000128	0.000500	0.00100	1	10/01/2022 13:50	WG1935601
Bromodichloromethane	75-27-4	0.000500	U	0.000136	0.000500	0.00100	1	10/01/2022 13:50	WG1935601
Bromoform	75-25-2	0.000500	U	0.000129	0.000500	0.00100	1	10/01/2022 13:50	WG1935601
Bromomethane	74-83-9	0.00200	U	0.000605	0.00200	0.00500	1	10/01/2022 13:50	WG1935601
n-Butylbenzene	104-51-8	0.000500	U	0.000157	0.000500	0.00100	1	10/01/2022 13:50	WG1935601
sec-Butylbenzene	135-98-8	0.000500	U	0.000125	0.000500	0.00100	1	10/01/2022 13:50	WG1935601
tert-Butylbenzene	98-06-6	0.000500	U	0.000127	0.000500	0.00100	1	10/01/2022 13:50	WG1935601
Carbon disulfide	75-15-0	0.000500	U	0.0000960	0.000500	0.00100	1	10/01/2022 13:50	WG1935601
Carbon tetrachloride	56-23-5	0.000500	U	0.000128	0.000500	0.00100	1	10/01/2022 13:50	WG1935601
Chlorobenzene	108-90-7	0.000500	U	0.000116	0.000500	0.00100	1	10/01/2022 13:50	WG1935601
Chlorodibromomethane	124-48-1	0.000500	U	0.000140	0.000500	0.00100	1	10/01/2022 13:50	WG1935601
Chloroethane	75-00-3	0.00200	U	0.000192	0.00200	0.00500	1	10/01/2022 13:50	WG1935601
Chloroform	67-66-3	0.00200	U	0.000111	0.00200	0.00500	1	10/01/2022 13:50	WG1935601
Chloromethane	74-87-3	0.00200	U	0.000960	0.00200	0.00400	1	10/04/2022 03:19	WG1935909
2-Chlorotoluene	95-49-8	0.000500	U	0.000106	0.000500	0.00100	1	10/01/2022 13:50	WG1935601
4-Chlorotoluene	106-43-4	0.000500	U	0.000114	0.000500	0.00100	1	10/01/2022 13:50	WG1935601
1,2-Dibromoethane	106-93-4	0.000500	U	0.000126	0.000500	0.00100	1	10/01/2022 13:50	WG1935601
1,2-Dibromo-3-Chloropropane	96-12-8	0.00200	C4 U	0.000276	0.00200	0.00500	1	10/04/2022 03:19	WG1935909
Dibromomethane	74-95-3	0.000500	U	0.000122	0.000500	0.00100	1	10/01/2022 13:50	WG1935601
1,2-Dichlorobenzene	95-50-1	0.000500	U	0.000107	0.000500	0.00100	1	10/01/2022 13:50	WG1935601
1,3-Dichlorobenzene	541-73-1	0.000500	U	0.000110	0.000500	0.00100	1	10/01/2022 13:50	WG1935601
1,4-Dichlorobenzene	106-46-7	0.000500	U	0.000120	0.000500	0.00100	1	10/01/2022 13:50	WG1935601
Dichlorodifluoromethane	75-71-8	0.00200	U	0.000374	0.00200	0.00500	1	10/01/2022 13:50	WG1935601
1,1-Dichloroethane	75-34-3	0.000500	U	0.000100	0.000500	0.00100	1	10/01/2022 13:50	WG1935601
1,2-Dichloroethane	107-06-2	0.000500	U	0.0000819	0.000500	0.00100	1	10/01/2022 13:50	WG1935601
1,1-Dichloroethene	75-35-4	0.000500	U	0.000188	0.000500	0.00100	1	10/01/2022 13:50	WG1935601
cis-1,2-Dichloroethene	156-59-2	0.000500	U	0.000126	0.000500	0.00100	1	10/01/2022 13:50	WG1935601
trans-1,2-Dichloroethene	156-60-5	0.000500	U	0.000149	0.000500	0.00100	1	10/01/2022 13:50	WG1935601
1,2-Dichloropropane	78-87-5	0.000500	U	0.000149	0.000500	0.00100	1	10/01/2022 13:50	WG1935601
1,3-Dichloropropane	142-28-9	0.000500	U	0.000110	0.000500	0.00100	1	10/01/2022 13:50	WG1935601
2,2-Dichloropropane	594-20-7	0.000500	U	0.000161	0.000500	0.00100	1	10/01/2022 13:50	WG1935601
1,1-Dichloropropene	563-58-6	0.000500	U	0.000142	0.000500	0.00100	1	10/01/2022 13:50	WG1935601
cis-1,3-Dichloropropene	10061-01-5	0.000500	U	0.000111	0.000500	0.00100	1	10/01/2022 13:50	WG1935601
trans-1,3-Dichloropropene	10061-02-6	0.000500	U	0.000118	0.000500	0.00100	1	10/01/2022 13:50	WG1935601
TOTAL 1,3-Dichloropropene		0.000500	U	0.000118	0.000500	0.00100	1	10/01/2022 13:50	WG1935601
Ethylbenzene	100-41-4	0.000500	U	0.000137	0.000500	0.00100	1	10/01/2022 13:50	WG1935601
Hexachloro-1,3-butadiene	87-68-3	0.000750	U	0.000337	0.000750	0.00150	1	10/04/2022 03:19	WG1935909
2-Hexanone	591-78-6	0.000750	U	0.000787	0.000750	0.0100	1	10/01/2022 13:50	WG1935601
Isopropylbenzene	98-82-8	0.000500	U	0.000105	0.000500	0.00100	1	10/01/2022 13:50	WG1935601
p-Isopropyltoluene	99-87-6	0.000500	U	0.000120	0.000500	0.00100	1	10/01/2022 13:50	WG1935601
2-Butanone (MEK)	78-93-3	0.00500	U	0.00119	0.00500	0.0100	1	10/01/2022 13:50	WG1935601
Methylene Chloride	75-09-2	0.00200	U	0.000430	0.00200	0.00500	1	10/01/2022 13:50	WG1935601
4-Methyl-2-pentanone (MIBK)	108-10-1	0.00500	U	0.000478	0.00500	0.0100	1	10/04/2022 03:19	WG1935909
n-Propylbenzene	103-65-1	0.000500	U	0.0000993	0.000500	0.00100	1	10/01/2022 13:50	WG1935601
Styrene	100-42-5	0.000500	U	0.000118	0.000500	0.00100	1	10/01/2022 13:50	WG1935601
1,1,1,2-Tetrachloroethane	630-20-6	0.000500	U	0.000147	0.000500	0.00100	1	10/01/2022 13:50	WG1935601
1,1,2,2-Tetrachloroethane	79-34-5	0.000500	U	0.000133	0.000500	0.00100	1	10/01/2022 13:50	WG1935601
Tetrachloroethene	127-18-4	0.000600	U	0.000300	0.000600	0.00120	1	10/01/2022 13:50	WG1935601
Toluene	108-88-3	0.000600	U	0.000278	0.000600	0.00120	1	10/01/2022 13:50	WG1935601
1,2,3-Trichlorobenzene	87-61-6	0.000500	J3 J4 U	0.000230	0.000500	0.00100	1	10/01/2022 13:50	WG1935601
1,2,4-Trichlorobenzene	120-82-1	0.00100	U	0.000481	0.00100	0.00200	1	10/04/2022 03:19	WG1935909
1,2,4-Trimethylbenzene	95-63-6	0.00100	U	0.000322	0.00100	0.00200	1	10/01/2022 13:50	WG1935601
1,3,5-Trimethylbenzene	108-67-8	0.000500	U	0.000104	0.000500	0.00100	1	10/01/2022 13:50	WG1935601

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

Analyte	CAS #	Result	Qualifier	DL	LOD	LOQ	Dilution	Analysis	Batch
		mg/l		mg/l	mg/l	mg/l		date / time	
1,1,1-Trichloroethane	71-55-6	0.000500	U	0.000149	0.000500	0.00100	1	10/01/2022 13:50	WG1935601
1,1,2-Trichloroethane	79-00-5	0.000500	U	0.000158	0.000500	0.00100	1	10/01/2022 13:50	WG1935601
Trichloroethene	79-01-6	0.00420		0.000190	0.000500	0.00100	1	10/01/2022 13:50	WG1935601
Trichlorofluoromethane	75-69-4	0.00200	U	0.000160	0.00200	0.00500	1	10/04/2022 03:19	WG1935909
1,2,3-Trichloropropane	96-18-4	0.00100	U	0.000237	0.00100	0.00250	1	10/01/2022 13:50	WG1935601
o-Xylene	95-47-6	0.000500	U	0.000174	0.000500	0.00100	1	10/01/2022 13:50	WG1935601
m&p-Xylene	1330-20-7	0.000500	U	0.000430	0.000500	0.00200	1	10/01/2022 13:50	WG1935601
Xylenes, Total	1330-20-7	0.00150	U	0.000174	0.00150	0.00300	1	10/01/2022 13:50	WG1935601
(S) Toluene-d8	*2037-26-5*	*104*				*89.0-112*		*10/01/2022 13:50*	WG1935601
(S) Toluene-d8	*2037-26-5*	*105*				*89.0-112*		*10/04/2022 03:19*	WG1935909
(S) 4-Bromofluorobenzene	*460-00-4*	*114*				*85.0-114*		*10/01/2022 13:50*	WG1935601
(S) 4-Bromofluorobenzene	*460-00-4*	*109*				*85.0-114*		*10/04/2022 03:19*	WG1935909
(S) 1,2-Dichloroethane-d4	*17060-07-0*	*95.8*				*81.0-118*		*10/01/2022 13:50*	WG1935601
(S) 1,2-Dichloroethane-d4	*17060-07-0*	*113*				*81.0-118*		*10/04/2022 03:19*	WG1935909

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

Analyte	CAS #	Result mg/l	Qualifier	DL mg/l	LOD mg/l	LOQ mg/l	Dilution	Analysis date / time	Batch
Acetone	67-64-1	0.0178	B J	0.0113	0.0250	0.0500	1	10/04/2022 03:40	WG1935909
Benzene	71-43-2	0.000500	U	0.0000941	0.000500	0.00100	1	10/01/2022 14:11	WG1935601
Bromobenzene	108-86-1	0.000500	U	0.000118	0.000500	0.00100	1	10/01/2022 14:11	WG1935601
Bromochloromethane	74-97-5	0.000500	U	0.000128	0.000500	0.00100	1	10/01/2022 14:11	WG1935601
Bromodichloromethane	75-27-4	0.000500	U	0.000136	0.000500	0.00100	1	10/01/2022 14:11	WG1935601
Bromoform	75-25-2	0.000500	U	0.000129	0.000500	0.00100	1	10/01/2022 14:11	WG1935601
Bromomethane	74-83-9	0.00200	U	0.000605	0.00200	0.00500	1	10/01/2022 14:11	WG1935601
n-Butylbenzene	104-51-8	0.000500	U	0.000157	0.000500	0.00100	1	10/01/2022 14:11	WG1935601
sec-Butylbenzene	135-98-8	0.000500	U	0.000125	0.000500	0.00100	1	10/01/2022 14:11	WG1935601
tert-Butylbenzene	98-06-6	0.000500	U	0.000127	0.000500	0.00100	1	10/01/2022 14:11	WG1935601
Carbon disulfide	75-15-0	0.000500	U	0.0000960	0.000500	0.00100	1	10/01/2022 14:11	WG1935601
Carbon tetrachloride	56-23-5	0.000500	U	0.000128	0.000500	0.00100	1	10/01/2022 14:11	WG1935601
Chlorobenzene	108-90-7	0.000500	U	0.000116	0.000500	0.00100	1	10/01/2022 14:11	WG1935601
Chlorodibromomethane	124-48-1	0.000500	U	0.000140	0.000500	0.00100	1	10/01/2022 14:11	WG1935601
Chloroethane	75-00-3	0.00200	U	0.000192	0.00200	0.00500	1	10/01/2022 14:11	WG1935601
Chloroform	67-66-3	0.00200	U	0.000111	0.00200	0.00500	1	10/01/2022 14:11	WG1935601
Chloromethane	74-87-3	0.00200	U	0.000960	0.00200	0.00400	1	10/04/2022 03:40	WG1935909
2-Chlorotoluene	95-49-8	0.000500	U	0.000106	0.000500	0.00100	1	10/01/2022 14:11	WG1935601
4-Chlorotoluene	106-43-4	0.000500	U	0.000114	0.000500	0.00100	1	10/01/2022 14:11	WG1935601
1,2-Dibromoethane	106-93-4	0.000500	U	0.000126	0.000500	0.00100	1	10/01/2022 14:11	WG1935601
1,2-Dibromo-3-Chloropropane	96-12-8	0.00200	C4 U	0.000276	0.00200	0.00500	1	10/04/2022 03:40	WG1935909
Dibromomethane	74-95-3	0.000500	U	0.000122	0.000500	0.00100	1	10/01/2022 14:11	WG1935601
1,2-Dichlorobenzene	95-50-1	0.000500	U	0.000107	0.000500	0.00100	1	10/01/2022 14:11	WG1935601
1,3-Dichlorobenzene	541-73-1	0.000500	U	0.000110	0.000500	0.00100	1	10/01/2022 14:11	WG1935601
1,4-Dichlorobenzene	106-46-7	0.000500	U	0.000120	0.000500	0.00100	1	10/01/2022 14:11	WG1935601
Dichlorodifluoromethane	75-71-8	0.00200	U	0.000374	0.00200	0.00500	1	10/01/2022 14:11	WG1935601
1,1-Dichloroethane	75-34-3	0.000500	U	0.000100	0.000500	0.00100	1	10/01/2022 14:11	WG1935601
1,2-Dichloroethane	107-06-2	0.000500	U	0.0000819	0.000500	0.00100	1	10/01/2022 14:11	WG1935601
1,1-Dichloroethene	75-35-4	0.000500	U	0.000188	0.000500	0.00100	1	10/01/2022 14:11	WG1935601
cis-1,2-Dichloroethene	156-59-2	0.000175	J	0.000126	0.000500	0.00100	1	10/01/2022 14:11	WG1935601
trans-1,2-Dichloroethene	156-60-5	0.000500	U	0.000149	0.000500	0.00100	1	10/01/2022 14:11	WG1935601
1,2-Dichloropropane	78-87-5	0.000500	U	0.000149	0.000500	0.00100	1	10/01/2022 14:11	WG1935601
1,3-Dichloropropane	142-28-9	0.000500	U	0.000110	0.000500	0.00100	1	10/01/2022 14:11	WG1935601
2,2-Dichloropropane	594-20-7	0.000500	U	0.000161	0.000500	0.00100	1	10/01/2022 14:11	WG1935601
1,1-Dichloropropene	563-58-6	0.000500	U	0.000142	0.000500	0.00100	1	10/01/2022 14:11	WG1935601
cis-1,3-Dichloropropene	10061-01-5	0.000500	U	0.000111	0.000500	0.00100	1	10/01/2022 14:11	WG1935601
trans-1,3-Dichloropropene	10061-02-6	0.000500	U	0.000118	0.000500	0.00100	1	10/01/2022 14:11	WG1935601
TOTAL 1,3-Dichloropropene		0.000500	U	0.000118	0.000500	0.00100	1	10/01/2022 14:11	WG1935601
Ethylbenzene	100-41-4	0.000500	U	0.000137	0.000500	0.00100	1	10/01/2022 14:11	WG1935601
Hexachloro-1,3-butadiene	87-68-3	0.000750	U	0.000337	0.000750	0.00150	1	10/04/2022 03:40	WG1935909
2-Hexanone	591-78-6	0.000750	U	0.000787	0.000750	0.0100	1	10/01/2022 14:11	WG1935601
Isopropylbenzene	98-82-8	0.000500	U	0.000105	0.000500	0.00100	1	10/01/2022 14:11	WG1935601
p-Isopropyltoluene	99-87-6	0.000500	U	0.000120	0.000500	0.00100	1	10/01/2022 14:11	WG1935601
2-Butanone (MEK)	78-93-3	0.00500	U	0.00119	0.00500	0.0100	1	10/01/2022 14:11	WG1935601
Methylene Chloride	75-09-2	0.00200	U	0.000430	0.00200	0.00500	1	10/01/2022 14:11	WG1935601
4-Methyl-2-pentanone (MIBK)	108-10-1	0.00500	U	0.000478	0.00500	0.0100	1	10/04/2022 03:40	WG1935909
n-Propylbenzene	103-65-1	0.000500	U	0.0000993	0.000500	0.00100	1	10/01/2022 14:11	WG1935601
Styrene	100-42-5	0.000500	U	0.000118	0.000500	0.00100	1	10/01/2022 14:11	WG1935601
1,1,1,2-Tetrachloroethane	630-20-6	0.000500	U	0.000147	0.000500	0.00100	1	10/01/2022 14:11	WG1935601
1,1,2,2-Tetrachloroethane	79-34-5	0.000500	U	0.000133	0.000500	0.00100	1	10/01/2022 14:11	WG1935601
Tetrachloroethene	127-18-4	0.000600	U	0.000300	0.000600	0.00120	1	10/01/2022 14:11	WG1935601
Toluene	108-88-3	0.000600	U	0.000278	0.000600	0.00120	1	10/01/2022 14:11	WG1935601
1,2,3-Trichlorobenzene	87-61-6	0.000500	J3 J4 U	0.000230	0.000500	0.00100	1	10/01/2022 14:11	WG1935601
1,2,4-Trichlorobenzene	120-82-1	0.00100	U	0.000481	0.00100	0.00200	1	10/04/2022 03:40	WG1935909
1,2,4-Trimethylbenzene	95-63-6	0.00100	U	0.000322	0.00100	0.00200	1	10/01/2022 14:11	WG1935601
1,3,5-Trimethylbenzene	108-67-8	0.000500	U	0.000104	0.000500	0.00100	1	10/01/2022 14:11	WG1935601

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

Analyte	CAS #	Result	Qualifier	DL	LOD	LOQ	Dilution	Analysis	Batch
		mg/l		mg/l	mg/l	mg/l		date / time	
1,1,1-Trichloroethane	71-55-6	0.000500	U	0.000149	0.000500	0.00100	1	10/01/2022 14:11	WG1935601
1,1,2-Trichloroethane	79-00-5	0.000500	U	0.000158	0.000500	0.00100	1	10/01/2022 14:11	WG1935601
Trichloroethene	79-01-6	0.00666		0.000190	0.000500	0.00100	1	10/01/2022 14:11	WG1935601
Trichlorofluoromethane	75-69-4	0.00200	U	0.000160	0.00200	0.00500	1	10/04/2022 03:40	WG1935909
1,2,3-Trichloropropane	96-18-4	0.00100	U	0.000237	0.00100	0.00250	1	10/01/2022 14:11	WG1935601
o-Xylene	95-47-6	0.000500	U	0.000174	0.000500	0.00100	1	10/01/2022 14:11	WG1935601
m&p-Xylene	1330-20-7	0.000500	U	0.000430	0.000500	0.00200	1	10/01/2022 14:11	WG1935601
Xylenes, Total	1330-20-7	0.00150	U	0.000174	0.00150	0.00300	1	10/01/2022 14:11	WG1935601
(S) Toluene-d8	*2037-26-5*	*103*				*89.0-112*		*10/01/2022 14:11*	WG1935601
(S) Toluene-d8	*2037-26-5*	*106*				*89.0-112*		*10/04/2022 03:40*	WG1935909
(S) 4-Bromofluorobenzene	*460-00-4*	*112*				*85.0-114*		*10/01/2022 14:11*	WG1935601
(S) 4-Bromofluorobenzene	*460-00-4*	*109*				*85.0-114*		*10/04/2022 03:40*	WG1935909
(S) 1,2-Dichloroethane-d4	*17060-07-0*	*96.4*				*81.0-118*		*10/01/2022 14:11*	WG1935601
(S) 1,2-Dichloroethane-d4	*17060-07-0*	*110*				*81.0-118*		*10/04/2022 03:40*	WG1935909

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

Analyte	CAS #	Result mg/l	Qualifier	DL mg/l	LOD mg/l	LOQ mg/l	Dilution	Analysis date / time	Batch
Acetone	67-64-1	0.0250	U	0.0113	0.0250	0.0500	1	10/01/2022 19:33	WG1935734
Benzene	71-43-2	0.000500	U	0.0000941	0.000500	0.00100	1	10/01/2022 19:33	WG1935734
Bromobenzene	108-86-1	0.000500	U	0.000118	0.000500	0.00100	1	10/01/2022 19:33	WG1935734
Bromochloromethane	74-97-5	0.000500	U	0.000128	0.000500	0.00100	1	10/01/2022 19:33	WG1935734
Bromodichloromethane	75-27-4	0.000500	U	0.000136	0.000500	0.00100	1	10/01/2022 19:33	WG1935734
Bromoform	75-25-2	0.000500	U	0.000129	0.000500	0.00100	1	10/01/2022 19:33	WG1935734
Bromomethane	74-83-9	0.00200	U	0.000605	0.00200	0.00500	1	10/01/2022 19:33	WG1935734
n-Butylbenzene	104-51-8	0.000500	U	0.000157	0.000500	0.00100	1	10/01/2022 19:33	WG1935734
sec-Butylbenzene	135-98-8	0.000500	U	0.000125	0.000500	0.00100	1	10/01/2022 19:33	WG1935734
tert-Butylbenzene	98-06-6	0.000500	U	0.000127	0.000500	0.00100	1	10/01/2022 19:33	WG1935734
Carbon disulfide	75-15-0	0.000500	U	0.0000960	0.000500	0.00100	1	10/01/2022 19:33	WG1935734
Carbon tetrachloride	56-23-5	0.000500	U	0.000128	0.000500	0.00100	1	10/01/2022 19:33	WG1935734
Chlorobenzene	108-90-7	0.000500	U	0.000116	0.000500	0.00100	1	10/01/2022 19:33	WG1935734
Chlorodibromomethane	124-48-1	0.000500	U	0.000140	0.000500	0.00100	1	10/01/2022 19:33	WG1935734
Chloroethane	75-00-3	0.00200	J4 U	0.000192	0.00200	0.00500	1	10/01/2022 19:33	WG1935734
Chloroform	67-66-3	0.00200	U	0.000111	0.00200	0.00500	1	10/01/2022 19:33	WG1935734
Chloromethane	74-87-3	0.00200	U	0.000960	0.00200	0.00400	1	10/01/2022 19:33	WG1935734
2-Chlorotoluene	95-49-8	0.000500	U	0.000106	0.000500	0.00100	1	10/01/2022 19:33	WG1935734
4-Chlorotoluene	106-43-4	0.000500	U	0.000114	0.000500	0.00100	1	10/01/2022 19:33	WG1935734
1,2-Dibromoethane	106-93-4	0.000500	U	0.000126	0.000500	0.00100	1	10/01/2022 19:33	WG1935734
1,2-Dibromo-3-Chloropropane	96-12-8	0.00200	U	0.000276	0.00200	0.00500	1	10/01/2022 19:33	WG1935734
Dibromomethane	74-95-3	0.000500	U	0.000122	0.000500	0.00100	1	10/01/2022 19:33	WG1935734
1,2-Dichlorobenzene	95-50-1	0.000500	U	0.000107	0.000500	0.00100	1	10/01/2022 19:33	WG1935734
1,3-Dichlorobenzene	541-73-1	0.000500	U	0.000110	0.000500	0.00100	1	10/01/2022 19:33	WG1935734
1,4-Dichlorobenzene	106-46-7	0.000500	U	0.000120	0.000500	0.00100	1	10/01/2022 19:33	WG1935734
Dichlorodifluoromethane	75-71-8	0.00200	U	0.000374	0.00200	0.00500	1	10/01/2022 19:33	WG1935734
1,1-Dichloroethane	75-34-3	0.000500	U	0.000100	0.000500	0.00100	1	10/01/2022 19:33	WG1935734
1,2-Dichloroethane	107-06-2	0.000500	U	0.0000819	0.000500	0.00100	1	10/01/2022 19:33	WG1935734
1,1-Dichloroethene	75-35-4	0.000500	U	0.000188	0.000500	0.00100	1	10/01/2022 19:33	WG1935734
cis-1,2-Dichloroethene	156-59-2	0.000128	J	0.000126	0.000500	0.00100	1	10/01/2022 19:33	WG1935734
trans-1,2-Dichloroethene	156-60-5	0.000500	U	0.000149	0.000500	0.00100	1	10/01/2022 19:33	WG1935734
1,2-Dichloropropane	78-87-5	0.000500	U	0.000149	0.000500	0.00100	1	10/01/2022 19:33	WG1935734
1,3-Dichloropropane	142-28-9	0.000500	U	0.000110	0.000500	0.00100	1	10/01/2022 19:33	WG1935734
2,2-Dichloropropane	594-20-7	0.000500	U	0.000161	0.000500	0.00100	1	10/01/2022 19:33	WG1935734
1,1-Dichloropropene	563-58-6	0.000500	U	0.000142	0.000500	0.00100	1	10/01/2022 19:33	WG1935734
cis-1,3-Dichloropropene	10061-01-5	0.000500	U	0.000111	0.000500	0.00100	1	10/01/2022 19:33	WG1935734
trans-1,3-Dichloropropene	10061-02-6	0.000500	U	0.000118	0.000500	0.00100	1	10/01/2022 19:33	WG1935734
TOTAL 1,3-Dichloropropene		0.000500	U	0.000118	0.000500	0.00100	1	10/01/2022 19:33	WG1935734
Ethylbenzene	100-41-4	0.000500	U	0.000137	0.000500	0.00100	1	10/01/2022 19:33	WG1935734
Hexachloro-1,3-butadiene	87-68-3	0.000750	U	0.000337	0.000750	0.00150	1	10/01/2022 19:33	WG1935734
2-Hexanone	591-78-6	0.000750	U	0.000787	0.000750	0.0100	1	10/01/2022 19:33	WG1935734
Isopropylbenzene	98-82-8	0.000500	U	0.000105	0.000500	0.00100	1	10/01/2022 19:33	WG1935734
p-Isopropyltoluene	99-87-6	0.000500	J3 U	0.000120	0.000500	0.00100	1	10/01/2022 19:33	WG1935734
2-Butanone (MEK)	78-93-3	0.00500	U	0.00119	0.00500	0.0100	1	10/01/2022 19:33	WG1935734
Methylene Chloride	75-09-2	0.00200	U	0.000430	0.00200	0.00500	1	10/01/2022 19:33	WG1935734
4-Methyl-2-pentanone (MIBK)	108-10-1	0.00500	U	0.000478	0.00500	0.0100	1	10/01/2022 19:33	WG1935734
n-Propylbenzene	103-65-1	0.000500	U	0.0000993	0.000500	0.00100	1	10/01/2022 19:33	WG1935734
Styrene	100-42-5	0.000500	U	0.000118	0.000500	0.00100	1	10/01/2022 19:33	WG1935734
1,1,1,2-Tetrachloroethane	630-20-6	0.000500	U	0.000147	0.000500	0.00100	1	10/01/2022 19:33	WG1935734
1,1,2,2-Tetrachloroethane	79-34-5	0.000500	U	0.000133	0.000500	0.00100	1	10/01/2022 19:33	WG1935734
Tetrachloroethene	127-18-4	0.000600	U	0.000300	0.000600	0.00120	1	10/01/2022 19:33	WG1935734
Toluene	108-88-3	0.000600	U	0.000278	0.000600	0.00120	1	10/01/2022 19:33	WG1935734
1,2,3-Trichlorobenzene	87-61-6	0.000500	U	0.000230	0.000500	0.00100	1	10/01/2022 19:33	WG1935734
1,2,4-Trichlorobenzene	120-82-1	0.00100	U	0.000481	0.00100	0.00200	1	10/01/2022 19:33	WG1935734
1,2,4-Trimethylbenzene	95-63-6	0.00100	U	0.000322	0.00100	0.00200	1	10/01/2022 19:33	WG1935734
1,3,5-Trimethylbenzene	108-67-8	0.000500	U	0.000104	0.000500	0.00100	1	10/01/2022 19:33	WG1935734

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

Analyte	CAS #	Result	Qualifier	DL	LOD	LOQ	Dilution	Analysis	Batch
		mg/l		mg/l	mg/l	mg/l		date / time	
1,1,1-Trichloroethane	71-55-6	0.000500	U	0.000149	0.000500	0.00100	1	10/01/2022 19:33	WG1935734
1,1,2-Trichloroethane	79-00-5	0.000500	U	0.000158	0.000500	0.00100	1	10/01/2022 19:33	WG1935734
Trichloroethene	79-01-6	0.00635		0.000190	0.000500	0.00100	1	10/01/2022 19:33	WG1935734
Trichlorofluoromethane	75-69-4	0.00200	U	0.000160	0.00200	0.00500	1	10/01/2022 19:33	WG1935734
1,2,3-Trichloropropane	96-18-4	0.00100	U	0.000237	0.00100	0.00250	1	10/01/2022 19:33	WG1935734
o-Xylene	95-47-6	0.000500	U	0.000174	0.000500	0.00100	1	10/01/2022 19:33	WG1935734
m&p-Xylene	1330-20-7	0.000500	U	0.000430	0.000500	0.00200	1	10/01/2022 19:33	WG1935734
Xylenes, Total	1330-20-7	0.00150	U	0.000174	0.00150	0.00300	1	10/01/2022 19:33	WG1935734
(S) Toluene-d8	*2037-26-5*	*106*				*89.0-112*		*10/01/2022 19:33*	WG1935734
(S) 4-Bromofluorobenzene	*460-00-4*	*107*				*85.0-114*		*10/01/2022 19:33*	WG1935734
(S) 1,2-Dichloroethane-d4	*17060-07-0*	*118*				*81.0-118*		*10/01/2022 19:33*	WG1935734

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

Analyte	CAS #	Result mg/l	Qualifier	DL mg/l	LOD mg/l	LOQ mg/l	Dilution	Analysis date / time	Batch
Acetone	67-64-1	0.0250	U	0.0113	0.0250	0.0500	1	10/01/2022 19:52	WG1935734
Benzene	71-43-2	0.000500	U	0.0000941	0.000500	0.00100	1	10/01/2022 19:52	WG1935734
Bromobenzene	108-86-1	0.000500	U	0.000118	0.000500	0.00100	1	10/01/2022 19:52	WG1935734
Bromochloromethane	74-97-5	0.000500	U	0.000128	0.000500	0.00100	1	10/01/2022 19:52	WG1935734
Bromodichloromethane	75-27-4	0.000500	U	0.000136	0.000500	0.00100	1	10/01/2022 19:52	WG1935734
Bromoform	75-25-2	0.000500	U	0.000129	0.000500	0.00100	1	10/01/2022 19:52	WG1935734
Bromomethane	74-83-9	0.00200	U	0.000605	0.00200	0.00500	1	10/01/2022 19:52	WG1935734
n-Butylbenzene	104-51-8	0.000500	U	0.000157	0.000500	0.00100	1	10/01/2022 19:52	WG1935734
sec-Butylbenzene	135-98-8	0.000500	U	0.000125	0.000500	0.00100	1	10/01/2022 19:52	WG1935734
tert-Butylbenzene	98-06-6	0.000500	U	0.000127	0.000500	0.00100	1	10/01/2022 19:52	WG1935734
Carbon disulfide	75-15-0	0.000500	U	0.0000960	0.000500	0.00100	1	10/01/2022 19:52	WG1935734
Carbon tetrachloride	56-23-5	0.000500	U	0.000128	0.000500	0.00100	1	10/01/2022 19:52	WG1935734
Chlorobenzene	108-90-7	0.000500	U	0.000116	0.000500	0.00100	1	10/01/2022 19:52	WG1935734
Chlorodibromomethane	124-48-1	0.000500	U	0.000140	0.000500	0.00100	1	10/01/2022 19:52	WG1935734
Chloroethane	75-00-3	0.00200	J4 U	0.000192	0.00200	0.00500	1	10/01/2022 19:52	WG1935734
Chloroform	67-66-3	0.00200	U	0.000111	0.00200	0.00500	1	10/01/2022 19:52	WG1935734
Chloromethane	74-87-3	0.00200	U	0.000960	0.00200	0.00400	1	10/01/2022 19:52	WG1935734
2-Chlorotoluene	95-49-8	0.000500	U	0.000106	0.000500	0.00100	1	10/01/2022 19:52	WG1935734
4-Chlorotoluene	106-43-4	0.000500	U	0.000114	0.000500	0.00100	1	10/01/2022 19:52	WG1935734
1,2-Dibromoethane	106-93-4	0.000500	U	0.000126	0.000500	0.00100	1	10/01/2022 19:52	WG1935734
1,2-Dibromo-3-Chloropropane	96-12-8	0.00200	U	0.000276	0.00200	0.00500	1	10/01/2022 19:52	WG1935734
Dibromomethane	74-95-3	0.000500	U	0.000122	0.000500	0.00100	1	10/01/2022 19:52	WG1935734
1,2-Dichlorobenzene	95-50-1	0.000500	U	0.000107	0.000500	0.00100	1	10/01/2022 19:52	WG1935734
1,3-Dichlorobenzene	541-73-1	0.000500	U	0.000110	0.000500	0.00100	1	10/01/2022 19:52	WG1935734
1,4-Dichlorobenzene	106-46-7	0.000500	U	0.000120	0.000500	0.00100	1	10/01/2022 19:52	WG1935734
Dichlorodifluoromethane	75-71-8	0.00200	U	0.000374	0.00200	0.00500	1	10/01/2022 19:52	WG1935734
1,1-Dichloroethane	75-34-3	0.000500	U	0.000100	0.000500	0.00100	1	10/01/2022 19:52	WG1935734
1,2-Dichloroethane	107-06-2	0.000500	U	0.0000819	0.000500	0.00100	1	10/01/2022 19:52	WG1935734
1,1-Dichloroethene	75-35-4	0.000500	U	0.000188	0.000500	0.00100	1	10/01/2022 19:52	WG1935734
cis-1,2-Dichloroethene	156-59-2	0.000500	U	0.000126	0.000500	0.00100	1	10/01/2022 19:52	WG1935734
trans-1,2-Dichloroethene	156-60-5	0.000500	U	0.000149	0.000500	0.00100	1	10/01/2022 19:52	WG1935734
1,2-Dichloropropane	78-87-5	0.000500	U	0.000149	0.000500	0.00100	1	10/01/2022 19:52	WG1935734
1,3-Dichloropropane	142-28-9	0.000500	U	0.000110	0.000500	0.00100	1	10/01/2022 19:52	WG1935734
2,2-Dichloropropane	594-20-7	0.000500	U	0.000161	0.000500	0.00100	1	10/01/2022 19:52	WG1935734
1,1-Dichloropropene	563-58-6	0.000500	U	0.000142	0.000500	0.00100	1	10/01/2022 19:52	WG1935734
cis-1,3-Dichloropropene	10061-01-5	0.000500	U	0.000111	0.000500	0.00100	1	10/01/2022 19:52	WG1935734
trans-1,3-Dichloropropene	10061-02-6	0.000500	U	0.000118	0.000500	0.00100	1	10/01/2022 19:52	WG1935734
TOTAL 1,3-Dichloropropene		0.000500	U	0.000118	0.000500	0.00100	1	10/01/2022 19:52	WG1935734
Ethylbenzene	100-41-4	0.000500	U	0.000137	0.000500	0.00100	1	10/01/2022 19:52	WG1935734
Hexachloro-1,3-butadiene	87-68-3	0.000750	U	0.000337	0.000750	0.00150	1	10/01/2022 19:52	WG1935734
2-Hexanone	591-78-6	0.000750	U	0.000787	0.000750	0.0100	1	10/01/2022 19:52	WG1935734
Isopropylbenzene	98-82-8	0.000500	U	0.000105	0.000500	0.00100	1	10/01/2022 19:52	WG1935734
p-Isopropyltoluene	99-87-6	0.000500	J3 U	0.000120	0.000500	0.00100	1	10/01/2022 19:52	WG1935734
2-Butanone (MEK)	78-93-3	0.00500	U	0.00119	0.00500	0.0100	1	10/01/2022 19:52	WG1935734
Methylene Chloride	75-09-2	0.00200	U	0.000430	0.00200	0.00500	1	10/01/2022 19:52	WG1935734
4-Methyl-2-pentanone (MIBK)	108-10-1	0.00500	U	0.000478	0.00500	0.0100	1	10/01/2022 19:52	WG1935734
n-Propylbenzene	103-65-1	0.000500	U	0.0000993	0.000500	0.00100	1	10/01/2022 19:52	WG1935734
Styrene	100-42-5	0.000500	U	0.000118	0.000500	0.00100	1	10/01/2022 19:52	WG1935734
1,1,1,2-Tetrachloroethane	630-20-6	0.000500	U	0.000147	0.000500	0.00100	1	10/01/2022 19:52	WG1935734
1,1,2,2-Tetrachloroethane	79-34-5	0.000500	U	0.000133	0.000500	0.00100	1	10/01/2022 19:52	WG1935734
Tetrachloroethene	127-18-4	0.000600	U	0.000300	0.000600	0.00120	1	10/01/2022 19:52	WG1935734
Toluene	108-88-3	0.000600	U	0.000278	0.000600	0.00120	1	10/01/2022 19:52	WG1935734
1,2,3-Trichlorobenzene	87-61-6	0.000500	U	0.000230	0.000500	0.00100	1	10/01/2022 19:52	WG1935734
1,2,4-Trichlorobenzene	120-82-1	0.00100	U	0.000481	0.00100	0.00200	1	10/01/2022 19:52	WG1935734
1,2,4-Trimethylbenzene	95-63-6	0.00100	U	0.000322	0.00100	0.00200	1	10/01/2022 19:52	WG1935734
1,3,5-Trimethylbenzene	108-67-8	0.000500	U	0.000104	0.000500	0.00100	1	10/01/2022 19:52	WG1935734

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

Analyte	CAS #	Result	Qualifier	DL	LOD	LOQ	Dilution	Analysis	Batch
		mg/l		mg/l	mg/l	mg/l		date / time	
1,1,1-Trichloroethane	71-55-6	0.000500	U	0.000149	0.000500	0.00100	1	10/01/2022 19:52	WG1935734
1,1,2-Trichloroethane	79-00-5	0.000500	U	0.000158	0.000500	0.00100	1	10/01/2022 19:52	WG1935734
Trichloroethene	79-01-6	0.00832		0.000190	0.000500	0.00100	1	10/01/2022 19:52	WG1935734
Trichlorofluoromethane	75-69-4	0.00200	U	0.000160	0.00200	0.00500	1	10/01/2022 19:52	WG1935734
1,2,3-Trichloropropane	96-18-4	0.00100	U	0.000237	0.00100	0.00250	1	10/01/2022 19:52	WG1935734
o-Xylene	95-47-6	0.000500	U	0.000174	0.000500	0.00100	1	10/01/2022 19:52	WG1935734
m&p-Xylene	1330-20-7	0.000500	U	0.000430	0.000500	0.00200	1	10/01/2022 19:52	WG1935734
Xylenes, Total	1330-20-7	0.00150	U	0.000174	0.00150	0.00300	1	10/01/2022 19:52	WG1935734
(S) Toluene-d8	*2037-26-5*	*107*				*89.0-112*		*10/01/2022 19:52*	WG1935734
(S) 4-Bromofluorobenzene	*460-00-4*	*111*				*85.0-114*		*10/01/2022 19:52*	WG1935734
(S) 1,2-Dichloroethane-d4	*17060-07-0*	*121*	J1			*81.0-118*		*10/01/2022 19:52*	WG1935734

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

Analyte	CAS #	Result mg/l	Qualifier	DL mg/l	LOD mg/l	LOQ mg/l	Dilution	Analysis date / time	Batch
Acetone	67-64-1	0.0250	U	0.0113	0.0250	0.0500	1	10/01/2022 20:11	WG1935734
Benzene	71-43-2	0.000500	U	0.0000941	0.000500	0.00100	1	10/01/2022 20:11	WG1935734
Bromobenzene	108-86-1	0.000500	U	0.000118	0.000500	0.00100	1	10/01/2022 20:11	WG1935734
Bromochloromethane	74-97-5	0.000500	U	0.000128	0.000500	0.00100	1	10/01/2022 20:11	WG1935734
Bromodichloromethane	75-27-4	0.000500	U	0.000136	0.000500	0.00100	1	10/01/2022 20:11	WG1935734
Bromoform	75-25-2	0.000500	U	0.000129	0.000500	0.00100	1	10/01/2022 20:11	WG1935734
Bromomethane	74-83-9	0.00200	U	0.000605	0.00200	0.00500	1	10/01/2022 20:11	WG1935734
n-Butylbenzene	104-51-8	0.000500	U	0.000157	0.000500	0.00100	1	10/01/2022 20:11	WG1935734
sec-Butylbenzene	135-98-8	0.000500	U	0.000125	0.000500	0.00100	1	10/01/2022 20:11	WG1935734
tert-Butylbenzene	98-06-6	0.000500	U	0.000127	0.000500	0.00100	1	10/01/2022 20:11	WG1935734
Carbon disulfide	75-15-0	0.000500	U	0.0000960	0.000500	0.00100	1	10/01/2022 20:11	WG1935734
Carbon tetrachloride	56-23-5	0.000500	U	0.000128	0.000500	0.00100	1	10/01/2022 20:11	WG1935734
Chlorobenzene	108-90-7	0.000500	U	0.000116	0.000500	0.00100	1	10/01/2022 20:11	WG1935734
Chlorodibromomethane	124-48-1	0.000500	U	0.000140	0.000500	0.00100	1	10/01/2022 20:11	WG1935734
Chloroethane	75-00-3	0.00200	J4 U	0.000192	0.00200	0.00500	1	10/01/2022 20:11	WG1935734
Chloroform	67-66-3	0.00200	U	0.000111	0.00200	0.00500	1	10/01/2022 20:11	WG1935734
Chloromethane	74-87-3	0.00200	U	0.000960	0.00200	0.00400	1	10/01/2022 20:11	WG1935734
2-Chlorotoluene	95-49-8	0.000500	U	0.000106	0.000500	0.00100	1	10/01/2022 20:11	WG1935734
4-Chlorotoluene	106-43-4	0.000500	U	0.000114	0.000500	0.00100	1	10/01/2022 20:11	WG1935734
1,2-Dibromoethane	106-93-4	0.000500	U	0.000126	0.000500	0.00100	1	10/01/2022 20:11	WG1935734
1,2-Dibromo-3-Chloropropane	96-12-8	0.00200	U	0.000276	0.00200	0.00500	1	10/01/2022 20:11	WG1935734
Dibromomethane	74-95-3	0.000500	U	0.000122	0.000500	0.00100	1	10/01/2022 20:11	WG1935734
1,2-Dichlorobenzene	95-50-1	0.000500	U	0.000107	0.000500	0.00100	1	10/01/2022 20:11	WG1935734
1,3-Dichlorobenzene	541-73-1	0.000500	U	0.000110	0.000500	0.00100	1	10/01/2022 20:11	WG1935734
1,4-Dichlorobenzene	106-46-7	0.000500	U	0.000120	0.000500	0.00100	1	10/01/2022 20:11	WG1935734
Dichlorodifluoromethane	75-71-8	0.00200	U	0.000374	0.00200	0.00500	1	10/01/2022 20:11	WG1935734
1,1-Dichloroethane	75-34-3	0.000500	U	0.000100	0.000500	0.00100	1	10/01/2022 20:11	WG1935734
1,2-Dichloroethane	107-06-2	0.000500	U	0.0000819	0.000500	0.00100	1	10/01/2022 20:11	WG1935734
1,1-Dichloroethene	75-35-4	0.000500	U	0.000188	0.000500	0.00100	1	10/01/2022 20:11	WG1935734
cis-1,2-Dichloroethene	156-59-2	0.000500	U	0.000126	0.000500	0.00100	1	10/01/2022 20:11	WG1935734
trans-1,2-Dichloroethene	156-60-5	0.000500	U	0.000149	0.000500	0.00100	1	10/01/2022 20:11	WG1935734
1,2-Dichloropropane	78-87-5	0.000500	U	0.000149	0.000500	0.00100	1	10/01/2022 20:11	WG1935734
1,3-Dichloropropane	142-28-9	0.000500	U	0.000110	0.000500	0.00100	1	10/01/2022 20:11	WG1935734
2,2-Dichloropropane	594-20-7	0.000500	U	0.000161	0.000500	0.00100	1	10/01/2022 20:11	WG1935734
1,1-Dichloropropene	563-58-6	0.000500	U	0.000142	0.000500	0.00100	1	10/01/2022 20:11	WG1935734
cis-1,3-Dichloropropene	10061-01-5	0.000500	U	0.000111	0.000500	0.00100	1	10/01/2022 20:11	WG1935734
trans-1,3-Dichloropropene	10061-02-6	0.000500	U	0.000118	0.000500	0.00100	1	10/01/2022 20:11	WG1935734
TOTAL 1,3-Dichloropropene		0.000500	U	0.000118	0.000500	0.00100	1	10/01/2022 20:11	WG1935734
Ethylbenzene	100-41-4	0.000500	U	0.000137	0.000500	0.00100	1	10/01/2022 20:11	WG1935734
Hexachloro-1,3-butadiene	87-68-3	0.000750	U	0.000337	0.000750	0.00150	1	10/01/2022 20:11	WG1935734
2-Hexanone	591-78-6	0.000750	U	0.000787	0.000750	0.0100	1	10/01/2022 20:11	WG1935734
Isopropylbenzene	98-82-8	0.000500	U	0.000105	0.000500	0.00100	1	10/01/2022 20:11	WG1935734
p-Isopropyltoluene	99-87-6	0.000500	J3 U	0.000120	0.000500	0.00100	1	10/01/2022 20:11	WG1935734
2-Butanone (MEK)	78-93-3	0.00500	U	0.00119	0.00500	0.0100	1	10/01/2022 20:11	WG1935734
Methylene Chloride	75-09-2	0.00200	U	0.000430	0.00200	0.00500	1	10/01/2022 20:11	WG1935734
4-Methyl-2-pentanone (MIBK)	108-10-1	0.00500	U	0.000478	0.00500	0.0100	1	10/01/2022 20:11	WG1935734
n-Propylbenzene	103-65-1	0.000500	U	0.0000993	0.000500	0.00100	1	10/01/2022 20:11	WG1935734
Styrene	100-42-5	0.000500	U	0.000118	0.000500	0.00100	1	10/01/2022 20:11	WG1935734
1,1,1,2-Tetrachloroethane	630-20-6	0.000500	U	0.000147	0.000500	0.00100	1	10/01/2022 20:11	WG1935734
1,1,2,2-Tetrachloroethane	79-34-5	0.000500	U	0.000133	0.000500	0.00100	1	10/01/2022 20:11	WG1935734
Tetrachloroethene	127-18-4	0.000600	U	0.000300	0.000600	0.00120	1	10/01/2022 20:11	WG1935734
Toluene	108-88-3	0.000600	U	0.000278	0.000600	0.00120	1	10/01/2022 20:11	WG1935734
1,2,3-Trichlorobenzene	87-61-6	0.000500	U	0.000230	0.000500	0.00100	1	10/01/2022 20:11	WG1935734
1,2,4-Trichlorobenzene	120-82-1	0.00100	U	0.000481	0.00100	0.00200	1	10/01/2022 20:11	WG1935734
1,2,4-Trimethylbenzene	95-63-6	0.00100	U	0.000322	0.00100	0.00200	1	10/01/2022 20:11	WG1935734
1,3,5-Trimethylbenzene	108-67-8	0.000500	U	0.000104	0.000500	0.00100	1	10/01/2022 20:11	WG1935734

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

Analyte	CAS #	Result	Qualifier	DL	LOD	LOQ	Dilution	Analysis	Batch
		mg/l		mg/l	mg/l	mg/l		date / time	
1,1,1-Trichloroethane	71-55-6	0.000500	U	0.000149	0.000500	0.00100	1	10/01/2022 20:11	WG1935734
1,1,2-Trichloroethane	79-00-5	0.000500	U	0.000158	0.000500	0.00100	1	10/01/2022 20:11	WG1935734
Trichloroethene	79-01-6	0.00190		0.000190	0.000500	0.00100	1	10/01/2022 20:11	WG1935734
Trichlorofluoromethane	75-69-4	0.00200	U	0.000160	0.00200	0.00500	1	10/01/2022 20:11	WG1935734
1,2,3-Trichloropropane	96-18-4	0.00100	U	0.000237	0.00100	0.00250	1	10/01/2022 20:11	WG1935734
o-Xylene	95-47-6	0.000500	U	0.000174	0.000500	0.00100	1	10/01/2022 20:11	WG1935734
m&p-Xylene	1330-20-7	0.000500	U	0.000430	0.000500	0.00200	1	10/01/2022 20:11	WG1935734
Xylenes, Total	1330-20-7	0.00150	U	0.000174	0.00150	0.00300	1	10/01/2022 20:11	WG1935734
(S) Toluene-d8	*2037-26-5*	*107*				*89.0-112*		*10/01/2022 20:11*	WG1935734
(S) 4-Bromofluorobenzene	*460-00-4*	*107*				*85.0-114*		*10/01/2022 20:11*	WG1935734
(S) 1,2-Dichloroethane-d4	*17060-07-0*	*121*	J1			*81.0-118*		*10/01/2022 20:11*	WG1935734

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

Analyte	CAS #	Result mg/l	Qualifier	DL mg/l	LOD mg/l	LOQ mg/l	Dilution	Analysis date / time	Batch
Acetone	67-64-1	0.0250	U	0.0113	0.0250	0.0500	1	10/01/2022 20:30	WG1935734
Benzene	71-43-2	0.000500	U	0.0000941	0.000500	0.00100	1	10/01/2022 20:30	WG1935734
Bromobenzene	108-86-1	0.000500	U	0.000118	0.000500	0.00100	1	10/01/2022 20:30	WG1935734
Bromochloromethane	74-97-5	0.000500	U	0.000128	0.000500	0.00100	1	10/01/2022 20:30	WG1935734
Bromodichloromethane	75-27-4	0.000500	U	0.000136	0.000500	0.00100	1	10/01/2022 20:30	WG1935734
Bromoform	75-25-2	0.000500	U	0.000129	0.000500	0.00100	1	10/01/2022 20:30	WG1935734
Bromomethane	74-83-9	0.00200	U	0.000605	0.00200	0.00500	1	10/01/2022 20:30	WG1935734
n-Butylbenzene	104-51-8	0.000500	U	0.000157	0.000500	0.00100	1	10/01/2022 20:30	WG1935734
sec-Butylbenzene	135-98-8	0.000500	U	0.000125	0.000500	0.00100	1	10/01/2022 20:30	WG1935734
tert-Butylbenzene	98-06-6	0.000500	U	0.000127	0.000500	0.00100	1	10/01/2022 20:30	WG1935734
Carbon disulfide	75-15-0	0.000500	U	0.0000960	0.000500	0.00100	1	10/01/2022 20:30	WG1935734
Carbon tetrachloride	56-23-5	0.000500	U	0.000128	0.000500	0.00100	1	10/01/2022 20:30	WG1935734
Chlorobenzene	108-90-7	0.000500	U	0.000116	0.000500	0.00100	1	10/01/2022 20:30	WG1935734
Chlorodibromomethane	124-48-1	0.000500	U	0.000140	0.000500	0.00100	1	10/01/2022 20:30	WG1935734
Chloroethane	75-00-3	0.00200	J4 U	0.000192	0.00200	0.00500	1	10/01/2022 20:30	WG1935734
Chloroform	67-66-3	0.00200	U	0.000111	0.00200	0.00500	1	10/01/2022 20:30	WG1935734
Chloromethane	74-87-3	0.00200	U	0.000960	0.00200	0.00400	1	10/01/2022 20:30	WG1935734
2-Chlorotoluene	95-49-8	0.000500	U	0.000106	0.000500	0.00100	1	10/01/2022 20:30	WG1935734
4-Chlorotoluene	106-43-4	0.000500	U	0.000114	0.000500	0.00100	1	10/01/2022 20:30	WG1935734
1,2-Dibromoethane	106-93-4	0.000500	U	0.000126	0.000500	0.00100	1	10/01/2022 20:30	WG1935734
1,2-Dibromo-3-Chloropropane	96-12-8	0.00200	U	0.000276	0.00200	0.00500	1	10/01/2022 20:30	WG1935734
Dibromomethane	74-95-3	0.000500	U	0.000122	0.000500	0.00100	1	10/01/2022 20:30	WG1935734
1,2-Dichlorobenzene	95-50-1	0.000500	U	0.000107	0.000500	0.00100	1	10/01/2022 20:30	WG1935734
1,3-Dichlorobenzene	541-73-1	0.000500	U	0.000110	0.000500	0.00100	1	10/01/2022 20:30	WG1935734
1,4-Dichlorobenzene	106-46-7	0.000500	U	0.000120	0.000500	0.00100	1	10/01/2022 20:30	WG1935734
Dichlorodifluoromethane	75-71-8	0.00200	U	0.000374	0.00200	0.00500	1	10/01/2022 20:30	WG1935734
1,1-Dichloroethane	75-34-3	0.000500	U	0.000100	0.000500	0.00100	1	10/01/2022 20:30	WG1935734
1,2-Dichloroethane	107-06-2	0.000500	U	0.0000819	0.000500	0.00100	1	10/01/2022 20:30	WG1935734
1,1-Dichloroethene	75-35-4	0.000500	U	0.000188	0.000500	0.00100	1	10/01/2022 20:30	WG1935734
cis-1,2-Dichloroethene	156-59-2	0.000500	U	0.000126	0.000500	0.00100	1	10/01/2022 20:30	WG1935734
trans-1,2-Dichloroethene	156-60-5	0.000500	U	0.000149	0.000500	0.00100	1	10/01/2022 20:30	WG1935734
1,2-Dichloropropane	78-87-5	0.000500	U	0.000149	0.000500	0.00100	1	10/01/2022 20:30	WG1935734
1,3-Dichloropropane	142-28-9	0.000500	U	0.000110	0.000500	0.00100	1	10/01/2022 20:30	WG1935734
2,2-Dichloropropane	594-20-7	0.000500	U	0.000161	0.000500	0.00100	1	10/01/2022 20:30	WG1935734
1,1-Dichloropropene	563-58-6	0.000500	U	0.000142	0.000500	0.00100	1	10/01/2022 20:30	WG1935734
cis-1,3-Dichloropropene	10061-01-5	0.000500	U	0.000111	0.000500	0.00100	1	10/01/2022 20:30	WG1935734
trans-1,3-Dichloropropene	10061-02-6	0.000500	U	0.000118	0.000500	0.00100	1	10/01/2022 20:30	WG1935734
TOTAL 1,3-Dichloropropene		0.000500	U	0.000118	0.000500	0.00100	1	10/01/2022 20:30	WG1935734
Ethylbenzene	100-41-4	0.000500	U	0.000137	0.000500	0.00100	1	10/01/2022 20:30	WG1935734
Hexachloro-1,3-butadiene	87-68-3	0.000750	U	0.000337	0.000750	0.00150	1	10/01/2022 20:30	WG1935734
2-Hexanone	591-78-6	0.000750	U	0.000787	0.000750	0.0100	1	10/01/2022 20:30	WG1935734
Isopropylbenzene	98-82-8	0.000500	U	0.000105	0.000500	0.00100	1	10/01/2022 20:30	WG1935734
p-Isopropyltoluene	99-87-6	0.000500	J3 U	0.000120	0.000500	0.00100	1	10/01/2022 20:30	WG1935734
2-Butanone (MEK)	78-93-3	0.00500	U	0.00119	0.00500	0.0100	1	10/01/2022 20:30	WG1935734
Methylene Chloride	75-09-2	0.00200	U	0.000430	0.00200	0.00500	1	10/01/2022 20:30	WG1935734
4-Methyl-2-pentanone (MIBK)	108-10-1	0.00500	U	0.000478	0.00500	0.0100	1	10/01/2022 20:30	WG1935734
n-Propylbenzene	103-65-1	0.000500	U	0.0000993	0.000500	0.00100	1	10/01/2022 20:30	WG1935734
Styrene	100-42-5	0.000500	U	0.000118	0.000500	0.00100	1	10/01/2022 20:30	WG1935734
1,1,1,2-Tetrachloroethane	630-20-6	0.000500	U	0.000147	0.000500	0.00100	1	10/01/2022 20:30	WG1935734
1,1,2,2-Tetrachloroethane	79-34-5	0.000500	U	0.000133	0.000500	0.00100	1	10/01/2022 20:30	WG1935734
Tetrachloroethene	127-18-4	0.000600	U	0.000300	0.000600	0.00120	1	10/01/2022 20:30	WG1935734
Toluene	108-88-3	0.000600	U	0.000278	0.000600	0.00120	1	10/01/2022 20:30	WG1935734
1,2,3-Trichlorobenzene	87-61-6	0.000500	U	0.000230	0.000500	0.00100	1	10/01/2022 20:30	WG1935734
1,2,4-Trichlorobenzene	120-82-1	0.00100	U	0.000481	0.00100	0.00200	1	10/01/2022 20:30	WG1935734
1,2,4-Trimethylbenzene	95-63-6	0.00100	U	0.000322	0.00100	0.00200	1	10/01/2022 20:30	WG1935734
1,3,5-Trimethylbenzene	108-67-8	0.000500	U	0.000104	0.000500	0.00100	1	10/01/2022 20:30	WG1935734

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

Analyte	CAS #	Result	Qualifier	DL	LOD	LOQ	Dilution	Analysis	Batch
		mg/l		mg/l	mg/l	mg/l		date / time	
1,1,1-Trichloroethane	71-55-6	0.000500	U	0.000149	0.000500	0.00100	1	10/01/2022 20:30	WG1935734
1,1,2-Trichloroethane	79-00-5	0.000500	U	0.000158	0.000500	0.00100	1	10/01/2022 20:30	WG1935734
Trichloroethene	79-01-6	0.000500	U	0.000190	0.000500	0.00100	1	10/01/2022 20:30	WG1935734
Trichlorofluoromethane	75-69-4	0.00200	U	0.000160	0.00200	0.00500	1	10/01/2022 20:30	WG1935734
1,2,3-Trichloropropane	96-18-4	0.00100	U	0.000237	0.00100	0.00250	1	10/01/2022 20:30	WG1935734
o-Xylene	95-47-6	0.000500	U	0.000174	0.000500	0.00100	1	10/01/2022 20:30	WG1935734
m&p-Xylene	1330-20-7	0.000500	U	0.000430	0.000500	0.00200	1	10/01/2022 20:30	WG1935734
Xylenes, Total	1330-20-7	0.00150	U	0.000174	0.00150	0.00300	1	10/01/2022 20:30	WG1935734
(S) Toluene-d8	*2037-26-5*	*107*				*89.0-112*		*10/01/2022 20:30*	WG1935734
(S) 4-Bromofluorobenzene	*460-00-4*	*105*				*85.0-114*		*10/01/2022 20:30*	WG1935734
(S) 1,2-Dichloroethane-d4	*17060-07-0*	*120*	J1			*81.0-118*		*10/01/2022 20:30*	WG1935734

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

Analyte	CAS #	Result mg/l	Qualifier	DL mg/l	LOD mg/l	LOQ mg/l	Dilution	Analysis date / time	Batch
Acetone	67-64-1	0.0250	U	0.0113	0.0250	0.0500	1	10/01/2022 20:49	WG1935734
Benzene	71-43-2	0.000500	U	0.0000941	0.000500	0.00100	1	10/01/2022 20:49	WG1935734
Bromobenzene	108-86-1	0.000500	U	0.000118	0.000500	0.00100	1	10/01/2022 20:49	WG1935734
Bromochloromethane	74-97-5	0.000500	U	0.000128	0.000500	0.00100	1	10/01/2022 20:49	WG1935734
Bromodichloromethane	75-27-4	0.000500	U	0.000136	0.000500	0.00100	1	10/01/2022 20:49	WG1935734
Bromoform	75-25-2	0.000500	U	0.000129	0.000500	0.00100	1	10/01/2022 20:49	WG1935734
Bromomethane	74-83-9	0.00200	U	0.000605	0.00200	0.00500	1	10/01/2022 20:49	WG1935734
n-Butylbenzene	104-51-8	0.000500	U	0.000157	0.000500	0.00100	1	10/01/2022 20:49	WG1935734
sec-Butylbenzene	135-98-8	0.000500	U	0.000125	0.000500	0.00100	1	10/01/2022 20:49	WG1935734
tert-Butylbenzene	98-06-6	0.000500	U	0.000127	0.000500	0.00100	1	10/01/2022 20:49	WG1935734
Carbon disulfide	75-15-0	0.000500	U	0.0000960	0.000500	0.00100	1	10/01/2022 20:49	WG1935734
Carbon tetrachloride	56-23-5	0.000500	U	0.000128	0.000500	0.00100	1	10/01/2022 20:49	WG1935734
Chlorobenzene	108-90-7	0.000500	U	0.000116	0.000500	0.00100	1	10/01/2022 20:49	WG1935734
Chlorodibromomethane	124-48-1	0.000500	U	0.000140	0.000500	0.00100	1	10/01/2022 20:49	WG1935734
Chloroethane	75-00-3	0.00200	J4 U	0.000192	0.00200	0.00500	1	10/01/2022 20:49	WG1935734
Chloroform	67-66-3	0.00200	U	0.000111	0.00200	0.00500	1	10/01/2022 20:49	WG1935734
Chloromethane	74-87-3	0.00200	U	0.000960	0.00200	0.00400	1	10/01/2022 20:49	WG1935734
2-Chlorotoluene	95-49-8	0.000500	U	0.000106	0.000500	0.00100	1	10/01/2022 20:49	WG1935734
4-Chlorotoluene	106-43-4	0.000500	U	0.000114	0.000500	0.00100	1	10/01/2022 20:49	WG1935734
1,2-Dibromoethane	106-93-4	0.000500	U	0.000126	0.000500	0.00100	1	10/01/2022 20:49	WG1935734
1,2-Dibromo-3-Chloropropane	96-12-8	0.00200	U	0.000276	0.00200	0.00500	1	10/01/2022 20:49	WG1935734
Dibromomethane	74-95-3	0.000500	U	0.000122	0.000500	0.00100	1	10/01/2022 20:49	WG1935734
1,2-Dichlorobenzene	95-50-1	0.000500	U	0.000107	0.000500	0.00100	1	10/01/2022 20:49	WG1935734
1,3-Dichlorobenzene	541-73-1	0.000500	U	0.000110	0.000500	0.00100	1	10/01/2022 20:49	WG1935734
1,4-Dichlorobenzene	106-46-7	0.000500	U	0.000120	0.000500	0.00100	1	10/01/2022 20:49	WG1935734
Dichlorodifluoromethane	75-71-8	0.00200	U	0.000374	0.00200	0.00500	1	10/01/2022 20:49	WG1935734
1,1-Dichloroethane	75-34-3	0.000500	U	0.000100	0.000500	0.00100	1	10/01/2022 20:49	WG1935734
1,2-Dichloroethane	107-06-2	0.000500	U	0.0000819	0.000500	0.00100	1	10/01/2022 20:49	WG1935734
1,1-Dichloroethene	75-35-4	0.000500	U	0.000188	0.000500	0.00100	1	10/01/2022 20:49	WG1935734
cis-1,2-Dichloroethene	156-59-2	0.000500	U	0.000126	0.000500	0.00100	1	10/01/2022 20:49	WG1935734
trans-1,2-Dichloroethene	156-60-5	0.000500	U	0.000149	0.000500	0.00100	1	10/01/2022 20:49	WG1935734
1,2-Dichloropropane	78-87-5	0.000500	U	0.000149	0.000500	0.00100	1	10/01/2022 20:49	WG1935734
1,3-Dichloropropane	142-28-9	0.000500	U	0.000110	0.000500	0.00100	1	10/01/2022 20:49	WG1935734
2,2-Dichloropropane	594-20-7	0.000500	U	0.000161	0.000500	0.00100	1	10/01/2022 20:49	WG1935734
1,1-Dichloropropene	563-58-6	0.000500	U	0.000142	0.000500	0.00100	1	10/01/2022 20:49	WG1935734
cis-1,3-Dichloropropene	10061-01-5	0.000500	U	0.000111	0.000500	0.00100	1	10/01/2022 20:49	WG1935734
trans-1,3-Dichloropropene	10061-02-6	0.000500	U	0.000118	0.000500	0.00100	1	10/01/2022 20:49	WG1935734
TOTAL 1,3-Dichloropropene		0.000500	U	0.000118	0.000500	0.00100	1	10/01/2022 20:49	WG1935734
Ethylbenzene	100-41-4	0.000500	U	0.000137	0.000500	0.00100	1	10/01/2022 20:49	WG1935734
Hexachloro-1,3-butadiene	87-68-3	0.000750	U	0.000337	0.000750	0.00150	1	10/01/2022 20:49	WG1935734
2-Hexanone	591-78-6	0.000750	U	0.000787	0.000750	0.0100	1	10/01/2022 20:49	WG1935734
Isopropylbenzene	98-82-8	0.000500	U	0.000105	0.000500	0.00100	1	10/01/2022 20:49	WG1935734
p-Isopropyltoluene	99-87-6	0.000500	J3 U	0.000120	0.000500	0.00100	1	10/01/2022 20:49	WG1935734
2-Butanone (MEK)	78-93-3	0.00500	U	0.00119	0.00500	0.0100	1	10/01/2022 20:49	WG1935734
Methylene Chloride	75-09-2	0.00200	U	0.000430	0.00200	0.00500	1	10/01/2022 20:49	WG1935734
4-Methyl-2-pentanone (MIBK)	108-10-1	0.00500	U	0.000478	0.00500	0.0100	1	10/01/2022 20:49	WG1935734
n-Propylbenzene	103-65-1	0.000500	U	0.0000993	0.000500	0.00100	1	10/01/2022 20:49	WG1935734
Styrene	100-42-5	0.000500	U	0.000118	0.000500	0.00100	1	10/01/2022 20:49	WG1935734
1,1,1,2-Tetrachloroethane	630-20-6	0.000500	U	0.000147	0.000500	0.00100	1	10/01/2022 20:49	WG1935734
1,1,2,2-Tetrachloroethane	79-34-5	0.000500	U	0.000133	0.000500	0.00100	1	10/01/2022 20:49	WG1935734
Tetrachloroethene	127-18-4	0.000600	U	0.000300	0.000600	0.00120	1	10/01/2022 20:49	WG1935734
Toluene	108-88-3	0.000600	U	0.000278	0.000600	0.00120	1	10/01/2022 20:49	WG1935734
1,2,3-Trichlorobenzene	87-61-6	0.000500	U	0.000230	0.000500	0.00100	1	10/01/2022 20:49	WG1935734
1,2,4-Trichlorobenzene	120-82-1	0.00100	U	0.000481	0.00100	0.00200	1	10/01/2022 20:49	WG1935734
1,2,4-Trimethylbenzene	95-63-6	0.00100	U	0.000322	0.00100	0.00200	1	10/01/2022 20:49	WG1935734
1,3,5-Trimethylbenzene	108-67-8	0.000500	U	0.000104	0.000500	0.00100	1	10/01/2022 20:49	WG1935734

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

Analyte	CAS #	Result	Qualifier	DL	LOD	LOQ	Dilution	Analysis	Batch
		mg/l		mg/l	mg/l	mg/l		date / time	
1,1,1-Trichloroethane	71-55-6	0.000500	U	0.000149	0.000500	0.00100	1	10/01/2022 20:49	WG1935734
1,1,2-Trichloroethane	79-00-5	0.000500	U	0.000158	0.000500	0.00100	1	10/01/2022 20:49	WG1935734
Trichloroethene	79-01-6	0.00292		0.000190	0.000500	0.00100	1	10/01/2022 20:49	WG1935734
Trichlorofluoromethane	75-69-4	0.00200	U	0.000160	0.00200	0.00500	1	10/01/2022 20:49	WG1935734
1,2,3-Trichloropropane	96-18-4	0.00100	U	0.000237	0.00100	0.00250	1	10/01/2022 20:49	WG1935734
o-Xylene	95-47-6	0.000500	U	0.000174	0.000500	0.00100	1	10/01/2022 20:49	WG1935734
m&p-Xylene	1330-20-7	0.000500	U	0.000430	0.000500	0.00200	1	10/01/2022 20:49	WG1935734
Xylenes, Total	1330-20-7	0.00150	U	0.000174	0.00150	0.00300	1	10/01/2022 20:49	WG1935734
(S) Toluene-d8	*2037-26-5*	*109*				*89.0-112*		*10/01/2022 20:49*	WG1935734
(S) 4-Bromofluorobenzene	*460-00-4*	*109*				*85.0-114*		*10/01/2022 20:49*	WG1935734
(S) 1,2-Dichloroethane-d4	*17060-07-0*	*119*	J1			*81.0-118*		*10/01/2022 20:49*	WG1935734

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

Analyte	CAS #	Result mg/l	Qualifier	DL mg/l	LOD mg/l	LOQ mg/l	Dilution	Analysis date / time	Batch
Acetone	67-64-1	0.0250	U	0.0113	0.0250	0.0500	1	10/01/2022 21:08	WG1935734
Benzene	71-43-2	0.000500	J5 U	0.0000941	0.000500	0.00100	1	10/01/2022 21:08	WG1935734
Bromobenzene	108-86-1	0.000500	U	0.000118	0.000500	0.00100	1	10/01/2022 21:08	WG1935734
Bromochloromethane	74-97-5	0.000500	J5 U	0.000128	0.000500	0.00100	1	10/01/2022 21:08	WG1935734
Bromodichloromethane	75-27-4	0.000500	J5 U	0.000136	0.000500	0.00100	1	10/01/2022 21:08	WG1935734
Bromoform	75-25-2	0.000500	J5 U	0.000129	0.000500	0.00100	1	10/01/2022 21:08	WG1935734
Bromomethane	74-83-9	0.00200	J5 U	0.000605	0.00200	0.00500	1	10/01/2022 21:08	WG1935734
n-Butylbenzene	104-51-8	0.000500	U	0.000157	0.000500	0.00100	1	10/01/2022 21:08	WG1935734
sec-Butylbenzene	135-98-8	0.000500	J5 U	0.000125	0.000500	0.00100	1	10/01/2022 21:08	WG1935734
tert-Butylbenzene	98-06-6	0.000500	J5 U	0.000127	0.000500	0.00100	1	10/01/2022 21:08	WG1935734
Carbon disulfide	75-15-0	0.000500	U	0.0000960	0.000500	0.00100	1	10/01/2022 21:08	WG1935734
Carbon tetrachloride	56-23-5	0.000500	J5 U	0.000128	0.000500	0.00100	1	10/01/2022 21:08	WG1935734
Chlorobenzene	108-90-7	0.000500	J5 U	0.000116	0.000500	0.00100	1	10/01/2022 21:08	WG1935734
Chlorodibromomethane	124-48-1	0.000500	J5 U	0.000140	0.000500	0.00100	1	10/01/2022 21:08	WG1935734
Chloroethane	75-00-3	0.00200	J4 J5 U	0.000192	0.00200	0.00500	1	10/01/2022 21:08	WG1935734
Chloroform	67-66-3	0.00200	J5 U	0.000111	0.00200	0.00500	1	10/01/2022 21:08	WG1935734
Chloromethane	74-87-3	0.00200	J5 U	0.000960	0.00200	0.00400	1	10/01/2022 21:08	WG1935734
2-Chlorotoluene	95-49-8	0.000500	U	0.000106	0.000500	0.00100	1	10/01/2022 21:08	WG1935734
4-Chlorotoluene	106-43-4	0.000500	U	0.000114	0.000500	0.00100	1	10/01/2022 21:08	WG1935734
1,2-Dibromoethane	106-93-4	0.000500	J5 U	0.000126	0.000500	0.00100	1	10/01/2022 21:08	WG1935734
1,2-Dibromo-3-Chloropropane	96-12-8	0.00200	U	0.000276	0.00200	0.00500	1	10/01/2022 21:08	WG1935734
Dibromomethane	74-95-3	0.000500	J5 U	0.000122	0.000500	0.00100	1	10/01/2022 21:08	WG1935734
1,2-Dichlorobenzene	95-50-1	0.000500	J5 U	0.000107	0.000500	0.00100	1	10/01/2022 21:08	WG1935734
1,3-Dichlorobenzene	541-73-1	0.000500	J5 U	0.000110	0.000500	0.00100	1	10/01/2022 21:08	WG1935734
1,4-Dichlorobenzene	106-46-7	0.000500	J5 U	0.000120	0.000500	0.00100	1	10/01/2022 21:08	WG1935734
Dichlorodifluoromethane	75-71-8	0.00200	U	0.000374	0.00200	0.00500	1	10/01/2022 21:08	WG1935734
1,1-Dichloroethane	75-34-3	0.000500	J5 U	0.000100	0.000500	0.00100	1	10/01/2022 21:08	WG1935734
1,2-Dichloroethane	107-06-2	0.000500	J5 U	0.0000819	0.000500	0.00100	1	10/01/2022 21:08	WG1935734
1,1-Dichloroethene	75-35-4	0.000500	J5 U	0.000188	0.000500	0.00100	1	10/01/2022 21:08	WG1935734
cis-1,2-Dichloroethene	156-59-2	0.000500	J5 U	0.000126	0.000500	0.00100	1	10/01/2022 21:08	WG1935734
trans-1,2-Dichloroethene	156-60-5	0.000500	J5 U	0.000149	0.000500	0.00100	1	10/01/2022 21:08	WG1935734
1,2-Dichloropropane	78-87-5	0.000500	J5 U	0.000149	0.000500	0.00100	1	10/01/2022 21:08	WG1935734
1,3-Dichloropropane	142-28-9	0.000500	J5 U	0.000110	0.000500	0.00100	1	10/01/2022 21:08	WG1935734
2,2-Dichloropropane	594-20-7	0.000500	J5 U	0.000161	0.000500	0.00100	1	10/01/2022 21:08	WG1935734
1,1-Dichloropropene	563-58-6	0.000500	J5 U	0.000142	0.000500	0.00100	1	10/01/2022 21:08	WG1935734
cis-1,3-Dichloropropene	10061-01-5	0.000500	J5 U	0.000111	0.000500	0.00100	1	10/01/2022 21:08	WG1935734
trans-1,3-Dichloropropene	10061-02-6	0.000500	J5 U	0.000118	0.000500	0.00100	1	10/01/2022 21:08	WG1935734
TOTAL 1,3-Dichloropropene		0.000500	U	0.000118	0.000500	0.00100	1	10/01/2022 21:08	WG1935734
Ethylbenzene	100-41-4	0.000500	J5 U	0.000137	0.000500	0.00100	1	10/01/2022 21:08	WG1935734
Hexachloro-1,3-butadiene	87-68-3	0.000750	J5 U	0.000337	0.000750	0.00150	1	10/01/2022 21:08	WG1935734
2-Hexanone	591-78-6	0.000750	U	0.000787	0.000750	0.0100	1	10/01/2022 21:08	WG1935734
Isopropylbenzene	98-82-8	0.000500	J5 U	0.000105	0.000500	0.00100	1	10/01/2022 21:08	WG1935734
p-Isopropyltoluene	99-87-6	0.000500	J5 U	0.000120	0.000500	0.00100	1	10/01/2022 21:08	WG1935734
2-Butanone (MEK)	78-93-3	0.00500	U	0.00119	0.00500	0.0100	1	10/01/2022 21:08	WG1935734
Methylene Chloride	75-09-2	0.00200	J5 U	0.000430	0.00200	0.00500	1	10/01/2022 21:08	WG1935734
4-Methyl-2-pentanone (MIBK)	108-10-1	0.00500	U	0.000478	0.00500	0.0100	1	10/01/2022 21:08	WG1935734
n-Propylbenzene	103-65-1	0.000500	U	0.0000993	0.000500	0.00100	1	10/01/2022 21:08	WG1935734
Styrene	100-42-5	0.000500	J5 U	0.000118	0.000500	0.00100	1	10/01/2022 21:08	WG1935734
1,1,1,2-Tetrachloroethane	630-20-6	0.000500	J5 U	0.000147	0.000500	0.00100	1	10/01/2022 21:08	WG1935734
1,1,2,2-Tetrachloroethane	79-34-5	0.000500	U	0.000133	0.000500	0.00100	1	10/01/2022 21:08	WG1935734
Tetrachloroethene	127-18-4	0.000600	J5 U	0.000300	0.000600	0.00120	1	10/01/2022 21:08	WG1935734
Toluene	108-88-3	0.000600	J5 U	0.000278	0.000600	0.00120	1	10/01/2022 21:08	WG1935734
1,2,3-Trichlorobenzene	87-61-6	0.000500	J5 U	0.000230	0.000500	0.00100	1	10/01/2022 21:08	WG1935734
1,2,4-Trichlorobenzene	120-82-1	0.00100	U	0.000481	0.00100	0.00200	1	10/01/2022 21:08	WG1935734
1,2,4-Trimethylbenzene	95-63-6	0.00100	J5 U	0.000322	0.00100	0.00200	1	10/01/2022 21:08	WG1935734
1,3,5-Trimethylbenzene	108-67-8	0.000500	J5 U	0.000104	0.000500	0.00100	1	10/01/2022 21:08	WG1935734

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

Analyte	CAS #	Result	Qualifier	DL	LOD	LOQ	Dilution	Analysis	Batch
		mg/l		mg/l	mg/l	mg/l		date / time	
1,1,1-Trichloroethane	71-55-6	0.000500	J5 U	0.000149	0.000500	0.00100	1	10/01/2022 21:08	WG1935734
1,1,2-Trichloroethane	79-00-5	0.000500	J5 U	0.000158	0.000500	0.00100	1	10/01/2022 21:08	WG1935734
Trichloroethene	79-01-6	0.000500	J5 U	0.000190	0.000500	0.00100	1	10/01/2022 21:08	WG1935734
Trichlorofluoromethane	75-69-4	0.00200	J5 U	0.000160	0.00200	0.00500	1	10/01/2022 21:08	WG1935734
1,2,3-Trichloropropane	96-18-4	0.00100	J5 U	0.000237	0.00100	0.00250	1	10/01/2022 21:08	WG1935734
o-Xylene	95-47-6	0.000500	J5 U	0.000174	0.000500	0.00100	1	10/01/2022 21:08	WG1935734
m&p-Xylene	1330-20-7	0.000500	J5 U	0.000430	0.000500	0.00200	1	10/01/2022 21:08	WG1935734
Xylenes, Total	1330-20-7	0.00150	J5 U	0.000174	0.00150	0.00300	1	10/01/2022 21:08	WG1935734
(S) Toluene-d8	*2037-26-5*	*108*				*89.0-112*		*10/01/2022 21:08*	WG1935734
(S) 4-Bromofluorobenzene	*460-00-4*	*107*				*85.0-114*		*10/01/2022 21:08*	WG1935734
(S) 1,2-Dichloroethane-d4	*17060-07-0*	*120*	J1			*81.0-118*		*10/01/2022 21:08*	WG1935734

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

Analyte	CAS #	Result mg/l	Qualifier	DL mg/l	LOD mg/l	LOQ mg/l	Dilution	Analysis date / time	Batch
Acetone	67-64-1	0.0250	U	0.0113	0.0250	0.0500	1	10/01/2022 21:27	WG1935734
Benzene	71-43-2	0.000500	U	0.0000941	0.000500	0.00100	1	10/01/2022 21:27	WG1935734
Bromobenzene	108-86-1	0.000500	U	0.000118	0.000500	0.00100	1	10/01/2022 21:27	WG1935734
Bromochloromethane	74-97-5	0.000500	U	0.000128	0.000500	0.00100	1	10/01/2022 21:27	WG1935734
Bromodichloromethane	75-27-4	0.000500	U	0.000136	0.000500	0.00100	1	10/01/2022 21:27	WG1935734
Bromoform	75-25-2	0.000500	U	0.000129	0.000500	0.00100	1	10/01/2022 21:27	WG1935734
Bromomethane	74-83-9	0.00200	U	0.000605	0.00200	0.00500	1	10/01/2022 21:27	WG1935734
n-Butylbenzene	104-51-8	0.000500	U	0.000157	0.000500	0.00100	1	10/01/2022 21:27	WG1935734
sec-Butylbenzene	135-98-8	0.000500	U	0.000125	0.000500	0.00100	1	10/01/2022 21:27	WG1935734
tert-Butylbenzene	98-06-6	0.000500	U	0.000127	0.000500	0.00100	1	10/01/2022 21:27	WG1935734
Carbon disulfide	75-15-0	0.000500	U	0.0000960	0.000500	0.00100	1	10/01/2022 21:27	WG1935734
Carbon tetrachloride	56-23-5	0.000500	U	0.000128	0.000500	0.00100	1	10/01/2022 21:27	WG1935734
Chlorobenzene	108-90-7	0.000500	U	0.000116	0.000500	0.00100	1	10/01/2022 21:27	WG1935734
Chlorodibromomethane	124-48-1	0.000500	U	0.000140	0.000500	0.00100	1	10/01/2022 21:27	WG1935734
Chloroethane	75-00-3	0.00200	J4 U	0.000192	0.00200	0.00500	1	10/01/2022 21:27	WG1935734
Chloroform	67-66-3	0.00200	U	0.000111	0.00200	0.00500	1	10/01/2022 21:27	WG1935734
Chloromethane	74-87-3	0.00200	U	0.000960	0.00200	0.00400	1	10/01/2022 21:27	WG1935734
2-Chlorotoluene	95-49-8	0.000500	U	0.000106	0.000500	0.00100	1	10/01/2022 21:27	WG1935734
4-Chlorotoluene	106-43-4	0.000500	U	0.000114	0.000500	0.00100	1	10/01/2022 21:27	WG1935734
1,2-Dibromoethane	106-93-4	0.000500	U	0.000126	0.000500	0.00100	1	10/01/2022 21:27	WG1935734
1,2-Dibromo-3-Chloropropane	96-12-8	0.00200	U	0.000276	0.00200	0.00500	1	10/01/2022 21:27	WG1935734
Dibromomethane	74-95-3	0.000500	U	0.000122	0.000500	0.00100	1	10/01/2022 21:27	WG1935734
1,2-Dichlorobenzene	95-50-1	0.000500	U	0.000107	0.000500	0.00100	1	10/01/2022 21:27	WG1935734
1,3-Dichlorobenzene	541-73-1	0.000500	U	0.000110	0.000500	0.00100	1	10/01/2022 21:27	WG1935734
1,4-Dichlorobenzene	106-46-7	0.000500	U	0.000120	0.000500	0.00100	1	10/01/2022 21:27	WG1935734
Dichlorodifluoromethane	75-71-8	0.00200	U	0.000374	0.00200	0.00500	1	10/01/2022 21:27	WG1935734
1,1-Dichloroethane	75-34-3	0.000500	U	0.000100	0.000500	0.00100	1	10/01/2022 21:27	WG1935734
1,2-Dichloroethane	107-06-2	0.000500	U	0.0000819	0.000500	0.00100	1	10/01/2022 21:27	WG1935734
1,1-Dichloroethene	75-35-4	0.000500	U	0.000188	0.000500	0.00100	1	10/01/2022 21:27	WG1935734
cis-1,2-Dichloroethene	156-59-2	0.000500	U	0.000126	0.000500	0.00100	1	10/01/2022 21:27	WG1935734
trans-1,2-Dichloroethene	156-60-5	0.000500	U	0.000149	0.000500	0.00100	1	10/01/2022 21:27	WG1935734
1,2-Dichloropropane	78-87-5	0.000500	U	0.000149	0.000500	0.00100	1	10/01/2022 21:27	WG1935734
1,3-Dichloropropane	142-28-9	0.000500	U	0.000110	0.000500	0.00100	1	10/01/2022 21:27	WG1935734
2,2-Dichloropropane	594-20-7	0.000500	U	0.000161	0.000500	0.00100	1	10/01/2022 21:27	WG1935734
1,1-Dichloropropene	563-58-6	0.000500	U	0.000142	0.000500	0.00100	1	10/01/2022 21:27	WG1935734
cis-1,3-Dichloropropene	10061-01-5	0.000500	U	0.000111	0.000500	0.00100	1	10/01/2022 21:27	WG1935734
trans-1,3-Dichloropropene	10061-02-6	0.000500	U	0.000118	0.000500	0.00100	1	10/01/2022 21:27	WG1935734
TOTAL 1,3-Dichloropropene		0.000500	U	0.000118	0.000500	0.00100	1	10/01/2022 21:27	WG1935734
Ethylbenzene	100-41-4	0.000500	U	0.000137	0.000500	0.00100	1	10/01/2022 21:27	WG1935734
Hexachloro-1,3-butadiene	87-68-3	0.000750	U	0.000337	0.000750	0.00150	1	10/01/2022 21:27	WG1935734
2-Hexanone	591-78-6	0.000750	U	0.000787	0.000750	0.0100	1	10/01/2022 21:27	WG1935734
Isopropylbenzene	98-82-8	0.000500	U	0.000105	0.000500	0.00100	1	10/01/2022 21:27	WG1935734
p-Isopropyltoluene	99-87-6	0.000500	J3 U	0.000120	0.000500	0.00100	1	10/01/2022 21:27	WG1935734
2-Butanone (MEK)	78-93-3	0.00500	U	0.00119	0.00500	0.0100	1	10/01/2022 21:27	WG1935734
Methylene Chloride	75-09-2	0.00200	U	0.000430	0.00200	0.00500	1	10/01/2022 21:27	WG1935734
4-Methyl-2-pentanone (MIBK)	108-10-1	0.00500	U	0.000478	0.00500	0.0100	1	10/01/2022 21:27	WG1935734
n-Propylbenzene	103-65-1	0.000500	U	0.0000993	0.000500	0.00100	1	10/01/2022 21:27	WG1935734
Styrene	100-42-5	0.000500	U	0.000118	0.000500	0.00100	1	10/01/2022 21:27	WG1935734
1,1,1,2-Tetrachloroethane	630-20-6	0.000500	U	0.000147	0.000500	0.00100	1	10/01/2022 21:27	WG1935734
1,1,2,2-Tetrachloroethane	79-34-5	0.000500	U	0.000133	0.000500	0.00100	1	10/01/2022 21:27	WG1935734
Tetrachloroethene	127-18-4	0.000600	U	0.000300	0.000600	0.00120	1	10/01/2022 21:27	WG1935734
Toluene	108-88-3	0.000600	U	0.000278	0.000600	0.00120	1	10/01/2022 21:27	WG1935734
1,2,3-Trichlorobenzene	87-61-6	0.000500	U	0.000230	0.000500	0.00100	1	10/01/2022 21:27	WG1935734
1,2,4-Trichlorobenzene	120-82-1	0.00100	U	0.000481	0.00100	0.00200	1	10/01/2022 21:27	WG1935734
1,2,4-Trimethylbenzene	95-63-6	0.00100	U	0.000322	0.00100	0.00200	1	10/01/2022 21:27	WG1935734
1,3,5-Trimethylbenzene	108-67-8	0.000500	U	0.000104	0.000500	0.00100	1	10/01/2022 21:27	WG1935734

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

Analyte	CAS #	Result	Qualifier	DL	LOD	LOQ	Dilution	Analysis	Batch
		mg/l		mg/l	mg/l	mg/l		date / time	
1,1,1-Trichloroethane	71-55-6	0.000500	U	0.000149	0.000500	0.00100	1	10/01/2022 21:27	WG1935734
1,1,2-Trichloroethane	79-00-5	0.000500	U	0.000158	0.000500	0.00100	1	10/01/2022 21:27	WG1935734
Trichloroethene	79-01-6	0.000500	U	0.000190	0.000500	0.00100	1	10/01/2022 21:27	WG1935734
Trichlorofluoromethane	75-69-4	0.00200	U	0.000160	0.00200	0.00500	1	10/01/2022 21:27	WG1935734
1,2,3-Trichloropropane	96-18-4	0.00100	U	0.000237	0.00100	0.00250	1	10/01/2022 21:27	WG1935734
o-Xylene	95-47-6	0.000500	U	0.000174	0.000500	0.00100	1	10/01/2022 21:27	WG1935734
m&p-Xylene	1330-20-7	0.000500	U	0.000430	0.000500	0.00200	1	10/01/2022 21:27	WG1935734
Xylenes, Total	1330-20-7	0.00150	U	0.000174	0.00150	0.00300	1	10/01/2022 21:27	WG1935734
(S) Toluene-d8	*2037-26-5*	*107*				*89.0-112*		*10/01/2022 21:27*	WG1935734
(S) 4-Bromofluorobenzene	*460-00-4*	*107*				*85.0-114*		*10/01/2022 21:27*	WG1935734
(S) 1,2-Dichloroethane-d4	*17060-07-0*	*119*	J1			*81.0-118*		*10/01/2022 21:27*	WG1935734

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

Analyte	CAS #	Result mg/l	Qualifier	DL mg/l	LOD mg/l	LOQ mg/l	Dilution	Analysis date / time	Batch
Acetone	67-64-1	0.0250	U	0.0113	0.0250	0.0500	1	10/01/2022 21:46	WG1935734
Benzene	71-43-2	0.000500	U	0.0000941	0.000500	0.00100	1	10/01/2022 21:46	WG1935734
Bromobenzene	108-86-1	0.000500	U	0.000118	0.000500	0.00100	1	10/01/2022 21:46	WG1935734
Bromochloromethane	74-97-5	0.000500	U	0.000128	0.000500	0.00100	1	10/01/2022 21:46	WG1935734
Bromodichloromethane	75-27-4	0.000500	U	0.000136	0.000500	0.00100	1	10/01/2022 21:46	WG1935734
Bromoform	75-25-2	0.000500	U	0.000129	0.000500	0.00100	1	10/01/2022 21:46	WG1935734
Bromomethane	74-83-9	0.00200	U	0.000605	0.00200	0.00500	1	10/01/2022 21:46	WG1935734
n-Butylbenzene	104-51-8	0.000500	U	0.000157	0.000500	0.00100	1	10/01/2022 21:46	WG1935734
sec-Butylbenzene	135-98-8	0.000500	U	0.000125	0.000500	0.00100	1	10/01/2022 21:46	WG1935734
tert-Butylbenzene	98-06-6	0.000500	U	0.000127	0.000500	0.00100	1	10/01/2022 21:46	WG1935734
Carbon disulfide	75-15-0	0.000500	U	0.0000960	0.000500	0.00100	1	10/01/2022 21:46	WG1935734
Carbon tetrachloride	56-23-5	0.000500	U	0.000128	0.000500	0.00100	1	10/01/2022 21:46	WG1935734
Chlorobenzene	108-90-7	0.000500	U	0.000116	0.000500	0.00100	1	10/01/2022 21:46	WG1935734
Chlorodibromomethane	124-48-1	0.000500	U	0.000140	0.000500	0.00100	1	10/01/2022 21:46	WG1935734
Chloroethane	75-00-3	0.00200	J4 U	0.000192	0.00200	0.00500	1	10/01/2022 21:46	WG1935734
Chloroform	67-66-3	0.00200	U	0.000111	0.00200	0.00500	1	10/01/2022 21:46	WG1935734
Chloromethane	74-87-3	0.00200	U	0.000960	0.00200	0.00400	1	10/01/2022 21:46	WG1935734
2-Chlorotoluene	95-49-8	0.000500	U	0.000106	0.000500	0.00100	1	10/01/2022 21:46	WG1935734
4-Chlorotoluene	106-43-4	0.000500	U	0.000114	0.000500	0.00100	1	10/01/2022 21:46	WG1935734
1,2-Dibromoethane	106-93-4	0.000500	U	0.000126	0.000500	0.00100	1	10/01/2022 21:46	WG1935734
1,2-Dibromo-3-Chloropropane	96-12-8	0.00200	U	0.000276	0.00200	0.00500	1	10/01/2022 21:46	WG1935734
Dibromomethane	74-95-3	0.000500	U	0.000122	0.000500	0.00100	1	10/01/2022 21:46	WG1935734
1,2-Dichlorobenzene	95-50-1	0.000500	U	0.000107	0.000500	0.00100	1	10/01/2022 21:46	WG1935734
1,3-Dichlorobenzene	541-73-1	0.000500	U	0.000110	0.000500	0.00100	1	10/01/2022 21:46	WG1935734
1,4-Dichlorobenzene	106-46-7	0.000500	U	0.000120	0.000500	0.00100	1	10/01/2022 21:46	WG1935734
Dichlorodifluoromethane	75-71-8	0.00200	U	0.000374	0.00200	0.00500	1	10/01/2022 21:46	WG1935734
1,1-Dichloroethane	75-34-3	0.000500	U	0.000100	0.000500	0.00100	1	10/01/2022 21:46	WG1935734
1,2-Dichloroethane	107-06-2	0.000500	U	0.0000819	0.000500	0.00100	1	10/01/2022 21:46	WG1935734
1,1-Dichloroethene	75-35-4	0.000500	U	0.000188	0.000500	0.00100	1	10/01/2022 21:46	WG1935734
cis-1,2-Dichloroethene	156-59-2	0.000500	U	0.000126	0.000500	0.00100	1	10/01/2022 21:46	WG1935734
trans-1,2-Dichloroethene	156-60-5	0.000500	U	0.000149	0.000500	0.00100	1	10/01/2022 21:46	WG1935734
1,2-Dichloropropane	78-87-5	0.000500	U	0.000149	0.000500	0.00100	1	10/01/2022 21:46	WG1935734
1,3-Dichloropropane	142-28-9	0.000500	U	0.000110	0.000500	0.00100	1	10/01/2022 21:46	WG1935734
2,2-Dichloropropane	594-20-7	0.000500	U	0.000161	0.000500	0.00100	1	10/01/2022 21:46	WG1935734
1,1-Dichloropropene	563-58-6	0.000500	U	0.000142	0.000500	0.00100	1	10/01/2022 21:46	WG1935734
cis-1,3-Dichloropropene	10061-01-5	0.000500	U	0.000111	0.000500	0.00100	1	10/01/2022 21:46	WG1935734
trans-1,3-Dichloropropene	10061-02-6	0.000500	U	0.000118	0.000500	0.00100	1	10/01/2022 21:46	WG1935734
TOTAL 1,3-Dichloropropene		0.000500	U	0.000118	0.000500	0.00100	1	10/01/2022 21:46	WG1935734
Ethylbenzene	100-41-4	0.000500	U	0.000137	0.000500	0.00100	1	10/01/2022 21:46	WG1935734
Hexachloro-1,3-butadiene	87-68-3	0.000750	U	0.000337	0.000750	0.00150	1	10/01/2022 21:46	WG1935734
2-Hexanone	591-78-6	0.000750	U	0.000787	0.000750	0.0100	1	10/01/2022 21:46	WG1935734
Isopropylbenzene	98-82-8	0.000500	U	0.000105	0.000500	0.00100	1	10/01/2022 21:46	WG1935734
p-Isopropyltoluene	99-87-6	0.000500	J3 U	0.000120	0.000500	0.00100	1	10/01/2022 21:46	WG1935734
2-Butanone (MEK)	78-93-3	0.00500	U	0.00119	0.00500	0.0100	1	10/01/2022 21:46	WG1935734
Methylene Chloride	75-09-2	0.00200	U	0.000430	0.00200	0.00500	1	10/01/2022 21:46	WG1935734
4-Methyl-2-pentanone (MIBK)	108-10-1	0.00500	U	0.000478	0.00500	0.0100	1	10/01/2022 21:46	WG1935734
n-Propylbenzene	103-65-1	0.000500	U	0.0000993	0.000500	0.00100	1	10/01/2022 21:46	WG1935734
Styrene	100-42-5	0.000500	U	0.000118	0.000500	0.00100	1	10/01/2022 21:46	WG1935734
1,1,1,2-Tetrachloroethane	630-20-6	0.000500	U	0.000147	0.000500	0.00100	1	10/01/2022 21:46	WG1935734
1,1,2,2-Tetrachloroethane	79-34-5	0.000500	U	0.000133	0.000500	0.00100	1	10/01/2022 21:46	WG1935734
Tetrachloroethene	127-18-4	0.000600	U	0.000300	0.000600	0.00120	1	10/01/2022 21:46	WG1935734
Toluene	108-88-3	0.000600	U	0.000278	0.000600	0.00120	1	10/01/2022 21:46	WG1935734
1,2,3-Trichlorobenzene	87-61-6	0.000500	U	0.000230	0.000500	0.00100	1	10/01/2022 21:46	WG1935734
1,2,4-Trichlorobenzene	120-82-1	0.00100	U	0.000481	0.00100	0.00200	1	10/01/2022 21:46	WG1935734
1,2,4-Trimethylbenzene	95-63-6	0.00100	U	0.000322	0.00100	0.00200	1	10/01/2022 21:46	WG1935734
1,3,5-Trimethylbenzene	108-67-8	0.000500	U	0.000104	0.000500	0.00100	1	10/01/2022 21:46	WG1935734

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

Analyte	CAS #	Result	Qualifier	DL	LOD	LOQ	Dilution	Analysis	Batch
		mg/l		mg/l	mg/l	mg/l		date / time	
1,1,1-Trichloroethane	71-55-6	0.000500	U	0.000149	0.000500	0.00100	1	10/01/2022 21:46	WG1935734
1,1,2-Trichloroethane	79-00-5	0.000500	U	0.000158	0.000500	0.00100	1	10/01/2022 21:46	WG1935734
Trichloroethene	79-01-6	0.000500	U	0.000190	0.000500	0.00100	1	10/01/2022 21:46	WG1935734
Trichlorofluoromethane	75-69-4	0.00200	U	0.000160	0.00200	0.00500	1	10/01/2022 21:46	WG1935734
1,2,3-Trichloropropane	96-18-4	0.00100	U	0.000237	0.00100	0.00250	1	10/01/2022 21:46	WG1935734
o-Xylene	95-47-6	0.000500	U	0.000174	0.000500	0.00100	1	10/01/2022 21:46	WG1935734
m&p-Xylene	1330-20-7	0.000500	U	0.000430	0.000500	0.00200	1	10/01/2022 21:46	WG1935734
Xylenes, Total	1330-20-7	0.00150	U	0.000174	0.00150	0.00300	1	10/01/2022 21:46	WG1935734
(S) Toluene-d8	*2037-26-5*	*109*				*89.0-112*		*10/01/2022 21:46*	WG1935734
(S) 4-Bromofluorobenzene	*460-00-4*	*109*				*85.0-114*		*10/01/2022 21:46*	WG1935734
(S) 1,2-Dichloroethane-d4	*17060-07-0*	*123*	J1			*81.0-118*		*10/01/2022 21:46*	WG1935734

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	CAS #	Result mg/l	Qualifier	DL mg/l	LOD mg/l	LOQ mg/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	TPH C6 - C12	0.221		0.0316	0.0670	0.134	1	10/01/2022 08:50	WG1935408
(S) a,a,a-Trifluorotoluene(FID)	*98-08-8*	*81.3*				*78.0-120*		*10/01/2022 08:50*	WG1935408

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

Analyte	CAS #	Result mg/l	Qualifier	DL mg/l	LOD mg/l	LOQ mg/l	Dilution	Analysis date / time	Batch
Acetone	67-64-1	0.0250	U	0.0113	0.0250	0.0500	1	10/01/2022 22:06	WG1935734
Benzene	71-43-2	0.000500	U	0.0000941	0.000500	0.00100	1	10/01/2022 22:06	WG1935734
Bromobenzene	108-86-1	0.000500	U	0.000118	0.000500	0.00100	1	10/01/2022 22:06	WG1935734
Bromochloromethane	74-97-5	0.000500	U	0.000128	0.000500	0.00100	1	10/01/2022 22:06	WG1935734
Bromodichloromethane	75-27-4	0.000500	U	0.000136	0.000500	0.00100	1	10/01/2022 22:06	WG1935734
Bromoform	75-25-2	0.000500	U	0.000129	0.000500	0.00100	1	10/01/2022 22:06	WG1935734
Bromomethane	74-83-9	0.00200	U	0.000605	0.00200	0.00500	1	10/01/2022 22:06	WG1935734
n-Butylbenzene	104-51-8	0.000500	U	0.000157	0.000500	0.00100	1	10/01/2022 22:06	WG1935734
sec-Butylbenzene	135-98-8	0.000500	U	0.000125	0.000500	0.00100	1	10/01/2022 22:06	WG1935734
tert-Butylbenzene	98-06-6	0.000500	U	0.000127	0.000500	0.00100	1	10/01/2022 22:06	WG1935734
Carbon disulfide	75-15-0	0.000500	U	0.0000960	0.000500	0.00100	1	10/01/2022 22:06	WG1935734
Carbon tetrachloride	56-23-5	0.000500	U	0.000128	0.000500	0.00100	1	10/01/2022 22:06	WG1935734
Chlorobenzene	108-90-7	0.000500	U	0.000116	0.000500	0.00100	1	10/01/2022 22:06	WG1935734
Chlorodibromomethane	124-48-1	0.000500	U	0.000140	0.000500	0.00100	1	10/01/2022 22:06	WG1935734
Chloroethane	75-00-3	0.00200	J4 U	0.000192	0.00200	0.00500	1	10/01/2022 22:06	WG1935734
Chloroform	67-66-3	0.00200	U	0.000111	0.00200	0.00500	1	10/01/2022 22:06	WG1935734
Chloromethane	74-87-3	0.00200	U	0.000960	0.00200	0.00400	1	10/01/2022 22:06	WG1935734
2-Chlorotoluene	95-49-8	0.000500	U	0.000106	0.000500	0.00100	1	10/01/2022 22:06	WG1935734
4-Chlorotoluene	106-43-4	0.000500	U	0.000114	0.000500	0.00100	1	10/01/2022 22:06	WG1935734
1,2-Dibromoethane	106-93-4	0.000500	U	0.000126	0.000500	0.00100	1	10/01/2022 22:06	WG1935734
1,2-Dibromo-3-Chloropropane	96-12-8	0.00200	U	0.000276	0.00200	0.00500	1	10/01/2022 22:06	WG1935734
Dibromomethane	74-95-3	0.000500	U	0.000122	0.000500	0.00100	1	10/01/2022 22:06	WG1935734
1,2-Dichlorobenzene	95-50-1	0.000500	U	0.000107	0.000500	0.00100	1	10/01/2022 22:06	WG1935734
1,3-Dichlorobenzene	541-73-1	0.000500	U	0.000110	0.000500	0.00100	1	10/01/2022 22:06	WG1935734
1,4-Dichlorobenzene	106-46-7	0.000500	U	0.000120	0.000500	0.00100	1	10/01/2022 22:06	WG1935734
Dichlorodifluoromethane	75-71-8	0.00200	U	0.000374	0.00200	0.00500	1	10/01/2022 22:06	WG1935734
1,1-Dichloroethane	75-34-3	0.000500	U	0.000100	0.000500	0.00100	1	10/01/2022 22:06	WG1935734
1,2-Dichloroethane	107-06-2	0.000500	U	0.0000819	0.000500	0.00100	1	10/01/2022 22:06	WG1935734
1,1-Dichloroethene	75-35-4	0.000500	U	0.000188	0.000500	0.00100	1	10/01/2022 22:06	WG1935734
cis-1,2-Dichloroethene	156-59-2	0.000500	U	0.000126	0.000500	0.00100	1	10/01/2022 22:06	WG1935734
trans-1,2-Dichloroethene	156-60-5	0.000500	U	0.000149	0.000500	0.00100	1	10/01/2022 22:06	WG1935734
1,2-Dichloropropane	78-87-5	0.000500	U	0.000149	0.000500	0.00100	1	10/01/2022 22:06	WG1935734
1,3-Dichloropropane	142-28-9	0.000500	U	0.000110	0.000500	0.00100	1	10/01/2022 22:06	WG1935734
2,2-Dichloropropane	594-20-7	0.000500	U	0.000161	0.000500	0.00100	1	10/01/2022 22:06	WG1935734
1,1-Dichloropropene	563-58-6	0.000500	U	0.000142	0.000500	0.00100	1	10/01/2022 22:06	WG1935734
cis-1,3-Dichloropropene	10061-01-5	0.000500	U	0.000111	0.000500	0.00100	1	10/01/2022 22:06	WG1935734
trans-1,3-Dichloropropene	10061-02-6	0.000500	U	0.000118	0.000500	0.00100	1	10/01/2022 22:06	WG1935734
TOTAL 1,3-Dichloropropene		0.000500	U	0.000118	0.000500	0.00100	1	10/01/2022 22:06	WG1935734
Ethylbenzene	100-41-4	0.000500	U	0.000137	0.000500	0.00100	1	10/01/2022 22:06	WG1935734
Hexachloro-1,3-butadiene	87-68-3	0.000750	U	0.000337	0.000750	0.00150	1	10/01/2022 22:06	WG1935734
2-Hexanone	591-78-6	0.000750	U	0.000787	0.000750	0.0100	1	10/01/2022 22:06	WG1935734
Isopropylbenzene	98-82-8	0.000500	U	0.000105	0.000500	0.00100	1	10/01/2022 22:06	WG1935734
p-Isopropyltoluene	99-87-6	0.000500	J3 U	0.000120	0.000500	0.00100	1	10/01/2022 22:06	WG1935734
2-Butanone (MEK)	78-93-3	0.00500	U	0.00119	0.00500	0.0100	1	10/01/2022 22:06	WG1935734
Methylene Chloride	75-09-2	0.00200	U	0.000430	0.00200	0.00500	1	10/01/2022 22:06	WG1935734
4-Methyl-2-pentanone (MIBK)	108-10-1	0.00500	U	0.000478	0.00500	0.0100	1	10/01/2022 22:06	WG1935734
n-Propylbenzene	103-65-1	0.000500	U	0.0000993	0.000500	0.00100	1	10/01/2022 22:06	WG1935734
Styrene	100-42-5	0.000500	U	0.000118	0.000500	0.00100	1	10/01/2022 22:06	WG1935734

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

Analyte	CAS #	Result	Qualifier	DL	LOD	LOQ	Dilution	Analysis	Batch
		mg/l		mg/l	mg/l	mg/l		date / time	
1,1,1,2-Tetrachloroethane	630-20-6	0.000500	U	0.000147	0.000500	0.00100	1	10/01/2022 22:06	WG1935734
1,1,2,2-Tetrachloroethane	79-34-5	0.000500	U	0.000133	0.000500	0.00100	1	10/01/2022 22:06	WG1935734
Tetrachloroethene	127-18-4	0.000600	U	0.000300	0.000600	0.00120	1	10/01/2022 22:06	WG1935734
Toluene	108-88-3	0.000600	U	0.000278	0.000600	0.00120	1	10/01/2022 22:06	WG1935734
1,2,3-Trichlorobenzene	87-61-6	0.000500	U	0.000230	0.000500	0.00100	1	10/01/2022 22:06	WG1935734
1,2,4-Trichlorobenzene	120-82-1	0.00100	U	0.000481	0.00100	0.00200	1	10/01/2022 22:06	WG1935734
1,2,4-Trimethylbenzene	95-63-6	0.00100	U	0.000322	0.00100	0.00200	1	10/01/2022 22:06	WG1935734
1,3,5-Trimethylbenzene	108-67-8	0.000500	U	0.000104	0.000500	0.00100	1	10/01/2022 22:06	WG1935734
1,1,1-Trichloroethane	71-55-6	0.000500	U	0.000149	0.000500	0.00100	1	10/01/2022 22:06	WG1935734
1,1,2-Trichloroethane	79-00-5	0.000500	U	0.000158	0.000500	0.00100	1	10/01/2022 22:06	WG1935734
Trichloroethene	79-01-6	0.000500	U	0.000190	0.000500	0.00100	1	10/01/2022 22:06	WG1935734
Trichlorofluoromethane	75-69-4	0.00200	U	0.000160	0.00200	0.00500	1	10/01/2022 22:06	WG1935734
1,2,3-Trichloropropane	96-18-4	0.00100	U	0.000237	0.00100	0.00250	1	10/01/2022 22:06	WG1935734
o-Xylene	95-47-6	0.000500	U	0.000174	0.000500	0.00100	1	10/01/2022 22:06	WG1935734
m&p-Xylene	1330-20-7	0.000500	U	0.000430	0.000500	0.00200	1	10/01/2022 22:06	WG1935734
Xylenes, Total	1330-20-7	0.00150	U	0.000174	0.00150	0.00300	1	10/01/2022 22:06	WG1935734
(S) Toluene-d8	*2037-26-5*	*107*				*89.0-112*		*10/01/2022 22:06*	WG1935734
(S) 4-Bromofluorobenzene	*460-00-4*	*109*				*85.0-114*		*10/01/2022 22:06*	WG1935734
(S) 1,2-Dichloroethane-d4	*17060-07-0*	*123*	J1			*81.0-118*		*10/01/2022 22:06*	WG1935734

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	CAS #	Result	Qualifier	DL	LOD	LOQ	Dilution	Analysis	Batch
		mg/l		mg/l	mg/l	mg/l		date / time	
Diesel Range Organics (DRO)	68334-30-5	0.115	B J	0.0833	0.188	0.375	2.5	10/05/2022 11:54	WG1935840
Residual Range Organics (RRO)	RRO	0.471	B J	0.208	0.418	0.835	2.5	10/05/2022 11:54	WG1935840
(S) o-Terphenyl	*84-15-1*	*102*				*31.0-160*		*10/05/2022 11:54*	WG1935840

Sample Narrative:

L1540401-13 WG1935840: Dilution due to matrix impact during extraction procedure

Method Blank (MB)

(MB) R3844938-3 10/01/22 07:50

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
Gasoline Range Organics-NWTPH	0.0670	U	0.0316	0.0670	0.134
(S) a,a,a-Trifluorotoluene(FID)	*92.4*				*78.0-120*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3844938-1 10/01/22 06:48 • (LCSD) R3844938-2 10/01/22 07:09

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Gasoline Range Organics-NWTPH	5.50	5.57	5.43	101	98.7	78.0-122			2.55	30
(S) a,a,a-Trifluorotoluene(FID)				*103*	*98.8*	*78.0-120*				

L1540401-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1540401-01 10/01/22 08:10 • (MS) R3844938-4 10/01/22 09:11 • (MSD) R3844938-5 10/01/22 09:31

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Gasoline Range Organics-NWTPH	5.50	1.00	6.16	6.17	93.8	94.0	1	78.0-122			0.162	30
(S) a,a,a-Trifluorotoluene(FID)					*104*	*103*		*78.0-120*				

Method Blank (MB)

(MB) R3843739-3 10/01/22 09:54

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
Benzene	0.000500	U	0.0000941	0.000500	0.00100
Bromobenzene	0.000500	U	0.000118	0.000500	0.00100
Bromochloromethane	0.000500	U	0.000128	0.000500	0.00100
Bromodichloromethane	0.000500	U	0.000136	0.000500	0.00100
Bromoform	0.000500	U	0.000129	0.000500	0.00100
Bromomethane	0.00200	U	0.000605	0.00200	0.00500
n-Butylbenzene	0.000500	U	0.000157	0.000500	0.00100
sec-Butylbenzene	0.000500	U	0.000125	0.000500	0.00100
tert-Butylbenzene	0.000500	U	0.000127	0.000500	0.00100
Carbon disulfide	0.000500	U	0.0000960	0.000500	0.00100
Carbon tetrachloride	0.000500	U	0.000128	0.000500	0.00100
Chlorobenzene	0.000500	U	0.000116	0.000500	0.00100
Chlorodibromomethane	0.000500	U	0.000140	0.000500	0.00100
Chloroethane	0.00200	U	0.000192	0.00200	0.00500
Chloroform	0.00200	U	0.000111	0.00200	0.00500
2-Chlorotoluene	0.000500	U	0.000106	0.000500	0.00100
4-Chlorotoluene	0.000500	U	0.000114	0.000500	0.00100
1,2-Dibromoethane	0.000500	U	0.000126	0.000500	0.00100
Dibromomethane	0.000500	U	0.000122	0.000500	0.00100
1,2-Dichlorobenzene	0.000500	U	0.000107	0.000500	0.00100
1,3-Dichlorobenzene	0.000500	U	0.000110	0.000500	0.00100
1,4-Dichlorobenzene	0.000500	U	0.000120	0.000500	0.00100
Dichlorodifluoromethane	0.00200	U	0.000374	0.00200	0.00500
1,1-Dichloroethane	0.000500	U	0.000100	0.000500	0.00100
1,2-Dichloroethane	0.000500	U	0.0000819	0.000500	0.00100
1,1-Dichloroethene	0.000500	U	0.000188	0.000500	0.00100
cis-1,2-Dichloroethene	0.000500	U	0.000126	0.000500	0.00100
trans-1,2-Dichloroethene	0.000500	U	0.000149	0.000500	0.00100
1,2-Dichloropropane	0.000500	U	0.000149	0.000500	0.00100
1,3-Dichloropropane	0.000500	U	0.000110	0.000500	0.00100
2,2-Dichloropropane	0.000500	U	0.000161	0.000500	0.00100
1,1-Dichloropropene	0.000500	U	0.000142	0.000500	0.00100
cis-1,3-Dichloropropene	0.000500	U	0.000111	0.000500	0.00100
trans-1,3-Dichloropropene	0.000500	U	0.000118	0.000500	0.00100
Total 1,3-Dichloropropene	0.000500	U	0.000118	0.000500	0.00100
Ethylbenzene	0.000500	U	0.000137	0.000500	0.00100
2-Hexanone	0.000750	U	0.000787	0.000750	0.0100
Isopropylbenzene	0.000500	U	0.000105	0.000500	0.00100
p-Isopropyltoluene	0.000500	U	0.000120	0.000500	0.00100
2-Butanone (MEK)	0.00500	U	0.00119	0.00500	0.0100

Method Blank (MB)

(MB) R3843739-3 10/01/22 09:54

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
Methylene Chloride	0.00200	U	0.000430	0.00200	0.00500
n-Propylbenzene	0.000500	U	0.0000993	0.000500	0.00100
Styrene	0.000500	U	0.000118	0.000500	0.00100
1,1,1,2-Tetrachloroethane	0.000500	U	0.000147	0.000500	0.00100
1,1,2,2-Tetrachloroethane	0.000500	U	0.000133	0.000500	0.00100
Tetrachloroethene	0.000600	U	0.000300	0.000600	0.00120
Toluene	0.000600	U	0.000278	0.000600	0.00120
1,2,3-Trichlorobenzene	0.000500	U	0.000230	0.000500	0.00100
1,2,4-Trimethylbenzene	0.00100	U	0.000322	0.00100	0.00200
1,3,5-Trimethylbenzene	0.000500	U	0.000104	0.000500	0.00100
1,1,1-Trichloroethane	0.000500	U	0.000149	0.000500	0.00100
1,1,2-Trichloroethane	0.000500	U	0.000158	0.000500	0.00100
Trichloroethene	0.000500	U	0.000190	0.000500	0.00100
1,2,3-Trichloropropane	0.00100	U	0.000237	0.00100	0.00250
o-Xylene	0.000500	U	0.000174	0.000500	0.00100
m&p-Xylene	0.000500	U	0.000430	0.000500	0.00200
Xylenes, Total	0.00150	U	0.000174	0.00150	0.00300
(S) Toluene-d8	*103*				*89.0-112*
(S) 4-Bromofluorobenzene	*107*				*85.0-114*
(S) 1,2-Dichloroethane-d4	*94.5*				*81.0-118*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3843739-1 10/01/22 08:51 • (LCSD) R3843739-2 10/01/22 09:12

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.00500	0.00548	0.00544	110	109	79.0-120			0.733	20
Bromobenzene	0.00500	0.00428	0.00468	85.6	93.6	80.0-120			8.93	20
Bromochloromethane	0.00500	0.00591	0.00599	118	120	78.0-123			1.34	20
Bromodichloromethane	0.00500	0.00524	0.00499	105	99.8	79.0-125			4.89	20
Bromoform	0.00500	0.00463	0.00415	92.6	83.0	66.0-130			10.9	20
Bromomethane	0.00500	0.00577	0.00565	115	113	53.0-141			2.10	20
n-Butylbenzene	0.00500	0.00441	0.00395	88.2	79.0	75.0-128			11.0	20
sec-Butylbenzene	0.00500	0.00484	0.00488	96.8	97.6	77.0-126			0.823	20
tert-Butylbenzene	0.00500	0.00458	0.00487	91.6	97.4	78.0-124			6.14	20
Carbon disulfide	0.00500	0.00462	0.00471	92.4	94.2	64.0-133			1.93	20
Carbon tetrachloride	0.00500	0.00533	0.00567	107	113	72.0-136			6.18	20
Chlorobenzene	0.00500	0.00492	0.00498	98.4	99.6	82.0-118			1.21	20
Chlorodibromomethane	0.00500	0.00445	0.00445	89.0	89.0	74.0-126			0.000	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3843739-1 10/01/22 08:51 • (LCSD) R3843739-2 10/01/22 09:12

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Chloroethane	0.00500	0.00558	0.00589	112	118	60.0-138			5.41	20
Chloroform	0.00500	0.00579	0.00586	116	117	79.0-124			1.20	20
2-Chlorotoluene	0.00500	0.00466	0.00473	93.2	94.6	79.0-122			1.49	20
4-Chlorotoluene	0.00500	0.00430	0.00456	86.0	91.2	78.0-122			5.87	20
1,2-Dibromoethane	0.00500	0.00484	0.00484	96.8	96.8	77.0-121			0.000	20
Dibromomethane	0.00500	0.00565	0.00561	113	112	79.0-123			0.710	20
1,2-Dichlorobenzene	0.00500	0.00487	0.00451	97.4	90.2	80.0-119			7.68	20
1,3-Dichlorobenzene	0.00500	0.00468	0.00469	93.6	93.8	80.0-119			0.213	20
1,4-Dichlorobenzene	0.00500	0.00459	0.00471	91.8	94.2	79.0-118			2.58	20
Dichlorodifluoromethane	0.00500	0.00502	0.00512	100	102	32.0-152			1.97	20
1,1-Dichloroethane	0.00500	0.00527	0.00542	105	108	77.0-125			2.81	20
1,2-Dichloroethane	0.00500	0.00523	0.00514	105	103	73.0-128			1.74	20
1,1-Dichloroethene	0.00500	0.00563	0.00611	113	122	71.0-131			8.18	20
cis-1,2-Dichloroethene	0.00500	0.00579	0.00588	116	118	78.0-123			1.54	20
trans-1,2-Dichloroethene	0.00500	0.00560	0.00567	112	113	75.0-124			1.24	20
1,2-Dichloropropane	0.00500	0.00487	0.00470	97.4	94.0	78.0-122			3.55	20
1,3-Dichloropropane	0.00500	0.00447	0.00466	89.4	93.2	80.0-119			4.16	20
2,2-Dichloropropane	0.00500	0.00552	0.00538	110	108	60.0-139			2.57	20
1,1-Dichloropropene	0.00500	0.00516	0.00532	103	106	79.0-125			3.05	20
cis-1,3-Dichloropropene	0.00500	0.00454	0.00449	90.8	89.8	75.0-124			1.11	20
trans-1,3-Dichloropropene	0.00500	0.00401	0.00395	80.2	79.0	73.0-127			1.51	20
Ethylbenzene	0.00500	0.00527	0.00504	105	101	79.0-121			4.46	20
2-Hexanone	0.0250	0.0221	0.0218	88.4	87.2	57.0-139			1.37	20
Isopropylbenzene	0.00500	0.00525	0.00499	105	99.8	72.0-131			5.08	20
p-Isopropyltoluene	0.00500	0.00460	0.00456	92.0	91.2	77.0-127			0.873	20
2-Butanone (MEK)	0.0250	0.0221	0.0205	88.4	82.0	56.0-143			7.51	20
Methylene Chloride	0.00500	0.00569	0.00590	114	118	74.0-124			3.62	20
n-Propylbenzene	0.00500	0.00435	0.00468	87.0	93.6	76.0-126			7.31	20
Styrene	0.00500	0.00484	0.00469	96.8	93.8	78.0-123			3.15	20
1,1,1,2-Tetrachloroethane	0.00500	0.00481	0.00470	96.2	94.0	78.0-124			2.31	20
1,1,2,2-Tetrachloroethane	0.00500	0.00449	0.00485	89.8	97.0	71.0-121			7.71	20
Tetrachloroethene	0.00500	0.00500	0.00509	100	102	74.0-129			1.78	20
Toluene	0.00500	0.00469	0.00484	93.8	96.8	80.0-121			3.15	20
1,2,3-Trichlorobenzene	0.00500	0.00441	0.00335	88.2	67.0	69.0-129		J3 J4	27.3	20
1,2,4-Trimethylbenzene	0.00500	0.00455	0.00449	91.0	89.8	76.0-124			1.33	20
1,3,5-Trimethylbenzene	0.00500	0.00458	0.00482	91.6	96.4	75.0-124			5.11	20
1,1,1-Trichloroethane	0.00500	0.00562	0.00564	112	113	74.0-131			0.355	20
1,1,2-Trichloroethane	0.00500	0.00482	0.00503	96.4	101	80.0-119			4.26	20
Trichloroethene	0.00500	0.00551	0.00551	110	110	79.0-123			0.000	20
1,2,3-Trichloropropane	0.00500	0.00469	0.00536	93.8	107	73.0-122			13.3	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3843739-1 10/01/22 08:51 • (LCSD) R3843739-2 10/01/22 09:12

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
o-Xylene	0.00500	0.00517	0.00506	103	101	78.0-122			2.15	20
m&p-Xylene	0.0100	0.0103	0.0101	103	101	80.0-121			1.96	20
Xylenes, Total	0.0150	0.0155	0.0152	103	101	79.0-121			1.95	20
(S) Toluene-d8				*99.6*	*103*	*89.0-112*				
(S) 4-Bromofluorobenzene				*108*	*102*	*85.0-114*				
(S) 1,2-Dichloroethane-d4				*97.6*	*97.4*	*81.0-118*				

L1540401-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1540401-01 10/01/22 13:08 • (MS) R3843739-4 10/01/22 19:03 • (MSD) R3843739-5 10/01/22 19:24

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.00500	0.000614	0.00771	0.00792	142	146	1	79.0-120	J5	J5	2.69	20
Bromobenzene	0.00500	0.000500	0.00541	0.00567	108	113	1	80.0-120			4.69	20
Bromochloromethane	0.00500	0.000500	0.00755	0.00797	151	159	1	78.0-123	J5	J5	5.41	20
Bromodichloromethane	0.00500	0.000500	0.00670	0.00689	134	138	1	79.0-125	J5	J5	2.80	20
Bromoform	0.00500	0.000500	0.00545	0.00563	109	113	1	66.0-130			3.25	20
Bromomethane	0.00500	0.00200	0.00723	0.00828	145	166	1	53.0-141	J5	J5	13.5	20
n-Butylbenzene	0.00500	0.00162	0.00641	0.00643	95.8	96.2	1	75.0-128			0.312	20
sec-Butylbenzene	0.00500	0.00149	0.00705	0.00745	111	119	1	77.0-126			5.52	20
tert-Butylbenzene	0.00500	0.000171	0.00552	0.00611	107	119	1	78.0-124			10.1	20
Carbon disulfide	0.00500	0.000121	0.00960	0.00846	190	167	1	64.0-133	J5	J5	12.6	20
Carbon tetrachloride	0.00500	0.000500	0.00780	0.00812	156	162	1	72.0-136	J5	J5	4.02	20
Chlorobenzene	0.00500	0.000500	0.00622	0.00641	124	128	1	82.0-118	J5	J5	3.01	20
Chlorodibromomethane	0.00500	0.000500	0.00541	0.00587	108	117	1	74.0-126			8.16	20
Chloroethane	0.00500	0.00200	0.00844	0.00864	169	173	1	60.0-138	J5	J5	2.34	20
Chloroform	0.00500	0.00200	0.00749	0.00792	150	158	1	79.0-124	J5	J5	5.58	20
2-Chlorotoluene	0.00500	0.000500	0.00544	0.00596	109	119	1	79.0-122			9.12	20
4-Chlorotoluene	0.00500	0.000500	0.00529	0.00578	106	116	1	78.0-122			8.85	20
1,2-Dibromoethane	0.00500	0.000500	0.00579	0.00621	116	124	1	77.0-121		J5	7.00	20
Dibromomethane	0.00500	0.000500	0.00698	0.00700	140	140	1	79.0-123	J5	J5	0.286	20
1,2-Dichlorobenzene	0.00500	0.000550	0.00673	0.00665	124	122	1	80.0-119	J5	J5	1.20	20
1,3-Dichlorobenzene	0.00500	0.000500	0.00565	0.00602	113	120	1	80.0-119		J5	6.34	20
1,4-Dichlorobenzene	0.00500	0.000500	0.00579	0.00602	116	120	1	79.0-118		J5	3.90	20
Dichlorodifluoromethane	0.00500	0.00200	0.00707	0.00755	141	151	1	32.0-152			6.57	20
1,1-Dichloroethane	0.00500	0.000500	0.00691	0.00737	138	147	1	77.0-125	J5	J5	6.44	20
1,2-Dichloroethane	0.00500	0.000500	0.00661	0.00669	132	134	1	73.0-128	J5	J5	1.20	20
1,1-Dichloroethene	0.00500	0.000500	0.00765	0.00847	153	169	1	71.0-131	J5	J5	10.2	20
cis-1,2-Dichloroethene	0.00500	0.000500	0.00747	0.00762	149	152	1	78.0-123	J5	J5	1.99	20

L1540401-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1540401-01 10/01/22 13:08 • (MS) R3843739-4 10/01/22 19:03 • (MSD) R3843739-5 10/01/22 19:24

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
trans-1,2-Dichloroethene	0.00500	0.000500	0.00764	0.00776	153	155	1	75.0-124	J5	J5	1.56	20
1,2-Dichloropropane	0.00500	0.000500	0.00623	0.00663	125	133	1	78.0-122	J5	J5	6.22	20
1,3-Dichloropropane	0.00500	0.000500	0.00553	0.00593	111	119	1	80.0-119			6.98	20
2,2-Dichloropropane	0.00500	0.000500	0.00794	0.00847	159	169	1	60.0-139	J5	J5	6.46	20
1,1-Dichloropropene	0.00500	0.000500	0.00735	0.00757	147	151	1	79.0-125	J5	J5	2.95	20
cis-1,3-Dichloropropene	0.00500	0.000500	0.00583	0.00604	117	121	1	75.0-124			3.54	20
trans-1,3-Dichloropropene	0.00500	0.000500	0.00509	0.00534	102	107	1	73.0-127			4.79	20
Ethylbenzene	0.00500	0.00203	0.00888	0.00897	137	139	1	79.0-121	J5	J5	1.01	20
2-Hexanone	0.0250	0.000750	0.0253	0.0275	101	110	1	57.0-139			8.33	20
Isopropylbenzene	0.00500	0.00252	0.00916	0.00972	133	144	1	72.0-131	J5	J5	5.93	20
p-Isopropyltoluene	0.00500	0.00245	0.00797	0.00828	110	117	1	77.0-127			3.82	20
2-Butanone (MEK)	0.0250	0.00500	0.0248	0.0254	99.2	102	1	56.0-143			2.39	20
Methylene Chloride	0.00500	0.00200	0.00732	0.00770	146	154	1	74.0-124	J5	J5	5.06	20
n-Propylbenzene	0.00500	0.00263	0.00801	0.00873	108	122	1	76.0-126			8.60	20
Styrene	0.00500	0.000500	0.00617	0.00643	123	129	1	78.0-123		J5	4.13	20
1,1,1,2-Tetrachloroethane	0.00500	0.000500	0.00609	0.00635	122	127	1	78.0-124		J5	4.18	20
1,1,2,2-Tetrachloroethane	0.00500	0.000500	0.00563	0.00603	113	121	1	71.0-121			6.86	20
Tetrachloroethene	0.00500	0.000600	0.00688	0.00717	138	143	1	74.0-129	J5	J5	4.13	20
Toluene	0.00500	0.000600	0.00593	0.00632	119	126	1	80.0-121		J5	6.37	20
1,2,3-Trichlorobenzene	0.00500	0.000500	0.00567	0.00503	113	101	1	69.0-129			12.0	20
1,2,4-Trimethylbenzene	0.00500	0.0300	0.0354	0.0356	108	112	1	76.0-124			0.563	20
1,3,5-Trimethylbenzene	0.00500	0.000500	0.00559	0.00614	112	123	1	75.0-124			9.38	20
1,1,1-Trichloroethane	0.00500	0.000500	0.00783	0.00812	157	162	1	74.0-131	J5	J5	3.64	20
1,1,2-Trichloroethane	0.00500	0.000500	0.00578	0.00623	116	125	1	80.0-119		J5	7.49	20
Trichloroethene	0.00500	0.000500	0.00691	0.00735	138	147	1	79.0-123	J5	J5	6.17	20
1,2,3-Trichloropropane	0.00500	0.00100	0.00512	0.00584	102	117	1	73.0-122			13.1	20
o-Xylene	0.00500	0.000379	0.00708	0.00732	134	139	1	78.0-122	J5	J5	3.33	20
m&p-Xylene	0.0100	0.000500	0.0127	0.0138	127	138	1	80.0-121	J5	J5	8.30	20
Xylenes, Total	0.0150	0.000379	0.0198	0.0211	129	138	1	79.0-121	J5	J5	6.36	20
(S) Toluene-d8					*95.3*	*98.0*		*89.0-112*				
(S) 4-Bromofluorobenzene					*108*	*108*		*85.0-114*				
(S) 1,2-Dichloroethane-d4					*101*	*101*		*81.0-118*				

L1540980-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1540980-01 10/01/22 16:16 • (MS) R3843739-6 10/01/22 19:44 • (MSD) R3843739-7 10/01/22 20:06

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.00500	0.000500	0.00755	0.00748	151	150	1	79.0-120	J5	J5	0.931	20
Bromobenzene	0.00500	0.000500	0.00559	0.00586	112	117	1	80.0-120			4.72	20
Bromochloromethane	0.00500	0.000500	0.00803	0.00761	161	152	1	78.0-123	J5	J5	5.37	20
Bromodichloromethane	0.00500	0.000500	0.00696	0.00682	139	136	1	79.0-125	J5	J5	2.03	20
Bromoform	0.00500	0.000500	0.00587	0.00586	117	117	1	66.0-130			0.171	20
Bromomethane	0.00500	0.00200	0.00798	0.00796	160	159	1	53.0-141	J5	J5	0.251	20
n-Butylbenzene	0.00500	0.000500	0.00609	0.00617	122	123	1	75.0-128			1.31	20
sec-Butylbenzene	0.00500	0.000500	0.00668	0.00691	134	138	1	77.0-126	J5	J5	3.38	20
tert-Butylbenzene	0.00500	0.000500	0.00639	0.00649	128	130	1	78.0-124	J5	J5	1.55	20
Carbon disulfide	0.00500	0.000500	0.00752	0.00732	150	146	1	64.0-133	J5	J5	2.70	20
Carbon tetrachloride	0.00500	0.000500	0.00815	0.00778	163	156	1	72.0-136	J5	J5	4.65	20
Chlorobenzene	0.00500	0.000500	0.00657	0.00676	131	135	1	82.0-118	J5	J5	2.85	20
Chlorodibromomethane	0.00500	0.000500	0.00582	0.00570	116	114	1	74.0-126			2.08	20
Chloroethane	0.00500	0.00200	0.00856	0.00824	171	165	1	60.0-138	J5	J5	3.81	20
Chloroform	0.00500	0.00200	0.00792	0.00767	158	153	1	79.0-124	J5	J5	3.21	20
2-Chlorotoluene	0.00500	0.000500	0.00615	0.00627	123	125	1	79.0-122	J5	J5	1.93	20
4-Chlorotoluene	0.00500	0.000500	0.00579	0.00595	116	119	1	78.0-122			2.73	20
1,2-Dibromoethane	0.00500	0.000500	0.00623	0.00642	125	128	1	77.0-121	J5	J5	3.00	20
Dibromomethane	0.00500	0.000500	0.00726	0.00711	145	142	1	79.0-123	J5	J5	2.09	20
1,2-Dichlorobenzene	0.00500	0.000500	0.00652	0.00672	130	134	1	80.0-119	J5	J5	3.02	20
1,3-Dichlorobenzene	0.00500	0.000500	0.00620	0.00620	124	124	1	80.0-119	J5	J5	0.000	20
1,4-Dichlorobenzene	0.00500	0.000500	0.00596	0.00624	119	125	1	79.0-118	J5	J5	4.59	20
Dichlorodifluoromethane	0.00500	0.00200	0.00745	0.00760	149	152	1	32.0-152			1.99	20
1,1-Dichloroethane	0.00500	0.000500	0.00749	0.00701	150	140	1	77.0-125	J5	J5	6.62	20
1,2-Dichloroethane	0.00500	0.000500	0.00713	0.00665	143	133	1	73.0-128	J5	J5	6.97	20
1,1-Dichloroethene	0.00500	0.000500	0.00865	0.00812	173	162	1	71.0-131	J5	J5	6.32	20
cis-1,2-Dichloroethene	0.00500	0.000500	0.00819	0.00747	164	149	1	78.0-123	J5	J5	9.20	20
trans-1,2-Dichloroethene	0.00500	0.000500	0.00797	0.00783	159	157	1	75.0-124	J5	J5	1.77	20
1,2-Dichloropropane	0.00500	0.000500	0.00664	0.00655	133	131	1	78.0-122	J5	J5	1.36	20
1,3-Dichloropropane	0.00500	0.000500	0.00599	0.00580	120	116	1	80.0-119	J5		3.22	20
2,2-Dichloropropane	0.00500	0.000500	0.00851	0.00794	170	159	1	60.0-139	J5	J5	6.93	20
1,1-Dichloropropene	0.00500	0.000500	0.00789	0.00797	158	159	1	79.0-125	J5	J5	1.01	20
cis-1,3-Dichloropropene	0.00500	0.000500	0.00613	0.00630	123	126	1	75.0-124		J5	2.74	20
trans-1,3-Dichloropropene	0.00500	0.000500	0.00532	0.00551	106	110	1	73.0-127			3.51	20
Ethylbenzene	0.00500	0.000500	0.00680	0.00729	136	146	1	79.0-121	J5	J5	6.96	20
2-Hexanone	0.0250	0.000750	0.0279	0.0283	112	113	1	57.0-139			1.42	20
Isopropylbenzene	0.00500	0.000500	0.00745	0.00753	149	151	1	72.0-131	J5	J5	1.07	20
p-Isopropyltoluene	0.00500	0.000500	0.00658	0.00671	132	134	1	77.0-127	J5	J5	1.96	20
2-Butanone (MEK)	0.0250	0.00500	0.0284	0.0282	114	113	1	56.0-143			0.707	20
Methylene Chloride	0.00500	0.00200	0.00759	0.00727	152	145	1	74.0-124	J5	J5	4.31	20

L1540980-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1540980-01 10/01/22 16:16 • (MS) R3843739-6 10/01/22 19:44 • (MSD) R3843739-7 10/01/22 20:06

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
n-Propylbenzene	0.00500	0.000500	0.00609	0.00622	122	124	1	76.0-126			2.11	20
Styrene	0.00500	0.000500	0.00656	0.00671	131	134	1	78.0-123	J5	J5	2.26	20
1,1,1,2-Tetrachloroethane	0.00500	0.000500	0.00651	0.00673	130	135	1	78.0-124	J5	J5	3.32	20
1,1,2,2-Tetrachloroethane	0.00500	0.000500	0.00631	0.00608	126	122	1	71.0-121	J5	J5	3.71	20
Tetrachloroethene	0.00500	0.000600	0.00723	0.00735	145	147	1	74.0-129	J5	J5	1.65	20
Toluene	0.00500	0.000600	0.00628	0.00636	126	127	1	80.0-121	J5	J5	1.27	20
1,2,3-Trichlorobenzene	0.00500	0.000500	0.00490	0.00545	98.0	109	1	69.0-129			10.6	20
1,2,4-Trimethylbenzene	0.00500	0.00100	0.00644	0.00650	129	130	1	76.0-124	J5	J5	0.927	20
1,3,5-Trimethylbenzene	0.00500	0.000500	0.00652	0.00654	130	131	1	75.0-124	J5	J5	0.306	20
1,1,1-Trichloroethane	0.00500	0.000500	0.00834	0.00800	167	160	1	74.0-131	J5	J5	4.16	20
1,1,2-Trichloroethane	0.00500	0.000500	0.00629	0.00624	126	125	1	80.0-119	J5	J5	0.798	20
Trichloroethene	0.00500	0.000500	0.00739	0.00727	148	145	1	79.0-123	J5	J5	1.64	20
1,2,3-Trichloropropane	0.00500	0.00100	0.00570	0.00588	114	118	1	73.0-122			3.11	20
o-Xylene	0.00500	0.000500	0.00720	0.00712	144	142	1	78.0-122	J5	J5	1.12	20
m&p-Xylene	0.0100	0.000500	0.0137	0.0140	137	140	1	80.0-121	J5	J5	2.17	20
Xylenes, Total	0.0150	0.00150	0.0209	0.0211	139	141	1	79.0-121	J5	J5	0.952	20
(S) Toluene-d8					*99.3*	*99.9*		*89.0-112*				
(S) 4-Bromofluorobenzene					*107*	*107*		*85.0-114*				
(S) 1,2-Dichloroethane-d4					*99.6*	*96.4*		*81.0-118*				

Method Blank (MB)

(MB) R3844752-3 10/01/22 15:13

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
Acetone	0.0250	U	0.0113	0.0250	0.0500
Benzene	0.000500	U	0.0000941	0.000500	0.00100
Bromobenzene	0.000500	U	0.000118	0.000500	0.00100
Bromochloromethane	0.000500	U	0.000128	0.000500	0.00100
Bromodichloromethane	0.000500	U	0.000136	0.000500	0.00100
Bromoform	0.000500	U	0.000129	0.000500	0.00100
Bromomethane	0.00200	U	0.000605	0.00200	0.00500
n-Butylbenzene	0.000500	U	0.000157	0.000500	0.00100
sec-Butylbenzene	0.000500	U	0.000125	0.000500	0.00100
tert-Butylbenzene	0.000500	U	0.000127	0.000500	0.00100
Carbon disulfide	0.000500	U	0.0000960	0.000500	0.00100
Carbon tetrachloride	0.000500	U	0.000128	0.000500	0.00100
Chlorobenzene	0.000500	U	0.000116	0.000500	0.00100
Chlorodibromomethane	0.000500	U	0.000140	0.000500	0.00100
Chloroethane	0.00200	U	0.000192	0.00200	0.00500
Chloroform	0.00200	U	0.000111	0.00200	0.00500
Chloromethane	0.00200	U	0.000960	0.00200	0.00400
2-Chlorotoluene	0.000500	U	0.000106	0.000500	0.00100
4-Chlorotoluene	0.000500	U	0.000114	0.000500	0.00100
1,2-Dibromoethane	0.000500	U	0.000126	0.000500	0.00100
1,2-Dibromo-3-Chloropropane	0.00200	U	0.000276	0.00200	0.00500
Dibromomethane	0.000500	U	0.000122	0.000500	0.00100
1,2-Dichlorobenzene	0.000500	U	0.000107	0.000500	0.00100
1,3-Dichlorobenzene	0.000500	U	0.000110	0.000500	0.00100
1,4-Dichlorobenzene	0.000500	U	0.000120	0.000500	0.00100
Dichlorodifluoromethane	0.00200	U	0.000374	0.00200	0.00500
1,1-Dichloroethane	0.000500	U	0.000100	0.000500	0.00100
1,2-Dichloroethane	0.000500	U	0.0000819	0.000500	0.00100
1,1-Dichloroethene	0.000500	U	0.000188	0.000500	0.00100
cis-1,2-Dichloroethene	0.000500	U	0.000126	0.000500	0.00100
trans-1,2-Dichloroethene	0.000500	U	0.000149	0.000500	0.00100
1,2-Dichloropropane	0.000500	U	0.000149	0.000500	0.00100
1,3-Dichloropropane	0.000500	U	0.000110	0.000500	0.00100
2,2-Dichloropropane	0.000500	U	0.000161	0.000500	0.00100
1,1-Dichloropropene	0.000500	U	0.000142	0.000500	0.00100
cis-1,3-Dichloropropene	0.000500	U	0.000111	0.000500	0.00100
trans-1,3-Dichloropropene	0.000500	U	0.000118	0.000500	0.00100
Total 1,3-Dichloropropene	0.000500	U	0.000118	0.000500	0.00100
Ethylbenzene	0.000500	U	0.000137	0.000500	0.00100
Hexachloro-1,3-butadiene	0.000750	U	0.000337	0.000750	0.00150

Method Blank (MB)

(MB) R3844752-3 10/01/22 15:13

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
2-Hexanone	0.000750	U	0.000787	0.000750	0.0100
Isopropylbenzene	0.000500	U	0.000105	0.000500	0.00100
p-Isopropyltoluene	0.000500	U	0.000120	0.000500	0.00100
2-Butanone (MEK)	0.00500	U	0.00119	0.00500	0.0100
Methylene Chloride	0.00200	U	0.000430	0.00200	0.00500
4-Methyl-2-pentanone (MIBK)	0.00500	U	0.000478	0.00500	0.0100
n-Propylbenzene	0.000500	U	0.0000993	0.000500	0.00100
Styrene	0.000500	U	0.000118	0.000500	0.00100
1,1,1,2-Tetrachloroethane	0.000500	U	0.000147	0.000500	0.00100
1,1,2,2-Tetrachloroethane	0.000500	U	0.000133	0.000500	0.00100
Tetrachloroethene	0.000600	U	0.000300	0.000600	0.00120
Toluene	0.000600	U	0.000278	0.000600	0.00120
1,2,3-Trichlorobenzene	0.000500	U	0.000230	0.000500	0.00100
1,2,4-Trichlorobenzene	0.00100	U	0.000481	0.00100	0.00200
1,2,4-Trimethylbenzene	0.00100	U	0.000322	0.00100	0.00200
1,3,5-Trimethylbenzene	0.000500	U	0.000104	0.000500	0.00100
1,1,1-Trichloroethane	0.000500	U	0.000149	0.000500	0.00100
1,1,2-Trichloroethane	0.000500	U	0.000158	0.000500	0.00100
Trichloroethene	0.000500	U	0.000190	0.000500	0.00100
Trichlorofluoromethane	0.00200	U	0.000160	0.00200	0.00500
1,2,3-Trichloropropane	0.00100	U	0.000237	0.00100	0.00250
o-Xylene	0.000500	U	0.000174	0.000500	0.00100
m&p-Xylene	0.000500	U	0.000430	0.000500	0.00200
Xylenes, Total	0.00150	U	0.000174	0.00150	0.00300
(S) Toluene-d8	*109*				*89.0-112*
(S) 4-Bromofluorobenzene	*107*				*85.0-114*
(S) 1,2-Dichloroethane-d4	*112*				*81.0-118*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3844752-1 10/01/22 14:16 • (LCSD) R3844752-2 10/01/22 14:35

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.0250	0.0250	0.0235	100	94.0	39.0-160			6.19	20
Benzene	0.00500	0.00503	0.00478	101	95.6	79.0-120			5.10	20
Bromobenzene	0.00500	0.00440	0.00415	88.0	83.0	80.0-120			5.85	20
Bromochloromethane	0.00500	0.00558	0.00526	112	105	78.0-123			5.90	20
Bromodichloromethane	0.00500	0.00552	0.00522	110	104	79.0-125			5.59	20
Bromoform	0.00500	0.00568	0.00521	114	104	66.0-130			8.63	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3844752-1 10/01/22 14:16 • (LCSD) R3844752-2 10/01/22 14:35

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromomethane	0.00500	0.00632	0.00565	126	113	53.0-141			11.2	20
n-Butylbenzene	0.00500	0.00429	0.00406	85.8	81.2	75.0-128			5.51	20
sec-Butylbenzene	0.00500	0.00473	0.00452	94.6	90.4	77.0-126			4.54	20
tert-Butylbenzene	0.00500	0.00472	0.00452	94.4	90.4	78.0-124			4.33	20
Carbon disulfide	0.00500	0.00497	0.00463	99.4	92.6	64.0-133			7.08	20
Carbon tetrachloride	0.00500	0.00583	0.00530	117	106	72.0-136			9.52	20
Chlorobenzene	0.00500	0.00491	0.00464	98.2	92.8	82.0-118			5.65	20
Chlorodibromomethane	0.00500	0.00546	0.00516	109	103	74.0-126			5.65	20
Chloroethane	0.00500	0.00712	0.00678	142	136	60.0-138	J4		4.89	20
Chloroform	0.00500	0.00545	0.00510	109	102	79.0-124			6.64	20
Chloromethane	0.00500	0.00596	0.00542	119	108	50.0-139			9.49	20
2-Chlorotoluene	0.00500	0.00433	0.00405	86.6	81.0	79.0-122			6.68	20
4-Chlorotoluene	0.00500	0.00434	0.00404	86.8	80.8	78.0-122			7.16	20
1,2-Dibromoethane	0.00500	0.00500	0.00502	100	100	77.0-121			0.399	20
1,2-Dibromo-3-Chloropropane	0.00500	0.00493	0.00495	98.6	99.0	62.0-128			0.405	20
Dibromomethane	0.00500	0.00523	0.00502	105	100	79.0-123			4.10	20
1,2-Dichlorobenzene	0.00500	0.00490	0.00464	98.0	92.8	80.0-119			5.45	20
1,3-Dichlorobenzene	0.00500	0.00475	0.00443	95.0	88.6	80.0-119			6.97	20
1,4-Dichlorobenzene	0.00500	0.00481	0.00460	96.2	92.0	79.0-118			4.46	20
Dichlorodifluoromethane	0.00500	0.00488	0.00422	97.6	84.4	32.0-152			14.5	20
1,1-Dichloroethane	0.00500	0.00492	0.00447	98.4	89.4	77.0-125			9.58	20
1,2-Dichloroethane	0.00500	0.00501	0.00479	100	95.8	73.0-128			4.49	20
1,1-Dichloroethene	0.00500	0.00498	0.00459	99.6	91.8	71.0-131			8.15	20
cis-1,2-Dichloroethene	0.00500	0.00526	0.00475	105	95.0	78.0-123			10.2	20
trans-1,2-Dichloroethene	0.00500	0.00523	0.00490	105	98.0	75.0-124			6.52	20
1,2-Dichloropropane	0.00500	0.00488	0.00458	97.6	91.6	78.0-122			6.34	20
1,3-Dichloropropane	0.00500	0.00479	0.00483	95.8	96.6	80.0-119			0.832	20
2,2-Dichloropropane	0.00500	0.00622	0.00565	124	113	60.0-139			9.60	20
1,1-Dichloropropene	0.00500	0.00521	0.00480	104	96.0	79.0-125			8.19	20
cis-1,3-Dichloropropene	0.00500	0.00523	0.00503	105	101	75.0-124			3.90	20
trans-1,3-Dichloropropene	0.00500	0.00498	0.00467	99.6	93.4	73.0-127			6.42	20
Ethylbenzene	0.00500	0.00497	0.00482	99.4	96.4	79.0-121			3.06	20
Hexachloro-1,3-butadiene	0.00500	0.00535	0.00492	107	98.4	66.0-134			8.37	20
2-Hexanone	0.0250	0.0230	0.0230	92.0	92.0	57.0-139			0.000	20
Isopropylbenzene	0.00500	0.00519	0.00482	104	96.4	72.0-131			7.39	20
p-Isopropyltoluene	0.00500	0.00591	0.00475	118	95.0	77.0-127		J3	21.8	20
2-Butanone (MEK)	0.0250	0.0241	0.0230	96.4	92.0	56.0-143			4.67	20
Methylene Chloride	0.00500	0.00530	0.00499	106	99.8	74.0-124			6.03	20
4-Methyl-2-pentanone (MIBK)	0.0250	0.0244	0.0238	97.6	95.2	67.0-130			2.49	20
n-Propylbenzene	0.00500	0.00436	0.00411	87.2	82.2	76.0-126			5.90	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3844752-1 10/01/22 14:16 • (LCSD) R3844752-2 10/01/22 14:35

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Styrene	0.00500	0.00481	0.00459	96.2	91.8	78.0-123			4.68	20
1,1,1,2-Tetrachloroethane	0.00500	0.00529	0.00504	106	101	78.0-124			4.84	20
1,1,2,2-Tetrachloroethane	0.00500	0.00434	0.00421	86.8	84.2	71.0-121			3.04	20
Tetrachloroethene	0.00500	0.00574	0.00527	115	105	74.0-129			8.54	20
Toluene	0.00500	0.00471	0.00448	94.2	89.6	80.0-121			5.01	20
1,2,3-Trichlorobenzene	0.00500	0.00570	0.00525	114	105	69.0-129			8.22	20
1,2,4-Trichlorobenzene	0.00500	0.00510	0.00479	102	95.8	69.0-130			6.27	20
1,2,4-Trimethylbenzene	0.00500	0.00463	0.00438	92.6	87.6	76.0-124			5.55	20
1,3,5-Trimethylbenzene	0.00500	0.00464	0.00431	92.8	86.2	75.0-124			7.37	20
1,1,1-Trichloroethane	0.00500	0.00539	0.00513	108	103	74.0-131			4.94	20
1,1,2-Trichloroethane	0.00500	0.00492	0.00487	98.4	97.4	80.0-119			1.02	20
Trichloroethene	0.00500	0.00572	0.00529	114	106	79.0-123			7.81	20
Trichlorofluoromethane	0.00500	0.00611	0.00575	122	115	65.0-141			6.07	20
1,2,3-Trichloropropane	0.00500	0.00493	0.00487	98.6	97.4	73.0-122			1.22	20
o-Xylene	0.00500	0.00507	0.00474	101	94.8	78.0-122			6.73	20
m&p-Xylene	0.0100	0.0103	0.00963	103	96.3	80.0-121			6.72	20
Xylenes, Total	0.0150	0.0154	0.0144	103	96.0	79.0-121			6.71	20
(S) Toluene-d8				*106*	*109*	*89.0-112*				
(S) 4-Bromofluorobenzene				*107*	*106*	*85.0-114*				
(S) 1,2-Dichloroethane-d4				*110*	*111*	*81.0-118*				

L1540401-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1540401-10 10/01/22 21:08 • (MS) R3844752-4 10/01/22 22:25 • (MSD) R3844752-5 10/01/22 22:44

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.0250	0.0250	0.0342	0.0335	137	134	1	39.0-160			2.07	20
Benzene	0.00500	0.000500	0.00682	0.00665	136	133	1	79.0-120	J5	J5	2.52	20
Bromobenzene	0.00500	0.000500	0.00545	0.00519	109	104	1	80.0-120			4.89	20
Bromochloromethane	0.00500	0.000500	0.00779	0.00750	156	150	1	78.0-123	J5	J5	3.79	20
Bromodichloromethane	0.00500	0.000500	0.00793	0.00762	159	152	1	79.0-125	J5	J5	3.99	20
Bromoform	0.00500	0.000500	0.00782	0.00707	156	141	1	66.0-130	J5	J5	10.1	20
Bromomethane	0.00500	0.00200	0.00816	0.00810	163	162	1	53.0-141	J5	J5	0.738	20
n-Butylbenzene	0.00500	0.000500	0.00595	0.00560	119	112	1	75.0-128			6.06	20
sec-Butylbenzene	0.00500	0.000500	0.00662	0.00631	132	126	1	77.0-126	J5		4.80	20
tert-Butylbenzene	0.00500	0.000500	0.00664	0.00621	133	124	1	78.0-124	J5		6.69	20
Carbon disulfide	0.00500	0.000500	0.00659	0.00649	132	130	1	64.0-133			1.53	20
Carbon tetrachloride	0.00500	0.000500	0.00895	0.00884	179	177	1	72.0-136	J5	J5	1.24	20
Chlorobenzene	0.00500	0.000500	0.00685	0.00632	137	126	1	82.0-118	J5	J5	8.05	20

L1540401-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1540401-10 10/01/22 21:08 • (MS) R3844752-4 10/01/22 22:25 • (MSD) R3844752-5 10/01/22 22:44

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chlorodibromomethane	0.00500	0.000500	0.00746	0.00684	149	137	1	74.0-126	J5	J5	8.67	20
Chloroethane	0.00500	0.00200	0.00994	0.00958	199	192	1	60.0-138	J5	J5	3.69	20
Chloroform	0.00500	0.00200	0.00771	0.00734	154	147	1	79.0-124	J5	J5	4.92	20
Chloromethane	0.00500	0.00200	0.00783	0.00734	157	147	1	50.0-139	J5	J5	6.46	20
2-Chlorotoluene	0.00500	0.000500	0.00585	0.00559	117	112	1	79.0-122			4.55	20
4-Chlorotoluene	0.00500	0.000500	0.00576	0.00538	115	108	1	78.0-122			6.82	20
1,2-Dibromoethane	0.00500	0.000500	0.00675	0.00626	135	125	1	77.0-121	J5	J5	7.53	20
1,2-Dibromo-3-Chloropropane	0.00500	0.00200	0.00616	0.00593	123	119	1	62.0-128			3.80	20
Dibromomethane	0.00500	0.000500	0.00715	0.00680	143	136	1	79.0-123	J5	J5	5.02	20
1,2-Dichlorobenzene	0.00500	0.000500	0.00635	0.00599	127	120	1	80.0-119	J5	J5	5.83	20
1,3-Dichlorobenzene	0.00500	0.000500	0.00639	0.00598	128	120	1	80.0-119	J5	J5	6.63	20
1,4-Dichlorobenzene	0.00500	0.000500	0.00649	0.00608	130	122	1	79.0-118	J5	J5	6.52	20
Dichlorodifluoromethane	0.00500	0.00200	0.00687	0.00655	137	131	1	32.0-152			4.77	20
1,1-Dichloroethane	0.00500	0.000500	0.00684	0.00641	137	128	1	77.0-125	J5	J5	6.49	20
1,2-Dichloroethane	0.00500	0.000500	0.00728	0.00698	146	140	1	73.0-128	J5	J5	4.21	20
1,1-Dichloroethene	0.00500	0.000500	0.00709	0.00686	142	137	1	71.0-131	J5	J5	3.30	20
cis-1,2-Dichloroethene	0.00500	0.000500	0.00711	0.00687	142	137	1	78.0-123	J5	J5	3.43	20
trans-1,2-Dichloroethene	0.00500	0.000500	0.00739	0.00712	148	142	1	75.0-124	J5	J5	3.72	20
1,2-Dichloropropane	0.00500	0.000500	0.00639	0.00620	128	124	1	78.0-122	J5	J5	3.02	20
1,3-Dichloropropane	0.00500	0.000500	0.00630	0.00600	126	120	1	80.0-119	J5	J5	4.88	20
2,2-Dichloropropane	0.00500	0.000500	0.00925	0.00928	185	186	1	60.0-139	J5	J5	0.324	20
1,1-Dichloropropene	0.00500	0.000500	0.00759	0.00728	152	146	1	79.0-125	J5	J5	4.17	20
cis-1,3-Dichloropropene	0.00500	0.000500	0.00656	0.00648	131	130	1	75.0-124	J5	J5	1.23	20
trans-1,3-Dichloropropene	0.00500	0.000500	0.00649	0.00610	130	122	1	73.0-127	J5		6.20	20
Ethylbenzene	0.00500	0.000500	0.00724	0.00674	145	135	1	79.0-121	J5	J5	7.15	20
Hexachloro-1,3-butadiene	0.00500	0.000750	0.00790	0.00780	158	156	1	66.0-134	J5	J5	1.27	20
2-Hexanone	0.0250	0.000750	0.0290	0.0271	116	108	1	57.0-139			6.77	20
Isopropylbenzene	0.00500	0.000500	0.00764	0.00699	153	140	1	72.0-131	J5	J5	8.89	20
p-Isopropyltoluene	0.00500	0.000500	0.00677	0.00638	135	128	1	77.0-127	J5	J5	5.93	20
2-Butanone (MEK)	0.0250	0.00500	0.0312	0.0300	125	120	1	56.0-143			3.92	20
Methylene Chloride	0.00500	0.00200	0.00649	0.00631	130	126	1	74.0-124	J5	J5	2.81	20
4-Methyl-2-pentanone (MIBK)	0.0250	0.00500	0.0306	0.0281	122	112	1	67.0-130			8.52	20
n-Propylbenzene	0.00500	0.000500	0.00582	0.00553	116	111	1	76.0-126			5.11	20
Styrene	0.00500	0.000500	0.00686	0.00634	137	127	1	78.0-123	J5	J5	7.88	20
1,1,1,2-Tetrachloroethane	0.00500	0.000500	0.00775	0.00707	155	141	1	78.0-124	J5	J5	9.18	20
1,1,2,2-Tetrachloroethane	0.00500	0.000500	0.00531	0.00505	106	101	1	71.0-121			5.02	20
Tetrachloroethene	0.00500	0.000600	0.00836	0.00777	167	155	1	74.0-129	J5	J5	7.32	20
Toluene	0.00500	0.000600	0.00639	0.00595	128	119	1	80.0-121	J5		7.13	20
1,2,3-Trichlorobenzene	0.00500	0.000500	0.00718	0.00707	144	141	1	69.0-129	J5	J5	1.54	20
1,2,4-Trichlorobenzene	0.00500	0.00100	0.00623	0.00625	125	125	1	69.0-130			0.321	20

L1540401-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1540401-10 10/01/22 21:08 • (MS) R3844752-4 10/01/22 22:25 • (MSD) R3844752-5 10/01/22 22:44

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
1,2,4-Trimethylbenzene	0.00500	0.00100	0.00646	0.00604	129	121	1	76.0-124	J5		6.72	20
1,3,5-Trimethylbenzene	0.00500	0.000500	0.00624	0.00589	125	118	1	75.0-124	J5		5.77	20
1,1,1-Trichloroethane	0.00500	0.000500	0.00867	0.00831	173	166	1	74.0-131	J5	J5	4.24	20
1,1,2-Trichloroethane	0.00500	0.000500	0.00649	0.00616	130	123	1	80.0-119	J5	J5	5.22	20
Trichloroethene	0.00500	0.000500	0.00806	0.00780	161	156	1	79.0-123	J5	J5	3.28	20
Trichlorofluoromethane	0.00500	0.00200	0.00989	0.00987	198	197	1	65.0-141	J5	J5	0.202	20
1,2,3-Trichloropropane	0.00500	0.00100	0.00644	0.00604	129	121	1	73.0-122	J5		6.41	20
o-Xylene	0.00500	0.000500	0.00691	0.00657	138	131	1	78.0-122	J5	J5	5.04	20
m&p-Xylene	0.0100	0.000500	0.0148	0.0133	148	133	1	80.0-121	J5	J5	10.7	20
Xylenes, Total	0.0150	0.00150	0.0217	0.0199	145	133	1	79.0-121	J5	J5	8.65	20
(S) Toluene-d8					*106*	*103*		*89.0-112*				
(S) 4-Bromofluorobenzene					*111*	*108*		*85.0-114*				
(S) 1,2-Dichloroethane-d4					*122*	*123*		*81.0-118*	J1	J1		

Method Blank (MB)

(MB) R3845009-3 10/04/22 01:31

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
Acetone	0.0163	J	0.0113	0.0250	0.0500
Chloromethane	0.00200	U	0.000960	0.00200	0.00400
1,2-Dibromo-3-Chloropropane	0.00200	U	0.000276	0.00200	0.00500
Hexachloro-1,3-butadiene	0.000750	U	0.000337	0.000750	0.00150
4-Methyl-2-pentanone (MIBK)	0.00500	U	0.000478	0.00500	0.0100
1,2,4-Trichlorobenzene	0.00100	U	0.000481	0.00100	0.00200
Trichlorofluoromethane	0.00200	U	0.000160	0.00200	0.00500
(S) Toluene-d8	*107*				*89.0-112*
(S) 4-Bromofluorobenzene	*110*				*85.0-114*
(S) 1,2-Dichloroethane-d4	*114*				*81.0-118*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3845009-1 10/03/22 23:52 • (LCSD) R3845009-2 10/04/22 00:57

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.0250	0.0372	0.0382	149	153	39.0-160			2.65	20
Chloromethane	0.00500	0.00427	0.00407	85.4	81.4	50.0-139			4.80	20
1,2-Dibromo-3-Chloropropane	0.00500	0.00472	0.00419	94.4	83.8	62.0-128			11.9	20
Hexachloro-1,3-butadiene	0.00500	0.00484	0.00509	96.8	102	66.0-134			5.04	20
4-Methyl-2-pentanone (MIBK)	0.0250	0.0224	0.0219	89.6	87.6	67.0-130			2.26	20
1,2,4-Trichlorobenzene	0.00500	0.00511	0.00476	102	95.2	69.0-130			7.09	20
Trichlorofluoromethane	0.00500	0.00601	0.00538	120	108	65.0-141			11.1	20
(S) Toluene-d8				*105*	*104*	*89.0-112*				
(S) 4-Bromofluorobenzene				*109*	*105*	*85.0-114*				
(S) 1,2-Dichloroethane-d4				*113*	*111*	*81.0-118*				

Method Blank (MB)

(MB) R3842788-1 09/29/22 05:30

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
Diesel Range Organics (DRO)	0.0806	J	0.0333	0.0750	0.150
Residual Range Organics (RRO)	0.167	U	0.0833	0.167	0.334
(S) o-Terphenyl	*78.5*				*31.0-160*

Laboratory Control Sample (LCS)

(LCS) R3842788-2 09/29/22 05:56

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Diesel Range Organics (DRO)	1.50	1.23	82.0	50.0-150	
(S) o-Terphenyl			*85.0*	*31.0-160*	

L1540401-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1540401-01 09/29/22 08:32 • (MS) R3842788-3 09/29/22 08:58 • (MSD) R3842788-4 09/29/22 09:24

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Diesel Range Organics (DRO)	1.50	11.6	17.3	17.7	380	407	1	50.0-150	E V	E V	2.29	20
(S) o-Terphenyl					*86.0*	*66.5*		*31.0-160*				

Method Blank (MB)

(MB) R3845152-3 10/05/22 12:57

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
Diesel Range Organics (DRO)	0.0561	J	0.0333	0.0750	0.150
Residual Range Organics (RRO)	0.208	J	0.0833	0.167	0.334
(S) o-Terphenyl	*115*				*31.0-160*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3845152-1 10/05/22 10:22 • (LCSD) R3845152-2 10/05/22 10:45

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Diesel Range Organics (DRO)	1.50	1.39	1.54	92.7	103	50.0-150			10.2	20
(S) o-Terphenyl				*129*	*137*	*31.0-160*				

Method Blank (MB)

(MB) R3844355-2 10/04/22 09:49

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
Benzoic Acid	0.00500	U	0.00170	0.00500	0.0500
Benzyl Alcohol	0.00500	U	0.000563	0.00500	0.0100
Bis(2-chlorethoxy)methane	0.00500	U	0.000116	0.00500	0.0100
Bis(2-chloroethyl)ether	0.00500	U	0.000137	0.00500	0.0100
2,2-Oxybis(1-Chloropropane)	0.00500	U	0.000210	0.00500	0.0100
4-Bromophenyl-phenylether	0.00500	U	0.0000877	0.00500	0.0100
Carbazole	0.00500	U	0.000111	0.00500	0.0100
4-Chloroaniline	0.00500	U	0.000234	0.00500	0.0100
2-Chloronaphthalene	0.000500	U	0.0000648	0.000500	0.00100
4-Chlorophenyl-phenylether	0.00500	U	0.0000926	0.00500	0.0100
Dibenzofuran	0.00500	U	0.0000970	0.00500	0.0100
3,3-Dichlorobenzidine	0.00500	U	0.000212	0.00500	0.0100
2,4-Dinitrotoluene	0.00500	U	0.0000983	0.00500	0.0100
2,6-Dinitrotoluene	0.00500	U	0.000250	0.00500	0.0100
Hexachlorobenzene	0.000500	U	0.0000755	0.000500	0.00100
Hexachlorocyclopentadiene	0.00500	U	0.0000598	0.00500	0.0100
Hexachloroethane	0.00500	U	0.000127	0.00500	0.0100
Isophorone	0.00500	U	0.000143	0.00500	0.0100
2-Nitroaniline	0.00500	U	0.000102	0.00500	0.0100
3-Nitroaniline	0.00500	U	0.0000860	0.00500	0.0100
4-Nitroaniline	0.00500	U	0.0000910	0.00500	0.0100
Nitrobenzene	0.00500	U	0.000297	0.00500	0.0100
n-Nitrosodimethylamine	0.00500	U	0.000998	0.00500	0.0100
n-Nitrosodiphenylamine	0.00500	U	0.00237	0.00500	0.0100
n-Nitrosodi-n-propylamine	0.00500	U	0.000261	0.00500	0.0100
Benzylbutyl phthalate	0.00200	U	0.000765	0.00200	0.00400
Bis(2-ethylhexyl)phthalate	0.00200	U	0.000895	0.00200	0.00400
Di-n-butyl phthalate	0.00150	U	0.000453	0.00150	0.00300
Diethyl phthalate	0.00150	U	0.000287	0.00150	0.00300
Dimethyl phthalate	0.00150	U	0.000260	0.00150	0.00300
Di-n-octyl phthalate	0.00200	U	0.000932	0.00200	0.00400
1,2,4-Trichlorobenzene	0.00500	U	0.0000698	0.00500	0.0100
4-Chloro-3-methylphenol	0.00500	U	0.000131	0.00500	0.0100
2-Chlorophenol	0.00500	U	0.000133	0.00500	0.0100
2,4-Dichlorophenol	0.00500	U	0.000102	0.00500	0.0100
2,4-Dimethylphenol	0.00500	U	0.0000636	0.00500	0.0100
4,6-Dinitro-2-methylphenol	0.00500	U	0.00112	0.00500	0.0100
2,4-Dinitrophenol	0.0150	U	0.00593	0.0150	0.0300
2-Methylphenol	0.0150	U	0.0000920	0.0150	0.0100
3&4-Methyl Phenol	0.0150	U	0.000168	0.0150	0.0100

Method Blank (MB)

(MB) R3844355-2 10/04/22 09:49

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
2-Nitrophenol	0.00500	U	0.000117	0.00500	0.0100
4-Nitrophenol	0.00500	U	0.000143	0.00500	0.0100
Pentachlorophenol	0.00500	U	0.000313	0.00500	0.0100
Phenol	0.0100	U	0.00433	0.0100	0.0200
2,4,5-Trichlorophenol	0.0100	U	0.000109	0.0100	0.0100
2,4,6-Trichlorophenol	0.00500	U	0.000100	0.00500	0.0100
(S) 2-Fluorophenol	*35.1*				*19.0-119*
(S) Phenol-d5	*22.6*				*10.0-67.0*
(S) Nitrobenzene-d5	*68.1*				*44.0-120*
(S) 2-Fluorobiphenyl	*75.2*				*44.0-119*
(S) 2,4,6-Tribromophenol	*66.5*				*43.0-140*
(S) p-Terphenyl-d14	*63.9*				*50.0-134*

Laboratory Control Sample (LCS)

(LCS) R3844355-1 10/04/22 09:28

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzoic Acid	0.100	0.0115	11.5	10.0-120	
Benzyl Alcohol	0.0500	0.0290	58.0	31.0-112	
Bis(2-chlorethoxy)methane	0.0500	0.0341	68.2	48.0-120	
Bis(2-chloroethyl)ether	0.0500	0.0365	73.0	43.0-118	
2,2-Oxybis(1-Chloropropane)	0.0500	0.0334	66.8	37.0-130	
4-Bromophenyl-phenylether	0.0500	0.0417	83.4	55.0-124	
Carbazole	0.0500	0.0429	85.8	60.0-122	
4-Chloroaniline	0.0500	0.0281	56.2	33.0-117	
2-Chloronaphthalene	0.0500	0.0382	76.4	40.0-116	
4-Chlorophenyl-phenylether	0.0500	0.0416	83.2	53.0-121	
Dibenzofuran	0.0500	0.0404	80.8	53.0-118	
3,3-Dichlorobenzidine	0.100	0.0890	89.0	27.0-129	
2,4-Dinitrotoluene	0.0500	0.0451	90.2	57.0-128	
2,6-Dinitrotoluene	0.0500	0.0430	86.0	57.0-124	
Hexachlorobenzene	0.0500	0.0383	76.6	53.0-125	
Hexachlorocyclopentadiene	0.0500	0.0138	27.6	10.0-121	
Hexachloroethane	0.0500	0.0332	66.4	21.0-115	
Isophorone	0.0500	0.0314	62.8	42.0-124	
2-Nitroaniline	0.0500	0.0443	88.6	55.0-127	
3-Nitroaniline	0.0500	0.0406	81.2	41.0-128	
4-Nitroaniline	0.0500	0.0454	90.8	35.0-124	

Laboratory Control Sample (LCS)

(LCS) R3844355-1 10/04/22 09:28

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Nitrobenzene	0.0500	0.0333	66.6	45.0-121	
n-Nitrosodimethylamine	0.0500	0.0213	42.6	10.0-121	
n-Nitrosodiphenylamine	0.0500	0.0388	77.6	51.0-123	
n-Nitrosodi-n-propylamine	0.0500	0.0349	69.8	49.0-119	
Benzylbutyl phthalate	0.0500	0.0420	84.0	53.0-134	
Bis(2-ethylhexyl)phthalate	0.0500	0.0408	81.6	55.0-135	
Di-n-butyl phthalate	0.0500	0.0448	89.6	59.0-127	
Diethyl phthalate	0.0500	0.0424	84.8	56.0-125	
Dimethyl phthalate	0.0500	0.0411	82.2	45.0-127	
Di-n-octyl phthalate	0.0500	0.0401	80.2	51.0-140	
1,2,4-Trichlorobenzene	0.0500	0.0334	66.8	29.0-116	
4-Chloro-3-methylphenol	0.0500	0.0315	63.0	52.0-119	
2-Chlorophenol	0.0500	0.0294	58.8	38.0-117	
2,4-Dichlorophenol	0.0500	0.0341	68.2	47.0-121	
2,4-Dimethylphenol	0.0500	0.0313	62.6	31.0-124	
4,6-Dinitro-2-methylphenol	0.0500	0.0426	85.2	44.0-137	
2,4-Dinitrophenol	0.0500	0.0388	77.6	23.0-143	
2-Methylphenol	0.0500	0.0258	51.6	30.0-117	
3&4-Methyl Phenol	0.0500	0.0266	53.2	29.0-110	
2-Nitrophenol	0.0500	0.0348	69.6	47.0-123	
4-Nitrophenol	0.0500	0.0154	30.8	10.0-120	
Pentachlorophenol	0.0500	0.0388	77.6	35.0-138	
Phenol	0.0500	0.0123	24.6	10.0-120	
2,4,5-Trichlorophenol	0.0500	0.0436	87.2	50.0-125	
2,4,6-Trichlorophenol	0.0500	0.0397	79.4	53.0-123	
(S) 2-Fluorophenol			*33.7*	*19.0-119*	
(S) Phenol-d5			*21.9*	*10.0-67.0*	
(S) Nitrobenzene-d5			*61.1*	*44.0-120*	
(S) 2-Fluorobiphenyl			*70.9*	*44.0-119*	
(S) 2,4,6-Tribromophenol			*71.5*	*43.0-140*	
(S) p-Terphenyl-d14			*65.7*	*50.0-134*	

L1540401-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1540401-01 10/04/22 14:27 • (MS) R3844355-3 10/04/22 14:49 • (MSD) R3844355-4 10/04/22 15:10

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzoic acid	0.0952	0.00500	0.0550	0.0343	57.8	34.3	1	10.0-120		J3	46.4	20
Benzyl Alcohol	0.0476	0.00500	0.0220	0.0232	46.2	46.4	1	31.0-112			5.31	20

L1540401-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1540401-01 10/04/22 14:27 • (MS) R3844355-3 10/04/22 14:49 • (MSD) R3844355-4 10/04/22 15:10

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Bis(2-chlorethoxy)methane	0.0476	0.00500	0.0271	0.0260	56.9	52.0	1	48.0-120			4.14	20
Bis(2-chloroethyl)ether	0.0476	0.00500	0.0288	0.0270	60.5	54.0	1	43.0-118			6.45	20
2,2-Oxybis(1-Chloropropane)	0.0476	0.00500	0.0235	0.0232	49.4	46.4	1	37.0-130			1.28	20
4-Bromophenyl-phenylether	0.0476	0.00500	0.0244	0.0270	51.3	54.0	1	55.0-124	J6	J6	10.1	20
Carbazole	0.0476	0.00500	0.0290	0.0301	60.9	60.2	1	60.0-122			3.72	20
4-Chloroaniline	0.0476	0.00500	0.00500	0.0150	0.000	30.0	1	33.0-117	J6 U	J3 J6	200	20
2-Chloronaphthalene	0.0476	0.000500	0.0233	0.0241	48.9	48.2	1	40.0-116			3.38	20
4-Chlorophenyl-phenylether	0.0476	0.00500	0.0222	0.0248	46.6	49.6	1	53.0-121	J6	J6	11.1	20
Dibenzofuran	0.0476	0.00500	0.0251	0.0272	52.7	54.4	1	53.0-118	J6		8.03	20
3,3-Dichlorobenzidine	0.0952	0.00500	0.00500	0.00364	0.000	3.64	1	27.0-129	J6 U	J3 J6	200	20
2,4-Dinitrotoluene	0.0476	0.00500	0.0321	0.0331	67.4	66.2	1	57.0-128			3.07	20
2,6-Dinitrotoluene	0.0476	0.00500	0.0300	0.0300	63.0	60.0	1	57.0-124			0.000	20
Hexachlorobenzene	0.0476	0.000500	0.0202	0.0228	42.4	45.6	1	53.0-125	J6	J6	12.1	20
Hexachlorocyclopentadiene	0.0476	0.00500	0.00895	0.00945	18.8	18.9	1	10.0-121			5.43	20
Hexachloroethane	0.0476	0.00500	0.0322	0.0312	67.6	62.4	1	21.0-115			3.15	20
Isophorone	0.0476	0.00500	0.0257	0.0249	54.0	49.8	1	42.0-124			3.16	20
2-Nitroaniline	0.0476	0.00500	0.0359	0.0373	75.4	74.6	1	55.0-127			3.83	20
3-Nitroaniline	0.0476	0.00500	0.0130	0.0291	27.3	58.2	1	41.0-128	J6	J3	76.5	20
4-Nitroaniline	0.0476	0.00500	0.0291	0.0335	61.1	67.0	1	35.0-124			14.1	20
Nitrobenzene	0.0476	0.00500	0.0284	0.0270	59.7	54.0	1	45.0-121			5.05	20
n-Nitrosodimethylamine	0.0476	0.00500	0.0157	0.0153	33.0	30.6	1	10.0-121			2.58	20
n-Nitrosodiphenylamine	0.0476	0.00500	0.0306	0.0354	64.3	70.8	1	51.0-123			14.5	20
n-Nitrosodi-n-propylamine	0.0476	0.00500	0.0278	0.0268	58.4	53.6	1	49.0-119			3.66	20
Benzylbutyl phthalate	0.0476	0.00200	0.0256	0.0276	53.8	55.2	1	53.0-134			7.52	20
Bis(2-ethylhexyl)phthalate	0.0476	0.00383	0.0214	0.0241	36.9	40.5	1	55.0-135	J6	J6	11.9	20
Di-n-butyl phthalate	0.0476	0.00150	0.0247	0.0273	51.9	54.6	1	59.0-127	J6	J6	10.0	20
Diethyl phthalate	0.0476	0.00150	0.0258	0.0269	54.2	53.8	1	56.0-125	J6	J6	4.17	20
Dimethyl phthalate	0.0476	0.00150	0.0282	0.0280	59.2	56.0	1	45.0-127			0.712	20
Di-n-octyl phthalate	0.0476	0.00200	0.0194	0.0228	40.8	45.6	1	51.0-140	J6	J6	16.1	20
1,2,4-Trichlorobenzene	0.0476	0.00500	0.0220	0.0221	46.2	44.2	1	29.0-116			0.454	20
4-Chloro-3-methylphenol	0.0476	0.00500	0.0298	0.0318	62.6	63.6	1	52.0-119			6.49	20
2-Chlorophenol	0.0476	0.00500	0.0276	0.0272	58.0	54.4	1	38.0-117			1.46	20
2,4-Dichlorophenol	0.0476	0.00500	0.0311	0.0307	65.3	61.4	1	47.0-121			1.29	20
2,4-Dimethylphenol	0.0476	0.00500	0.0300	0.0308	63.0	61.6	1	31.0-124			2.63	20
4,6-Dinitro-2-methylphenol	0.0476	0.00500	0.0334	0.0356	70.2	71.2	1	44.0-137			6.38	20
2,4-Dinitrophenol	0.0476	0.0150	0.0333	0.0268	70.0	53.6	1	23.0-143		J3	21.6	20
2-Methylphenol	0.0476	0.0150	0.0268	0.0280	56.3	56.0	1	30.0-117			4.38	20
3&4-Methyl Phenol	0.0476	0.0150	0.0289	0.0300	60.7	60.0	1	29.0-110			3.74	20
2-Nitrophenol	0.0476	0.00500	0.0311	0.0284	65.3	56.8	1	47.0-123			9.08	20
4-Nitrophenol	0.0476	0.00500	0.0230	0.0236	48.3	47.2	1	10.0-120			2.58	20

L1540401-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1540401-01 10/04/22 14:27 • (MS) R3844355-3 10/04/22 14:49 • (MSD) R3844355-4 10/04/22 15:10

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Pentachlorophenol	0.0476	0.00500	0.0297	0.0324	62.4	64.8	1	35.0-138			8.70	20
Phenol	0.0476	0.0100	0.0161	0.0163	33.8	32.6	1	10.0-120			1.23	20
2,4,5-Trichlorophenol	0.0476	0.0100	0.0344	0.0346	72.3	69.2	1	50.0-125			0.580	20
2,4,6-Trichlorophenol	0.0476	0.00500	0.0324	0.0320	68.1	64.0	1	53.0-123			1.24	20
(S) 2-Fluorophenol					*41.1*	*38.3*		*19.0-119*				
(S) Phenol-d5					*29.1*	*28.8*		*10.0-67.0*				
(S) Nitrobenzene-d5					*53.3*	*47.6*		*44.0-120*				
(S) 2-Fluorobiphenyl					*44.5*	*45.7*		*44.0-119*				
(S) 2,4,6-Tribromophenol					*56.3*	*55.0*		*43.0-140*				
(S) p-Terphenyl-d14					*35.6*	*38.1*		*50.0-134*	J2	J2		

Sample Narrative:

OS: Surrogate recovery within historical limits.

Method Blank (MB)

(MB) R3844135-2 10/02/22 10:41

Analyte	MB Result mg/l	MB Qualifier	MB DL mg/l	MB LOD mg/l	MB LOQ mg/l
Anthracene	0.0000500	U	0.0000190	0.0000500	0.000100
Acenaphthene	0.0000500	U	0.0000190	0.0000500	0.000100
Acenaphthylene	0.0000500	U	0.0000170	0.0000500	0.000100
Benzo(a)anthracene	0.0000500	U	0.0000200	0.0000500	0.000100
Benzo(a)pyrene	0.0000500	U	0.0000180	0.0000500	0.000100
Benzo(b)fluoranthene	0.0000500	U	0.0000170	0.0000500	0.000100
Benzo(g,h,i)perylene	0.0000500	U	0.0000180	0.0000500	0.000100
Benzo(k)fluoranthene	0.000125	U	0.0000200	0.000125	0.000250
Chrysene	0.0000500	U	0.0000180	0.0000500	0.000100
Dibenz(a,h)anthracene	0.0000500	U	0.0000180	0.0000500	0.000100
Fluoranthene	0.0000234	J	0.0000110	0.0000250	0.0000500
Fluorene	0.0000500	U	0.0000170	0.0000500	0.000100
Indeno(1,2,3-cd)pyrene	0.0000400	U	0.0000180	0.0000400	0.0000800
Naphthalene	0.000500	U	0.000128	0.000500	0.00100
Phenanthrene	0.0000500	U	0.0000180	0.0000500	0.000100
Pyrene	0.0000258	J	0.0000170	0.0000500	0.000100
1-Methylnaphthalene	0.000250	U	0.0000200	0.000250	0.000500
2-Methylnaphthalene	0.000250	U	0.0000280	0.000250	0.000500
(S) Nitrobenzene-d5	*72.5*				*55.0-111*
(S) 2-Fluorobiphenyl	*75.0*				*53.0-106*
(S) p-Terphenyl-d14	*78.5*				*58.0-132*
(S) 2-Methylnaphthalene-d10	*73.5*				*50.0-150*
(S) Fluoranthene-d10	*85.5*				*50.0-150*

Laboratory Control Sample (LCS)

(LCS) R3844135-1 10/02/22 10:24

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Anthracene	0.00200	0.00133	66.5	53.0-119	
Acenaphthene	0.00200	0.00139	69.5	48.0-114	
Acenaphthylene	0.00200	0.00141	70.5	35.0-121	
Benzo(a)anthracene	0.00200	0.00147	73.5	59.0-120	
Benzo(a)pyrene	0.00200	0.00154	77.0	53.0-120	
Benzo(b)fluoranthene	0.00200	0.00154	77.0	53.0-126	
Benzo(g,h,i)perylene	0.00200	0.00140	70.0	44.0-128	
Benzo(k)fluoranthene	0.00200	0.00147	73.5	54.0-125	
Chrysene	0.00200	0.00154	77.0	57.0-120	
Dibenz(a,h)anthracene	0.00200	0.00129	64.5	44.0-131	

Laboratory Control Sample (LCS)

(LCS) R3844135-1 10/02/22 10:24

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Fluoranthene	0.00200	0.00154	77.0	58.0-120	
Fluorene	0.00200	0.00144	72.0	50.0-118	
Indeno(1,2,3-cd)pyrene	0.00200	0.00151	75.5	48.0-130	
Naphthalene	0.00200	0.00127	63.5	43.0-114	
Phenanthrene	0.00200	0.00139	69.5	53.0-115	
Pyrene	0.00200	0.00156	78.0	53.0-121	
1-Methylnaphthalene	0.00200	0.00129	64.5	41.0-115	
2-Methylnaphthalene	0.00200	0.00129	64.5	39.0-114	
(S) Nitrobenzene-d5			*65.5*	*55.0-111*	
(S) 2-Fluorobiphenyl			*68.5*	*53.0-106*	
(S) p-Terphenyl-d14			*70.0*	*58.0-132*	
(S) 2-Methylnaphthalene-d10			*66.0*	*50.0-150*	
(S) Fluoranthene-d10			*77.5*	*50.0-150*	

L1540401-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1540401-01 10/02/22 10:59 • (MS) R3844135-3 10/02/22 11:17 • (MSD) R3844135-4 10/02/22 11:35

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Anthracene	0.00200	0.0000500	0.000600	0.000333	30.0	16.6	1	53.0-119	J6	J3 J6	57.2	40
Acenaphthene	0.00200	0.000861	0.000815	0.000537	0.000	0.000	1	48.0-114	J6	J3 J6	41.1	40
Acenaphthylene	0.00200	0.0000500	0.000800	0.000534	40.0	26.7	1	35.0-121		J6	39.9	40
Benzo(a)anthracene	0.00200	0.0000239	0.000209	0.000189	9.26	8.26	1	59.0-120	J6	J6	10.1	40
Benzo(a)pyrene	0.00200	0.0000208	0.000114	0.000134	4.66	5.66	1	53.0-120	J6	J6	16.1	40
Benzo(b)fluoranthene	0.00200	0.0000223	0.000150	0.000189	6.39	8.33	1	53.0-126	J6	J6	23.0	40
Benzo(g,h,i)perylene	0.00200	0.0000183	0.0000763	0.000128	2.90	5.48	1	44.0-128	J6	J3 J6	50.6	40
Benzo(k)fluoranthene	0.00200	0.000125	0.000108	0.000155	5.40	7.75	1	54.0-125	J6	J6	35.7	40
Chrysene	0.00200	0.0000383	0.000193	0.000202	7.73	8.18	1	57.0-120	J6	J6	4.56	40
Dibenz(a,h)anthracene	0.00200	0.0000500	0.0000468	0.000103	2.34	5.15	1	44.0-131	J6	J3 J6	75.0	40
Fluoranthene	0.00200	0.000102	0.000441	0.000270	17.0	8.40	1	58.0-120	J6	J3 J6	48.1	40
Fluorene	0.00200	0.00136	0.000787	0.000510	0.000	0.000	1	50.0-118	J6	J3 J6	42.7	40
Indeno(1,2,3-cd)pyrene	0.00200	0.0000400	0.0000944	0.000156	4.72	7.80	1	48.0-130	J6	J3 J6	49.2	40
Naphthalene	0.00200	0.00188	0.000796	0.000556	0.000	0.000	1	43.0-114	J6	J6	35.5	40
Phenanthrene	0.00200	0.000336	0.000667	0.000380	16.5	2.20	1	53.0-115	J6	J3 J6	54.8	40
Pyrene	0.00200	0.000265	0.000434	0.000273	8.45	0.400	1	53.0-121	J6	J3 J6	45.5	40
1-Methylnaphthalene	0.00200	0.00574	0.000762	0.000523	0.000	0.000	1	41.0-115	J6	J6	37.2	40
2-Methylnaphthalene	0.00200	0.000732	0.000760	0.000515	1.40	0.000	1	39.0-114	J6	J6	38.4	40
(S) Nitrobenzene-d5					*53.5*	*38.8*		*55.0-111*	J2	J2		
(S) 2-Fluorobiphenyl					*38.6*	*26.7*		*53.0-106*	J2	J2		

L1540401-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1540401-01 10/02/22 10:59 • (MS) R3844135-3 10/02/22 11:17 • (MSD) R3844135-4 10/02/22 11:35

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
(S) p-Terphenyl-d14					*28.2*	*17.8*		*58.0-132*	J2	J2		
(S) 2-Methylnaphthalene-d10					*39.1*	*27.8*		*50.0-150*	J2	J2		
(S) Fluoranthene-d10					*21.6*	*12.9*		*50.0-150*	J2	J2		

Sample Narrative:

OS: Surrogate failure due to matrix interference

L1540559-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1540559-02 10/02/22 13:04 • (MS) R3844135-5 10/02/22 12:11 • (MSD) R3844135-6 10/02/22 12:29

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Anthracene	0.00200	0.0000500	0.000528	0.000551	26.4	27.5	1	53.0-119	J6	J6	4.26	40
Acenaphthene	0.00200	0.0000500	0.00130	0.00161	65.0	80.5	1	48.0-114			21.3	40
Acenaphthylene	0.00200	0.0000500	0.000865	0.00103	43.2	51.5	1	35.0-121			17.4	40
Benzo(a)anthracene	0.00200	0.0000500	0.000520	0.000325	26.0	16.3	1	59.0-120	J6	J3 J6	46.2	40
Benzo(a)pyrene	0.00200	0.0000500	0.000379	0.000161	18.9	8.05	1	53.0-120	J6	J3 J6	80.7	40
Benzo(b)fluoranthene	0.00200	0.0000500	0.000372	0.000164	18.6	8.20	1	53.0-126	J6	J3 J6	77.6	40
Benzo(g,h,i)perylene	0.00200	0.0000500	0.000208	0.0000795	10.4	3.97	1	44.0-128	J6	J3 J6	89.4	40
Benzo(k)fluoranthene	0.00200	0.000125	0.000348	0.000153	17.4	7.65	1	54.0-125	J6	J3 J6	77.8	40
Chrysene	0.00200	0.0000500	0.000582	0.000357	29.1	17.9	1	57.0-120	J6	J3 J6	47.9	40
Dibenz(a,h)anthracene	0.00200	0.0000500	0.000197	0.0000773	9.85	3.86	1	44.0-131	J6	J3 J6	87.3	40
Fluoranthene	0.00200	0.0000250	0.000739	0.000630	36.9	31.5	1	58.0-120	J6	J6	15.9	40
Fluorene	0.00200	0.0000500	0.00152	0.00218	76.0	109	1	50.0-118			35.7	40
Indeno(1,2,3-cd)pyrene	0.00200	0.0000400	0.000225	0.0000798	11.2	3.99	1	48.0-130	J6	J3 J6	95.3	40
Naphthalene	0.00200	0.000500	0.00150	0.00294	75.0	147	1	43.0-114		J3 J5	64.9	40
Phenanthrene	0.00200	0.0000500	0.000754	0.000920	37.7	46.0	1	53.0-115	J6	J6	19.8	40
Pyrene	0.00200	0.0000500	0.000867	0.000743	43.3	37.1	1	53.0-121	J6	J6	15.4	40
1-Methylnaphthalene	0.00200	0.000250	0.00200	0.00704	100	352	1	41.0-115		J3 J5	112	40
2-Methylnaphthalene	0.00200	0.000250	0.000754	0.00160	37.7	80.0	1	39.0-114	J6	J3	71.9	40
(S) Nitrobenzene-d5					*53.5*	*61.0*		*55.0-111*	J2			
(S) 2-Fluorobiphenyl					*36.5*	*37.0*		*53.0-106*	J2	J2		
(S) p-Terphenyl-d14					*22.6*	*15.8*		*58.0-132*	J2	J2		
(S) 2-Methylnaphthalene-d10					*49.8*	*52.5*		*50.0-150*	J2			
(S) Fluoranthene-d10					*32.9*	*28.2*		*50.0-150*	J2	J2		

Sample Narrative:

OS: Duplicate Analysis performed due to surrogate failure. Results confirm; reporting in hold data

GLOSSARY OF TERMS

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

DL	Detection Limit.
LOD	Limit of Detection.
LOQ	Limit of Quantitation.
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.
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.
C4	The reported concentration is an estimate. The continuing calibration standard associated with this data responded low. Data is likely to show a low bias concerning the result.
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.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
J2	Surrogate recovery limits have been exceeded; values are outside lower control limits.
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.
U	Below Detectable Limits: Indicates that the analyte was not detected.

GLOSSARY OF TERMS

Qualifier	Description
V	The sample concentration is too high to evaluate accurate spike recoveries.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
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	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
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

* 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 Analytical.

Company Name/Address:
INNOVEX/ERRG Joint Venture - Redmond, WA
16310 NE 80th St.

Billing Information:
Accounts Payable
1800 Sutter Street
Concord, CA 94520

Pres Chk

Report to: **Anna Jordan/Jennifer Sonnichsen**

Email To: **anna.jordan@innovex.net/jennifer.sc**

Project Description: JBLM-YTC

City/State Collected: **Yakima, WA**

Please Circle: (PT) MT CT ET

Phone: **206-949-3010**

Client Project # **20506**

Lab Project # **IEJVRWA-JBLM-YTC**

Collected by (print): **A. Jordan/H. Carter**

Site/Facility ID # **YTC - IRP**

P.O. #

Collected by (signature): Anna Jordan

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day X Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

No. of Cntrs

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	DODVOCS8260	DODNWTPHGX	DODNWTPHDXNOSGT	DOD8270	DOD8270PAHSIM	Remarks	Sample # (lab only)
YTC-FTP-1-20220926		GW		9/26/22	1500	30	X	X	X	X	X	MS/MSD	-01
YTC-FTP-1A-20220926		GW		9/26/22	1510	10	X	X	X	X	X		-02
YTC-MTS-1-20220926		GW		9/26/22	1630	3	X						-03
YTC-MTS-2-20220926		GW		9/26/22	1610	3	X						-04
YTC-MTS-4-20220926		GW		9/26/22	1620	3	X						-05
YTC-TVR-1-20220926		GW		9/26/22	1555	3	X						-06
YTC-TVR-3-20220926		GW		9/26/22	1545	3	X						-07
~~YTC-TVR-3A-20220926~~		GW		~~9/26/22~~	~~1530~~	3	X						
YTC-TVR-6-20220926		GW		9/26/22	1140	3	X						-09
YTC-TVR-7-20220926		GW		9/26/22	1530	3	X						-10

* 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 X FedEx __ Courier __ _____

Tracking # 5829 6701 2116

Sample Receipt Checklist
COC Seal Present/Intact: __NP X N
COC Signed/Accurate: Y __N
Bottles arrive intact: Y __N
Correct bottles used: Y __N
Sufficient volume sent: __ X N
If Applicable
VOA Zero Headspace: __ __N
Preservation Correct/Checked: __ __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
Anna Jordan	9/27/22	1245		
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: JAA 6 °C Bottles Received: 2.8 +0 = 2.8 79
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 9-28-22 Time: 0900

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Chain of Custody Page 1 of 2

Pace
PEOPLE ADVANCING SCIENCE

12065 Lebanon Rd Mount Juliet, TN 37122
Phone: 615-758-5858 Alt: 800-767-5859

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

E202
U540401

Acctnum:
Template: T213823
Prelogin:
PM:
PB:
Shipped Via:

Company Name/Address:
INNOVEX/ERRG Joint Venture - Redmond, WA 16310 NE 80th St.

Billing Information:
Accounts Payable 1800 Sutter Street Concord, CA 94520

Pres Chk

Report to: **Anna Jordan/Jennifer Sonnichsen**

Email To: **anna.jordan@innovex.net/jennifer.so**

Project Description: **JBLM-YTC**

City/State Collected: **Yakima, WA**

Please Circle: (PT) MT CT ET

Phone: **206-949-3010**

Client Project # **20506**

Lab Project # **IEJVRWA-JBLM-YTC**

Collected by (print): **A. Jordan/H. Carter**

Site/Facility ID # **YTC- IRP**

P.O. #

Collected by (signature): Anna Jordan

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day X Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Analysis / Container / Preservative

Chain of Custody Page 2 of 2

Pace
PEOPLE ADVANCING SCIENCE

12065 Lebanon Rd Mount Juliet, TN 37122
Phone: 615-758-5858 Alt: 800-767-5859

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1540411

Table #

Acctnum:

Template: T213823

Prelogin:

PM:

PB:

Shipped Via:

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	DODVOCS8260	DOD NWTPHEX	DOD NWTPH DX NOSGT	DOD 8270	DOD 8270PAHSIM	Remarks	Sample # (lab only)
YTC-Pomona-20220927		GW		9/27/22	1115	9	X					MS/MSD	-10
YTC-PAIC-20220927		GW		9/27/22	1100	3	X						-11
YTC-PomonaA 20220927		GW		9/27/22	1120	3	X						-12
YTC-pump-20220927				9/27/22	1200	3	X	X	X	X	X		-13

* 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 # 5829 6701 2116

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: __ __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
Anna Jordan	9/27/22	1245		
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: JAA6 °C Bottles Received: 2.8 to 2.8
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 9.28.22 Time: 0900

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

09/28-L1540401-NCF IEJVRWA

R3/R4/RX/EX

Time estimate: oh **Time spent:** oh **Grouping date:** 6 October 2022

Members

Cole Medley (responsible) Jennifer Gambill

~~Due on *1 October 2022 5:00 PM* for target *Done*~~ (Was done by Cole Medley at 6 October 2022 4:42 PM)

- [x] Login Clarification needed
- [ ] Chain of custody is incomplete
- [ ] Please specify Metals requested
- [ ] Please specify TCLP requested
- [ ] Received additional samples not listed on COC
- [ ] Sample IDs on containers do not match IDs on COC
- [ ] Client did not "X" analysis
- [ ] Chain of Custody is missing
- [ ] If no COC: Received by:_____
- [ ] If no COC: Date/Time:_____
- [ ] If no COC: Temp./Cont.Rec./pH:_____
- [ ] If no COC: Carrier:_____
- [ ] If no COC: Tracking #:_____
- [ ] Client informed by call
- [ ] Client informed by Email
- [ ] Client informed by Voicemail
- [ ] Date/Time:_____
- [ ] PM initials:_____
- [ ] Client Contact:_____

Comments

Cole Medley *28 September 2022 1:45 PM*

For ID:YTC-PUMP-20220927 we only received 3 40mlAmb HCl containers.
Currently logged for DODNWTPHGX,DODNWTPHDXNOSGT, and DODV8260
Limited volume comment put in Seedpak.

Jennifer Gambill *28 September 2022 5:05 PM*

Per client, please run:

TPH-Gx
TPH-Dx
VOCs

I am working with LIMS team to get a new product code set up for for TPH-Dx LVI.

Jennifer Gambill *6 October 2022 4:40 PM*

Lab was able to run the TPH-Dx as LVI. No need code needed.

Cole Medley *6 October 2022 4:42 PM*

Done.

DATA VALIDATION CHECKLIST – STAGE 2A

Site Name	JBLM	**Project Name**	Yakima Training Center – IRP Sites
Data Reviewer (signature and date)	Anna J Jordan 10/31/2022	**Technical Reviewer (signature and date)**	Mary K Hollrah 11/15/2022
Laboratory Report No.	L1540401	**Laboratory**	Pace Analytical
Analyses	DOD8270PAHSIM, DOD8270, DODNWTPHDXNOSGT, DODNWTPHGX, DODVOC8260		
Sample and Matrix	YTC-FTP-1-20220926 (GW) L1540401-01 YTC-FTP-1A-202200926 (GW) L1540401-02 YTC-MTS-1-20220926 (GW) L1540401-03 YTC-MTS-2-20220926 (GW) L1540401-04 YTC-MTS-4-20220926 (GW) L1540401-05 YTC-TVR-1-20220926 (GW) L1540401-06 YTC-TVR-3-20220926 (GW) L1540401-07 YTC-TVR-6-20220927 (GW) L1540401-08 YTC-TVR-7-20220926 (GW) L1540401-09 YTC-Pomona-20220927 (GW) L1540401-10 YTC-PomonaA-20220927 (GW) L1540401-11 YTC-PAIC-20220927 (GW) L1540401-12 YTC-PUMP-20220927 (EB) L1540401-13		
Field Duplicate Pairs	YTC-FTP-1-20220314 and YTC-FTP-1A-20220314 YTC-Pomona-20220927 and YTC-PomonaA-20220927		
Field Blanks	One Equipment Blank was identified in this SDG		

DATA VALIDATION CHECKLIST – STAGE 2A

INTRODUCTION

This checklist summarizes the Stage 2A validation performed on the subject laboratory report, in accordance with the U.S. Environmental Protection Agency (EPA) Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use (January 2009). Analytical data were evaluated in general accordance with the EPA National Functional Guidelines for Organic and Inorganic Superfund Methods Data Review (November 2020).

OVERALL EVALUATION

All results are usable with the qualifications described in this checklist.

Data completeness and verification

Within Criteria	Exceedance/Notes
Y	

Sample preservation, receipt, and holding times:

Within Criteria	Exceedance/Notes
Y	All samples were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times.

Method Blanks:

Within Criteria	Exceedance/Notes
Y	Method blanks were analyzed as required by the methods. No contaminants were found in the method blanks.

Field Blanks:

Within Criteria	Exceedance/Notes
NA	One equipment blank was analyzed, and analytes were not detected above the LOD except for the following.

Analyte	Result (µg/L)	LOD (µg/L)	New Qualifier
Gasoline-Range Organics	221	67	J+ (all detects) No qualification (non-detects)
Residual-Range Organics	471	418	J+ (all detects) No qualification (non-detects)

System monitoring compounds (surrogates and labeled compounds):

Within Criteria	Exceedance/Notes
Y	Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits except for the following. The lab noted the surrogates associated with sample YTC-FTP-1-20220926 failed due to matrix interference.

Surrogate	Project Sample ID	Result	QC Limits	New Qualifier
1,2-Dichloroethane-d4	YTC-TVR-1-20220926	121	81.0-118	J+ (all detects) No qualification (all non-detects)
	YTC-TVR-3-20220926	121		
	YTC-TVR-6-20220927	120		
	YTC-TVR-7-20220926	119		
	YTC-Pomona-20220927	120		
	YTC-PAIC-20220927	119		
2-Fluorobiphenyl	YTC-FTP-1-20220926	41.6	53.0-116	J- (all detects) UJ (all non-detects)
p-Terphenyl-d14		19.7	58.0-132	
Fluoranthene-D10		33.1	50.0-150	

MS/MSD:

Within Criteria	Exceedance/Notes
Y	Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on an associated project sample. Percent recoveries (%R) were within QC limits, except those listed below.

Analyte	MS %R	MSD %R	QC Limits	New Qualifier
Bromochloromethane	151	159	78.0-123	J (all detects) No qualification (all non-detects)
Bromodichloromethane	134	138	79.0-125	J (all detects) No qualification (all non-detects)
Bromomethane	145	166	53.0-141	J (all detects) No qualification (all non-detects)
Carbon Disulfide	190	167	64.0-133	J (all detects) No qualification (all non-detects)
Carbon tetrachloride	156	162	72.0-136	J (all detects) No qualification (all non-detects)
Chlorobenzene	124	128	82.0-118	J (all detects) No qualification (all non-detects)
Chloroethane	169	173	60.0-138	J (all detects) No qualification (all non-detects)
Chloroform	150	158	79.0-124	J (all detects) No qualification (all non-detects)
Dibromomethane	140	140	79.0-123	J (all detects) No qualification (all non-detects)
1,2-Dichlorobenzene	124	122	80.0-119	J (all detects) No qualification (all non-detects)
1,4-Dichlorobenzene	NA	120	79.0-118	J (all detects) No qualification (all non-detects)
1,1-Dichloroethane	138	147	77.0-125	J (all detects) No qualification (all non-detects)

Analyte	MS %R	MSD %R	QC Limits	New Qualifier
1,2-Dichloroethane	132	134	73.0-128	J (all detects) No qualification (all non-detects)
1,1-Dichloroethene	153	69	71.0-131	J (all detects) No qualification (all non-detects)
Cis-1,2-Dichloroethene	149	152	78.0-123	J (all detects) No qualification (all non-detects)
trans-1,2-Dichloroethene	153	155	75.0-124	J (all detects) No qualification (all non-detects)
1,2-Dichloropropane	125	133	78.0-122	J (all detects) No qualification (all non-detects)
2,2-Dichloropropane	159	169	60.0-139	J (all detects) No qualification (all non-detects)
1,1-Dichloropropene	147	151	79.0-125	J (all detects) No qualification (all non-detects)
Ethylbenzene	137	139	79.0-121	J (all detects) No qualification (all non-detects)
Isopropylbenzene	133	144	72.0-131	J (all detects) No qualification (all non-detects)
Methylene Chloride	146	154	74.0-124	J (all detects) No qualification (all non-detects)
Styrene	NA	129	78.0-123	J (all detects) No qualification (all non-detects)
1,1,1,2-Tetrachloroethane	NA	127	78.0-124	J (all detects) No qualification (all non-detects)
Tetrachloroethene	138	143	74.0-129	J (all detects) No qualification (all non-detects)
Toluene	NA	126	80.0-121	J (all detects) No qualification (all non-detects)
1,1,1-Trichloroethane	157	162	74.0-131	J (all detects) No qualification (all non-detects)

Analyte	MS %R	MSD %R	QC Limits	New Qualifier
1,1,2-Trichloroethane	NA	125	80.0-119	J (all detects) No qualification (all non-detects)
Trichloroethene	138	147	79.0-123	J (all detects) No qualification (all non-detects)
o-Xylene	134	139	78.0-122	J (all detects) No qualification (all non-detects)
m&p-Xylene	127	138	80.0-121	J (all detects) No qualification (all non-detects)
Total Xylenes	129	138	79.0-121	J (all detects) No qualification (all non-detects)
Diesel-Range Organics	380	407	50.0-150	J (all detects) No qualification (all non-detects)
4-Bromophenyl-phenylether	51.3	54.0	55.0-124	J (all detects) UJ (all non-detects)
4-Chloroaniline	0	30.0	33.0-117	J (all detects) X (all non-detects)
4-Chlorophenyl-phenylether	46.6	49.6	53.0-121	J (all detects) UJ (all non-detects)
Dibenzofuran	52.7	NA	53.0-118	J (all detects) UJ (all non-detects)
3,3-Dichlorobenzidine	0	3.64	27.0-129	J (all detects) X (all non-detects)
Hexachlorobenzene	42.4	45.6	53.0-125	J (all detects) UJ (all non-detects)
3-Nitroaniline	27.3	NA	41.0-128	J (all detects) UJ (all non-detects)
Di-n-butyl phthalate	51.9	54.6	59.0-127	J (all detects) UJ (all non-detects)
Diethyl phthalate	54.2	53.8	56.0-125	J (all detects) UJ (all non-detects)

Analyte	MS %R	MSD %R	QC Limits	New Qualifier
Di-n-octyl phthalate	40.8	45.6	51.0-140	J (all detects) UJ (all non-detects)

Laboratory control:

Within Criteria	Exceedance/Notes
Y	Laboratory control samples (LCS) and laboratory control sample duplicate (LCSD) sample analysis were performed. Percent recoveries (%R) and Relative percent differences (RPD) were within QC limits (<20%), except for the following.

Analyte	LCS %R	LCSD %R	QC Limits	New Qualifier
1,2,3-Trichlorobenzene	NA	67.0	69.0-129	J- (all detects) No qualification (all non-detects)

Field duplicates:

Within Criteria	Exceedance/Notes
Y	Field duplicate sample analysis was performed. Relative percent differences (RPD) were within QC limits except for the following.

Analyte	YTC-FTP-1-20220926	YTC-FTP-1A-20220926	RPD	QC Limits	New Qualifier
Bis(2-ethylhexyl)phthalate	3.83	2.10	58.3	20	J (all detects) No qualification (all non-detects)
Acenaphthene	0.861	0.610	34.1	20	J (all detects) No qualification (all non-detects)
Benzo(a)anthracene	0.05U	0.121	83.0	20	J (all detects) No qualification (all non-detects)
Benzo(a)pyrene	0.05U	0.111	75.8	20	J (all detects) No qualification (all non-detects)

Analyte	YTC-FTP-1-20220926	YTC-FTP-1A-20220926	RPD	QC Limits	New Qualifier
Benzo(b)fluoranthene	0.05U	0.106	71.8	20	J (all detects) No qualification (all non-detects)
Benzo(g,h,i)perylene	0.05U	0.168	108.3	20	J (all detects) No qualification (all non-detects)
Chrysene	0.05U	0.172	109.9	20	J (all detects) No qualification (all non-detects)
Dibenz(a,h)anthracene	0.05U	0.127	87.0	20	J (all detects) No qualification (all non-detects)
Fluoranthene	0.102	0.165	47.2	20	J (all detects) No qualification (all non-detects)
Fluorene	1.360	0.665	68.6	20	J (all detects) No qualification (all non-detects)
Indeno(1,2,3-cd)pyrene	0.04U	0.170	123.8	20	J (all detects) No qualification (all non-detects)
Naphthalene	1.88	0.739	87.1	20	J (all detects) No qualification (all non-detects)
Phenanthrene	0.336	0.05U	148.2	20	J (all detects) No qualification (all non-detects)
Pyrene	0.265	0.361	30.7	20	J (all detects) No qualification (all non-detects)
1-methylnaphthalene	5.740	0.800	151.1	20	J (all detects) No qualification (all non-detects)
2-methylnaphthalene	0.732	0.250U	177.7	20	J (all detects) No qualification (all non-detects)
Residual Range Organics	1,330	1,770	28.4	20	J (all detects) No qualification (all non-detects)
Gasoline	1,000	3,840	117.4	20	J (all detects) No qualification (all non-detects)

DATA VALIDATION CHECKLIST – STAGE 2A

Sample dilutions:

Within Criteria	Exceedance/Notes
Y	All samples were analyzed undiluted except for the following.

Lab Sample ID	Project Sample ID	Method	Analyte	Dilution
L1471599-10	YTC-FTP-1-20220926	NWTPHDX-NO SGT	Diesel Range Organics	10

Re-extraction and reanalysis:

Within Criteria	Exceedance/Notes
NA	

MDLs/RLs:

Within Criteria	Exceedance/Notes
Y	Detections between the LOD and MDL (if present) were qualified as not detected (flagged U).

Tentatively identified compounds:

Within Criteria	Exceedance/Notes
NA	

Other [none]:

Within Criteria	Exceedance/Notes
NA	

DATA VALIDATION CHECKLIST – STAGE 2A

Overall Qualifications:

The following is a list of qualifiers and definitions that may be used for the validation of this data package:

U	The analyte was not detected; the concentration of the analyte is less than the limit of detection.
J	The reported result was an estimated value with unknown bias.
J+	The result was an estimated quantity, but the results may be biased high.
J-	The result was an estimated quantity, but the results may be biased low.
N	The analysis indicates the presence of an analyte for which there was presumptive evidence to make a “tentative identification”.
NJ	The analyte has been “tentatively identified” or “presumptively” as present and the associated numerical value was the estimated concentration in the sample.
UJ	The analyte was not detected and was reported as less than the LOD or as defined by the customer, however, the associated numerical value is approximate.
X	The presence or absence of the analyte cannot be substantiated by the data provided. Exclusion of the data is recommended.

3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

Innovex
Anna Jordan
16310 NE 80th St.
Redmond, WA 98052

RE: JBLM-YTC
Work Order Number: 2209390

October 05, 2022

Attention Anna Jordan:

Fremont Analytical, Inc. received 13 sample(s) on 9/28/2022 for the analyses presented in the following report.

Volatile Organic Compounds by EPA Method 8260D SIM

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Brianna Barnes
Project Manager

Date: *11/15/2022*

CLIENT: Innovex
Project: JBLM-YTC
Work Order: 2209390

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2209390-001	YTC-FTP-1-20220926	09/26/2022 3:00 PM	09/28/2022 12:30 PM
2209390-002	YTC-FTP-1A-20220926	09/26/2022 3:10 PM	09/28/2022 12:30 PM
2209390-003	YTC-MTS-1-20220926	09/26/2022 4:30 PM	09/28/2022 12:30 PM
2209390-004	YTC-MTS-2-20220926	09/26/2022 4:10 PM	09/28/2022 12:30 PM
2209390-005	YTC-MTS-4-20220926	09/26/2022 4:20 PM	09/28/2022 12:30 PM
2209390-006	YTC-TVR-1-20220926	09/26/2022 3:55 PM	09/28/2022 12:30 PM
2209390-007	YTC-TVR-3-20220926	09/26/2022 3:45 PM	09/28/2022 12:30 PM
2209390-008	YTC-TVR-7-20220926	09/26/2022 3:30 PM	09/28/2022 12:30 PM
2209390-009	YTC-TVR-6-20220927	09/27/2022 11:40 AM	09/28/2022 12:30 PM
2209390-010	YTC-Pomona-20220927	09/27/2022 11:15 AM	09/28/2022 12:30 PM
2209390-011	YTC-PomonaA-20220927	09/27/2022 11:20 AM	09/28/2022 12:30 PM
2209390-012	YTC-PAIC-20220927	09/27/2022 11:00 AM	09/28/2022 12:30 PM
2209390-013	Trip Blank		09/28/2022 12:30 PM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

Case Narrative

WO#: **2209390**

Date: **10/5/2022**

CLIENT: Innovex
Project: JBLM-YTC

I. SAMPLE RECEIPT:
Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:
Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:
Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

11/15/2022: Revision 1 includes a correction to a sample ID per client request.

Qualifiers:

* - Flagged value is not within established control limits
B - Analyte detected in the associated Method Blank
D - Dilution was required
E - Value above quantitation range
H - Holding times for preparation or analysis exceeded
I - Analyte with an internal standard that does not meet established acceptance criteria
J - Analyte detected below LOQ
N - Tentatively Identified Compound (TIC)
Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria
S - Spike recovery outside accepted recovery limits
U - Not detected above the LOD

Acronyms:

%Rec - Percent Recovery
CCB - Continued Calibration Blank
CCV - Continued Calibration Verification
DF - Dilution Factor
DL - Detection Limit
DUP - Sample Duplicate
HEM - Hexane Extractable Material
ICV - Initial Calibration Verification
LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
LOD - Limit of Detection
LOQ - Limit of Quantitation
MB or MBLANK - Method Blank
MS/MSD - Matrix Spike / Matrix Spike Duplicate
PDS - Post Digestion Spike
Ref Val - Reference Value
REP - Sample Replicate
RPD - Relative Percent Difference
SD - Serial Dilution
SGT - Silica Gel Treatment
SPK - Spike
Surr - Surrogate

Analytical Report

Work Order: **2209390**
Date Reported: **10/5/2022**

Client: Innovex
Collection Date: 9/26/2022 3:00:00 PM
Project: JBLM-YTC
Lab ID: 2209390-001
Matrix: Groundwater
Client Sample ID: **YTC-FTP-1-20220926**

Analyses	Result	LOQ	LOD	DL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D SIM						Batch ID: 37990		Analyst: AK
Vinyl chloride	0.00859	0.0100	0.00500	0.00199	J	µg/L	1	10/1/2022 5:21:53 AM
Surr: Dibromofluoromethane	98.3	80-119%				%Rec	1	10/1/2022 5:21:53 AM
Surr: Toluene-d8	97.3	89-112%				%Rec	1	10/1/2022 5:21:53 AM
Surr: 1-Bromo-4-fluorobenzene	105	85-114%				%Rec	1	10/1/2022 5:21:53 AM

Prep Method	Prep Date	Prep Initials
SW5030	9/30/2022 10:50:00 AM	LAC

Analytical Report

Work Order: **2209390**
Date Reported: **10/5/2022**

Client: Innovex
Collection Date: 9/26/2022 3:10:00 PM
Project: JBLM-YTC
Lab ID: 2209390-002
Matrix: Groundwater
Client Sample ID: **YTC-FTP-1A-20220926**

Analyses	Result	LOQ	LOD	DL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D SIM						Batch ID: 37990		Analyst: AK
Vinyl chloride	0.00748	0.0100	0.00500	0.00199	J	µg/L	1	10/1/2022 5:57:23 AM
Surr: Dibromofluoromethane	97.3	80-119%				%Rec	1	10/1/2022 5:57:23 AM
Surr: Toluene-d8	95.0	89-112%				%Rec	1	10/1/2022 5:57:23 AM
Surr: 1-Bromo-4-fluorobenzene	107	85-114%				%Rec	1	10/1/2022 5:57:23 AM

Prep Method	Prep Date	Prep Initials
SW5030	9/30/2022 10:50:00 AM	LAC

Analytical Report

Work Order: **2209390**
Date Reported: **10/5/2022**

Client: Innovex
Collection Date: 9/26/2022 4:30:00 PM
Project: JBLM-YTC
Lab ID: 2209390-003
Matrix: Groundwater
Client Sample ID: **YTC-MTS-1-20220926**

Analyses	Result	LOQ	LOD	DL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D SIM						Batch ID: 37990		Analyst: AK
Vinyl chloride	0.00500	0.0100	0.00500	0.00199	U	µg/L	1	10/1/2022 6:32:56 AM
Surr: Dibromofluoromethane	99.3	80-119%				%Rec	1	10/1/2022 6:32:56 AM
Surr: Toluene-d8	95.1	89-112%				%Rec	1	10/1/2022 6:32:56 AM
Surr: 1-Bromo-4-fluorobenzene	104	85-114%				%Rec	1	10/1/2022 6:32:56 AM

Prep Method	Prep Date	Prep Initials
SW5030	9/30/2022 10:50:00 AM	LAC

Analytical Report

Work Order: **2209390**
Date Reported: **10/5/2022**

Client: Innovex
Collection Date: 9/26/2022 4:10:00 PM
Project: JBLM-YTC
Lab ID: 2209390-004
Matrix: Groundwater
Client Sample ID: **YTC-MTS-2-20220926**

Analyses	Result	LOQ	LOD	DL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D SIM						Batch ID: 37990		Analyst: AK
Vinyl chloride	0.00500	0.0100	0.00500	0.00199	U	µg/L	1	10/1/2022 7:08:27 AM
Surr: Dibromofluoromethane	98.3	80-119%				%Rec	1	10/1/2022 7:08:27 AM
Surr: Toluene-d8	94.4	89-112%				%Rec	1	10/1/2022 7:08:27 AM
Surr: 1-Bromo-4-fluorobenzene	103	85-114%				%Rec	1	10/1/2022 7:08:27 AM

Prep Method	Prep Date	Prep Initials
SW5030	9/30/2022 10:50:00 AM	LAC

Analytical Report

Work Order: **2209390**
Date Reported: **10/5/2022**

Client: Innovex
Collection Date: 9/26/2022 4:20:00 PM
Project: JBLM-YTC
Lab ID: 2209390-005
Matrix: Groundwater
Client Sample ID: **YTC-MTS-4-20220926**

Analyses	Result	LOQ	LOD	DL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D SIM						Batch ID: 37990		Analyst: AK
Vinyl chloride	0.00500	0.0100	0.00500	0.00199	U	µg/L	1	10/1/2022 7:44:01 AM
Surr: Dibromofluoromethane	98.0	80-119%				%Rec	1	10/1/2022 7:44:01 AM
Surr: Toluene-d8	94.3	89-112%				%Rec	1	10/1/2022 7:44:01 AM
Surr: 1-Bromo-4-fluorobenzene	103	85-114%				%Rec	1	10/1/2022 7:44:01 AM

Prep Method	Prep Date	Prep Initials
SW5030	9/30/2022 10:50:00 AM	LAC

Analytical Report

Work Order: **2209390**
Date Reported: **10/5/2022**

Client: Innovex
Collection Date: 9/26/2022 3:55:00 PM
Project: JBLM-YTC
Lab ID: 2209390-006
Matrix: Groundwater
Client Sample ID: **YTC-TVR-1-20220926**

Analyses	Result	LOQ	LOD	DL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D SIM						Batch ID: 37990		Analyst: AK
Vinyl chloride	0.00500	0.0100	0.00500	0.00199	U	µg/L	1	10/1/2022 8:19:37 AM
Surr: Dibromofluoromethane	97.7	80-119%				%Rec	1	10/1/2022 8:19:37 AM
Surr: Toluene-d8	93.7	89-112%				%Rec	1	10/1/2022 8:19:37 AM
Surr: 1-Bromo-4-fluorobenzene	102	85-114%				%Rec	1	10/1/2022 8:19:37 AM

Prep Method	Prep Date	Prep Initials
SW5030	9/30/2022 10:50:00 AM	LAC

Analytical Report

Work Order: **2209390**
Date Reported: **10/5/2022**

Client: Innovex
Collection Date: 9/26/2022 3:45:00 PM
Project: JBLM-YTC
Lab ID: 2209390-007
Matrix: Groundwater
Client Sample ID: **YTC-TVR-3-20220926**

Analyses	Result	LOQ	LOD	DL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D SIM						Batch ID: 37990		Analyst: AK
Vinyl chloride	0.00500	0.0100	0.00500	0.00199	U	µg/L	1	10/1/2022 8:55:16 AM
Surr: Dibromofluoromethane	98.1	80-119%				%Rec	1	10/1/2022 8:55:16 AM
Surr: Toluene-d8	94.8	89-112%				%Rec	1	10/1/2022 8:55:16 AM
Surr: 1-Bromo-4-fluorobenzene	103	85-114%				%Rec	1	10/1/2022 8:55:16 AM

Prep Method	Prep Date	Prep Initials
SW5030	9/30/2022 10:50:00 AM	LAC

Analytical Report

Work Order: **2209390**
Date Reported: **10/5/2022**

Client: Innovex
Collection Date: 9/26/2022 3:30:00 PM
Project: JBLM-YTC
Lab ID: 2209390-008
Matrix: Groundwater
Client Sample ID: **YTC-TVR-7-20220926**

Analyses	Result	LOQ	LOD	DL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D SIM						Batch ID: 37990		Analyst: AK
Vinyl chloride	0.00500	0.0100	0.00500	0.00199	U	µg/L	1	10/1/2022 9:30:58 AM
Surr: Dibromofluoromethane	98.0	80-119%				%Rec	1	10/1/2022 9:30:58 AM
Surr: Toluene-d8	94.4	89-112%				%Rec	1	10/1/2022 9:30:58 AM
Surr: 1-Bromo-4-fluorobenzene	103	85-114%				%Rec	1	10/1/2022 9:30:58 AM

Prep Method	Prep Date	Prep Initials
SW5030	9/30/2022 10:50:00 AM	LAC

Analytical Report

Work Order: **2209390**
Date Reported: **10/5/2022**

Client: Innovex
Collection Date: 9/27/2022 11:40:00 AM
Project: JBLM-YTC
Lab ID: 2209390-009
Matrix: Groundwater
Client Sample ID: **YTC-TVR-6-20220927**

Analyses	Result	LOQ	LOD	DL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D SIM						Batch ID: 37990		Analyst: AK
Vinyl chloride	0.00500	0.0100	0.00500	0.00199	U	µg/L	1	10/1/2022 10:06:37 AM
Surr: Dibromofluoromethane	98.5	80-119%				%Rec	1	10/1/2022 10:06:37 AM
Surr: Toluene-d8	95.3	89-112%				%Rec	1	10/1/2022 10:06:37 AM
Surr: 1-Bromo-4-fluorobenzene	103	85-114%				%Rec	1	10/1/2022 10:06:37 AM

Prep Method	Prep Date	Prep Initials
SW5030	9/30/2022 10:50:00 AM	LAC

Analytical Report

Work Order: **2209390**
Date Reported: **10/5/2022**

Client: Innovex
Collection Date: 9/27/2022 11:15:00 AM
Project: JBLM-YTC
Lab ID: 2209390-010
Matrix: Groundwater
Client Sample ID: **YTC-Pomona-20220927**

Analyses	Result	LOQ	LOD	DL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D SIM						Batch ID: 37990		Analyst: AK
Vinyl chloride	0.00500	0.0100	0.00500	0.00199	U	µg/L	1	10/1/2022 10:42:20 AM
Surr: Dibromofluoromethane	98.7	80-119%				%Rec	1	10/1/2022 10:42:20 AM
Surr: Toluene-d8	96.1	89-112%				%Rec	1	10/1/2022 10:42:20 AM
Surr: 1-Bromo-4-fluorobenzene	103	85-114%				%Rec	1	10/1/2022 10:42:20 AM

Prep Method	Prep Date	Prep Initials
SW5030	9/30/2022 10:50:00 AM	LAC

Analytical Report

Work Order: **2209390**
Date Reported: **10/5/2022**

Client: Innovex
Collection Date: 9/27/2022 11:20:00 AM
Project: JBLM-YTC
Lab ID: 2209390-011
Matrix: Groundwater
Client Sample ID: **YTC-PomonaA-20220927**

Analyses	Result	LOQ	LOD	DL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D SIM						Batch ID: 37990		Analyst: AK
Vinyl chloride	0.00500	0.0100	0.00500	0.00199	U	µg/L	1	10/1/2022 11:18:02 AM
Surr: Dibromofluoromethane	99.0	80-119%				%Rec	1	10/1/2022 11:18:02 AM
Surr: Toluene-d8	96.5	89-112%				%Rec	1	10/1/2022 11:18:02 AM
Surr: 1-Bromo-4-fluorobenzene	102	85-114%				%Rec	1	10/1/2022 11:18:02 AM

Prep Method	Prep Date	Prep Initials
SW5030	9/30/2022 10:50:00 AM	LAC

Analytical Report

Work Order: **2209390**
Date Reported: **10/5/2022**

Client: Innovex
Collection Date: 9/27/2022 11:00:00 AM
Project: JBLM-YTC
Lab ID: 2209390-012
Matrix: Groundwater
Client Sample ID: **YTC-PAIC-20220927**

Analyses	Result	LOQ	LOD	DL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D SIM						Batch ID: 37990		Analyst: AK
Vinyl chloride	0.00500	0.0100	0.00500	0.00199	U	µg/L	1	10/1/2022 11:53:50 AM
Surr: Dibromofluoromethane	99.2	80-119%				%Rec	1	10/1/2022 11:53:50 AM
Surr: Toluene-d8	96.6	89-112%				%Rec	1	10/1/2022 11:53:50 AM
Surr: 1-Bromo-4-fluorobenzene	103	85-114%				%Rec	1	10/1/2022 11:53:50 AM

Prep Method	Prep Date	Prep Initials
SW5030	9/30/2022 10:50:00 AM	LAC

Analytical Report

Work Order: **2209390**
Date Reported: **10/5/2022**

Client: Innovex
Collection Date:
Project: JBLM-YTC
Lab ID: 2209390-013
Matrix: Water
Client Sample ID: **Trip Blank**

Analyses	Result	LOQ	LOD	DL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D SIM						Batch ID: 37990		Analyst: AK
Vinyl chloride	0.0164	0.0100	0.00500	0.00199		µg/L	1	10/1/2022 4:46:11 AM
Surr: Dibromofluoromethane	102	80-119%				%Rec	1	10/1/2022 4:46:11 AM
Surr: Toluene-d8	97.8	89-112%				%Rec	1	10/1/2022 4:46:11 AM
Surr: 1-Bromo-4-fluorobenzene	101	85-114%				%Rec	1	10/1/2022 4:46:11 AM

Prep Method	Prep Date	Prep Initials
SW5030	9/30/2022 10:50:00 AM	LAC

Work Order: 2209390
CLIENT: Innovex
Project: JBLM-YTC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D SIM

Sample ID: **LCS-37990** SampType: **LCS** Units: **µg/L** Prep Date: **9/30/2022** RunNo: **78734**
Client ID: **LCSW** Batch ID: **37990** Analysis Date: **10/1/2022** SeqNo: **1620702**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	5.22	0.0100	5.000	0	104	58	137				
Surr: Dibromofluoromethane	10.0		10.00		100	80	119				
Surr: Toluene-d8	10.1		10.00		101	89	112				
Surr: 1-Bromo-4-fluorobenzene	10.0		10.00		100	85	114				

Sample ID: **MB-37990** SampType: **MBLK** Units: **µg/L** Prep Date: **9/30/2022** RunNo: **78734**
Client ID: **MBLKW** Batch ID: **37990** Analysis Date: **10/1/2022** SeqNo: **1620700**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	ND	0.0100									U
Surr: Dibromofluoromethane	10.1		10.00		101	80	119				
Surr: Toluene-d8	9.77		10.00		97.7	89	112				
Surr: 1-Bromo-4-fluorobenzene	10.1		10.00		101	85	114				

Sample ID: **2209390-001AMS** SampType: **MS** Units: **µg/L** Prep Date: **9/30/2022** RunNo: **78734**
Client ID: **YTC-FTP-1-20220926** Batch ID: **37990** Analysis Date: **10/1/2022** SeqNo: **1620683**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	3.73	0.0100	5.000	0.008590	74.3	58	137				
Surr: Dibromofluoromethane	9.78		10.00		97.8	80	119				
Surr: Toluene-d8	9.56		10.00		95.6	89	112				
Surr: 1-Bromo-4-fluorobenzene	10.3		10.00		103	85	114				

Sample ID: **2209390-001AMSD** SampType: **MSD** Units: **µg/L** Prep Date: **9/30/2022** RunNo: **78734**
Client ID: **YTC-FTP-1-20220926** Batch ID: **37990** Analysis Date: **10/1/2022** SeqNo: **1620684**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	3.62	0.0100	5.000	0.008590	72.3	58	137	3.725	2.82	30	
Surr: Dibromofluoromethane	9.84		10.00		98.4	80	119		0		
Surr: Toluene-d8	9.60		10.00		96.0	89	112		0		

Work Order: 2209390
CLIENT: Innovex
Project: JBLM-YTC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D SIM

Sample ID: **2209390-001AMSD** SampType: **MSD** Units: **µg/L** Prep Date: **9/30/2022** RunNo: **78734**
Client ID: **YTC-FTP-1-20220926** Batch ID: **37990** Analysis Date: **10/1/2022** SeqNo: **1620684**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 1-Bromo-4-fluorobenzene	10.5		10.00		105	85	114		0		

Sample ID: **2209390-010AMS** SampType: **MS** Units: **µg/L** Prep Date: **9/30/2022** RunNo: **78734**
Client ID: **YTC-Pomona-20220927** Batch ID: **37990** Analysis Date: **10/1/2022** SeqNo: **1620694**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	3.88	0.0100	5.000	0	77.7	58	137				
Surr: Dibromofluoromethane	10.0		10.00		100	80	119				
Surr: Toluene-d8	9.69		10.00		96.9	89	112				
Surr: 1-Bromo-4-fluorobenzene	10.3		10.00		103	85	114				

Sample ID: **2209390-010AMSD** SampType: **MSD** Units: **µg/L** Prep Date: **9/30/2022** RunNo: **78734**
Client ID: **YTC-Pomona-20220927** Batch ID: **37990** Analysis Date: **10/1/2022** SeqNo: **1620695**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	3.64	0.0100	5.000	0	72.7	58	137	3.884	6.60	30	
Surr: Dibromofluoromethane	9.92		10.00		99.2	80	119		0		
Surr: Toluene-d8	9.67		10.00		96.7	89	112		0		
Surr: 1-Bromo-4-fluorobenzene	10.2		10.00		102	85	114		0		

Sample Log-In Check List

Client Name:	INNO	Work Order Number:	2209390
Logged by:	Gabrielle Coeuille	Date Received:	9/28/2022 12:30:00 PM

Chain of Custody

1.	Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2.	How was the sample delivered?	Client		

Log In

3.	Coolers are present?	Yes ☑	No ☐	NA ☐
4.	Shipping container/cooler in good condition?	Yes ☑	No ☐	
5.	Custody Seals present on shipping container/cooler? (Refer to comments for Custody Seals not intact)	Yes ☑	No ☐	Not Present ☐
6.	Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
7.	Were all items received at a temperature of >2°C to 6°C *	Yes ☑	No ☐	NA ☐
8.	Sample(s) in proper container(s)?	Yes ☑	No ☐	
9.	Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
10.	Are samples properly preserved?	Yes ☑	No ☐	
11.	Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
12.	Is there headspace in the VOA vials?	Yes ☐	No ☐	NA ☑
13.	Did all samples containers arrive in good condition(unbroken)?	Yes ☑	No ☐	
14.	Does paperwork match bottle labels?	Yes ☑	No ☐	
15.	Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
16.	Is it clear what analyses were requested?	Yes ☑	No ☐	
17.	Were all holding times able to be met?	Yes ☑	No ☐	

Special Handling (if applicable)

18.	Was client notified of all discrepancies with this order?	Yes ☐	No ☐	NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

19. Additional remarks:

Item Information

Item #	Temp ºC
Sample 1	3.1

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C

Chain of Custody Record & Laboratory Services Agreement

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Date: 9/26-~~27~~/22 Page: 1 of: 2

Laboratory Project No (internal): 2209390

Project Name: JBLM-YTC

Special Remarks:

Client: Innovex

Project No: 20506

Address: 16310 NE 80th St, Ste 104

Collected by: H. Carter / A. Jordan

City, State, Zip: Redmond, WA 98052

Location: Yakima, WA

Telephone: 206-949-3010

Report To (PM): Anna Jordan

Sample Disposal: ☐ Return to client ☒ Disposal by lab (after 30 days)

Fax:

PM Email: Anna.Jordan@innovex.net

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	# of Cont.	VOCs (EPA 8260 / 624)	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8) Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)	Vinyl Chloride (8260SIM)				Comments
1 YTC-FTP-1-20220926	9/26/22	1500	GW	9											X					MS/MSD
2 YTC-FTP-1A-20220926		1510		3											X					
3 YTC-MTS-1-20220926		1630		2											X					
4 YTC-MTS-2-20220926		1610		2											X					
5 YTC-MTS-4-20220926		1620		3											X					
6 YTC-TVR-1-20220926		1555		2											X					
7 YTC-TVR-3-20220926		1545		2											X					
8 YTC-TVR-7-20220926	↓	1530		2											X					
9 YTC-TVR-6-20220927	9/27/22	1140		3											X					
10 YTC-Pomona-20220927	↓	1115	↓	9											X					MS/MSD

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Turn-around Time:
☒ Standard ☐ Next Day
☐ 3 Day ☐ Same Day
☐ 2 Day ☐ (specify)

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above, that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x Anna Jordan	Anna Jordan	9/28/22 1215	x Elisabeth Sweeney	Elisabeth Sweeney	9/28/22 12:50
Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x			x		

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Chain of Custody Record & Laboratory Services Agreement

Date: 9/26-27/22 Page: 2 of: 2

Laboratory Project No (internal): 2209390

Project Name: JBLM - YTC

Special Remarks:

Client: Innovex

Project No: 20506

Address:

Collected by: H. Carter / A. Jordan

City, State, Zip:

Location: Yakima, WA

Telephone:

Report To (PM): Anna Jordan

Sample Disposal: ☐ Return to client ☑ Disposal by lab (after 30 days)

Fax:

PM Email: Anna.Jordan@innovex.net

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	# of Cont.	VOCs (EPA 8260 / 624)	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)	Vinyl Chloride (8260 SIM)				Comments
1 YTC-PomonaA-20220927	9/27/22	1120	GW	3													X				
2 YTC-PA1C-20220927	↓	1100	↓	3													X				
3 Trip Blank	—	-	-	2													✓				
4																					
5																					
6																					
7																					
8																					
9																					
10																					

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Turn-around Time:
☑ Standard ☐ Next Day
☐ 3 Day ☐ Same Day
☐ 2 Day _____ (specify)

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above, that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x Anna Jordan	Anna Jordan	9/28/22 1215	x Elisabeth Savery	Elisabeth Savery	9/28/22 12:30
Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x			x		

DATA VALIDATION CHECKLIST – STAGE 2A

Site Name	JBLM	**Project Name**	Yakima Training Center – IRP Sites
Data Reviewer (signature and date)	Anna J Jordan 11/10/2022	**Technical Reviewer (signature and date)**	Mary K Hollis 11/15/2022
Laboratory Report No.	2209390	**Laboratory**	Fremont Analytical
Analyses	DODVOC8260SIM		
Sample and Matrix	YTC-FTP-1-20220926 (GW) 2209390-001 YTC-FTP-1A-202200926 (GW) 2209390-002 YTC-MTS-1-20220926 (GW) 2209390-003 YTC-MTS-2-20220926 (GW) 2209390-004 YTC-MTS-4-20220926 (GW) 2209390-005 YTC-TVR-1-20220926 (GW) 2209390-006 YTC-TVR-3-20220926 (GW) 2209390-007 YTC-TVR-6-20220927 (GW) 2209390-008 YTC-TVR-7-20220926 (GW) 2209390-009 YTC-Pomona-20220927 (GW) 2209390-010 YTC-PomonaA-20220927 (GW) 2209390-011 YTC-PAIC-20220927 (GW) 2209390-012 Trip Blank 2209390-013		
Field Duplicate Pairs	YTC-FTP-1-20220314 and YTC-FTP-1A-20220314 YTC-Pomona-20220927 and YTC-PomonaA-20220927		
Field Blanks	One Trip Blank was identified in this SDG		

DATA VALIDATION CHECKLIST – STAGE 2A

INTRODUCTION

This checklist summarizes the Stage 2A validation performed on the subject laboratory report, in accordance with the U.S. Environmental Protection Agency (EPA) Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use (January 2009). Analytical data were evaluated in general accordance with the EPA National Functional Guidelines for Organic and Inorganic Superfund Methods Data Review (November 2020).

OVERALL EVALUATION

All results are usable with the qualifications described in this checklist.

Data completeness and verification

Within Criteria	Exceedance/Notes
Y	

Sample preservation, receipt, and holding times:

Within Criteria	Exceedance/Notes
Y	All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times.

Method Blanks:

Within Criteria	Exceedance/Notes
Y	Method blanks were analyzed as required by the methods. No contaminants were found in the method blanks.

DATA VALIDATION CHECKLIST – STAGE 2A

Field Blanks:

Within Criteria	Exceedance/Notes
Y	One trip blank was analyzed, and analytes were not detected above the LOD except for the following.

Analyte	Result (µg/L)	LOD (µg/L)	New Qualifier
Vinyl Chloride	0.0164	0.00500	J+ (all detects) No qualifier (non-detects)

System monitoring compounds (surrogates and labeled compounds):

Within Criteria	Exceedance/Notes
Y	Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

MS/MSD:

Within Criteria	Exceedance/Notes
Y	Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on an associated project sample. Percent recoveries (%R) were within QC limits.

Laboratory control:

Within Criteria	Exceedance/Notes
Y	Laboratory control samples (LCS) and laboratory control sample duplicate (LCSD) sample analysis were performed. Percent recoveries (%R) and Relative percent differences (RPD) were within QC limits (<20%).

DATA VALIDATION CHECKLIST – STAGE 2A

Field duplicates:

Within Criteria	Exceedance/Notes
Y	Field duplicate sample analysis was performed. Relative percent differences (RPD) were within QC limits.

Sample dilutions:

Within Criteria	Exceedance/Notes
Y	All samples were analyzed undiluted.

Re-extraction and reanalysis:

Within Criteria	Exceedance/Notes
NA	

MDLs/RLs:

Within Criteria	Exceedance/Notes
Y	Detections between the LOD and MDL (if present) were qualified as not detected (flagged U).

Tentatively identified compounds:

Within Criteria	Exceedance/Notes
NA	

Other [none]:

Within Criteria	Exceedance/Notes
NA	

Overall Qualifications:

The following is a list of qualifiers and definitions that may be used for the validation of this data package:

U	The analyte was not detected; the concentration of the analyte is less than the limit of detection.
J	The reported result was an estimated value with unknown bias.
J+	The result was an estimated quantity, but the results may be biased high.
J-	The result was an estimated quantity, but the results may be biased low.
N	The analysis indicates the presence of an analyte for which there was presumptive evidence to make a “tentative identification”.
NJ	The analyte has been “tentatively identified” or “presumptively” as present and the associated numerical value was the estimated concentration in the sample.
UJ	The analyte was not detected and was reported as less than the LOD or as defined by the customer, however, the associated numerical value is approximate.
X	The presence or absence of the analyte cannot be substantiated by the data provided. Exclusion of the data is recommended.

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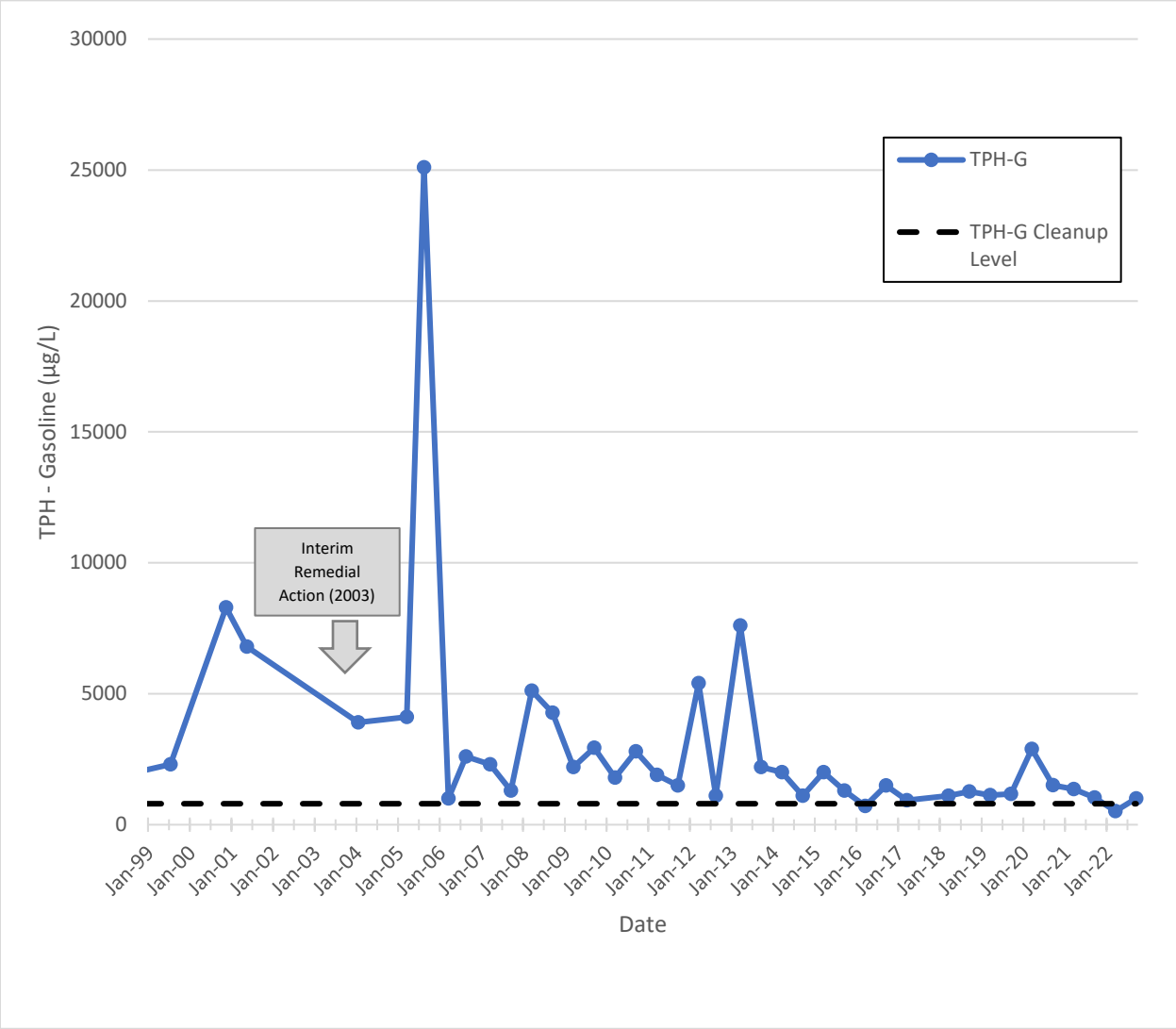
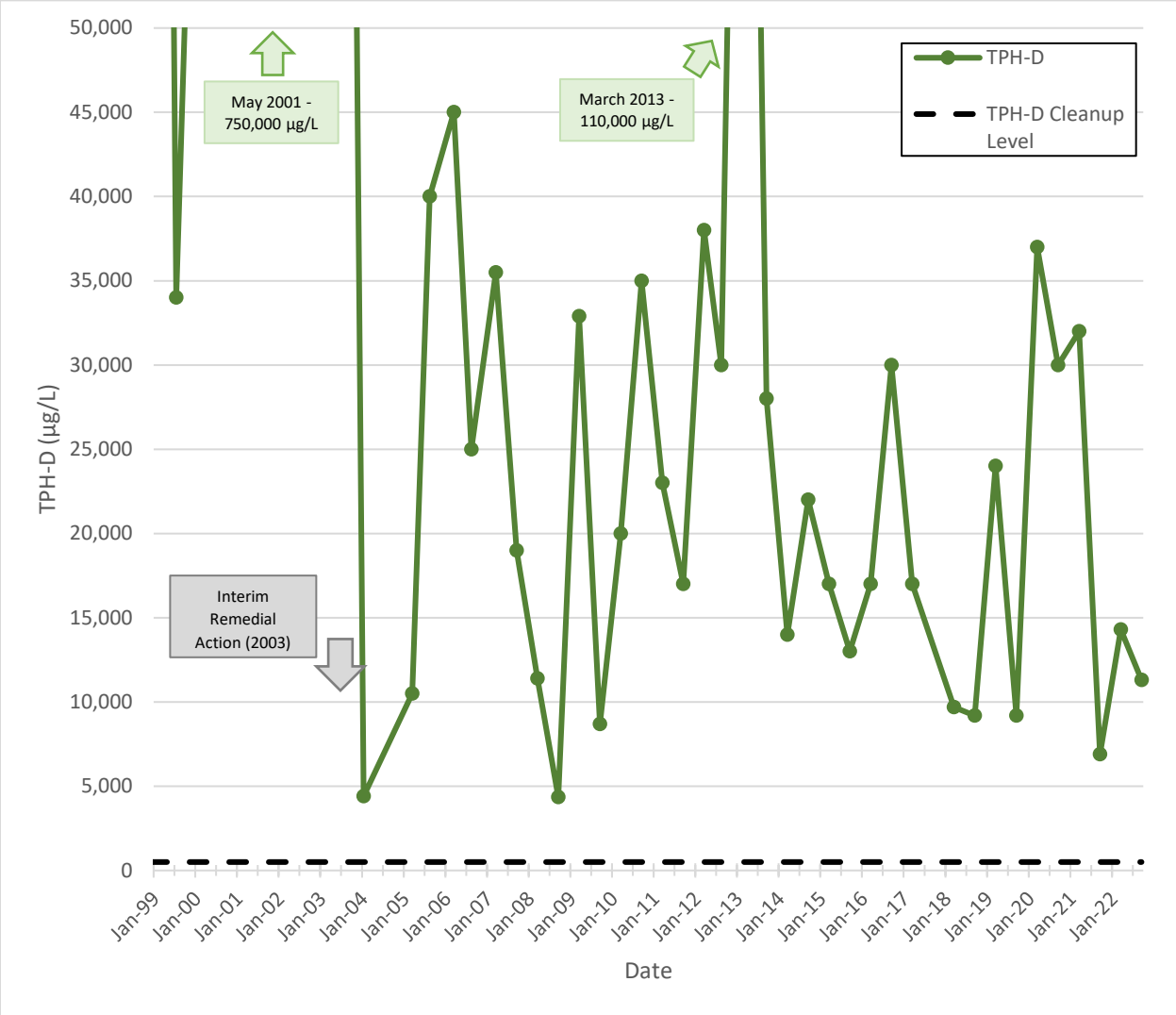
APPENDIX B HISTORICAL CONCENTRATION GRAPHS

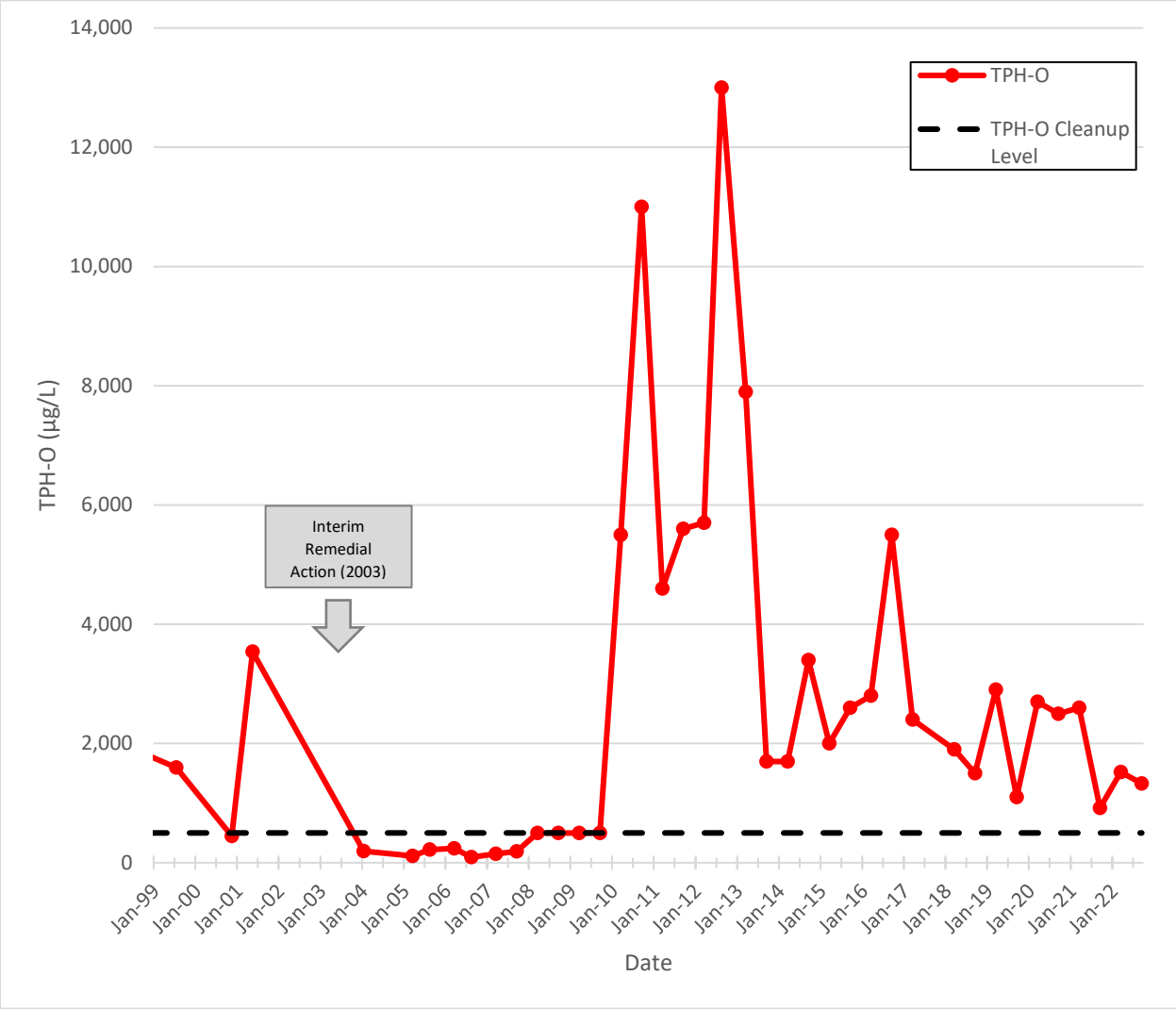
FTP – TPH Concentrations



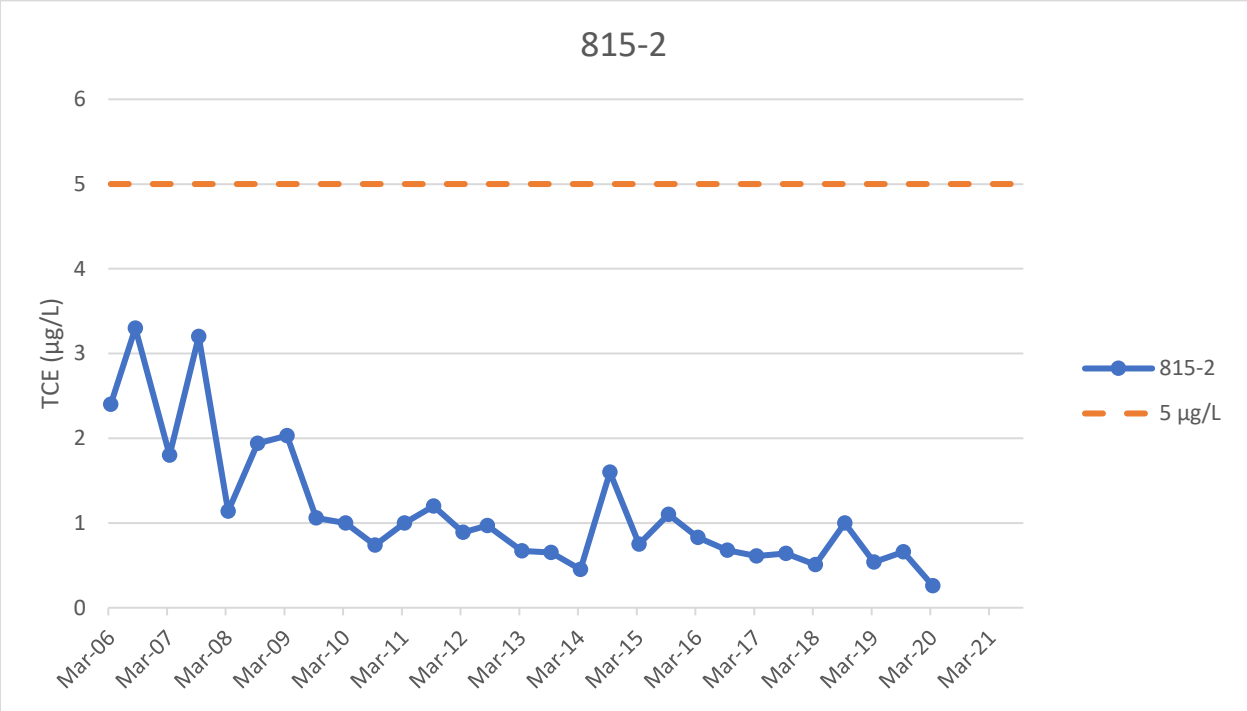
FTP – TPH Concentrations

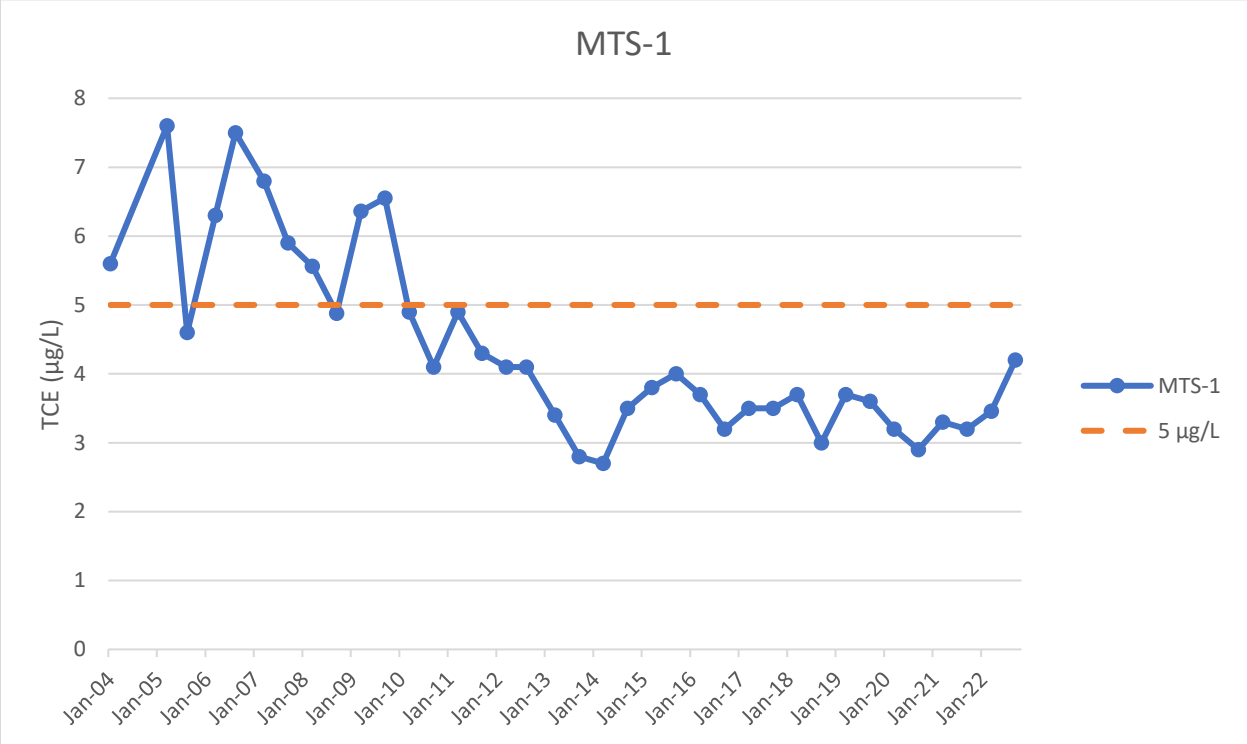


FTP – TPH Concentrations



TVR/Old MATES – TCE Concentrations





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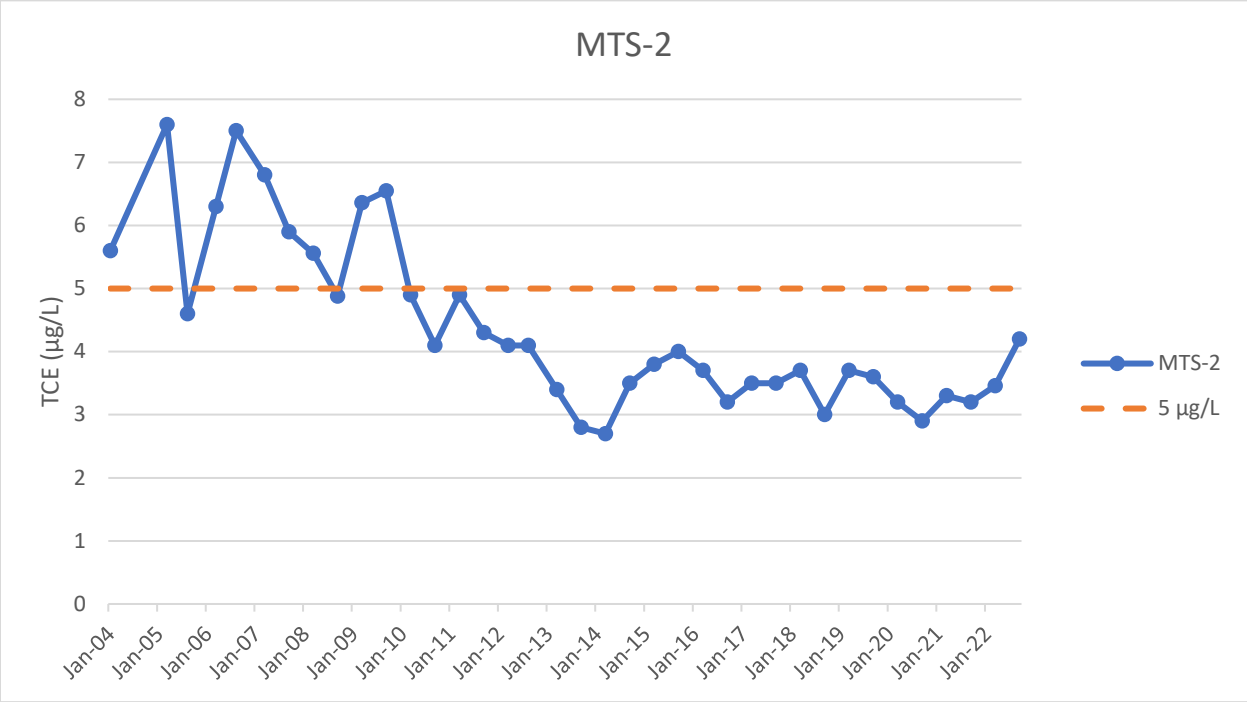
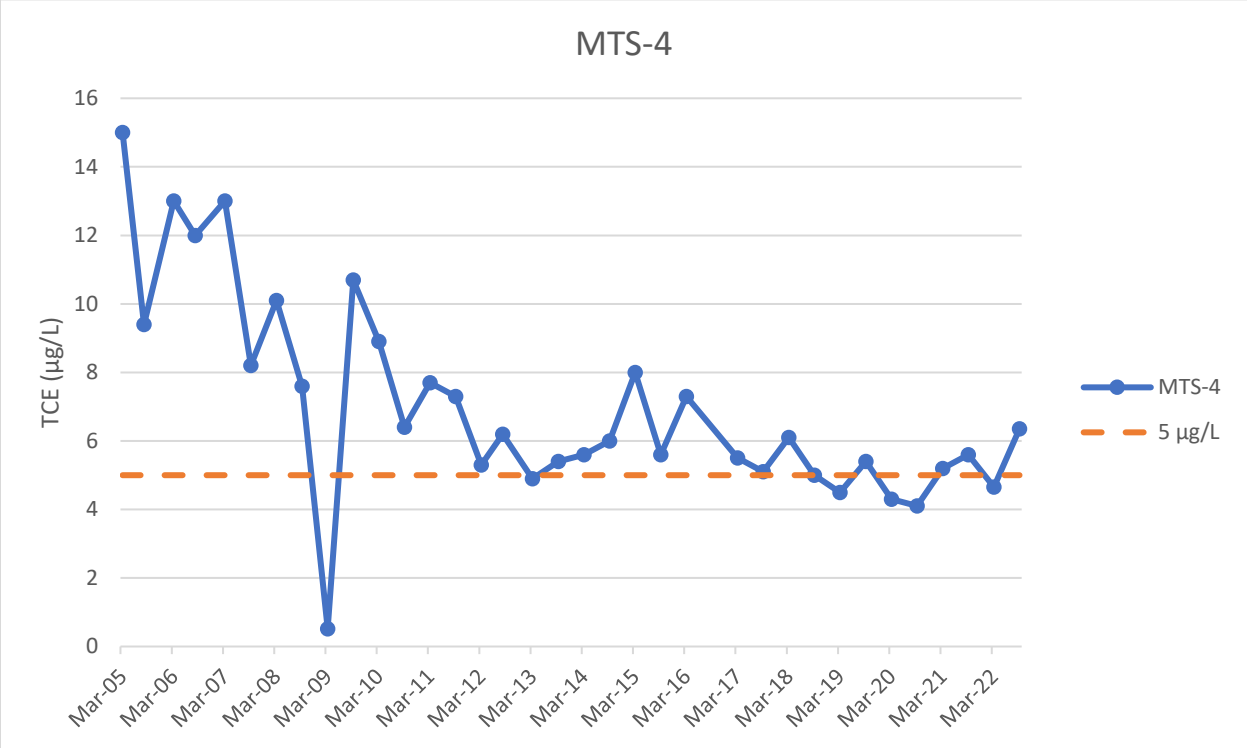
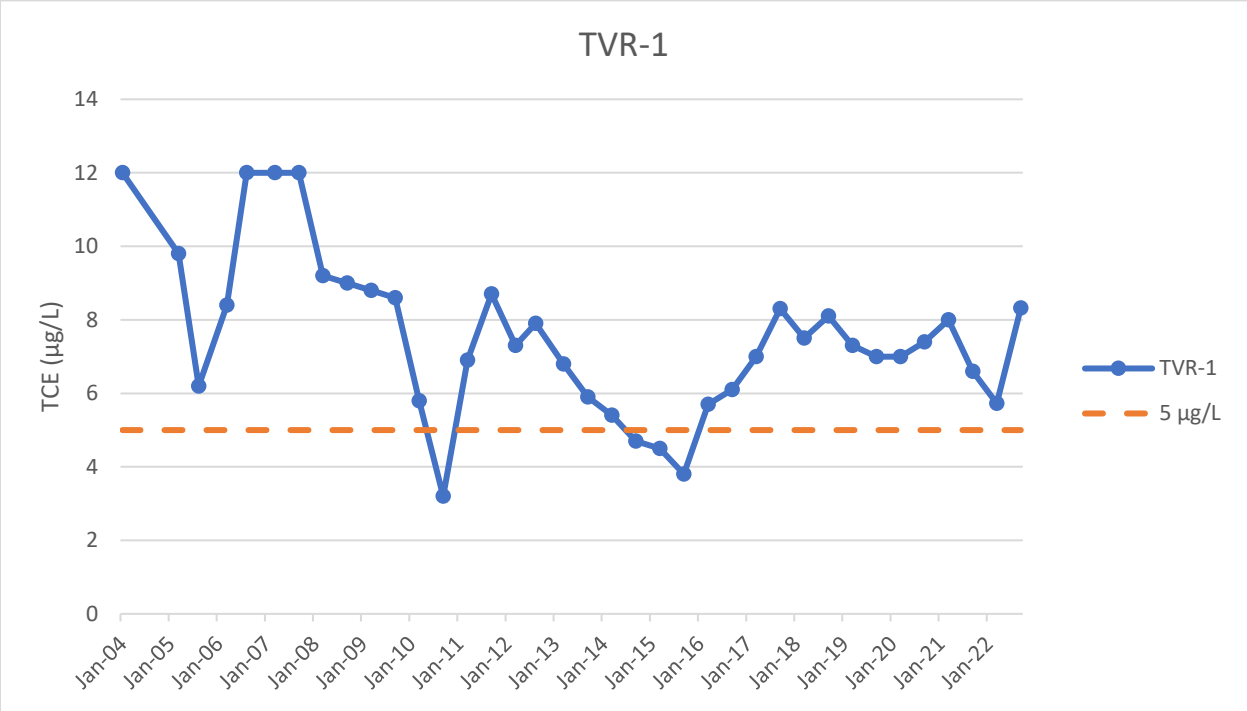
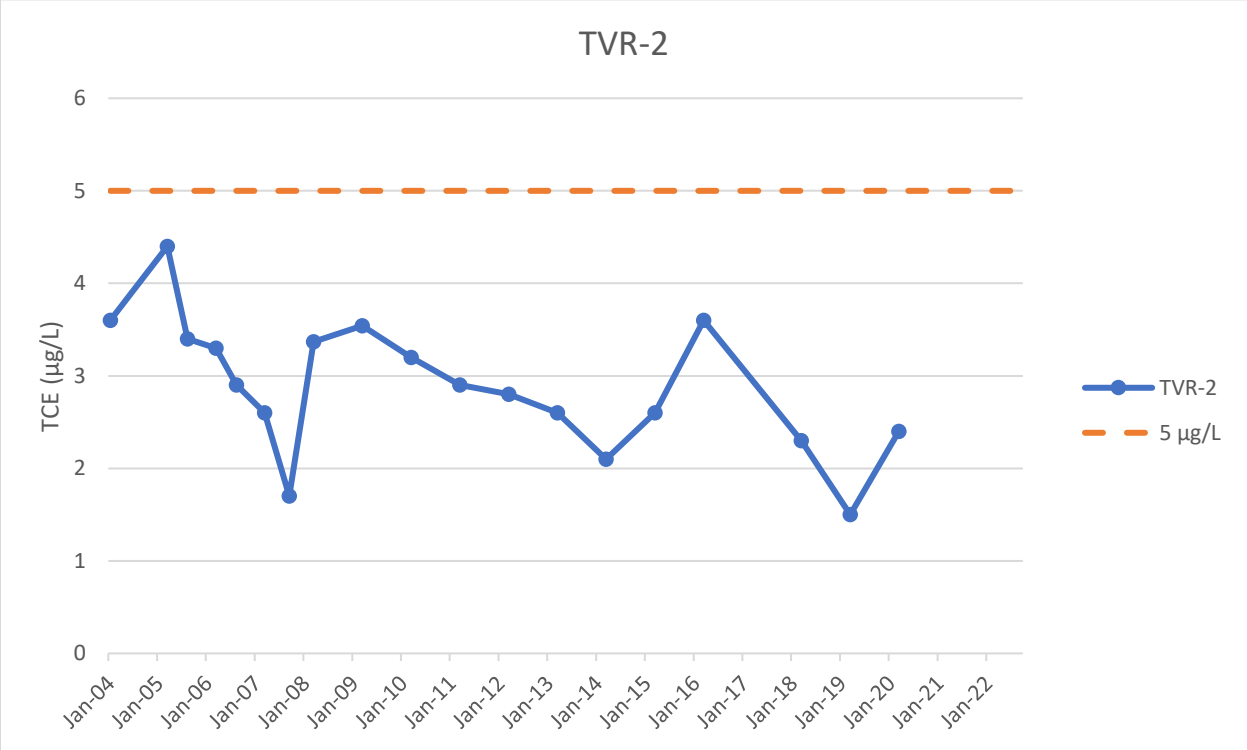


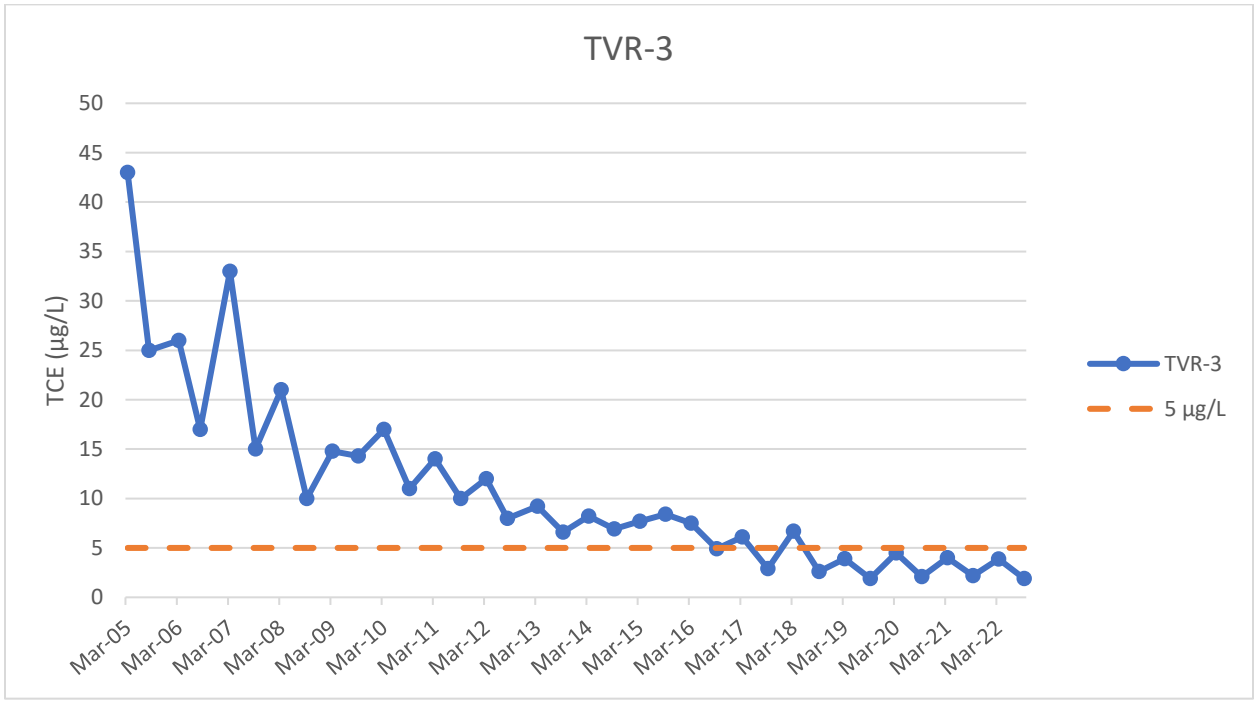


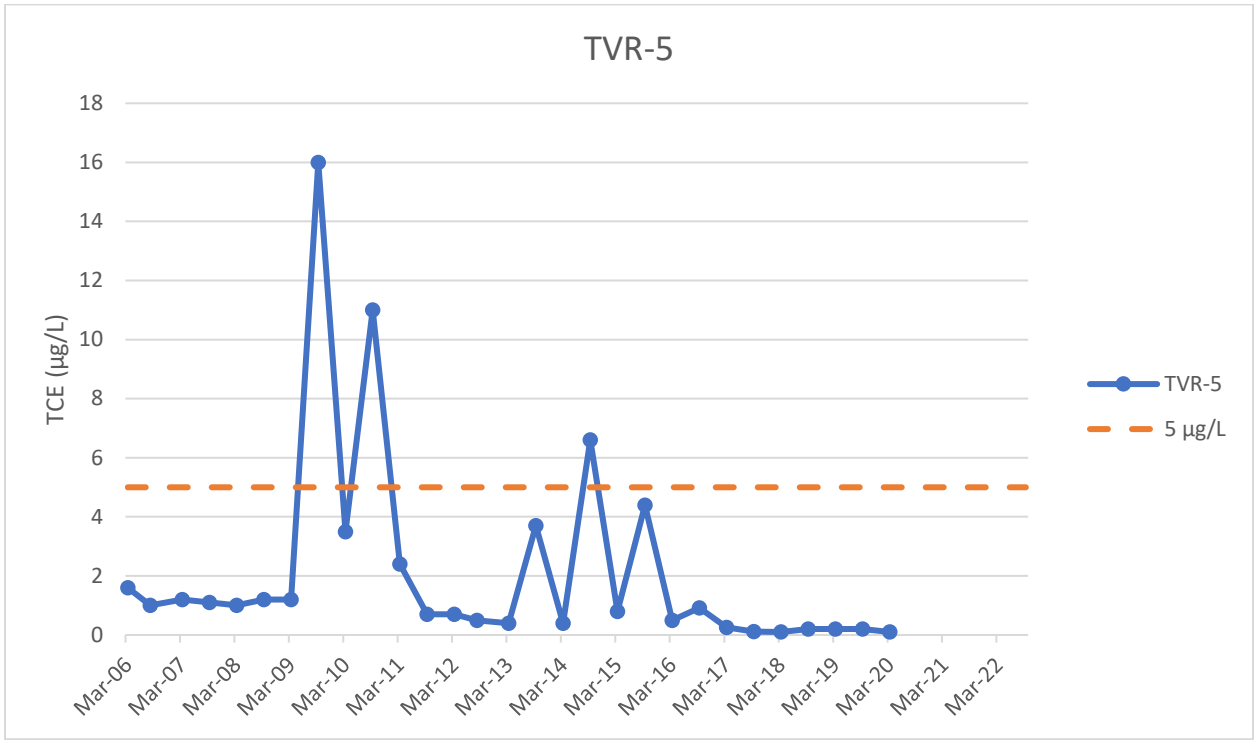
TVR/Old MATES – TCE Concentrations



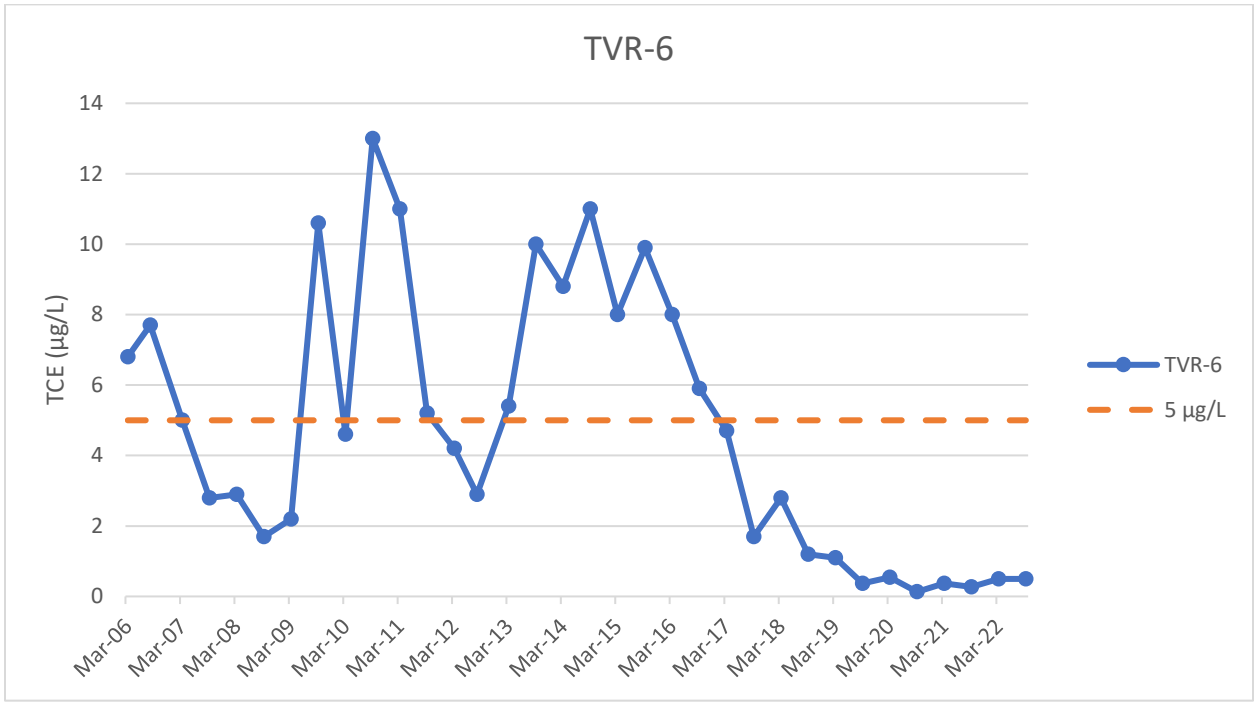


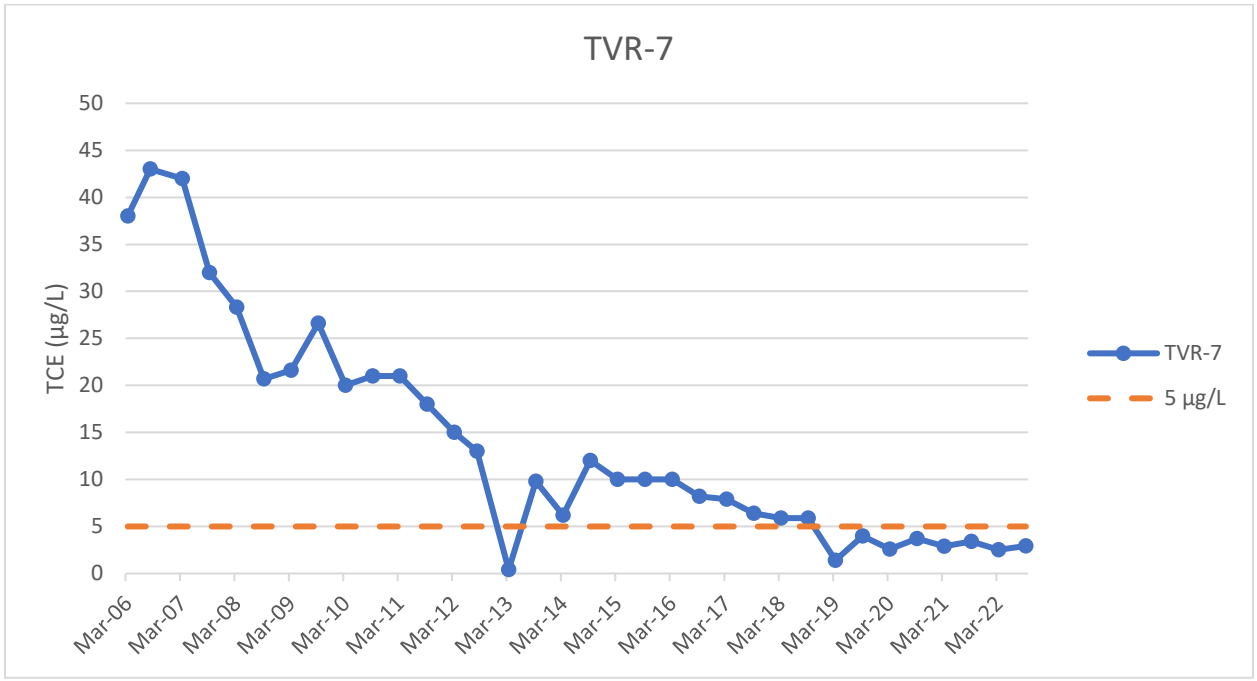
TVR/Old MATES – TCE Concentrations





TVR/Old MATES – TCE Concentrations





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APPENDIX C STATISTICS

ANALYSIS OF DATA

Statistical analysis on data from the Fire Training Pit (FTP) and Tracked Vehicle Repair (TVR)/ Old Mobilization and Training Equipment Site (Old MATES) sites followed guidelines presented in the U.S. Environmental Protection Agency's (EPA's) Methods for Evaluating the Attainment of Cleanup Standards, Volume 2: Ground Water (EPA 1992). Statistical analysis was performed only on data from monitoring wells which consisted of less than half non-detects. This included total petroleum hydrocarbons – gasoline range, total petroleum hydrocarbons – diesel range, and total petroleum hydrocarbons – heavy oil range data for monitoring well FTP-1, as well as trichloroethylene data for the following monitoring wells: 815-2, MTS-1, MTS-2, MTS-4, TVR-1, TVR-2, TVR-3, TVR-5, TVR-6, and TVR-7.

Summary statistics (e.g. mean and standard deviation) were calculated using the Microsoft Excel® Descriptive Statistics tool. The Shapiro-Wilk test for normality, linear regression analysis, and Mann-Kendall test for trend were performed using Analyse-it for Microsoft Excel version 5.01. The Mann-Kendall test was performed only on non-parametric data.

All concentration measurements not known to be in error were considered valid. Suspect "outliers" were not removed from the data set and were included. Non-detect data, which represent concentration measurements below the analytical reporting limits, were evaluated at the reporting limit value.

A. SUMMARY STATISTICS

Summary statistics were calculated using Microsoft Excel®'s Descriptive Statistics tool and are shown in Table 6.

B. SHAPIRO-WILK TEST FOR NORMALITY

Prior to analyzing data for trends, the data were tested for normal distribution. A significance level, or alpha level, of 0.05 was used when determining whether current data from monitoring wells was normally distributed. P values, generated using the Shapiro-Wilk test for normality, were then compared to the alpha level. The alpha level is the "cutoff" point for the test statistic in making a decision whether the data was normally distributed or not. P values show the strength of the test in determining whether the data was normally distributed or not. P values range from 0 to 1; the closer a P value is to 1, the closer the dataset is to a normally distribution. P values equal to or below 0.05 (alpha level) were not considered normally distributed.

Datasets that were not considered normally distributed were then transformed by taking the natural logarithm of the original values. The Shapiro-Wilk test for normality was run on the transformed data with the same criteria as the datasets above. Histograms are presented following this discussion.

C. LINEAR REGRESSION AND MANN-KENDALL TREND ANALYSES

Linear regression trend analyses were conducted on all concentration data that was found to be normally or log-normally distributed. The alpha level for the linear regression analysis was 0.05. P values generated by the analysis were then compared to the alpha level. P values less than the alpha value suggested a trend in the data. Linear regression graphs are presented following this discussion.

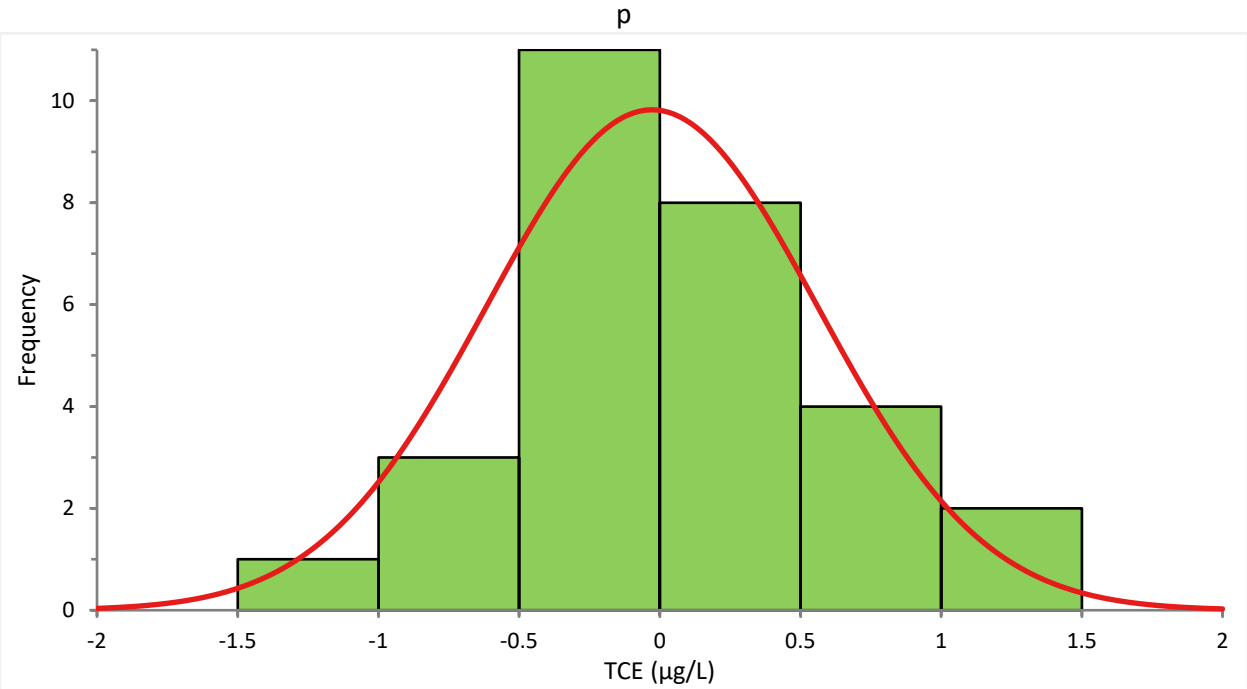
The Mann-Kendall test for trend was performed on data that was not normally or log-normally distributed (non-parametric data). No assumptions need to be made about the distribution of the data in order to perform the Mann-Kendall test (Helsel and Hirsch 2002). The alpha level was kept at 0.05, although the Mann-Kendall test computes a P value for a two-tailed prediction interval, and as such the null hypothesis was rejected for P values smaller than 0.025 or larger than 0.975. Mann-Kendall scatter plots are presented following this discussion.

D. TOTAL TOXIC EQUIVALENT CONCENTRATIONS OF CPAHS

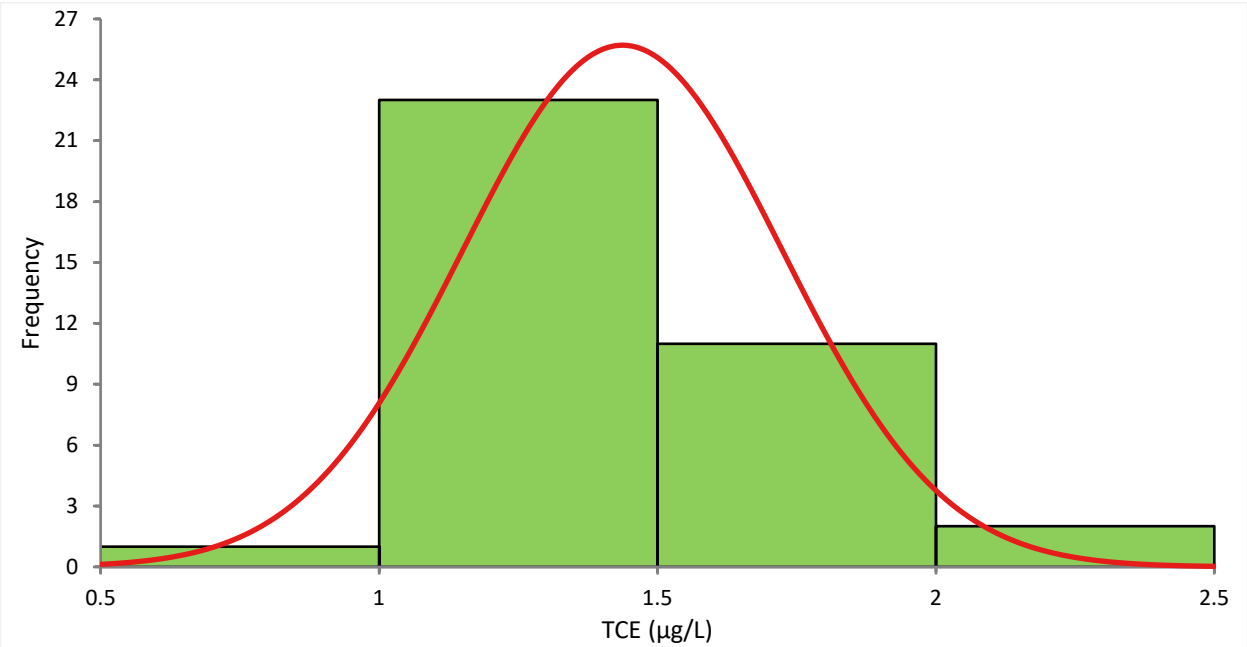
During YTC's 5-year review conducted by the U.S. Army Corps of Engineers in 2011, it was noted that the updated 2007 groundwater monitoring plan stated that total carcinogenic polycyclic aromatic hydrocarbons (cPAHs) for the FTP site would be evaluated using the total toxic equivalent concentration (TEC) of the benzo(a)pyrene method outlined in Washington Administrative Code (WAC) 173-340-708(8)(e) (U.S. Army Corps of Engineers 2012). The cPAHs required for this analysis include benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluroanthene, chrysene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene. The concentration of each of these cPAHs is multiplied by its corresponding toxicity equivalency factor (TEF) listed in Table 708-2 (WAC 173-340-900) to obtain the TEC for that cPAH. The TECs from each cPAH are then added together to obtain the total TEC for that sample. If the total TEC is equal to or greater than 0.1, then the cPAHs are above the MTCA Method A cleanup level of 0.1 µg/L for cPAHs. During both the spring and fall 2022 sampling events, the specified cPAHs were not detected in the primary sample from well FTP-1. However, cPAHs were detected in the duplicate sample collected from this location. Accordingly, a TEC was calculated for the duplicate sample, but not the primary sample (Table 4).

TVR/Old MATES – TCE Histograms

ln(815-2)

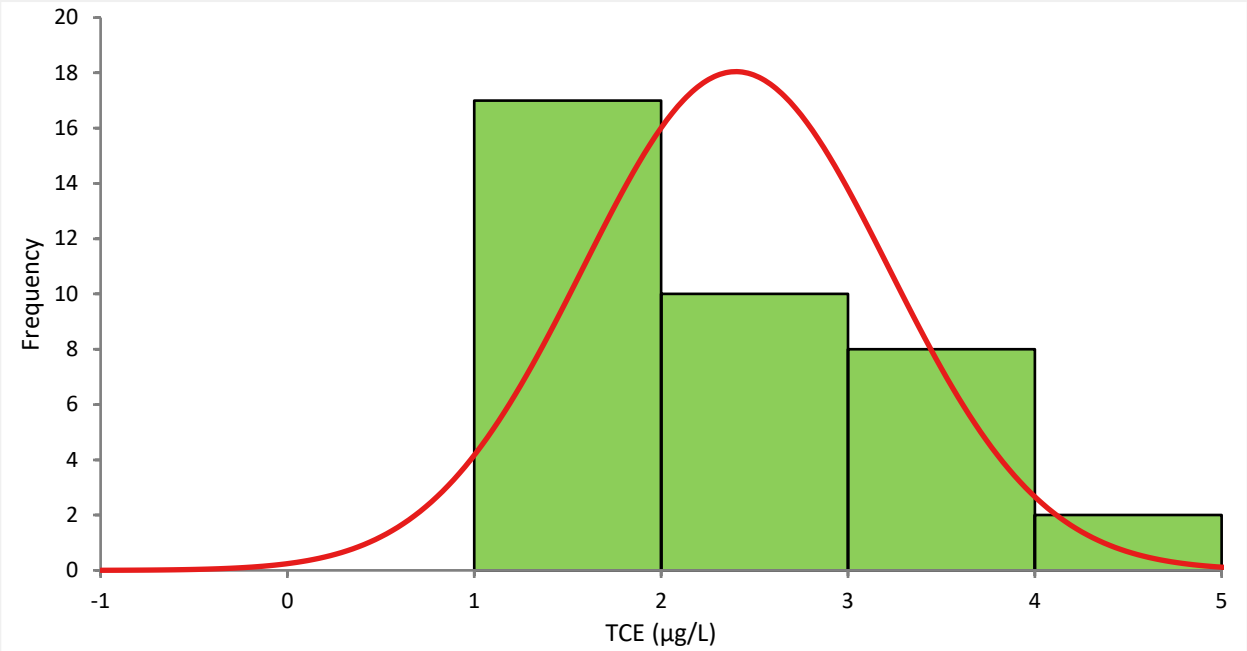


ln(MTS-1)

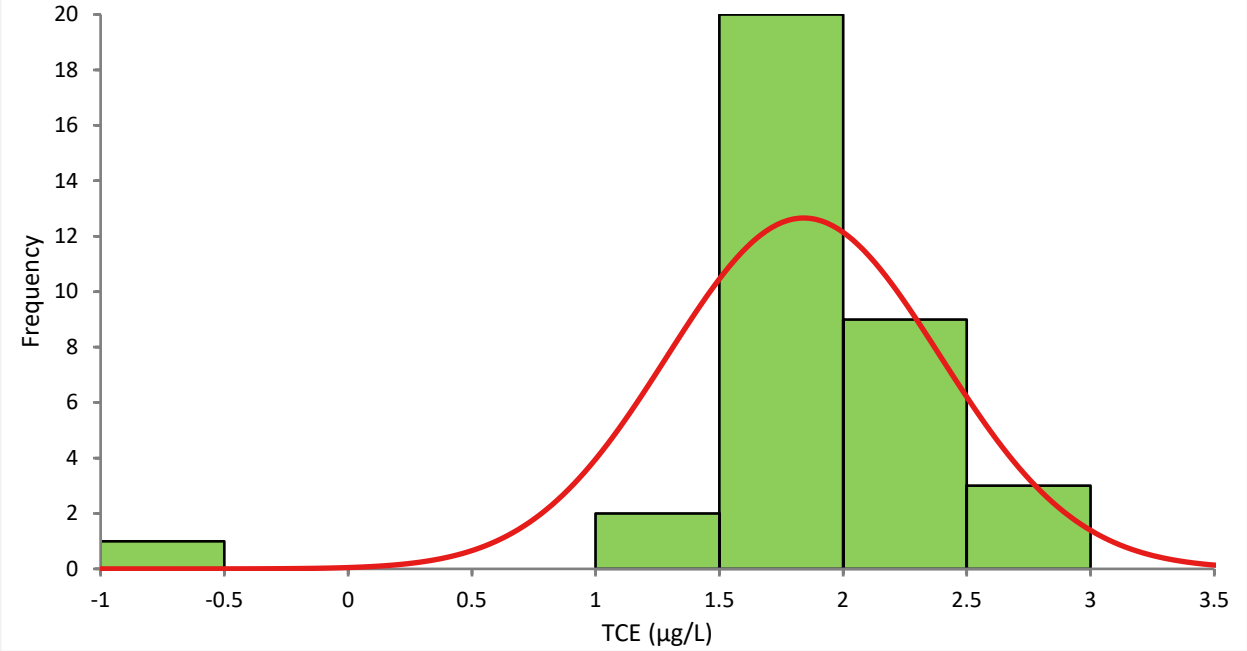


TVR/Old MATES – TCE Histograms

ln(MTS-2)

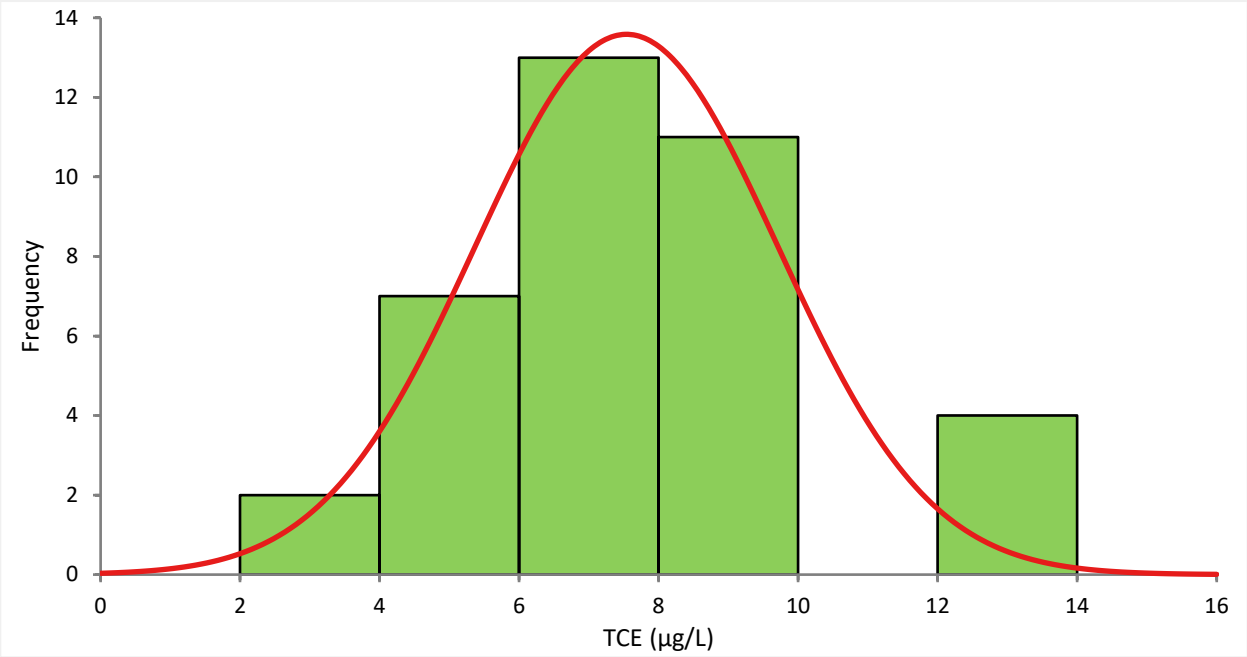


ln(MTS-4)

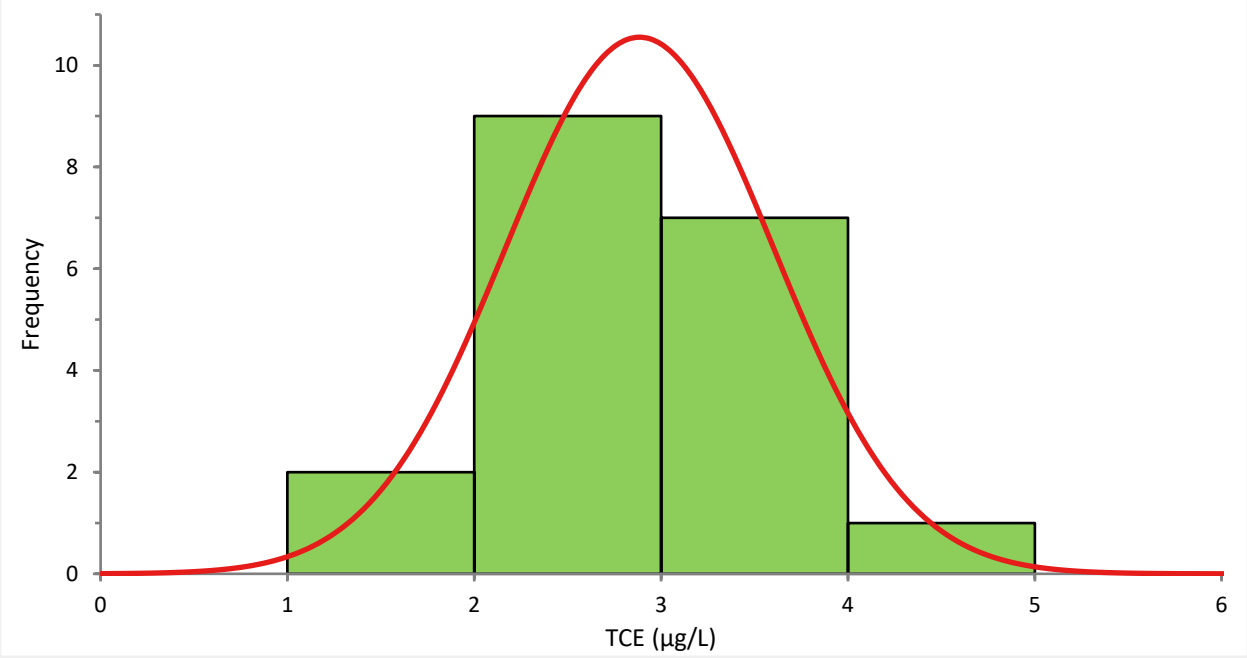


TVR/Old MATES – TCE Histograms

TVR-1

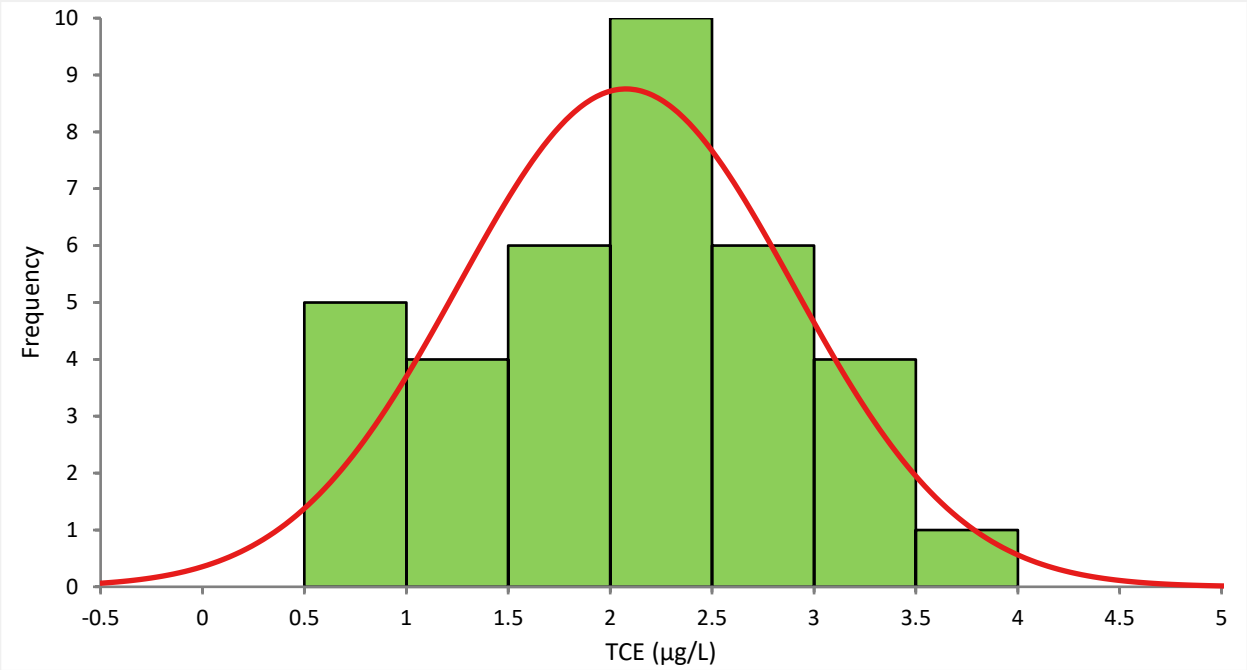


TVR-2

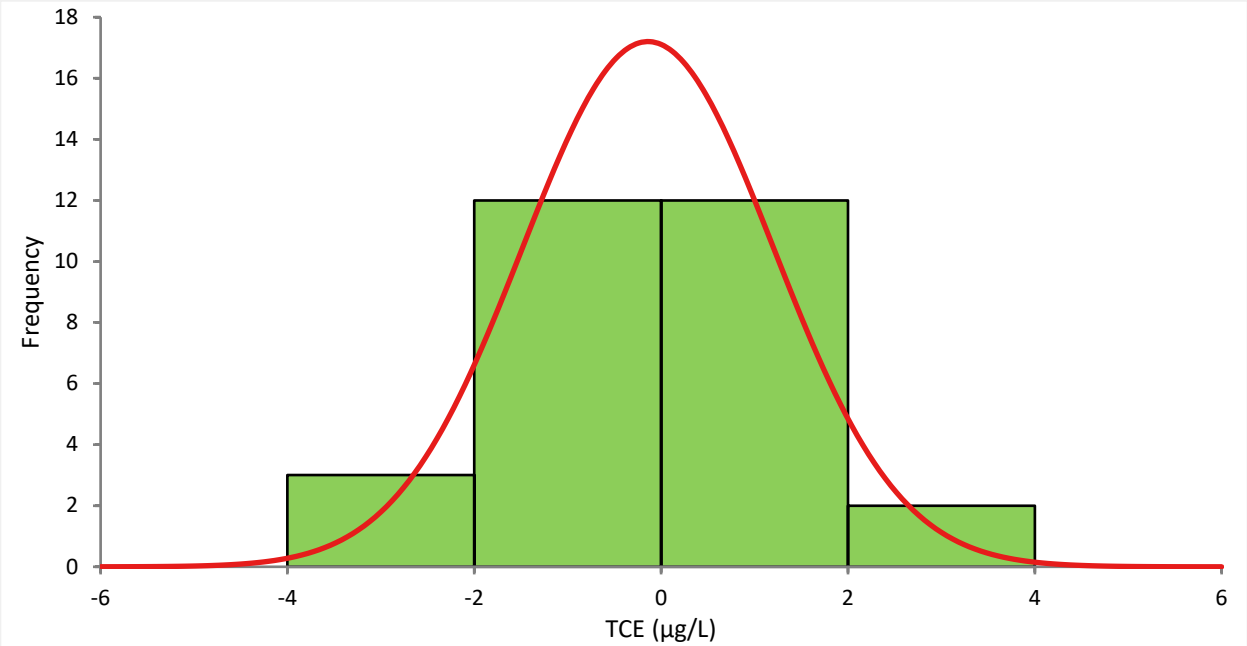


TVR/Old MATES – TCE Histograms

ln(TVR-3)

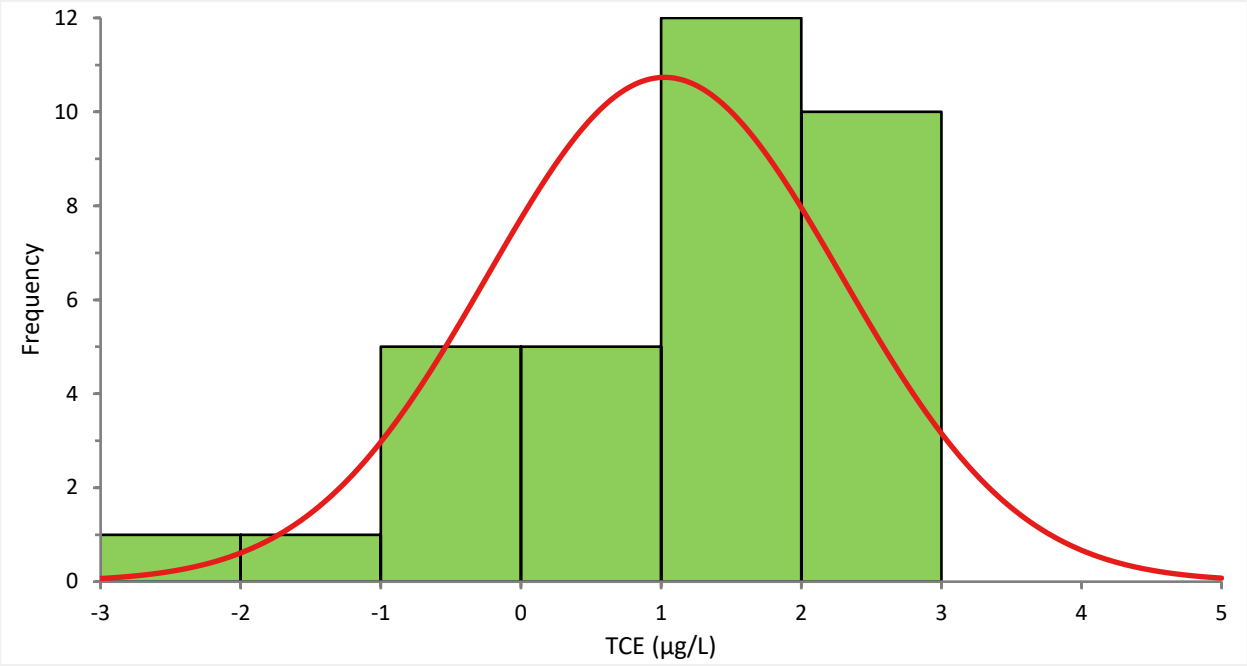


ln(TVR-5)

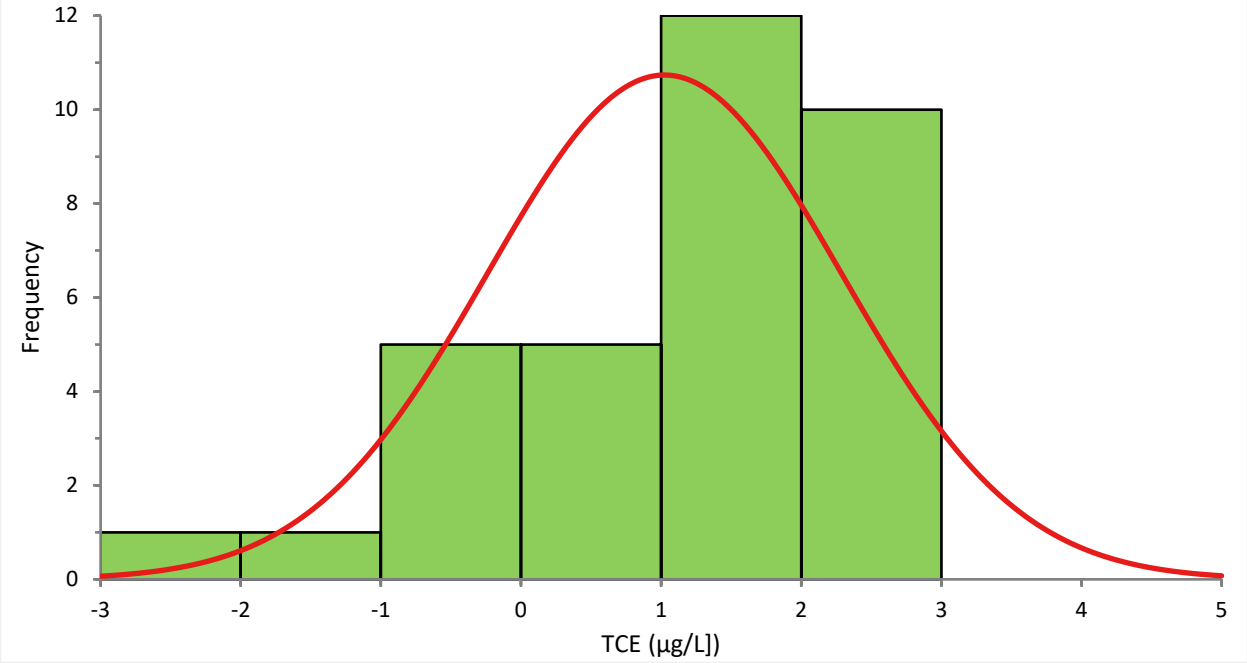


TVR/Old MATES – TCE Histograms

ln(TVR-6)

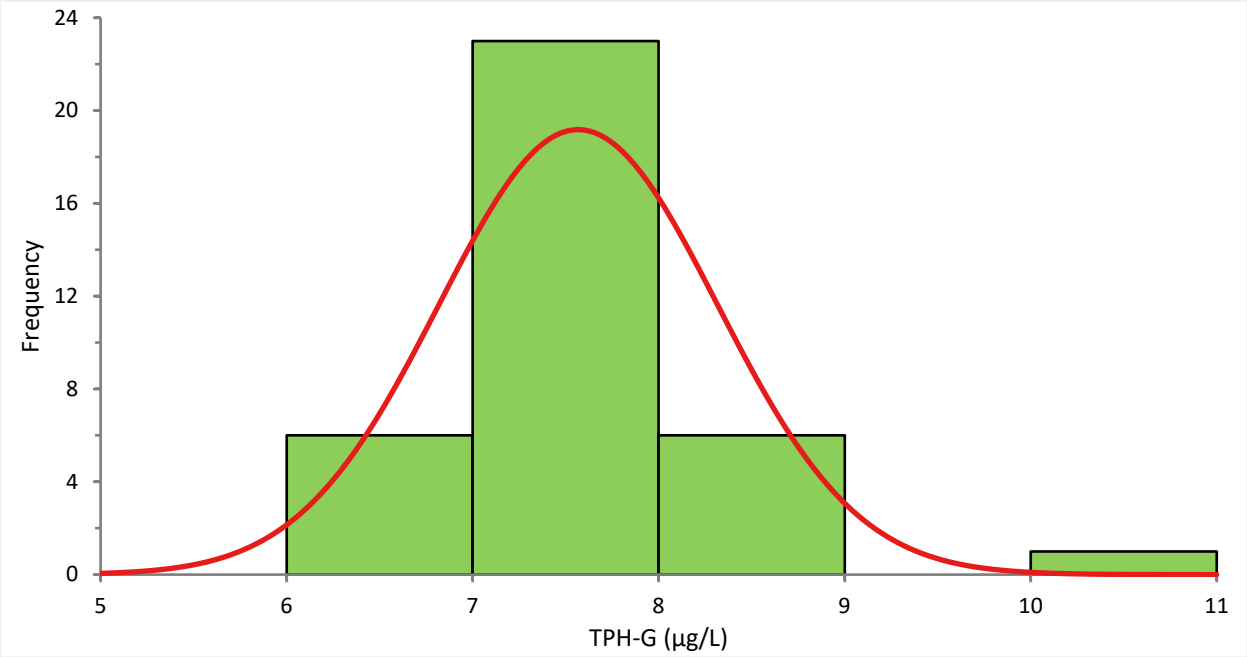


ln(TVR-7)

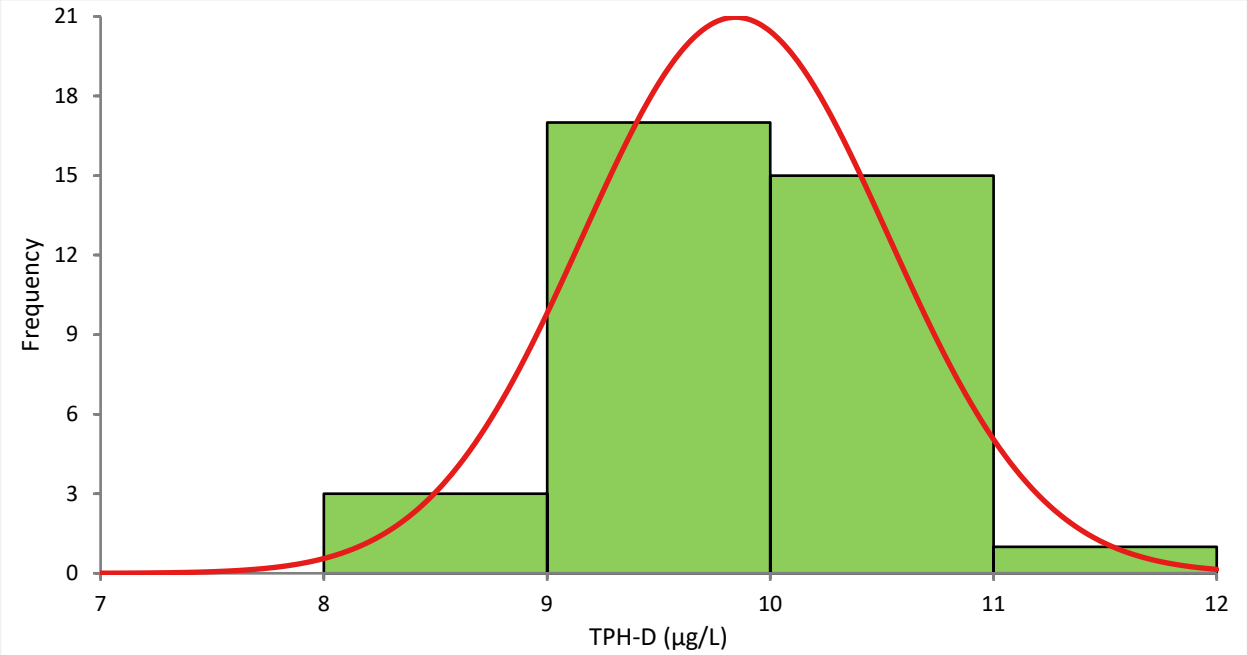


Fire Training Pit – TPH Histograms

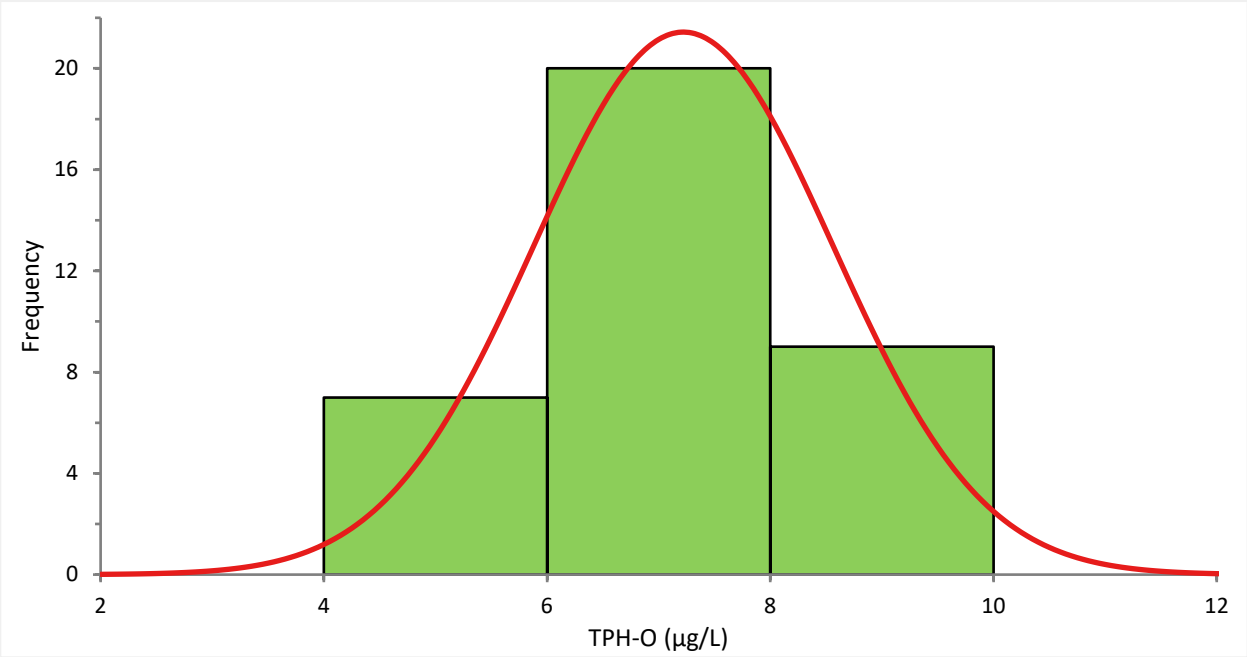
ln(FTP-1) – TPH-G



ln(FTP-1) – TPH-D

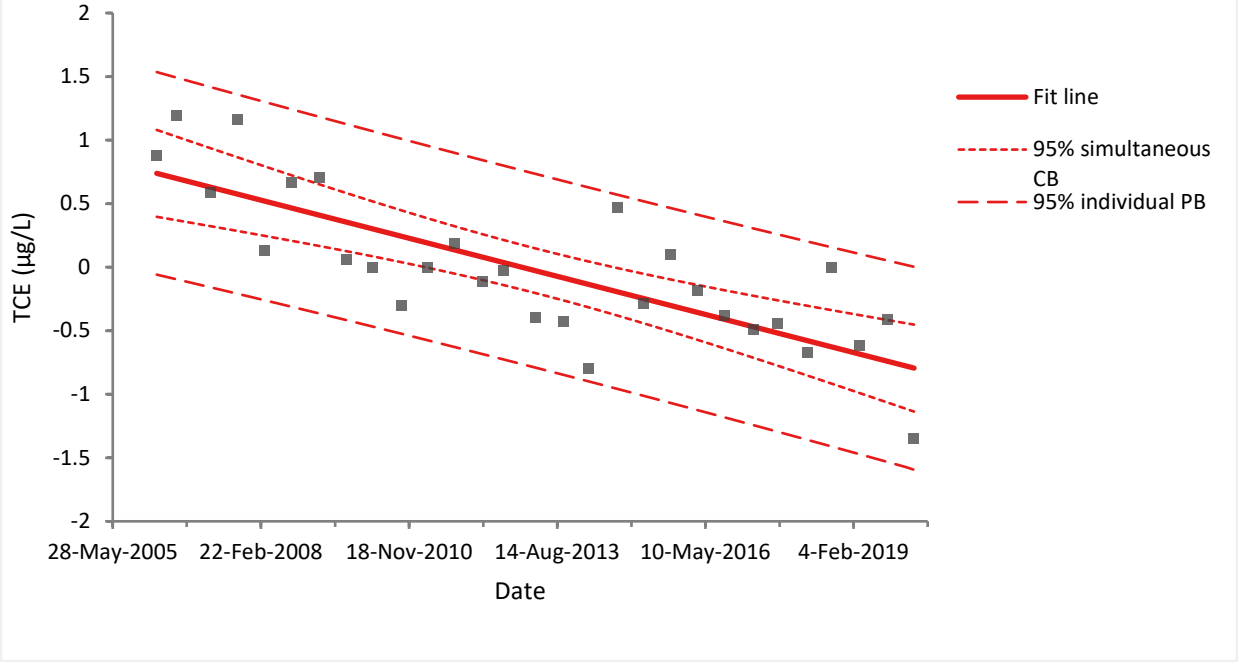


Fire Training Pit – TPH Histograms

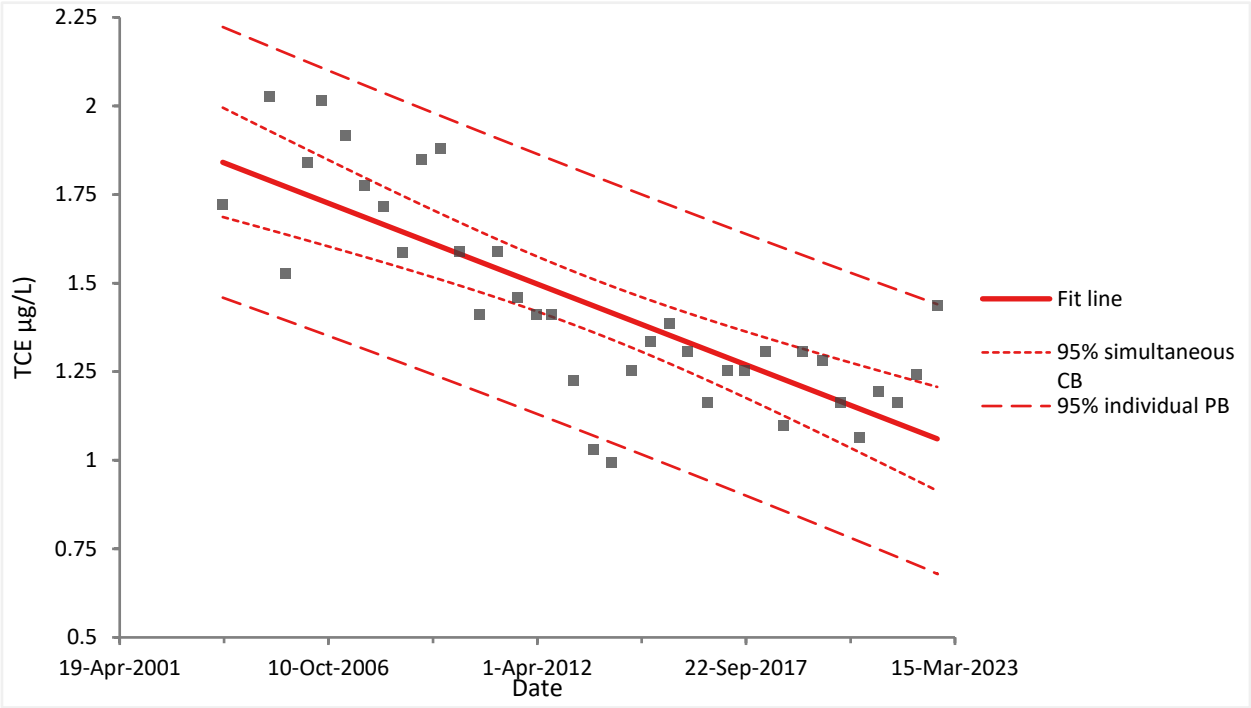


TVR/Old MATES – TCE Linear Regressions

ln(815-2)

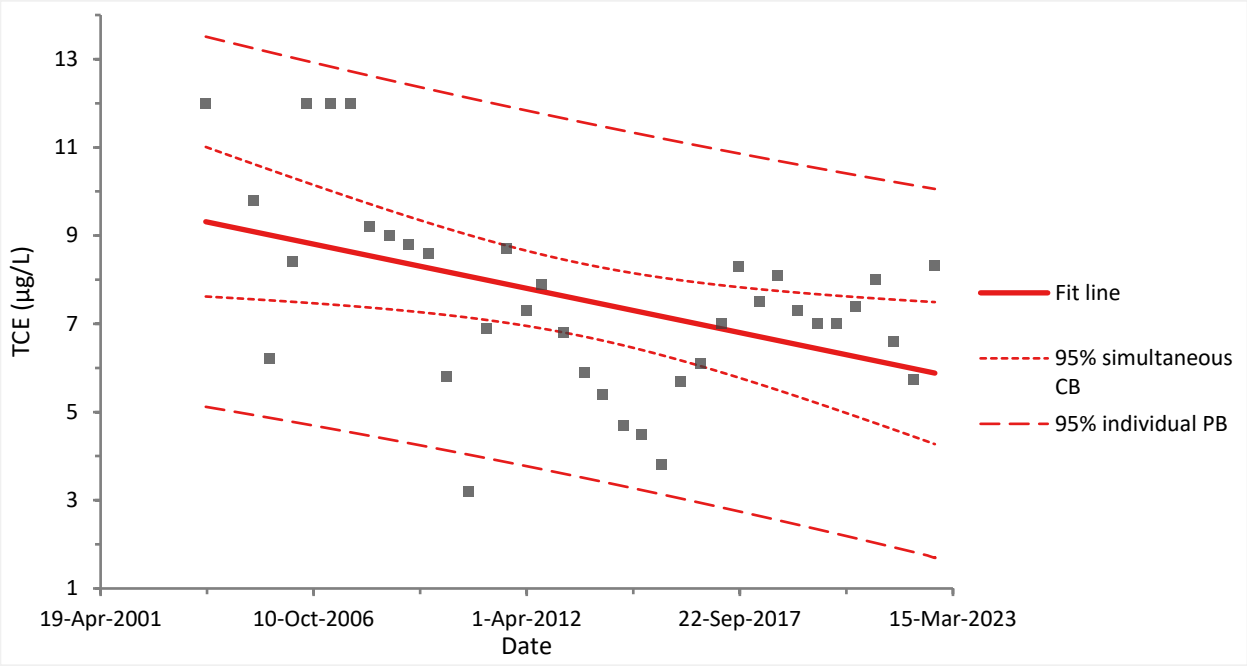


ln(MTS-1)

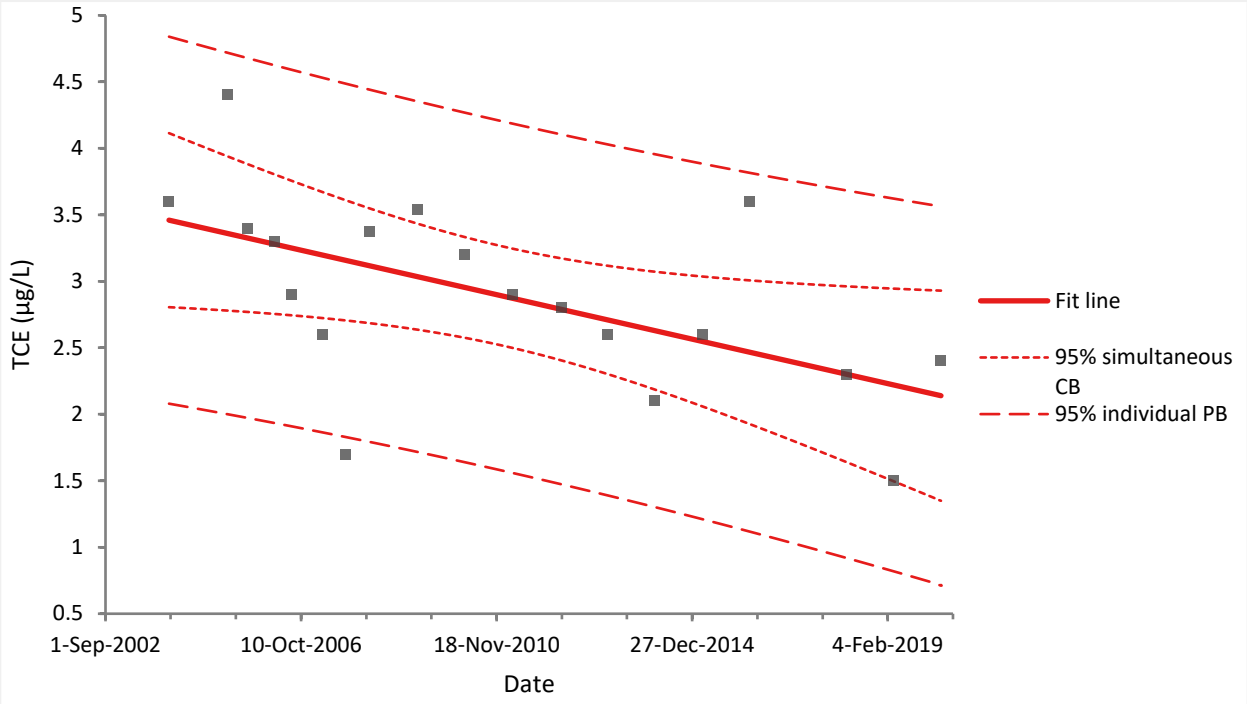


TVR/Old MATES – TCE Linear Regressions

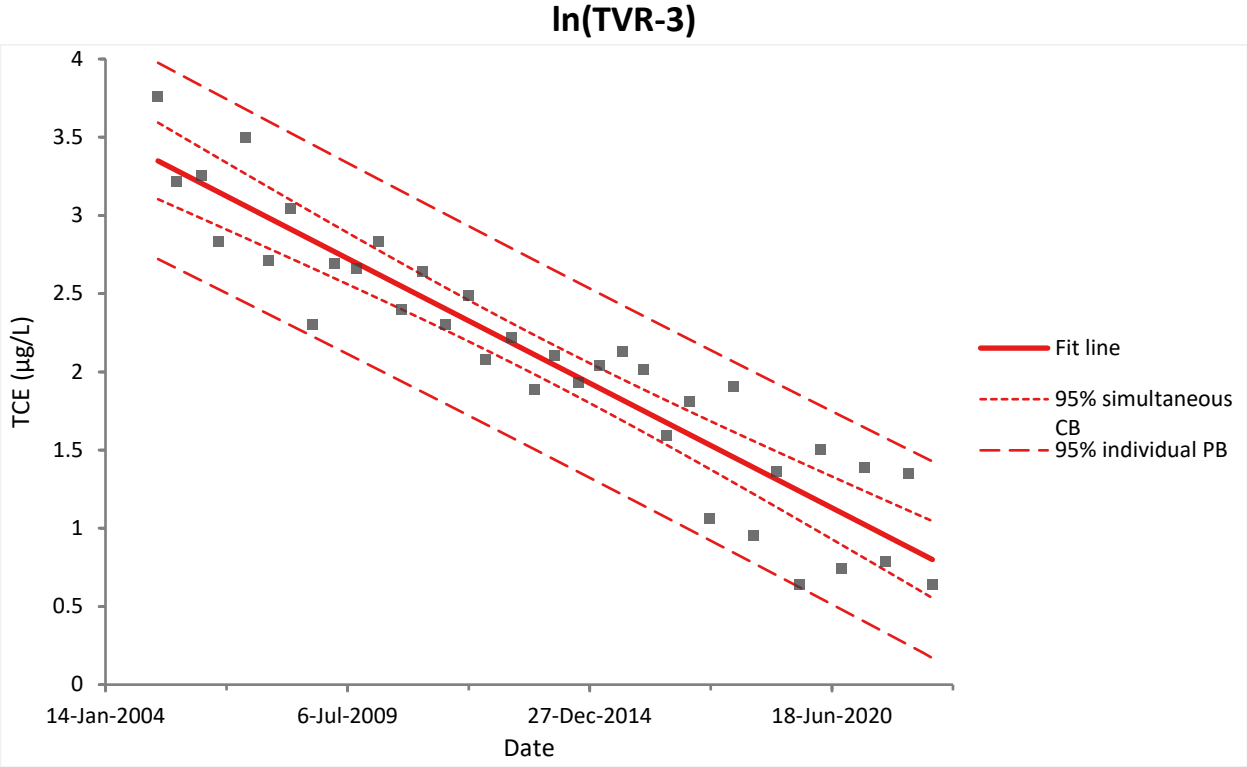
TVR-1

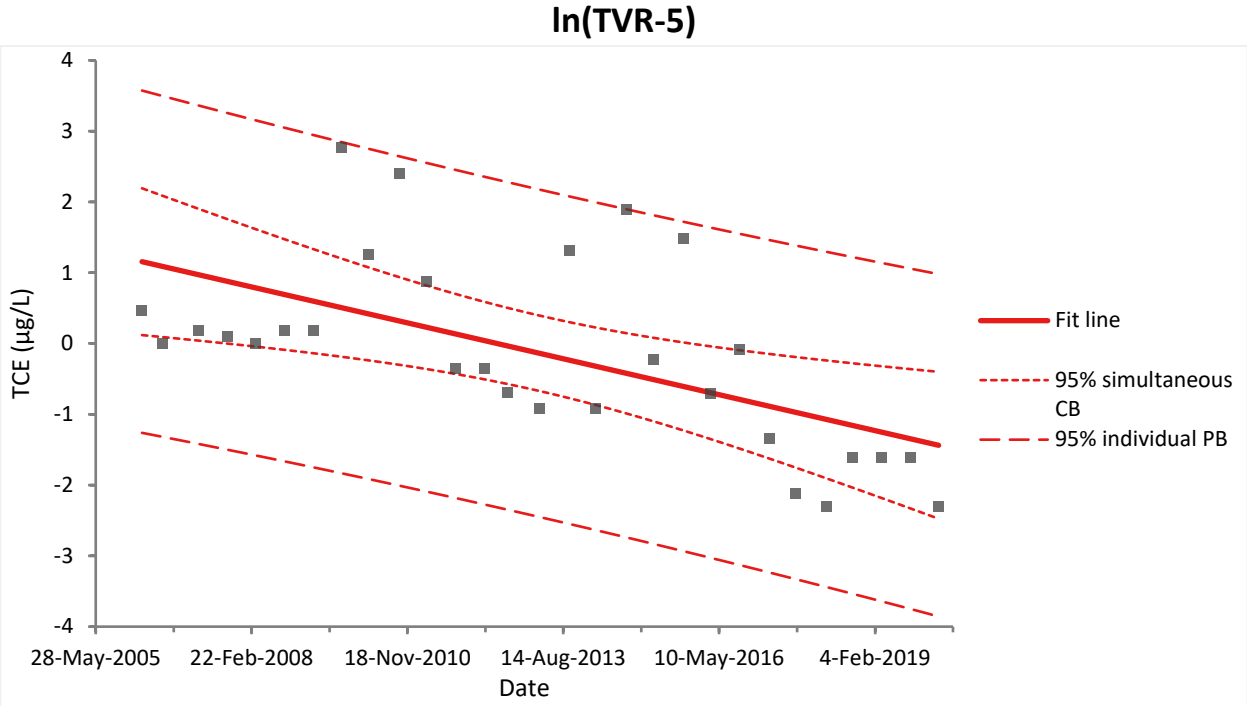


TVR-2

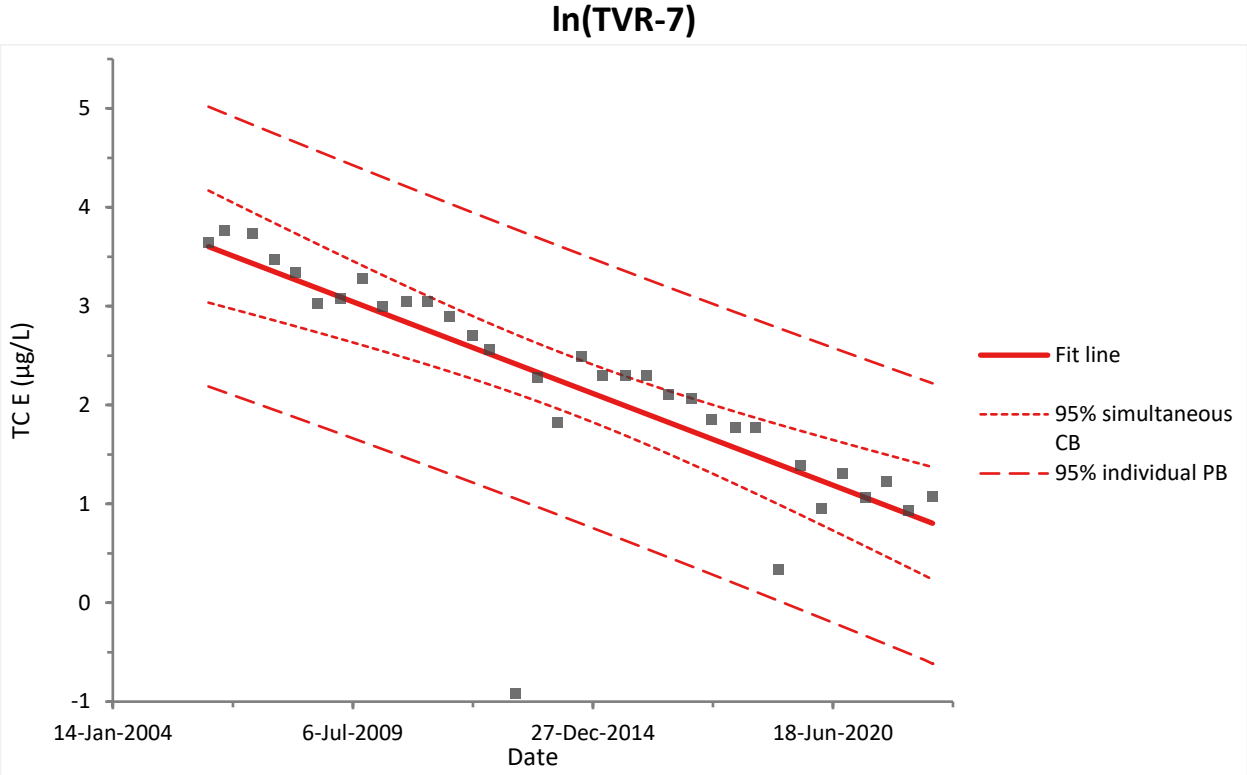


TVR/Old MATES – TCE Linear Regressions

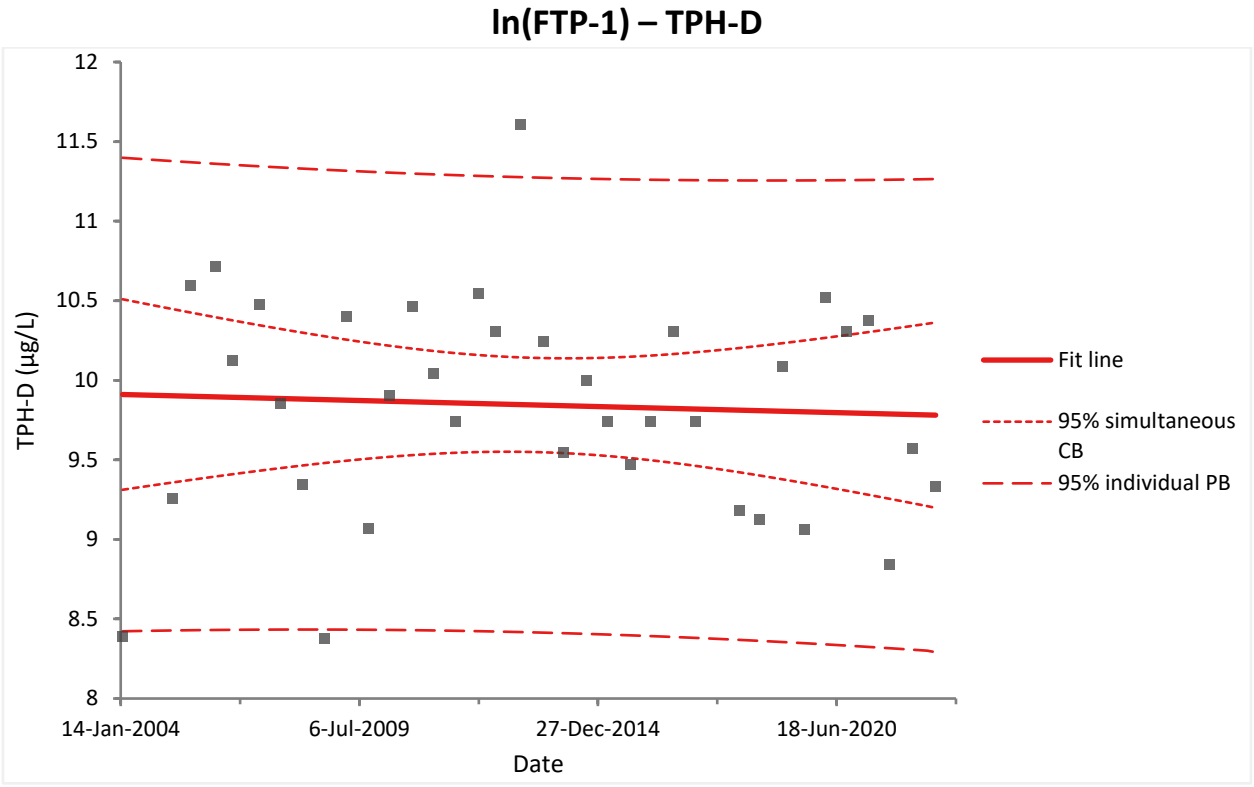


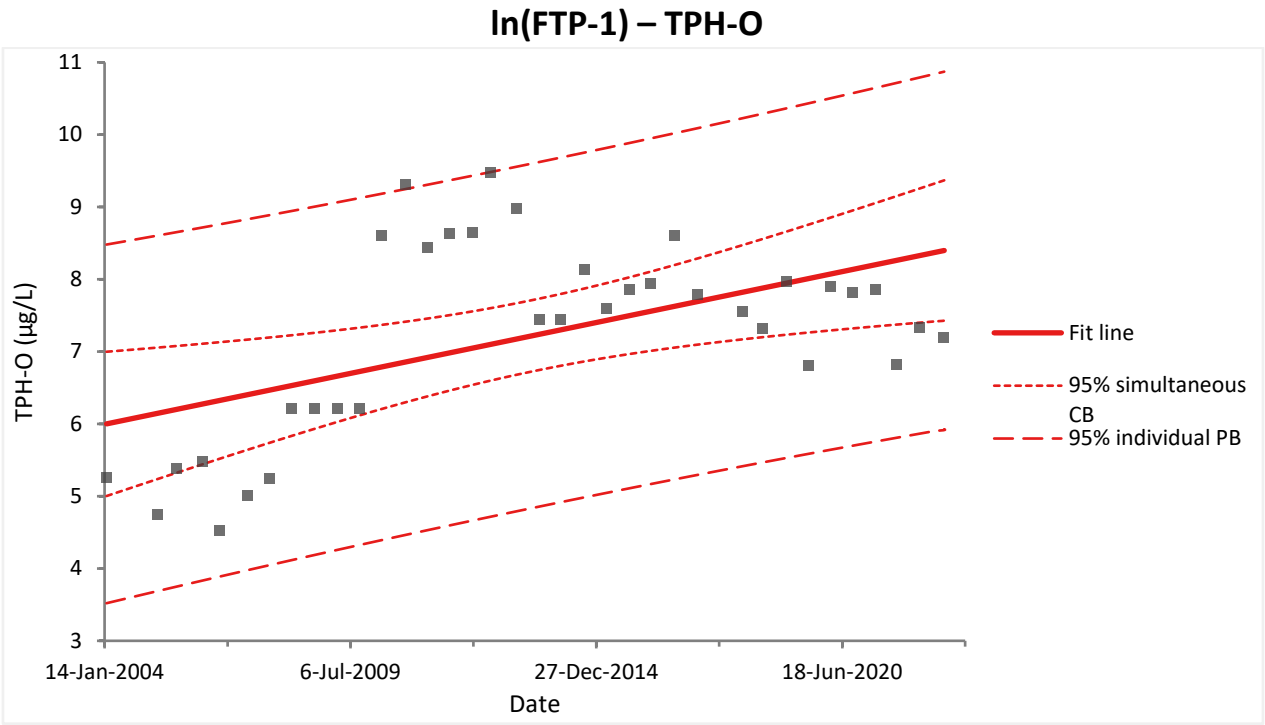


TVR/Old MATES – TCE Linear Regressions

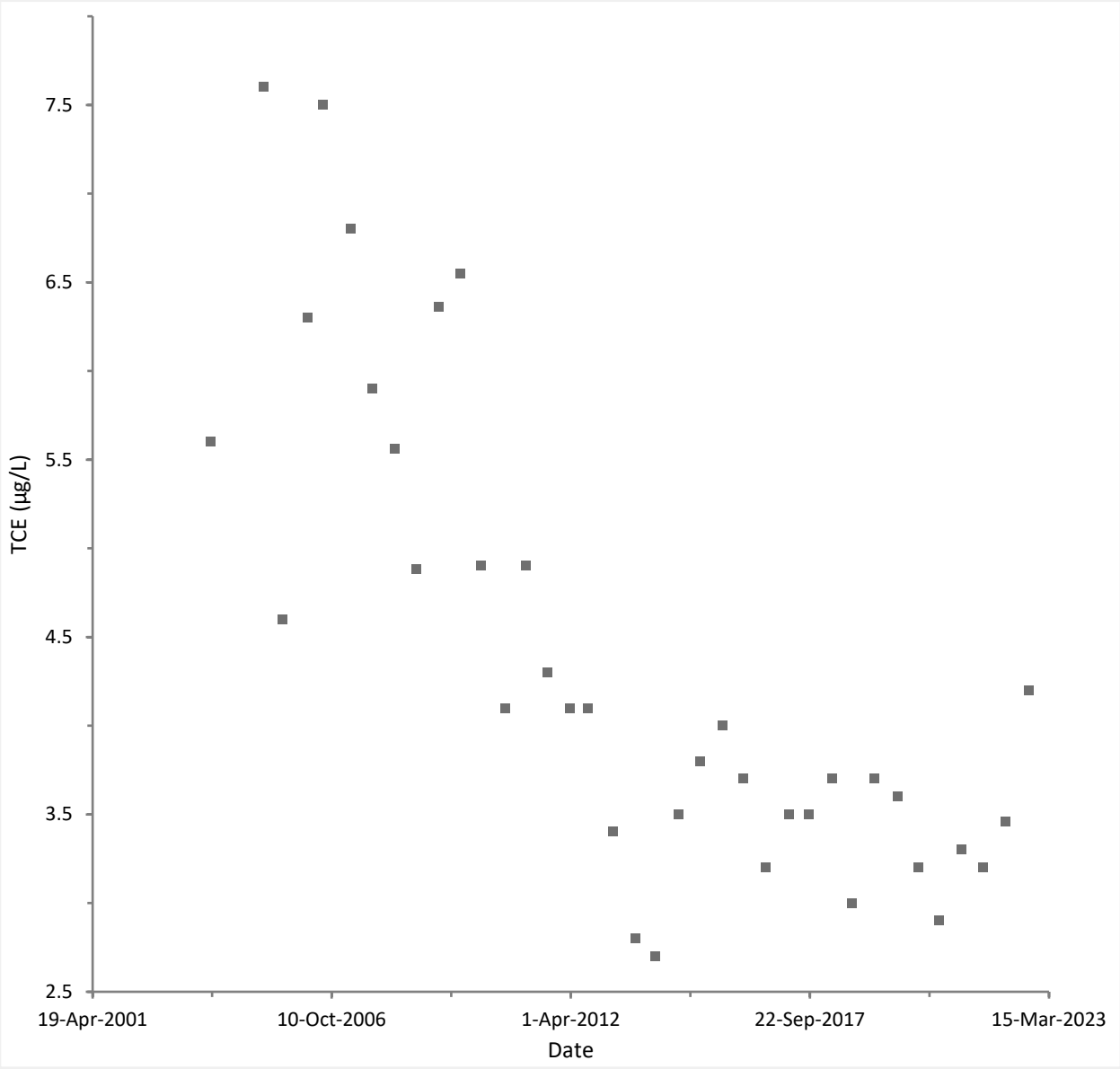


Fire Training Pit – TPH Linear Regressions

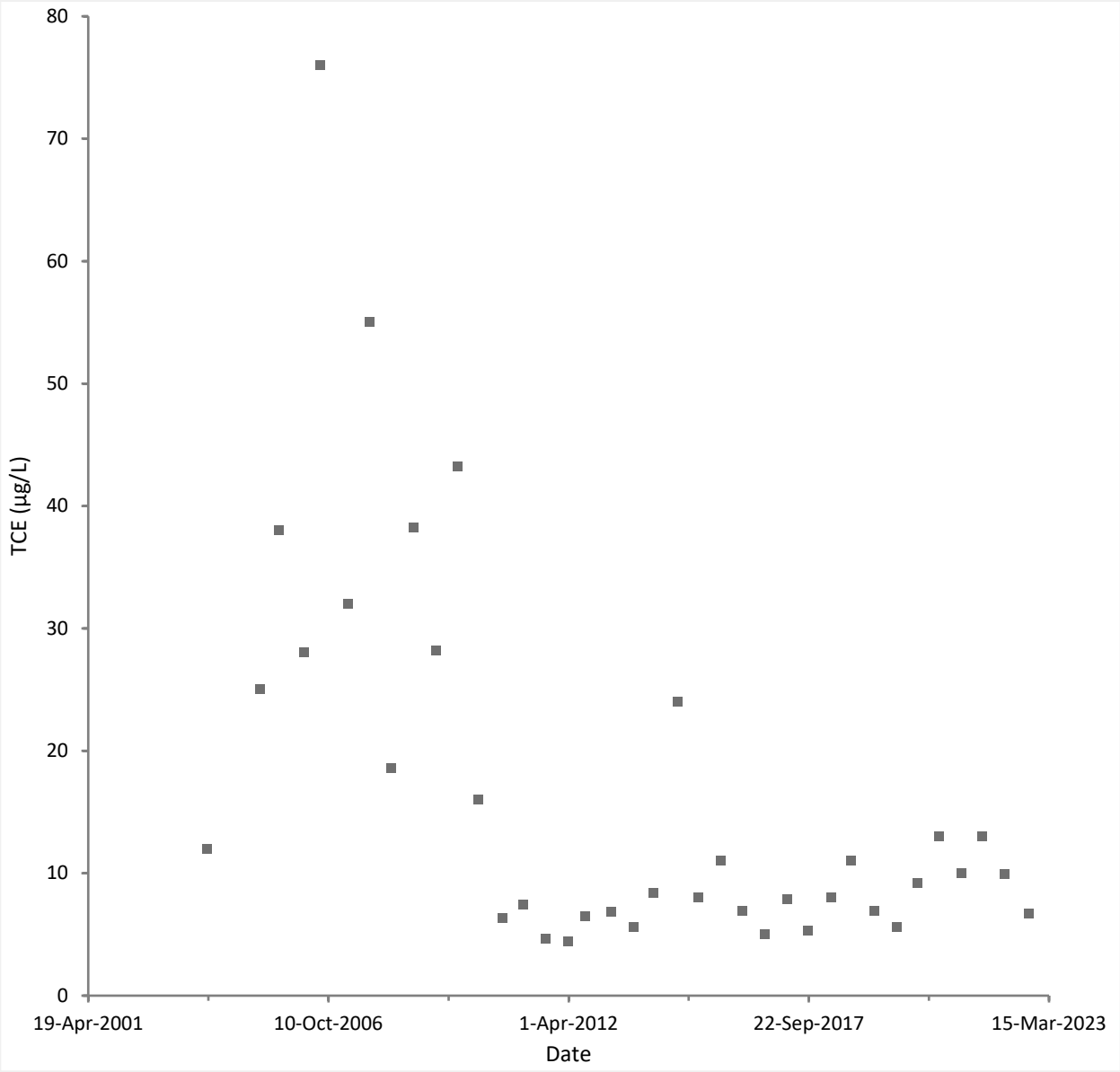




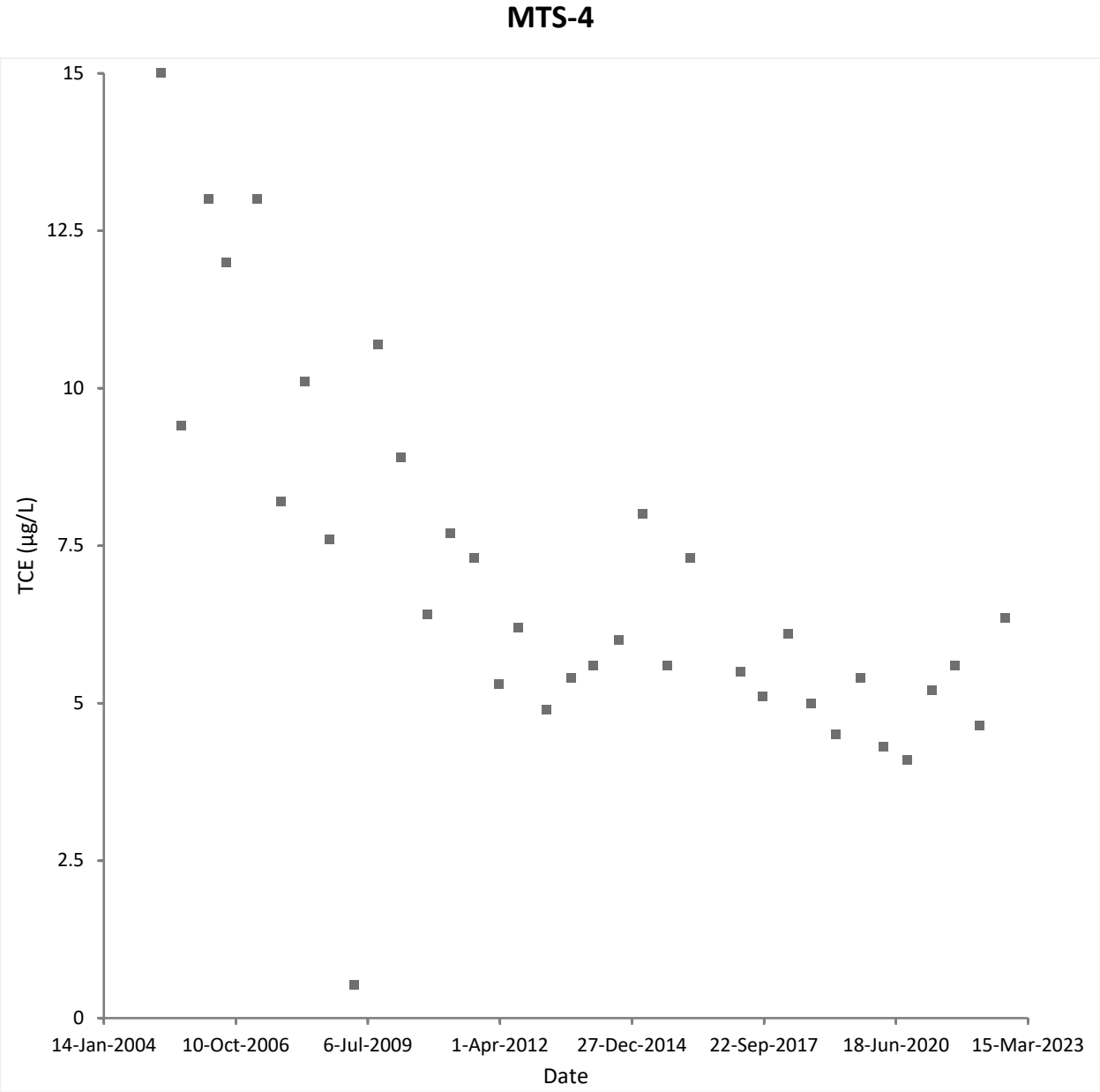
TVR/Old MATES – TCE Mann-Kendall Scatterplots



TVR/Old MATES – TCE Mann-Kendall Scatterplots

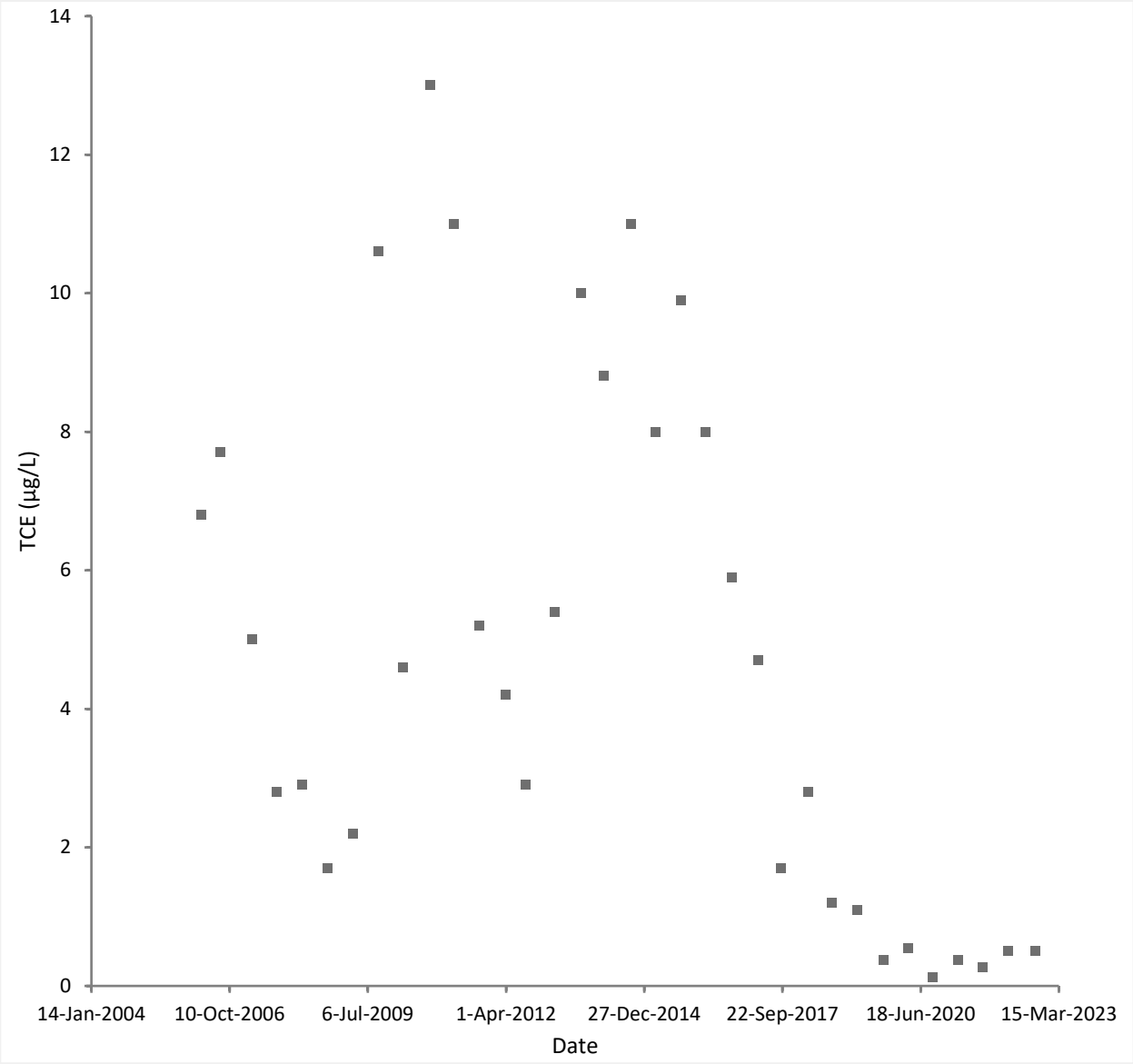


TVR/Old MATES – TCE Mann-Kendall Scatterplots

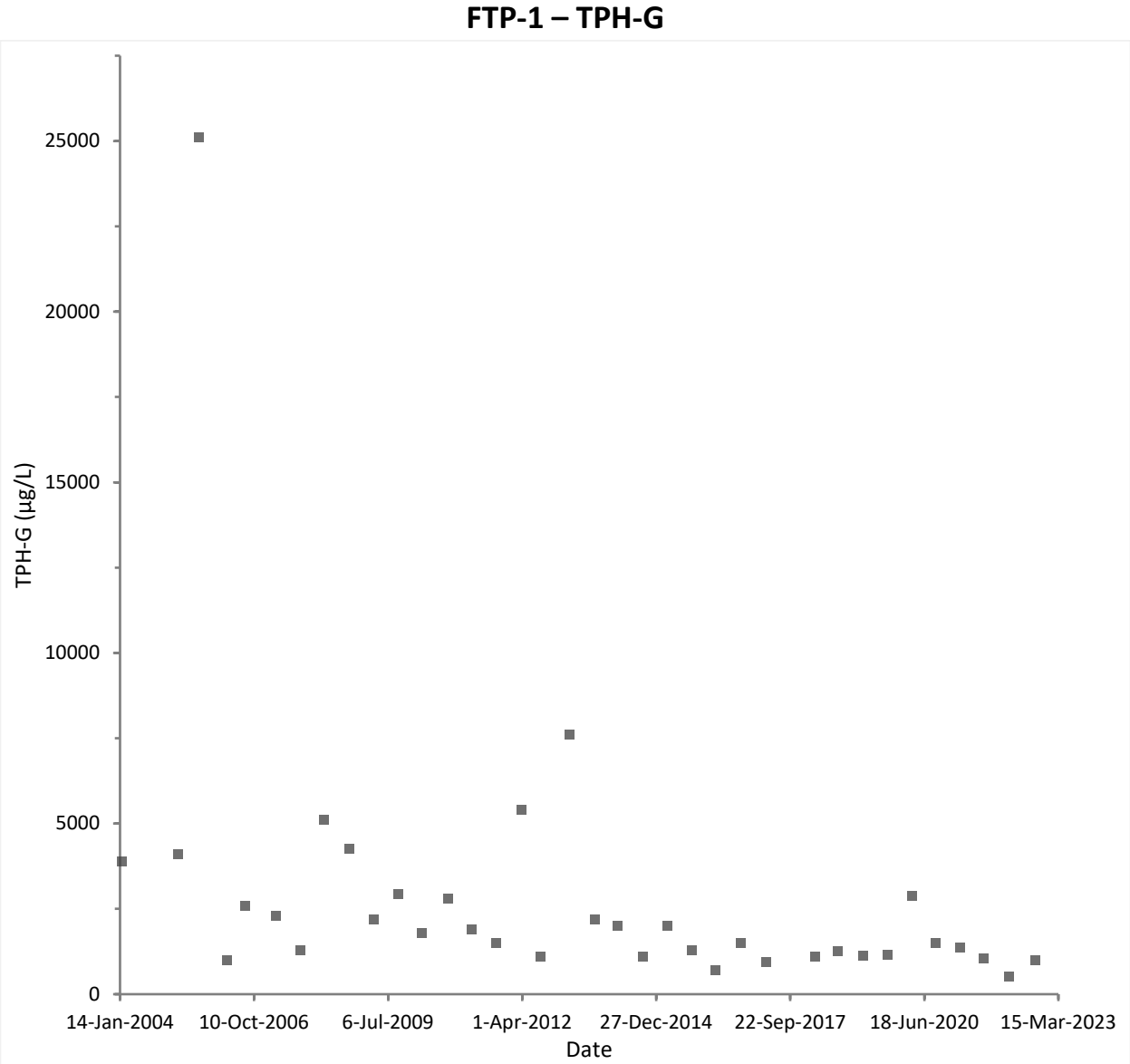


TVR/Old MATES – TCE Mann-Kendall Scatterplots

TVR-6



Fire Training Pit – TPH Mann-Kendall Scatterplots



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