FINAL

Report
Long-Term Management
Kalakaket Creek Radio Relay Station
Sites LF002 and OT001

May 2026

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PACAF Regional Support Center

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TITLE AND APPROVAL PAGE

2025 Long-Term Management Report
Kalakaket Creek Radio Relay Station
Sites LF002 and OT001
USACE Contract W911KB20D0002, Task Order W911KB20F0135

Kalakaket, Alaska

Prepared for:

Air Force Civil Engineer Center
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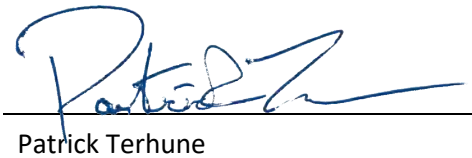

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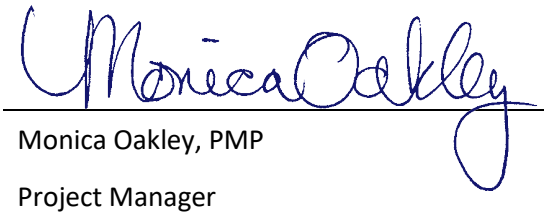

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ACRONYMS AND ABBREVIATIONS

AAC	Alaska Administrative Code
ADEC	Alaska Department of Environmental Conservation
AWH	Airstrip Warehouse
Brice	Brice Engineering, LLC
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CES	Civil Engineer Squadron
COC	contaminant of concern
DD	Decision Document
DRO	diesel range organics
DS2	Drum Storage Area 2
DS3	Drum Storage Area 3
ESD	Explanation of Significant Differences
FD	field duplicate
GAC	granular activated carbon
GRO	gasoline range organics
IC	institutional control
LF1	Landfill 1
LF2	Landfill 2
LTM	long-term management
LUC	land use control
MS	matrix spike
MSD	matrix spike duplicate
ND	non-detect
ORC	Optimized Remediation Contract
PACAF	Pacific Air Forces
PAH	polycyclic aromatic hydrocarbon
PCB	polychlorinated biphenyl
PMP	Project Management Professional
POL	petroleum, oil, and lubricants
PT1	POL Tank 1
RDC	remote drum cache
ROD	Record of Decision
RRO	residual range organics
RRS	Radio Relay Station
TB	trip blank
USACE	U.S. Army Corps of Engineers
USAF	U.S. Air Force
VOC	volatile organic compound
WACS	White Alice Communication System
WPH	Water Pump House

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EXECUTIVE SUMMARY

This report presents the long-term management (LTM) activities conducted by Brice Engineering, LLC (Brice) at Sites LF002 and OT001 at Kalakaket Creek Radio Relay Station (RRS). Fieldwork was conducted during two mobilizations. On 22 August 2025, the IC/LUC inspection and groundwater monitoring at LF002, subsite LF1 was completed; however, due to cloud cover and deteriorating weather conditions, the field team could not continue the inspections and demobilized on 23 August 2025. On 24 September 2025, IC/LUC inspections at OT001 and LF002 subsite LF2, and groundwater monitoring at OT001 were completed.

Institutional control (IC)/land use control (LUC) inspections were conducted at Site LF002 subarea Landfill 1 (LF1) and OT001 subarea Petroleum, Oil, and Lubricant (POL) Tank 1 (PT1). At LF002, subarea Landfill 2 (LF2) the area was heavily vegetated and the field team was unable to access the site to complete the inspection.

Site LF002, subarea LF1, was heavily vegetated. No discolored vegetation, disturbance of the landfill cap, or trespassing was observed. Buried vehicles and other metal debris were observed exposed at the eastern edge of the site, indicating that erosion of the cap is occurring and the remedy is not functioning as intended. One groundwater sample was collected from monitoring well LF1SB07MW and analyzed for gasoline range organics (GRO), diesel range organics (DRO), residual range organics (RRO), volatile organic compounds (VOCs), and polycyclic aromatic hydrocarbons (PAHs). All analytical results were either non-detect or less than the Alaska Department of Environmental Conservation (ADEC) Table C cleanup level. Monitoring wells LF1SB01MW, LF1SB03MW, and LF1SB05MW were either dry or did not contain enough water to sample; therefore, no samples were collected.

Since 2011, the groundwater analytical results have been either non-detect or less than cleanup levels for all events with exception to the analytical result for RRO collected from monitoring well LF1SB07MW in 2020. The result was just above the cleanup level; however, the duplicate result was less than the cleanup level. This well does not have any other historical exceedances, and in 2025 the results were less than the cleanup level.

At subarea LF1, it is recommended that groundwater monitoring be discontinued. It is also recommended that IC/LUC inspections continue every 5 years, and the landfill cap be repaired by covering, grading, and reseeding areas where exposed debris has been observed.

At subarea LF2, the area was heavily vegetated and the field team was unable to land, so an on-ground inspection was not performed. In June and July 2025, fieldwork was performed under a separate contract (USAF 2026). The visual assessment from that project noted that the area was partially vegetated with alders and grass, a bare area in the center of the landfill boundary, and standing water was observed in the middle of the landfill. A geophysical survey was conducted to assess the extent and cover depth of LF2. Based on the survey, the thickness of the cap was estimated to measure 0 to 2.5 feet thick and approximately 0.5 cubic yards of exposed debris was observed (USAF 2026). It is recommended that IC/LUC inspections continue every 5 years, and the landfill cap is recommended for repair by covering, grading, and reseeding areas where exposed debris has been observed. It is also recommended that the field team inspecting the site bring equipment in order to perform vegetative clearing if an immediate area for landing/access is not available as well as assess the condition of the historical road from the Clean Sweep Landfill via helicopter to determine if there is a landing area or location further south from the site.

At Site OT001, subarea PT1 two IC/LUC signs were present along the airstrip and in good condition. The area is heavily vegetated, and no evidence of erosion, discolored vegetation, ponded water, disturbance, or trespassing was observed. The oil stain observed in 2014 and 2015 and the ponded water with sheen

observed in 2020 was not found. Groundwater samples were collected from monitoring wells PT1SB01, PT1SB04, and PT1SB09 and analyzed for DRO, RRO, VOCs, and PAHs. At PT1SB09, the results for DRO, naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene were greater than the cleanup levels. All other results were either non-detect or less than the ADEC cleanup level.

At OT001, subarea PT1, it is recommended that IC/LUC inspections and groundwater monitoring continue every 5 years. It is also recommended that wells currently in the monitoring program (PT1SB01, PT1SB04, PT1SB05, PT1SB09, PT1SB15) and historical wells, if located, be surveyed and labelled using a permanent method.

At OT001, subareas AWH, DS2, DS3, RDC, WPH, and the Upper Camp Area were recommended for site closure during the 2009 Clean Sweep (USAF 2010b). IC/LUC inspections are not required for these subareas; however, they were erroneously included in the Work Plan (USAF 2025) and inspected during the field event. Visual inspections were performed at subareas AWH, DS2, and the Upper Camp Area, which were observed to be heavily vegetated. There was no evidence of erosion, discolored vegetation, ponded water, disturbance, or trespassing. Signs of moose, bear, fox, and birds were observed. Subareas DS3, RDC, and WPH were heavily vegetated and could not be accessed on foot by the field team; the sites were photographed from the helicopter, but no visual inspections were performed. It is recommended that future IC/LUC inspections at OT001 are limited to subarea PT1, and the subareas recommended for site closure (AWH, DS2, DS3, RDC, WPH, and the Upper Camp Area) are not inspected.

1.0 INTRODUCTION

This report presents the 2025 long-term management (LTM) activities conducted by Brice Engineering, LLC for Sites LF002 and OT001 at the Kalakaket Creek Radio Relay Station (RRS) under the 611 Civil Engineer Squadron (CES) North Group Optimized Remediation Contract (ORC), U.S. Army Corps of Engineers (USACE), Alaska District, Contract W911KB20D0002, Task Order W911KB20F0135. This work was performed during two mobilizations on 22 August 2025 and 24 September 2025.

1.1 Purpose and Project Objectives

The purpose of this project is to conduct IC/LUC inspections, sampling and analyses of groundwater, and sign maintenance, as needed, for the following sites to maintain compliance with U.S. Air Force (USAF) and regulatory requirements for:

- Site LF002– Operational Landfills
- Site OT001 – White Alice Station

The field activities documented in this report were conducted in accordance with the Alaska Department of Environmental Conservation (ADEC) approved Work Plan, *Final Work Plan, Long-Term Management, Kalakaket Radio Relay Station, Site LF002 and Site OT001* (USAF 2025), hereafter referred to as the Work Plan.

1.2 Project Background

The former Kalakaket Creek RRS is located in west central Alaska approximately 22 miles south of Galena, 270 miles west of Fairbanks, and 325 miles north of Anchorage, and occupies 316 acres on a level mountaintop (Figure 1). Initial construction of USAF facilities at Kalakaket Creek occurred in 1957 as one of the 31 original White Alice Communication System (WACS) sites. It operated as a combined tropospheric scatter/TD-2 microwave station which relayed radio information to and from other WACS sites (USAF 1988). Kalakaket RRS maintained radio links with the North River RRS, Bear Creek RRS, Tatalina RRS, and the Galena and Campion Air Stations. In 1973, the RRS was decommissioned and deactivated (USAF 2010a).

The Kalakaket Creek RRS Installation is comprised of the Upper Camp Area, Airstrip Area, and Miscellaneous Area, and two facilities which fall outside of these areas. The Upper Camp Area had equipment and housing for RRS operations such as antennas, generators, dormitories, electronics, bulk fuel storage, and a vehicle maintenance garage. The Airstrip Area comprised of the airstrip and a warehouse building, a fire equipment storage building, a fuel storage tank, and two drum storage areas. The Miscellaneous Area contained a water pump house (WPH) and a remote drum cache (RDC). Along with these facilities, there are two permitted landfills at Kalakaket RRS located at Site LF002.

In 2009, all facilities and structures were demolished (USAF 2010b). Activities included a remedial action, abatement of deactivated buildings and other infrastructure, demolition of buildings and infrastructure, and construction of an onsite landfill for excavated soil, which was designed and closed according to ADEC permit requirements of an inert monofil under 18 Alaska Administrative Code (AAC) 60 (USAF 2010b; ADEC 2023). The remedial action included excavation and source removal remedies of polychlorinated biphenyls (PCBs), diesel range organics (DRO), residual range organics (RRO), volatile organic compounds (VOCs), lead, and petroleum-contaminated soil. Table 1 presents a summary of the current selected remedy for each site.

Table 1 Site Summary

SITE	HAZARD ID	SITE STATUS	REMEDY	COC
Site LF002				
Landfill 1	4676	LTM	ICs/LUCs, groundwater monitoring, visual monitoring and maintenance of cover	GRO, DRO, RRO, VOCs, PAHs,
Landfill 2	4677	LTM	ICs/LUCs, visual monitoring and maintenance of cover	GRO, DRO, RRO, VOCs, PAHs,
Site OT001				
OT001	4669	LTM	ICs/LUCs, groundwater monitoring, excavation of PCB-contaminated soil	DRO, RRO, VOCs, PAHs, PCBs

Notes:
For definitions, refer to the Acronyms and Abbreviations section.

1.3 Site LF002 Description

Site LF002 is composed of two subareas, each consisting of a closed landfill which was authorized under ADEC Solid Waste Permit 8631-BA008. Landfill 1 (LF1) is located to the north of the east end of the airstrip while Landfill 2 (LF2) is located north of the RRS (Figure 2). LF1 (ADEC Hazard ID 4676) and LF2 (ADEC Hazard ID 4677) were constructed in 1984 and used once as a part of the RRS deactivation cleanup work.

During the 2007 Site Investigation/Remedial Investigation, subsurface soil and groundwater samples were collected from the landfill perimeters and analyzed for DRO, RRO, VOCs, semi-volatile organic compounds, PCBs, pesticides, and metals (USAF 2009a). At LF1, DRO, GRO, and RRO exceeded ADEC soil and groundwater cleanup levels at LF1SB05MW and LF1SB03MW. While petroleum contamination has not been detected at concentrations greater than ADEC cleanup levels in soil or groundwater at LF2, the potential for contamination remains.

In 2010, a combined Final Decision Document (DD) and Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Record of Decision (ROD) was prepared to identify appropriate remedies for Site LF002 (USAF 2010a). The selected remedy for petroleum-contaminated soil at LF002, subarea LF1 was ICs to restrict access and limit exposure to and use of contaminated subsurface soil. ICs were also applied to subarea LF2 to protect against potential future exposure to unknown contamination from the landfill. The selected remedy for petroleum-contaminated groundwater at LF1 was ICs and long-term monitoring. The major components of the selected remedies are:

- Visual monitoring of the top cover at each landfill for signs of settlement, subsidence, erosion or other such events once every 5 years or until ADEC approves discontinuation of visual monitoring.
- Maintaining the integrity of the final top cover of each landfill to limit exposure to landfill contents and subsurface soil.
- Restricting access to and limiting exposure from contaminated soil through ICs.
- Submitting a performance report on ICs every 5 years.
- Conducting LTM at LF1 to monitor petroleum concentrations in groundwater at an initial frequency of annually but may be revised after five years with approval from ADEC.

Since remedy implementation, there have been site inspections and sampling events in 2011, 2012, 2013, 2014, 2015, and 2020 (USAF 2012; 2013; 2014; 2015a; 2015b; 2021). Historically, inclement weather and insufficient groundwater volumes have led to limited groundwater analysis at Site LF002. In 2012 and 2014, all LF1 wells were sampled. In 2020, three wells were sampled.

In 2020, the Second Five-Year Review (USAF 2023) was conducted and made the following recommendations for Site LF002 with implementation status and/or progress noted:

- Repair damaged wells LF1SB01MW and LF1SB05MW
- Install, repair, or replace signs in order to notify site visitors of the location of sites and IC/LUC restrictions
- Inspect LF1 cap to locate, cover, grade, and reseed the area where metal debris was observed in 2012
- Employ sampling techniques appropriate for low-yielding wells
- Continue periodic inspections to monitor for signs of trespassing
- The Five-Year Review also concluded that the protectiveness of the remedy for LF002 could not be determined until after the completion of the landfill cap inspection.

In 2025, fieldwork was conducted under separate contract. The scope of the project included landfill assessments, geophysical survey of LF1 and LF2 to identify the depth and extent of landfill debris, installation of IC/LUC signs at LF1 and LF2, and the repair and survey of three monitoring wells at LF1 (LF1SSB01MW, LF1SB03MW, and LF1SB05MW) (USAF 2026).

1.4 Site OT001 Description

Site OT001 is the former WACS and is divided into three geographic investigation areas, each further divided into 16 investigation subareas: Upper Camp Area (10 subareas), Airstrip Area (four subareas), and Miscellaneous Area (two subareas). Figure 2 presents the investigation areas and subareas.

Both CERCLA and non-CERCLA contamination is present at Site OT001. In 2009, a ROD was finalized for the subareas containing CERCLA hazardous substances (USAF 2009b) and in 2010 a DD was finalized for the subareas with remaining POL contamination (USAF 2010c). The selected remedy in the ROD for soil with CERCLA-contaminants included excavation and offsite disposal of contaminated soil. The selected remedy in the DD for petroleum-contaminated soil was source removal and ICs. The selected remedy in the DD for petroleum-contaminated groundwater was long-term monitoring with ICs. The major components of the selected remedies included:

- Excavation and offsite disposal of PCB, dieldrin, and 1,2,3-trichloropropane contaminated soil.
- Excavation of petroleum-contaminated surface soil with concentrations greater than ADEC cleanup levels.
- Landspreading of excavated soil from subareas Petroleum, Oil, and Lubricant Tank 1 (PT1), Drum Storage Area 2 (DS2), Drum Storage Area 3 (DS3), and WPH, and reuse of the excavated soil as cover for the landfill constructed at the Upper Camp Area in 2009.
- Excavation and offsite disposal of lead- and petroleum-contaminated soil at the Vehicle Maintenance Garage subarea.

- Restricting excavation or disturbance of petroleum-contaminated soil to prevent additional groundwater contamination or placement of petroleum-contaminated soil in environmentally sensitive areas through ICs.
- Submitting a performance report on ICs every 5 years.
- Conducting long-term monitoring at PT1 to monitor petroleum concentrations in groundwater at an initial frequency of annually but may be revised after 5 years with approval from ADEC.
- Limiting human and ecological exposure to and use of petroleum-contaminated groundwater at OT001 through ICs.

In 2009, the following remedial actions were completed:

- Soil with PCB concentrations greater than 1 milligram per kilogram (mg/kg) but less than 10 mg/kg was excavated and placed in the Municipal Solid Waste Landfill constructed at Site OT001. Soil with PCB concentrations greater than 10 mg/kg PCBs was shipped offsite for disposal.
- Soil with DRO and RRO concentrations exceeding 10,250 mg/kg and 10,000 mg/kg, respectively, was landspread. Once the ADEC cleanup levels were met through volatilization of POL contaminants, the soil was used as cover material for the new onsite Municipal Solid Waste Landfill.
- Soil with historical 1,2,3 trichloropropane detections was placed on a concrete pad to allow the VOCs to volatize. After VOC concentrations were documented to be less than the ADEC cleanup level, the soil was transported to the onsite Municipal Solid Waste Landfill and used as cover material.
- Soil at the Site OT001 Vehicle Maintenance Garage subarea with lead greater than the ADEC cleanup level (400 mg/kg), co-located with petroleum-contaminated soil greater than ADEC Method Two ingestion cleanup levels, was excavated and shipped offsite for disposal.

The selected remedy in the ROD was excavation and offsite disposal of PCB-contaminated soil; however, the quantity of soil excavated in 2009 exceeded the initial estimates and a landfill was constructed onsite to allow for the disposal of soil with low-level concentrations of PCBs. ADEC approved the onsite disposal of PCB-contaminated soil with concentrations greater than 1 mg/kg and less than 10 mg/kg. The AWH, DS3, RDC, WPH, Antenna Fuel System, Equipment Building, and Vehicle Maintenance Garage are listed as Cleanup Complete in the ADEC database.

In 2011, 2012, 2013, 2014, 2015, and 2020 site inspections and sampling events were conducted. Since implementation of the remedy, concentrations of DRO greater than the cleanup level have been observed in wells PT1SB01, PT1SB05, and PT1SB09. Additionally, an oil stain and/or standing water with sheen was observed in 2014, 2015, and 2020 by the airstrip. Table 3 presents the historical groundwater sampling results for DRO and RRO.

In 2020, the Second Five-Year Review (USAF 2023) was conducted and made the following recommendations for Site OT001 with implementation status and/or progress noted:

- Collect soil samples from the area of oil staining
- Repair damaged wells PT1SB01, PT1SB04, PT1SB05, and PT1SB15
- Employ sampling techniques appropriate for low-yielding wells
- Continue periodic inspections to monitor for signs of trespassing

- Prepare an ESD or ROD amendment to document the change to approved remedy for PCB-contaminated soil
- Record the deed restriction for Site OT001: proposed for implementation in 2025. The USAF will file a Notice of Activity and Use Limitation in accordance with Alaska Statute 46.04.340.

The Second Five-Year Review also concluded that the protectiveness of the remedy for OT001 cannot be determined until sampling of the documented oil staining occurs and is evaluated (USAF 2023).

In 2025, fieldwork was conducted under separate contract. The scope of the project included collection of two sets of co-located surface soil and surface water samples from the observed area of stained soil for the analysis of GRO, DRO, RRO, VOCs, and PAHs; installation of six LUC signs with two at each Upper Camp Area, Airstrip Area, and Miscellaneous Area; repair and survey four monitoring wells (PT1SB01, PT1SB04, PT1SB05, and PT1SB15) (USAF 2026).

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2.0 FIELD ACTIVITIES

This section presents field activities conducted at Kalakaket during the 2025 IC/LUC inspections performed in accordance with the Work Plan for Sites LF002 and OT001. Activities consisted of completion of a visual inspection checklist, groundwater sampling of existing wells, and photograph documentation of each site. Appendix A includes the field logbook documenting field inspections, Appendix B includes the completed inspection checklists and groundwater sampling forms, and Appendix C includes a photograph log.

Fieldwork was conducted during two mobilizations. On 22 August 2025, the IC/LUC inspection and groundwater monitoring at LF002, subsite LF1 was completed; however, due to cloud cover and deteriorating weather conditions, the field team could not continue the inspections and demobilized on 23 August 2025. On 24 September 2025, IC/LUC inspections at OT001 and LF002 subsite LF2, and groundwater monitoring at OT001 were completed.

2.1 Institutional Control/Land Use Control Inspections

2.1.1 Site LF002 Inspections

2.1.1.1 Subarea LF1 Inspection

At subarea LF1, three IC/LUC signs were present and in good condition. The site was heavily vegetated with alders, willows, spruce, forbs, and bushes. No discolored vegetation, ponded water, disturbance of the landfill cap, or trespassing was observed. On the eastern edge of the site, there were multiple buried vehicles just below ground surface with voids and frames visible at the surface. Exposed metal debris from a possible buried drum was also visible. Exposed debris observed at the site indicates that erosion of the cap is occurring. The site access roads were completely overgrown and there was evidence of moose, bears, and birds inhabiting the area.

2.1.1.2 Subarea LF2 Inspection

Subarea LF2 was completely overgrown and there was no safe area for the helicopter to land, so an on-ground inspection was not performed. The site access road was heavily overgrown with alders and bushes. No animals were observed from the helicopter.

In June and July 2025, additional fieldwork was conducted at the site under a separate contract. The scope of the project included landfill assessments at LF1 and LF2. Complete project objectives and results for this work is presented under separate cover (USAF 2026). During the LF2 assessment the field team noted that the area was partially vegetated with alders and grass, a bare area in the center of the landfill boundary, and standing water was observed in the middle of the landfill.

2.1.2 Site OT001 Inspections

2.1.2.1 Subarea AWH, DS2, DS3, RDC, WPH, and Upper Camp Area Inspections

Following the remedial actions performed during the 2009 Clean Sweep, subareas AWH, DS2, DS3, RDC, WPH, and the Upper Camp Area were recommended for site closure (USAF 2010b). IC/LUC inspections are not required for these subareas; however, they were erroneously included in the Work Plan and inspected during the field event. Subarea DS3 was accessed on foot, but the site was so heavily vegetated that an inspection could not be performed. Subareas RDC and WPH were not accessible on foot due to

heavy vegetation, topography, and standing water. Subareas DS3, RDC, and WPH were photographed from the helicopter, but visual inspections were not performed.

Visual inspections were performed at subareas AWH, DS2, and the Upper Camp Area. Subareas AWH, DS2, and the Upper Camp Area were observed to be heavily vegetated. There was no evidence of erosion, discolored vegetation, ponded water, disturbance, or trespassing. Signs of moose, bear, fox, and birds were observed. Two IC/LUC signs were installed at the Clean Sweep Landfill at the Upper Camp Area under separate contract (USAF 2024); during the inspection of the Upper Camp Area, the western IC/LUC sign was observed to be damaged.

2.1.2.2 Subarea PT1 Inspection

At subarea PT1, two IC/LUC signs were present along the airstrip and in good condition. The site, including the access trail, is heavily overgrown with alders and bushes. There was no evidence of erosion, discolored vegetation, ponded water, disturbance, or trespassing observed. The oil stain observed in 2014 and 2015 and the ponded water with sheen observed in 2020 was not found. A moose was seen on site, and signs of bears, foxes, and squirrels were also present. IC/LUCs were functioning as intended.

2.2 Sign Replacement

No IC/LUC signs were repaired or replaced during this event. Three signs were installed at LF2 under a separate contract.

2.3 Monitoring Well Conditions

During the 2025 annual monitoring event, monitoring well conditions for the wells at LF002 and OT001 were documented in field notes, monitoring well inspection checklists, and photographs. No well repairs or maintenance were conducted. At LF002, all four monitoring wells (LF1SB01MW, LF1SB03MW, LF1SB05MW, LF1SB07MW) were located.

At OT001, three (PT1SB01, PT1SB04, PT1SB09) of the five wells were located. Wells PT1SB05 and PT1SB15 were not found. The field team used a Global Positioning System (GPS) unit and field map to navigate to the location of monitoring wells PT1SB05 and PT1SB15, as shown on recent document figures (USAF 2023; 2024), but neither well could be located. The area is densely overgrown with alders and bushes, which limited visibility in the area. Table 4 summarizes monitoring well conditions at both sites. The well locations are shown on Figure 3.

Table 2 Monitoring Well Conditions

Well ID	Sampled (Y/N)	Well Diameter (inches)	Depth To Water (feet btoc)	Total Depth (feet btoc)	Observed Monitoring Well Condition
LF002					
LF1SB01MW	N	1	11.60	12.06	Fair condition. Keyed lock present, but outer casing lid can be removed when locked. Outer casing is loose. Not enough water present in well to collect sample.
LF1SB03MW	N	1	8.56	8.96	Fair condition. Keyed lock present, but outer casing lid can be removed when locked. Not enough water present in well to collect sample.

Table 2 Monitoring Well Conditions

Well ID	Sampled (Y/N)	Well Diameter (inches)	Depth To Water (feet btoc)	Total Depth (feet btoc)	Observed Monitoring Well Condition
LF1SB05MW	N	1	Dry	15.66	Fair condition. Keyed lock present, but outer casing lid can be removed when locked. Outer casing is slightly loose. Well was dry.
LF1SB07MW	Y	1	8.49	11.03	Fair condition. Keyed lock present, but outer casing lid can be removed when locked. Outer casing is loose and filled with water.
OT001					
PT1SB01	Y	1	9.64	16.77	Fair condition. Keyed lock present, but outer casing lid can be removed when locked. Outer casing is loose.
PT1SB04	Y	1	5.01	9.02	Good condition. Keyed lock present, but outer casing lid can be removed when locked.
PT1SB09	Y	1	4.50	12.80	Good condition. Keyed lock present, but outer casing lid can be removed when locked.

Notes:
For definitions, refer to the Acronyms and Abbreviations section.

2.4 Groundwater Sampling Methodology

Groundwater samples were collected from four wells using low-flow sampling procedures in accordance with the Work Plan (USAF 2025). On 22 August 2025, one well at Site LF002 (LF1SB07MW) was sampled for GRO, DRO, RRO, VOCs, and PAHs. On 24 September 2025, three wells at Site OT001 (PT1SB01, PT1SB04, and PT1SB09) were sampled for DRO, RRO, VOCs, and PAHs. Groundwater samples were planned for two wells at LF002, but monitoring wells LF1SB01MW, LF1SB03MW, and LF1SB05MW were either dry or did not contain enough water to sample.

Groundwater samples were planned for five monitoring wells at OT001, but wells PT1SB05 and PT1SB15 could not be located. In 2025, three unlabeled wells were observed near PT1SB09, one of which was destroyed and found lying on the ground (Appendix C, Photograph 45). Discrepancies have been observed between the 2007, 2013, and 2020 survey data for the monitoring wells at PT1 and the actual locations of the wells. Based on the historical survey data, the unknown wells may be PT1SB05 and PT1SB15. Prior to mobilization for the next LTM event in 2030, current and historical data should be reviewed and cross-referenced to best determine existing locations.

The depth to water and total depth of each monitoring well were measured using an oil/water interface probe, which was also used to evaluate for the presence of light non-aqueous phase liquid (LNAPL); LNAPL was not observed in any of the monitoring wells. Groundwater samples were collected using a peristaltic pump and Teflon-lined poly tubing. At monitoring well LF1SB07MW, field stabilization parameters including pH, temperature, conductivity, dissolved oxygen, oxidation-reduction potential, and turbidity were measured using a calibrated YSI Pro DSS Multiparameter water quality meter.

Due to low recharge, field stabilization parameters were not collected at monitoring wells PT1SB01, PT1SB04, and PT1SB09 prior to sample collection. To prevent a potential bias for volatile samples, volatile groundwater samples at PT1SB04 were collected by dipping the dedicated peristaltic pump tubing into the well and plugging the end, pulling the tubing up, and releasing the end to drain water into the sample vial. This method was attempted at LF1SB07MW, PT1SB01, and PT1SB09, but the wells were too deep for the method to be effective; therefore, volatile samples at LF1SB07MW, PT1SB01, and PT1SB09 were collected using a peristaltic pump. Groundwater sampling forms with records of well depth, time, date, location, and field stabilization parameters (where applicable) are included in Appendix B.

The Five-Year Review for Kalakaket RRS recommended that a Hydrasleeve be used for groundwater sample collection because of the historically low yield of monitoring wells at the sites (USAF 2023). During the 2025 field event, the team attempted to collect samples using a custom built Hydrasleeve assembly designed for 1-inch wells with 2.5-foot screens. However, upon arrival at the site, it was determined that the wells were constructed with a thick-walled PVC casing and the inner diameter of each well was less than 1-inch. Therefore, the custom Hydrasleeve assembly could not fit into the well, and was not used for sample collection. Smaller Hydrasleeve assemblies are not currently available; therefore, the use of a Hydrasleeve is not a viable sampling method for future LTM events.

2.5 Groundwater Sampling Results

2.5.1 LF002

One groundwater sample was collected from monitoring well LF1SB07MW and analyzed for GRO, DRO, RRO, VOCs, and PAHs. Analytical results were compared to the ADEC Table C cleanup levels (ADEC 2023). The results were either non-detect or less than the cleanup level. Appendix D, Attachment D-2 presents all results.

Since 2011, seven groundwater monitoring events have been conducted at the site. Between 2011 and 2015, all analytes were less than the ADEC groundwater cleanup levels. In 2020, three wells were sampled for DRO, RRO, VOCs, and PAHs. At monitoring well LF1SB07MW primary result (1.85 QN mg/L) for RRO was greater than the cleanup level (1.1 mg/L); however, the duplicate result (0.722 QN mg/L) was less than the cleanup level. Table 3 presents current and historical results for GRO, DRO, and RRO.

Table 3 LF1 – Current and Historical Groundwater Results Greater than Cleanup Levels

Analyte	Cleanup Level (mg/L)[1]	Monitoring Well ID	Result (mg/L)						
			2011[2]	2012[3]	2013[4]	2014[5]	2015[6]	2020[7]	2025
GRO	2.2	LF1SB01MW	NS	0.018 B,J	NS	ND	NS	NS	NS
		LF1SB03MW	NS	0.022 B,J	NS	NS	NS	NS	NS
		LF1SB05MW	NS	0.023 B,J	NS	ND	ND	NS	NS
		LF1SB07MW	NS	0.019 B,J	NS	ND	ND	NS	ND QL
DRO	1.5	LF1SB01MW	NS	0.270	NS	NS	NS	ND	NS
		LF1SB03MW	NS	0.300	NS	NS	NS	NS	NS
		LF1SB05MW	NS	0.100	NS	NS	NS	ND	NS
		LF1SB07MW	NS	0.600	NS	0.143 J	0.171	0.529 B,QN	0.288 J
RRO	1.1	LF1SB01MW	NS	0.340	NS	NS	NS	ND	NS
		LF1SB03MW	NS	0.450	NS	NS	NS	NS	NS

Table 3 LF1 – Current and Historical Groundwater Results Greater than Cleanup Levels

Analyte	Cleanup Level (mg/L)[1]	Monitoring Well ID	Result (mg/L)						
			2011[2]	2012[3]	2013[4]	2014[5]	2015[6]	2020[7]	2025
RRO (continued)	1.1	LF1SB05MW	NS	0.150	NS	NS	NS	ND	NS
		LF1SB07MW	NS	1.00	NS	0.301 J	0.460	**1.85 QN**	ND

Notes:
For definitions, refer to the Acronyms and Abbreviations section.
[1] Cleanup levels are defined by 18 AAC 75 Table C (ADEC 2023).
[2]USAF 2012; [3]USAF 2013; [4]USAF 2014; [5]USAF 2015a; [6]USAF 2015b; [7]USAF 2021
Bold indicates that the detected result is greater than the cleanup level.
NS – not sampled for analyte
B – analyte detected in associated blank
J – the result is an estimated value greater than or equal to the detection limit and below the limit of quantitation
QN/QL – the result is an estimated value, bias low/intermediate, due to a QC failure

2.5.2 OT001

Groundwater samples were collected from monitoring wells PT1SB01, PT1SB04, and PT1SB09 and analyzed for DRO, RRO, VOCs, and PAHs. At PT1SB09, the results for DRO, naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene exceeded the cleanup levels. Results for naphthalene were reported by both SW8270E-SIM and SW8260D-low-level methodologies. The result from the SW8270E-SIM method was preferentially selected because the method presented the higher value of the two reported concentrations. All other results were either non-detect or less than the ADEC cleanup level.

Since 2011, seven groundwater monitoring events have been conducted at the site. Wells were sampled for DRO, RRO, VOCs, and/or PAHs. Table 4 presents the current and historical results for DRO, naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene. Appendix D, Attachment D-2 presents all 2025 analytical results.

Table 4 PT1 – Current and Historical Results Greater than Cleanup Levels

Analyte	Cleanup Level (mg/L)[1]	Monitoring Well ID	Result (mg/L)						
			2011	2012	2013	2014	2015	2020	2025
DRO	1.5	PT1SB01	**1.96**	**2.3**	0.108	0.123 J	0.629	0.309 B,J,QN	ND QL
		PT1SB04	NS	0.36	0.264	0.115 J	0.175	0.414 J	ND
		PT1SB05	NS	**2**	**1.75**	0.733 J	0.493	NS	NS
		PT1SB09	**3.69**	**3.3**	1.36	1.1 J	**1.72**	**3.46**	**2.09**
		PT1SB15	NS	NS	1.08	0.761 J	0.919	NS	NS
RRO	1.1	PT1SB01	NS	0.47	0.068 J	ND	0.246	ND	ND
		PT1SB04	NS	0.14	ND	ND	0.843 J	ND	ND
		PT1SB05	NS	0.2	0.103 J	ND	0.109 J	NS	NS
		PT1SB09	NS	0.25	0.089	ND	0.163 J	ND	ND
		PT1SB15	NS	NS	0.130 J	ND	0.188 J	NS	NS
Naphthalene	0.0017	PT1SB01	0.00025 B	ND	ND	ND	ND	ND	ND
		PT1SB04	NS	ND	**0.0113**	ND	ND	ND	ND

Table 4 PT1 – Current and Historical Results Greater than Cleanup Levels

Analyte	Cleanup Level (mg/L)[1]	Monitoring Well ID	Result (mg/L)						
			2011	2012	2013	2014	2015	2020	2025
Naphthalene (continued)	0.0017	PT1SB05	NS	**0.17**	**0.199**	**0.0185**	**0.0185**	NS	NS
		PT1SB09	**0.31**	**0.2**	**0.0301**	**0.338**	NS	**0.263**	**0.167**
		PT1SB15	NS	**0.18**	**0.0079**	0.0075	**0.0416**	NS	NS
1-Methylnapthalene	0.011	PT1SB01	0.00012 B	ND	ND	ND	ND	NS	ND
		PT1SB04	NS	ND	ND	ND	ND	NS	ND
		PT1SB05	NS	**0.038**	**0.0634**	0.0102 J	**0.0118**	NS	NS
		PT1SB09	**0.131 B**	**0.11**	0.0052	0.0956	**0.0756**	NS	**0.0926 QL**
		PT1SB15	NS	**0.042**	0.004	0.00023	**0.0243**	NS	NS
2-Methylnapthalene	0.036	PT1SB01	0.00011 B	ND	ND	ND	ND	NS	ND
		PT1SB04	NS	ND	ND	ND	ND	NS	ND
		PT1SB05	NS	**0.043**	**0.0498**	0.0016	0.0003	NS	NS
		PT1SB09	**0.132 B**	**0.12**	ND	**0.105**	**0.0795**	NS	**0.105**
		PT1SB15	NS	**0.047**	ND	0.00067	0.0251	NS	NS

Notes:
For definitions, refer to the Acronyms and Abbreviations section.
[1] Cleanup levels are defined by 18 AAC 75 Table C (ADEC 2023).
[2]USAF 2012; [3]USAF 2013; [4]USAF 2014; [5]USAF 2015a; [6]USAF 2015b; [7]USAF 2021
Bold indicates that the detected result is greater than the cleanup level.
ND – non-detect
NS – not sampled for analyte
J – the result is an estimated value greater than or equal to the detection limit and below the limit of quantitation
QL – the result is an estimated value, bias low, due to a QC failure

2.6 Investigation-Derived Waste

Purge water was filtered through a 5-gallon granular activated carbon (GAC) treatment system, visually inspected to confirm that no sheen was present, then discharged at a distance greater than 100 feet from the nearest surface water body. General refuse (e.g., paper towels, nitrile gloves) was disposed of at the Galena and Fairbanks Municipal Landfills.

2.7 Work Plan Deviations

The following deviations from the Work Plan occurred:

- At LF002, subarea LF1 monitoring wells LF1SB01MW, LF1SB03MW, and LF1SB05MW were either dry or did not contain enough water to sample; therefore, no samples were collected.
- At LF002, subarea LF2 the field team was unable to access the site on foot; therefore, no visual inspection was conducted.
- At OT001, monitoring wells PT1SB05 and PT1SB15 could not be located; therefore, no samples were collected.
- At OT001, subarea DS3 was accessed on foot, but the site was so heavily vegetated that an inspection could not be performed. Subareas RDC and WPH were not accessible on foot due to heavy vegetation, topography, and standing water. Subareas DS3, RDC, and WPH were photographed from the helicopter, but visual inspections were not conducted.

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3.0 DATA QUALITY REVIEW

A total of four primary groundwater samples, two field duplicates (FDs), and two trip blanks (TBs) were collected and analyzed in support of project activities. Appendix D presents the Chemical Data Quality Report. The sample summary table in Attachment D-1 includes all field samples submitted to the analytical laboratory. Results are reported under Pace-TN work order numbers L1892109 (LF002) and L1902397 (OT001).

The project-required frequency of one FD for every 10 or fewer primary samples, per analyte, per matrix, was met. Sample 25LF002-LF1SB079MW was submitted as an FD of 25LF002-LF1SB07MW, and OT001-PT1SB049 was submitted as an FD for 25OT001-PT1SB04 for all methods.

Matrix spike/matrix spike duplicates (MS/MSDs) were collected and submitted to the laboratory at the project-required minimum frequency of one set for every 20 or fewer project samples (5%) and designated MS/MSD samples were included in both shipments. Sample 25LF002-LF1SB07MW was designated as the MS/MSD for L1892109 (LF002) and 25OT001-PT1SB01 was designated as the MS/MSD for L1902397 (OT001).

A TB was included in each of the two coolers containing all samples: 25LF002-TB01 for LF002 in cooler 25KALET-01 and 25KCOT001-TB01 for OT001 in cooler Lone Wolf.

The volatile analyses for samples LF1SB07MW, FD LF1SB079MW, PT1SB01, and PT1SB09 were collected using a peristaltic pump after all other methods/attempts were exhausted. Because this was the only means of sampling, the GRO and/or VOC results for these samples are qualified as estimated and flagged QL to indicate a possible low bias.

Groundwater samples were shipped to Nashville, TN, via Alaska Airlines Goldstreak, then forwarded to Pace Analytical in Mt. Juliet, Tennessee (Pace-TN), via courier. The sample coolers were received with a temperature blank temperature between 0 and 6°C at 0.7°C for “25KALET-01” and 0.2°C for “Lone Wolf”. All samples were received in good condition, and no anomalies were noted at receipt.

The 8270 PAH extraction of samples 25LF002-LF1SB07MW and 25LF002-LF1SB079MW were one day past holding time due to logistical constrictions. Affected results are qualified as estimated and flagged QL to indicate a possible low bias. Usability is not affected as the qualified results are either less than the cleanup level, or greater than the cleanup level.

A total of 657 results were reviewed, with 338 results qualified due to one or more of the following reasons: improper collection method, holding time exceedance, FD imprecision, blank concentrations, spike recoveries or relative percent differences outside criteria, or surrogate recoveries. No results were rejected, and all results are considered usable as qualified. The analytical completeness goal of 95% for all methods and matrices was met.

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4.0 PERFORMANCE MODEL/STATISTICAL TREND ANALYSIS

As the intent of the ORC is to advance site cleanup, this section presents the results of statistical trend analysis to assess remedy progress for OT001, subarea PT1. Statistical trend analysis was not performed at LF002, subarea LF1 because there are not enough data points, and because all results at all wells have been non-detect or less than cleanup levels, with the exception of the 2020 result for RRO at monitoring well LF1SB07-MW (Table 3).

4.1 OT001, Subarea PT1 Updated Performance Model

The primary COC at the site is DRO. To evaluate the potential impacts and effectiveness of the remedy at OT001, subarea PT1, DRO concentrations from monitoring wells PT1SB01, PT1SB04, and PT1SB09 were analyzed using the Mann-Kendall test to identify statistically significant increasing or decreasing concentration trends (Appendix E). Monitoring wells PT1SB05 and PT1SB15 did not have enough data points to evaluate the performance of the remedial action using a time-series analysis tool such as Mann-Kendall, which requires five points to complete statistical analysis. For the analysis, a significance value of 0.05 was selected as the threshold for statistical significance, which corresponds to 95% confidence.

Results of the analysis indicate there is no trend at monitoring wells PT1SB01, PT1SB04, and PT1SB09. Table 4 presents the current and historical DRO results for the wells. Table 5 presents the Mann-Kendall analysis.

Table 5 Mann-Kendall Trend Analysis – OT001, Subarea PT1

Monitoring Well ID	Number of Sample Events Evaluated (N)	Number of NDs	Date Range of Sample Events	DRO			
				Most Recent Concentration (mg/L)	Mann-Kendall Statistic (s)	P-Value	Trend
PT1SB01	7	1	2011–2025	ND	-9	0.115	No trend
PT1SB04	6	1	2012–2025	ND	-5	0.226	No trend
PT1SB09	7	0	2012–2025	2.09	-3	0.382	No trend

Notes:
For definitions, refer to the Acronyms and Abbreviations section.

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5.0 SUMMARY AND RECOMMENDATIONS

On 22 August and 24 September 2025, the Kalakaket Creek RRS LTM inspection events for sites LF002 and OT001 were conducted. The following sections present the summary and recommendations for each site.

5.1 Site LF002

Activities consisted of visual inspections, photographic documentation, and groundwater sampling in accordance with the DD/ROD and in support of a protectiveness statement for the site based on the recommendations from the Second Five-Year Review (USAF 2023). The protectiveness of the remedy cannot be determined until completion of the landfill cap assessment and geophysical survey at LF1 and LF2, which is being conducted under separate contract.

5.1.1 Subarea LF1

Three IC/LUC signs were present and in good condition. The site was heavily vegetated, and no discolored vegetation, disturbance of the landfill cap, or trespassing was observed. Buried vehicles and other metal debris was observed exposed at the eastern edge of the site, indicating that erosion of the cap is occurring and the remedy is not functioning as intended.

One groundwater sample was collected from monitoring well LF1SB07MW and analyzed for GRO, DRO, RRO, VOCs, and PAHs. All analytical results were either non-detect or less than the cleanup level. Monitoring wells LF1SB01MW, LF1SB03MW, and LF1SB05MW were either dry or did not contain enough water to sample; therefore, no samples were collected.

Since 2011, seven groundwater monitoring events have been conducted at the site. Between 2011 and 2015, all analytes were less than the ADEC groundwater cleanup levels. In 2020, the analytical result for RRO collected from monitoring well LF1SB07MW was just above the cleanup level; however, the duplicate result was less than the cleanup level. This well does not have any other historical exceedances, and in 2025 the results were less than the cleanup level. Past use does not appear to be impacting groundwater at the site. It is recommended that groundwater monitoring be discontinued at LF1.

It is recommended that IC/LUC inspections continue every 5 years, and the landfill cap is recommended for repair by covering, grading, and reseeding areas where exposed debris has been observed.

5.1.2 Subarea LF2

The area was heavily vegetated and the field team was unable to land, so an on-ground inspection was not performed.

In June and July 2025, fieldwork was performed under a separate contract (USAF 2024). The visual assessment from that project noted that the area was partially vegetated with alders and grass, a bare area in the center of the landfill boundary, and standing water was observed in the middle of the landfill. A geophysical survey was conducted to assess the extent and cover depth of LF2. Based on the survey, the thickness of the cap was estimated to measure 0 to 2.5 feet thick and approximately 0.5 cubic yards of exposed debris was observed (USAF 2026).

It is recommended that IC/LUC inspections continue every 5 years, and the landfill cap is recommended for repair by covering, grading, and reseeding areas where exposed debris has been observed. It is also recommended that the field team inspecting the site bring equipment to perform vegetative clearing if

an immediate area for landing/access is not available as well as assess the condition of the historical road from the Clean Sweep Landfill via helicopter to determine if there is a landing area or location further south from the site.

5.2 Site OT001

Activities consisted of visual inspections, photographic documentation, and groundwater sampling in accordance with the DD/ROD and in support of a protectiveness statement for the site based on the recommendations from the Second Five-Year Review (USAF 2023). The protectiveness of the remedy cannot be determined until completion of the soil sampling at the location of previously observed soil staining, which is being conducted under separate contract (USAF 2026).

5.2.1 Subareas AWH, DS2, DS3, RDC, WPH, and the Upper Camp Area

Subareas AWH, DS2, DS3, RDC, WPH, and the Upper Camp Area were recommended for site closure during the 2009 Clean Sweep (USAF 2010b). IC/LUC inspections are not required for these subareas; however, they were erroneously included in the Work Plan (USAF 2025) and inspected during the field event. Visual inspections were performed at subareas AWH, DS2, and the Upper Camp Area, which were observed to be heavily vegetated. There was no evidence of erosion, discolored vegetation, ponded water, disturbance, or trespassing. Signs of moose, bear, fox, and birds were observed. Two IC/LUC signs were installed at the Clean Sweep Landfill at the Upper Camp Area under separate contract (USAF 2024); during the inspection of the Upper Camp Area, the western IC/LUC sign was observed to be damaged. Subareas DS3, RDC, and WPH were heavily vegetated and could not be accessed on foot by the field team; the sites were photographed from the helicopter, but no visual inspections were performed.

It is recommended that future IC/LUC inspections at OT001 are limited to subarea PT1, and that subareas recommended for site closure (AWH, DS2, DS3, RDC, WPH, and the Upper Camp Area) are not inspected. It is also recommended that the damaged western IC/LUC sign at the Upper Camp Area be replaced.

5.2.2 Subarea PT1

Two IC/LUC signs were present along the airstrip and in good condition. The area is heavily vegetated, and no evidence of erosion, discolored vegetation, ponded water, disturbance, or trespassing was observed. The oil stain observed in 2014 and 2015 and the ponded water with sheen observed in 2020 was not found. IC/LUCs were functioning as intended.

Groundwater samples were collected from monitoring wells PT1SB01, PT1SB04, and PT1SB09 and analyzed for DRO, RRO, VOCs, and PAHs. At PT1SB09, the results for DRO, naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene were greater than the cleanup levels. All other results were either non-detect or less than the ADEC cleanup level. Results of the Mann-Kendall analysis indicate no trend in DRO concentrations at monitoring wells PT1SB01, PT1SB04, and PT1SB09.

It is recommended that IC/LUC inspections and groundwater monitoring continue every 5 years. It is also recommended that wells currently in the monitoring program (PT1SB01, PT1SB04, PT1SB05, PT1SB09, PT1SB15) and historical wells, if located, be surveyed and labelled using a permanent method (e.g., affixed metal labels). Prior to mobilization current and historical data should be reviewed and cross-referenced to best determine existing locations.

6.0 REFERENCES

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FIGURES

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1 INCH

RUSSIA

ALASKA

KALAKAKET CREEK RRS

CANADA

N

2025 KALAKAKET CREEK RRS LONG-TERM MANAGEMENT REPORT

KALAKAKET CREEK RADIO RELAY STATION, ALASKA

SITE LOCATION MAP

Legend

☆ Approximate Location of Former Installation

Abbreviations

RRS Radio Relay Station

Notes

1. Map produced using ESRI ArcMap v. 10.7.

References

1. Imagery source: Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community.

NAD83 (2011) ALASKA ALBERS PROJECTION
HORIZONAL DATUM: NAD83 (2011)

150 75 0 150 300

Miles

PROJECT No.:	DATE:	FIGURE:
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P.M.: M.O.	DRAWN: Z.L.	

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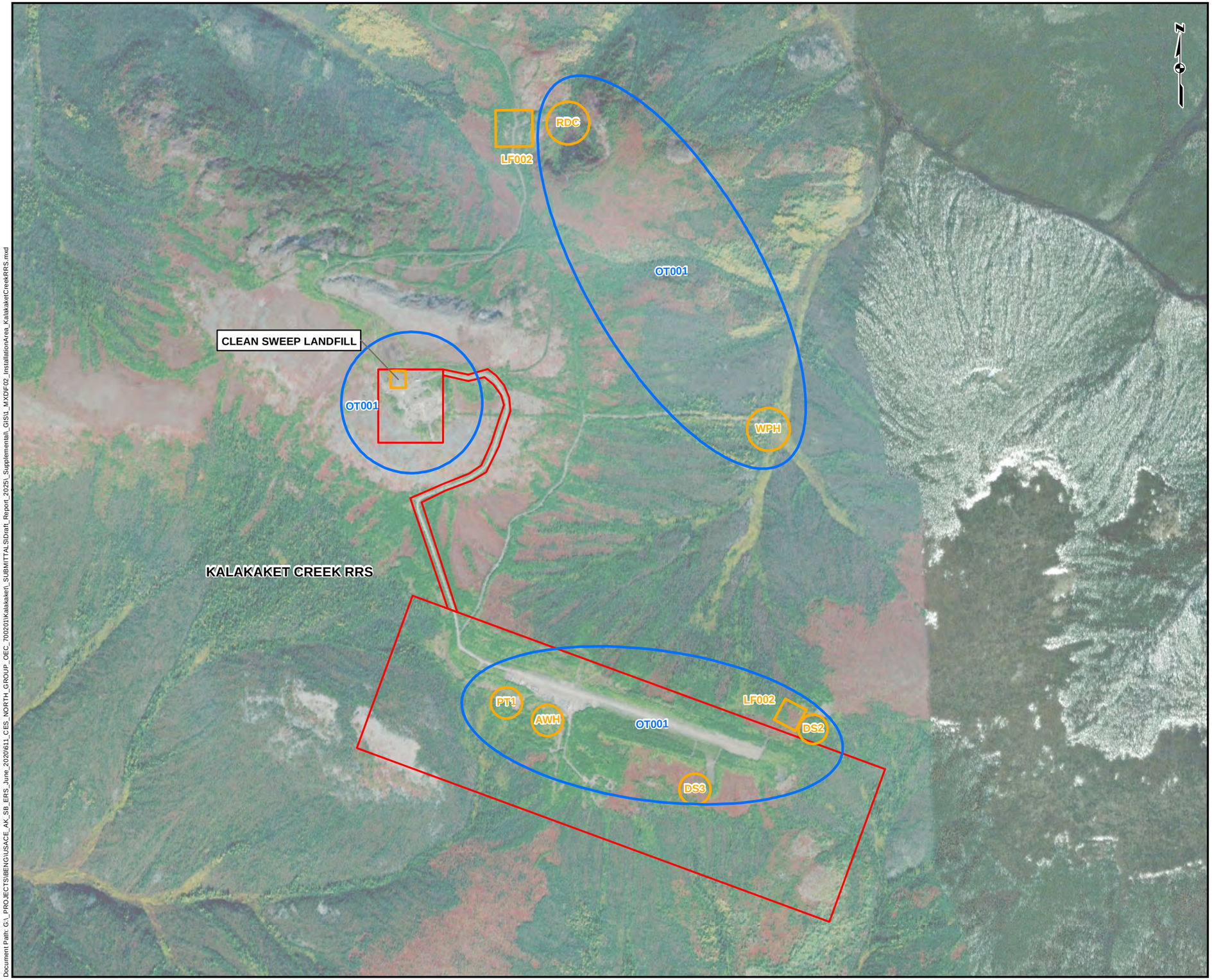
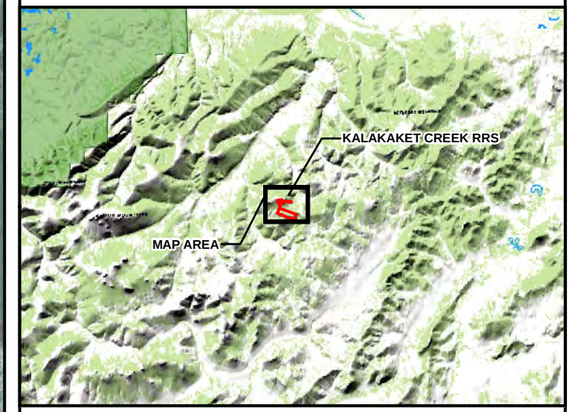
1 INCH

2025 KALAKAKET CREEK RRS LONG-TERM MANAGEMENT REPORT

KALAKAKET CREEK RADIO RELAY STATION, ALASKA

SITES OT001 AND LF002 AND SUBAREAS





Legend

- Land Use Control Boundary
- Land Use Control Boundary (Subarea)
- Installation Boundary

Abbreviations

AWH	Airstrip Warehouse
DS2	Drum Storage Area 2
DS3	Drum Storage Area 3
POL	Petroleum, oil, and lubricants
PT1	POL Tank 1
RDC	Remote Drum Cache
WPH	Water Pump House

Notes

1. Map produced using ESRI ArcMap v. 10.8.

References

1. Imagery source: ESRI, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN.
2. Site boundaries were provided by US Air Force Civil Engineer Center Environmental in July 2023.
3. The installation boundary and LF1 and LF2 outlines are georeferenced and screen digitized from “Figure 1 - Kalakaket Creek RRS Site Location and Vicinity Map” from the 2020 Remedial Actions Operations Institutional Control/Land Use Control Report”

ALASKA STATE PLANE COORDINATE SYSTEM ZONE 4, U.S. SURVEY FEET

HORIZONAL DATUM: NAD83 (2011) | VERTICAL DATUM: NAVD88

1,200 600 0 1,200 2,400

SCALE IN FEET

PROJECT No.: !20158	DATE: 3/30/2026	FIGURE: 2
P.M.: M.O.	DRAWN: Z.L.	

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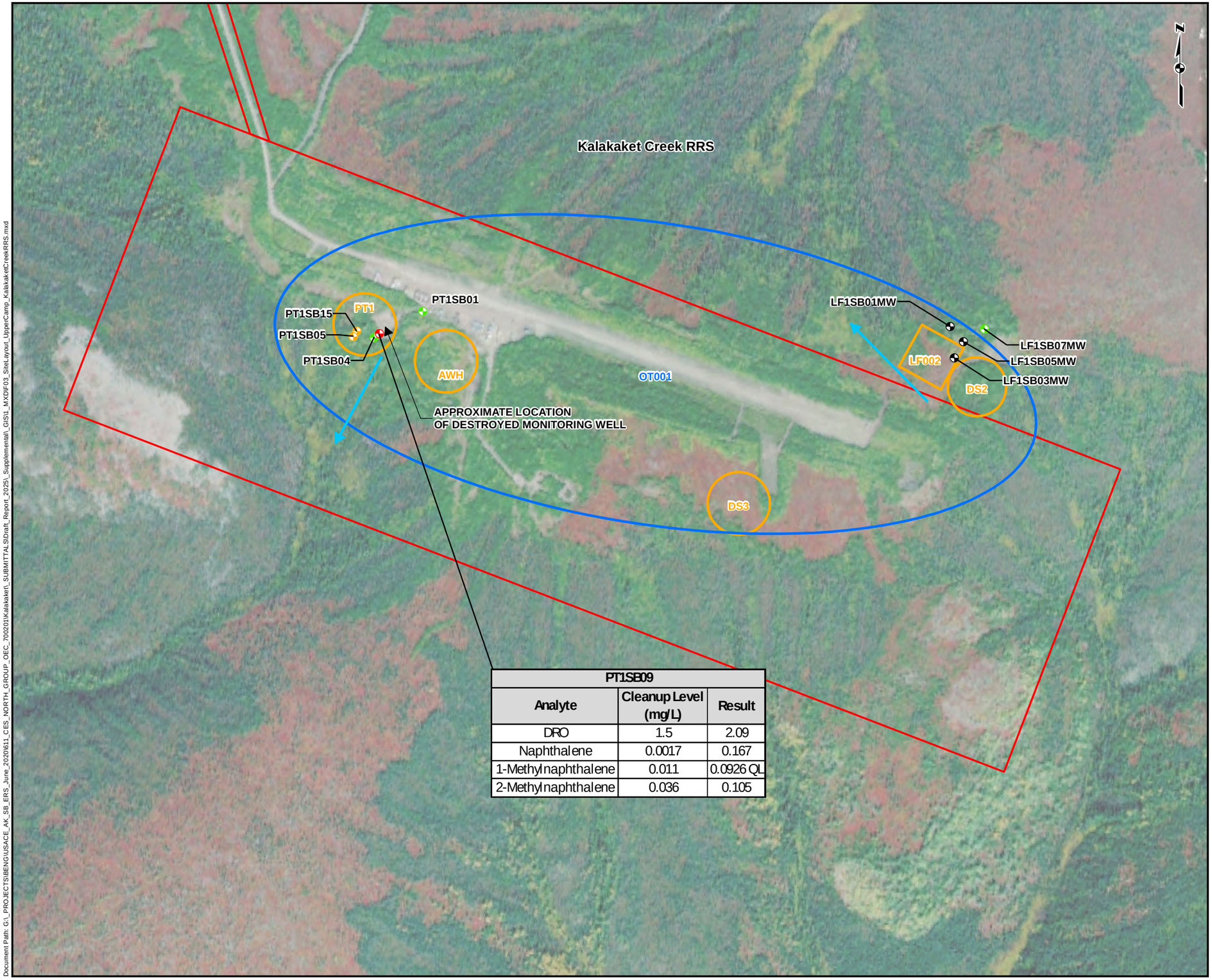
1 INCH



PT1SB09		
Analyte	**Cleanup Level (mg/L)**	**Result**
DRO	1.5	2.09
Naphthalene	0.0017	0.167
1-Methylnaphthalene	0.011	0.0926 QL
2-Methylnaphthalene	0.036	0.105

2025 KALAKAKET CREEK RRS LONG-TERM MANAGEMENT REPORT

KALAKAKET CREEK RADIO RELAY STATION, ALASKA

SITE OT001, AIRSTRIP AREA AND SITE LF002, SUBAREA LF1 2025 GROUNDWATER MONITORING RESULTS

Legend

- Monitoring Well Sampled, Groundwater Result > Cleanup Levels
- Monitoring Well Sampled, Groundwater Result < Cleanup Levels
- Monitoring Well Location, Not Sampled
- Monitoring Well Not Located, Not Sampled
- Approximate Groundwater Flow Direction
- Land Use Control Boundary
- Land Use Control Boundary (Subarea)
- Installation Boundary

Abbreviations

AWH	Airstrip Warehouse
DS2	Drum Storage Area No. 2
DS3	Drum Storage Area No. 3
PT1	POL Tank No. 1
mg/L	milligrams per liter
QL	The result is an estimated value, bias low, due to a quality control failure

Notes

1. Cleanup levels defined by ADEC 18 AAC 75 Table C Groundwater Cleanup Levels (ADEC 2023).
2. Map produced using ESRI ArcMap v. 10.8.

References

1. Imagery source: ESRI, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN.
2. Site boundaries were provided by US Air Force Civil Engineer Center Environmental in July 2023.
3. The installation boundary and LF1 and LF2 outlines are georeferenced and screen digitized from “Figure 1 - Kalakaket Creek RRS Site Location and Vicinity Map” from the 2020 Remedial Actions Operations Institutional Control/Land Use Control Report”
4. Wells and the observed oil stain are georeferenced and screen digitized from "Figure 3 - Kalakaket Creek RRS OT001 Subarea Detail – Groundwater Analytical Results" from the 2020 Remedial Action Operations, Institutional Control/Land Use Control Report, and Georeferenced and screen digitized from "Figure 5: OT001, Subarea PT1 Groundwater Sampling" and "Figure 6: LF002, Subarea LF1 Groundwater Sampling" from the Kalakaket Creek RRS Groundwater Monitoring Report, dated October 2015.

ALASKA STATE PLANE COORDINATE SYSTEM ZONE 6, U.S. SURVEY FEET
HORIZONAL DATUM: NAD83 (2011) | VERTICAL DATUM: NAVD88

600 300 0 600 1,200

SCALE IN FEET

PROJECT No.: 700216	DATE: 3/30/2026	FIGURE: 3
P.M.: M.O.	DRAWN: Z.L.	

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APPENDIX A
FIELD NOTES

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Project Long-Term Management
Kalakaket Radio Relay Station
611 CES NorthORC
USACE Contract W911KB20D0002

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CONTENTS

PAGE	REFERENCE	DATE

21 August 2025

Personnel: Patrick Schick
Weather: Overcast, 60°, light breeze, no precipitation.
Safety: Commercial airline travel, follow instructions, handling preservative chemicals.
0800: Arrive Everts Air in Anchorage.
0920: Take off from Anchorage International Airport.
1100: Land in Galena and meet Candace Ede and Kristin Hruska.
1200: Charge equipment, manage sampling containers and supplies.
1700: End of day

Scale: 1 square = _____

22 August 2025

~~0845~~ P.S.
Personnel: Patrick Schick, Candace Ede, Kristin Hruska
Weather: Overcast, calm, 55°F, occasional sprinkles.
Safety: Discussed helicopter loading, unloading, and travel, as well as emergency procedures. Discussed inclement weather, wildlife awareness (moose and bears), slips/trips/falls in brush and on uneven ground, and handling preservative chemicals.
0845: Arrive at USAF MedAid building in Galena.
0900: Stage equipment and supplies for flight to Kalakaket. Helicopter ETA in Galena is 12:20.
1220: Meet helicopter and pilot at Galena airport.
1230: Helicopter safety and operation briefing with pilot.
1250: Load helicopter and

Scale: 1 square = _____

Rite in the Rain

22 August 2025

take off from Galena airport.
1315: Arrive Kalakaket LRRS. Cloud ceiling at 1,200 ft above sea level. Kalakaket LRRS runway at 1,600 ft above sea level. Unable to reach runway and unable to land.
1320: Circled Kalakaket LRRS looking for landing areas and waiting for clouds to lift.
1325: No alternate landing areas identified and cloud ceiling persistent at 1,200 ft. Return to Galena airport.
1340: Land at Galena airport. Wait for weather conditions to change for a second attempt.
1500: Take off from Galena airport.
1525: Land at east end of Kalakaket LRRS airstrip. Trail to LF002 LF1 and OT001 DS2 recently cleared.
1545: Begin inspecting LF002 LF1 and OT001 DS2.

Scale: 1 square = _____

22 August 2025

1615: Arrive monitoring well LF1MW7. Locked with key lock, but lid removable.
1650: Collect primary sample 25LF002-LF1SB07MW, duplicate sample 25LF002-LF1SB079MW, and MS/MSD (same sample ID as primary).
1720: Arrive monitoring well LF1MW5. Well completely dry, no sample collected.
1730: Arrive monitoring well LF1MW3. Water column 0.4 ft, no sample collected.
1740: Inspect monitoring well LF1MW7.
1800: Arrive monitoring well LF1MW1.
1805: Inspect monitoring well LF1MW1.
1815: Inspect monitoring well LF1MW3.
1825: Inspect monitoring well LF1MW5.
1845: Monitoring well LF1MW1

Scale: 1 square = _____

Rite in the Rain

22 August 2025

pumped dry.
1905: Finish inspecting LF002 LF1 and OT001 DS2.
1915: Re-check water level in monitoring well LF1MW1. No measurable recharge. No sample collected.
1930: Load helicopter and take off from Kalakaket RRS airstrip.
1933: No safe landing area identified at OT001 WPH, OT001 RDC, or LF002 LF2. Visual inspection of OT001 WPH conducted from helicopter at low altitude.
1935: Visual inspection of ~~OTPs~~ LF002 LF2 conducted from helicopter at low altitude.
1936: Visual inspection of OT001 RDC conducted from helicopter at low altitude.
1955: Land at Galena airport. Unload helicopter.

2030: Arrive at USAF MedAid building and manage samples and equipment.
2100: End of day.

PD

23 August 2025

Personnel: Patrick Schuck, Kristin Hruska, Candace Ede, and Alex Shapiro.
Weather: Low clouds, moderate gusty wind, 55°F, no precip.
Safety: Discussed helicopter loading, unloading, operation, and emergency procedures. Discussed inclement weather, navigation with a low cloud ceiling, wildlife, rough footing, and preservative chemicals.
0830: Meet at USAF MedAid building and transport supplies to Galena airport.
0840: Safety meeting with helicopter pilot Alex Shapiro at Galena airport. Load helicopter.
0900: Take off from Galena airport.
0920: Arrive at Kalakaket RTS. Cloud ceiling approximately 1800 ft above sea level, but variable, and overall cloud

Scale: 1 square = _____

ceiling lowering rapidly. Wind to 30 mph. Due to safety hazard - possibility of becoming stranded at Kalakaket RTS in inclement weather - decided to return to Galena airport.
0945: Land at Galena airport.
1000: Return to USAF MedAid building to assess options. Due to worsening weather for several days, decided to return personnel and equipment to Fairbanks and Anchorage.
1240: Ship equipment on Everts.
1330: Board Wright Air flight to Fairbanks.
1335: Take off from Galena airport.
1530: Land at FBX airport.
2115: Board Alaska Air flight to Anchorage.
2245: Land at ANC airport. End of day.

RS

Scale: 1 square = _____

24 September 2025 N. Cel Kalakaket

0700 Pat Terhune arrives at Maritime Helicopters in Fairbanks.
Objective: Complete LTM Sampling at Kalakaket
Helicopter: Bell 206 L4.
0750 Depart Fairbanks for Galena
1015 Arrive in Galena. Refuel, Pickup Vickie Kruil and field equipment. Safety walkthrough with Helicopter.
1030 Depart Galena for Kalakaket.
Weather: 30°F, Sunny.
1045 Arrive at Kalakaket OTC01 Top Camp
1100 Complete IC/UC inspection at OTC01 Top Camp and Clean Sweep landfill. IC/UC signs in place. Western sign is damaged and should be replaced.
1130 Located wells PTISB01, PTISB03, PTISB04, and three other unknown wells.
1150 Setting up to sample at PTISB01
1200 collect [2SOTC01-PTISB01] + ms/msD
1300 Setting up at PTISB04
1330 collected [PTISB04] [2SOTC01-PTISB04]
collected [2SOTC01-PTISB04D] @1330 (FD of PTISB04
1415 Setting UP at PTISB09

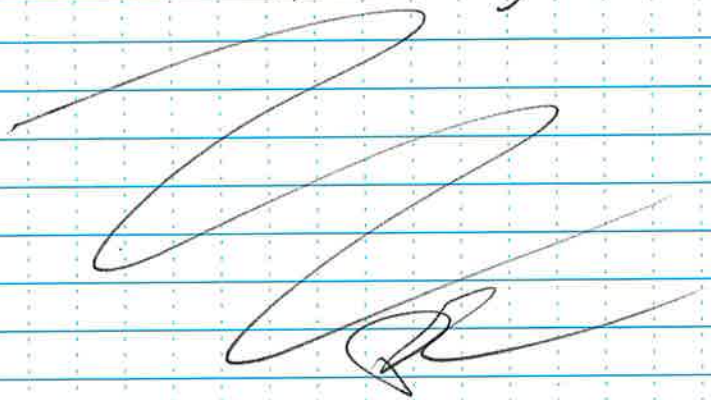
Scale: 1 square = _____

1420 ~~Well PTISB09 is Not in the same location~~ (PT) The well that we Sampled as PTISB09 is Not at the location shown on the Figure. There are 3 unlabeled wells in close proximity to one another. ~~One was~~ the well we Sampled as PTISB09 has the same DTW/TD as the well Sampled during previous efforts, and was recently maintained by AECOM/Alert (they put locks on all program wells), but does (PT) is Not at the location Shown on historical figures. There is a well at the Figure location of PTISB09, but it does not have the same DTW/TD as the well historically Sampled (it has a Total depth of 55'6toc), and does not appear to have been maintained by AECOM/Alert (no lock). Therefore, we did not collect a sample at this location and Sampled the well at the location consistent with previous efforts.
1420 collected [2SOTC01-PTISB09]
1500 Attempted to locate PTISB05 and PTISB15, but could not locate either. The Field team used field maps + well coordinates to search a large area for the wells, but the area is densely overgrown with alders and they were not found.

Scale: 1 square = _____

Rite in the Rain.

1510 Complete IC/LUC inspection at PTT
1550 Completed IC/LUC inspection at AWH. Attempted to access DS3 on ground but could not reach site due to dense alders. 2 IC/LUC signs along airstrip (1 at east & west end) in good condition.
1620 Performed IC/LUC inspection at DS3 by helicopter.
1635 Performed IC/LUC inspection at LFZ by helicopter. 2 IC/LUC signs visible
1640 Leaving Kalakaket for Galena.
1700 In Galena, Refuel Helicopter.
1715 Leave Galena for Fairbanks.
1945 In Fairbanks, End of day.



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Daily Contractor Quality Control Report

PROJECT TITLE		DATE
Long-Term Management Kalakaket Radio Relay Station		8/22/2025
CONTRACT NUMBER		**REPORT NUMBER**
W911KB20D0002		001
WEATHER	**WIND**	**TEMPERATURE**
Low clouds. Ceiling approximately 2500 feet above sea level in Galena and 2000 feet above sea level at Kalakaket RRS. Occasional sprinkles.	10-30 mph	50°F

ACTIVITY STATUS

Project Location

Kalakaket Radio Relay Station

Comments

- First attempt to land at Kalakaket RRS in the early afternoon on 8/22 was unsuccessful due to the cloud ceiling being lower than the RRS runway. The second attempt was successful, but upper camp was still obscured by clouds and rapidly lowering cloud ceiling forced departure at 1930. Future attempts to access Kalakaket RRS will need to consider cloud ceiling as one of the most important weather considerations. Cloud ceiling is often much lower in the mountains than reported at Galena airport.
- Only 1 of 4 wells at LF002 LF1 had enough water and recharge to sample. Wells LF1MW1, LF1MW3, and LF1MW5 had minimal water column (less than 0.5 feet) and no measurable recharge within 30 minutes of pumping dry. Well LF1MW7 had good recharge and was sampled.

Activities Today

- Mobilize from Galena to Kalakaket RRS
- Locate and inspect all 4 groundwater monitoring wells at site LF002, subsite LF1
- Sample 2 of 4 groundwater monitoring wells at LF002 LF1
- Inspect site LF002 subsites LF1 and LF2; and site OT001 subsites DS2, WPH, and RDC
- Locate all IC/LUC signs associated with LF002 LF1 and OT001 DS2

Activities Planned for Tomorrow

- Locate, inspect, and sample all 5 groundwater monitoring wells at OT001 PT1
- Inspect site OT001 and subsites PT1, AWH, and DS3
- Locate all remaining IC/LUC signs at Kalakaket RRS

Cumulative Progress as of Today

- 5 of 9 IC/LUC inspections completed
- 4 of 9 monitoring well inspections completed
- Collected 1 of 7 primary groundwater samples
- Collected 3 of 3 quality control groundwater samples
- 3 of 10 IC/LUC signs located

Meetings/Safety

- Conducted safety meeting. Received instruction on helicopter safety and operation from Alaska Land Exploration helicopter pilot. Discussed bear and moose safety, inclement weather, and preservative chemicals.

Visitors
None
Project Delays
None
QC NARRATIVE
QC Remarks
1 FD and 1 MS/MSD were collected from monitoring well LF1MW7
Tests and Inspections Performed
None

CONTRACTORS ON SITE	PERSONNEL
Brice Engineering, LLC	3
Alaska Land Exploration	1
Total	**4**

CONTRACTOR CERTIFICATION
On behalf of the contractor, I certify this report is complete and correct and all equipment and material used and work performed during the reporting period follow the contract plans and specifications, to the best of my knowledge, except as noted above.

Patrick Schick

Signature

Patrick Schick

Typed Name

Geologist

Title

8/22/2025

Date

PHOTOGRAPH LOG

Photograph No. 1 **Description:** Sampling monitoring well LF1MW7 at site LF002, subsite LF1. Facing northeast.	
Photograph No. 2 **Description:** Heavy equipment almost completely buried at site LF002, subsite LF1. Facing southwest.	

Photograph No. 3 **Description:** Monitoring well LF1MW1 showing full well volume pumped out. Facing north.	

Photograph No. 4 **Description:** Passable trail from airstrip to LF002 LF1 and OT001 DS2 heavily used by moose. Facing down.	

Daily Contractor Quality Control Report

PROJECT TITLE		DATE
Long-Term Management Kalakaket Radio Relay Station		9/24/2025
CONTRACT NUMBER		**REPORT NUMBER**
W911KB20D0002		002
WEATHER	**WIND**	**TEMPERATURE**
Sunny	5-10 mph	30-38°F

ACTIVITY STATUS

Project Location

Kalakaket Radio Relay Station

Comments

- Monitoring wells PT1SB05 and PT1SB15 could not be located and were not sampled. The field team used a digital field map and the well coordinates to navigate to the well locations, but neither well could be found. The wells are located in an area that is overgrown by dense alders with limited visibility. Monitoring well PT1SB15 was not located during the FYR in 2020.

Activities Today

- Mobilize from Fairbanks to Kalakaket RRS
- Locate and inspect 3 of 5 wells at OT001 (PT1SB01, PT1SB04, PT1SB09).
- Sample 3 of 5 groundwater monitoring wells at OT001 (PT1SB01, PT1SB04, PT1SB09).
- Inspect site OT001 subsites DS3, AWH, and PT1 and OT001 Upper Camp
- Locate all IC/LUC signs associated with OT001 airstrip, OT001 top camp, and LF001 LF2
- Demobilize to Fairbanks

Activities Planned for Tomorrow

- None, all activities have been completed.

Cumulative Progress as of Today

- 9 of 9 IC/LUC inspections completed
- 7 of 9 monitoring well inspections completed
- Collected 4 of 7 primary groundwater samples (only 1 well at LF001 had enough water to sample, and wells PT1SB05 and PT1SB15 at OT001 could not be located).
- 10 of 10 IC/LUC signs located

Meetings/Safety

- Conducted safety meeting. Received instruction on helicopter safety and operation from Maritime Helicopters.

Visitors

None

Project Delays

None

QC NARRATIVE

QC Remarks

1 FD and 1 MS/MSD were collected from monitoring wells PT1SB04 and PT1SB01 respectively

Tests and Inspections Performed
None

CONTRACTORS ON SITE	PERSONNEL
Brice Engineering, LLC	2
Maritime Helicopters	1
Total	**3**

CONTRACTOR CERTIFICATION
On behalf of the contractor, I certify this report is complete and correct and all equipment and material used and work performed during the reporting period follow the contract plans and specifications, to the best of my knowledge, except as noted above.

Signature

Patrick Terhune

Typed Name

Geologist

Title

9/25/2025

Date

PHOTOGRAPH LOG

Photograph No. 1 **Description:** OT001, AWH, view north.	
Photograph No. 2 **Description:** OT001, monitoring well PT1SB04, view north.	

Photograph No. 3 **Description:** OT001, eastern IC/LUC sign at Upper Camp, view west.	
Photograph No. 4 **Description:** OT001, mapped location of PTSB15, no well present, view south.	

APPENDIX B
FIELD FORMS

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VISUAL INSPECTION CHECKLIST

NAME OF LANDFILL / SITE: Kalakaket ~~ERRS~~ LF002 LF1
NAME OF INSPECTOR / DATE: 8/22/25 Patrick Schick
WEATHER CONDITIONS / TEMPERATURE (°F) Low clouds, 50°F, gusty wind, no precip

MONITORING ITEM	Y	N	NOTES
LUC Signs in place?	✓		3 new signs in good condition
Monitoring Well Condition *See also monitoring well sampling sheet*			Well ID (Good, Fair, Poor) All wells in fair condition
Evidence of settlement within or on surface of landfill?		✓	
Ponded water within, against, or on surface of landfill?		✓	
Evidence of surface erosion on disposal area walls or on exterior berms?	✓	~~✓~~ CF 8/27/25	
Erosion of access roads?		✓	Access roads are completely overgrown
Discoloring of vegetation downslope?		✓	Seasonal odor changes (natural) are beginning
Any evidence of leakage or escape of waste from cells?		✓	
Airborne ash or dust particles?		✓	
Evidence of wildlife or birds present? Include number and type of birds on site.	✓		Abundant moose sign. Bear sign frequent. Songbirds heard.
Windblown litter in cells or along access roads?		✓	
Landfill odors?		✓	
Fire or combustion in the waste?		✓	
Evidence of trespass or inconsistent site usage?		✓	
Damage to the structural integrity of a dike wall, culvert, or erosion control?		✓	
Is revegetation occurring?	✓		
Estimated Percent Vegetative Cover: 100% On cap surface: On sideslopes:			
Comments: Entire site is heavily vegetated with alder, willow, spruce, forbs, bushes, and tundra and is nearly impassable.			

GENERAL COMMENTS: East edge ~~Central area~~ of site has many vehicles buried just below ground surface. Voids and frames visible at ground surface. Possible buried drums as well.

CORRECTIVE ACTION TAKEN: None

VISUAL INSPECTION CHECKLIST

NAME OF LANDFILL / SITE: Kalakaket ERRS OT001 DS2
NAME OF INSPECTOR / DATE: Patrick Schick 4/22/25
WEATHER CONDITIONS / TEMPERATURE (°F) Low clouds, 50°F, gusty wind, no precip

MONITORING ITEM	Y	N	NOTES
LUC Signs in place?	✓		3 new signs in good condition
Monitoring Well Condition *See also monitoring well sampling sheet*			Well ID (Good, Fair, Poor) No wells
Evidence of settlement within or on surface of landfill?		✓	
Ponded water within, against, or on surface of landfill?		✓	
Evidence of surface erosion on disposal area walls or on exterior berms?		✓	
Erosion of access roads?		✓	Access roads are completely overgrown
Discoloring of vegetation downslope?		✓	Natural seasonal color changes are beginning
Any evidence of leakage or escape of waste from cells?		✓	
Airborne ash or dust particles?		✓	
Evidence of wildlife or birds present? Include number and type of birds on site.	✓		Moose, bear, fox sign abundant. Songbirds heard.
Windblown litter in cells or along access roads?		✓	
Landfill odors?		✓	
Fire or combustion in the waste?		✓	
Evidence of trespass or inconsistent site usage?		✓	
Damage to the structural integrity of a dike wall, culvert, or erosion control?		✓	
Is revegetation occurring?	✓		
Estimated Percent Vegetative Cover: 100% On cap surface:			On sideslopes:
Comments:			

GENERAL COMMENTS: No non-natural features visible. Old roads are only identifiable because they are heavily overgrown with dense alder thickets, in contrast to mixed willow/spruce/dwarf birch subalpine forest of the surrounding area.

CORRECTIVE ACTION TAKEN: None

VISUAL INSPECTION CHECKLIST

NAME OF LANDFILL/SITE: N. ORi Kala Kaket OTOOl TCP camp

NAME OF INSPECTOR/DATE: PT/VK 9/24/25

WEATHER CONDITIONS/TEMPERATURE (°F) 30° F, Sunny

MONITORING ITEM	Y	N	NOTES
LUC Signs in place?	✓		2 signs in place (E) ~~East~~ West sign is damaged + needs replaced
Monitoring Well Condition *See also monitoring well sampling sheet*	–	–	Well ID (Good, Fair, Poor) N/A
Evidence of settlement within or on surface of landfill?		✓	
Ponded water within, against, or on surface of landfill?		✓	
Evidence of surface erosion on disposal area walls or on exterior berms?		✓	
Erosion of access roads?	–	–	N/A
Discoloring of vegetation downslope?		✓	
Any evidence of leakage or escape of waste from cells?		✓	
Airborne ash or dust particles?		✓	
Evidence of wildlife or birds present? Include number and type of birds on site.	✓		moose antlers
Windblown litter in cells or along access roads?		✓	
Landfill odors?		✓	
Fire or combustion in the waste?		✓	
Evidence of trespass or inconsistent site usage?		✓	
Damage to the structural integrity of a dike wall, culvert, or erosion control?		✓	
Is revegetation occurring?	✓		

Estimated Percent Vegetative Cover: 100 %	On cap surface: 100 %	On sideslopes: 100 %
Comments:		

GENERAL COMMENTS: Site is revegetated. 2 LUC signs in place. ~~Eastern~~ Western sign is damaged but still legible; it should be replaced.

CORRECTIVE ACTION TAKEN: None

VISUAL INSPECTION CHECKLIST

NAME OF LANDFILL/SITE: U.CRC Kaktaket - AWH (Steel)

NAME OF INSPECTOR/DATE: PT/VK 9/24/25

WEATHER CONDITIONS/TEMPERATURE (°F) 38°F, Sunny

MONITORING ITEM	Y	N	NOTES
LUC Signs in place?	—	—	N/A - 1 sign along airstrip (Eastend) in good condition
Monitoring Well Condition *See also monitoring well sampling sheet*	—	—	1 sign along airstrip (Westend) in good condition Well ID (Good, Fair, Poor) N/A
Evidence of settlement within or on surface of landfill?		✓	
Ponded water within, against, or on surface of landfill?		✓	
Evidence of surface erosion on disposal area walls or on exterior berms?		✓	
Erosion of access roads?		✓	
Discoloring of vegetation downslope?		✓	
Any evidence of leakage or escape of waste from cells?		✓	
Airborne ash or dust particles?		✓	
Evidence of wildlife or birds present? Include number and type of birds on site.	✓		moose, birds, squirrels
Windblown litter in cells or along access roads?		✓	
Landfill odors?		✓	
Fire or combustion in the waste?		✓	
Evidence of trespass or inconsistent site usage?		✓	
Damage to the structural integrity of a dike wall, culvert, or erosion control?		✓	
Is revegetation occurring?	✓		

Estimated Percent Vegetative Cover:	On cap surface: 100 %	On sideslopes: 100 %
Comments:		

GENERAL COMMENTS: Site is revegetated. Single metal pipe sticking out of ground in area.

CORRECTIVE ACTION TAKEN: None

VISUAL INSPECTION CHECKLIST

NAME OF LANDFILL/SITE: N.ORC Kalakaket - PT1 (etool)

NAME OF INSPECTOR/DATE: PT/VK 9/24/25

WEATHER CONDITIONS/TEMPERATURE (°F) 35°f, Sunny

MONITORING ITEM	Y	N	NOTES
LUC Signs in place?	✓	~~✓~~	~~All~~ 2 signs along airstrip Not in PT1 - in good condition
Monitoring Well Condition *See also monitoring well sampling sheet*	–	–	Well ID (Good, Fair, Poor) See inspection forms/ Field notes
Evidence of settlement within or on surface of landfill?		✓	
Ponded water within, against, or on surface of landfill?		✓	
Evidence of surface erosion on disposal area walls or on exterior berms?		✓	
Erosion of access roads?		✓	
Discoloring of vegetation downslope?		✓	
Any evidence of leakage or escape of waste from cells?		✓	
Airborne ash or dust particles?		✓	
Evidence of wildlife or birds present? Include number and type of birds on site.	✓		moose, birds, squirrels
Windblown litter in cells or along access roads?		✓	
Landfill odors?		✓	
Fire or combustion in the waste?		✓	
Evidence of trespass or inconsistent site usage?		✓	
Damage to the structural integrity of a dike wall, culvert, or erosion control?		✓	
Is revegetation occurring?	✓		

Estimated Percent Vegetative Cover:	On cap surface: 100 %.	On sideslopes: 100 %.
Comments:	Densely Vegetated with thick alders	

GENERAL COMMENTS: PT1SB05 + PT1SB15 could not be located. Area is revegetated with thick alders.

CORRECTIVE ACTION TAKEN: None

MONITORING WELL INSPECTION CHECKLIST LF1SB01MW

NAME OF SITE: Kalaheket RRS LF002 LF1
WELL-ID: ~~LF1SB01MW~~ ~~LF1MW1~~ RS
NAME OF INSPECTOR: K. Hroska/C. Ede
WELL TYPE: Stick up 1 inch PVC
WEATHER CONDITIONS / TEMPERATURE (°F) cloudy/50°F
DATE/TIME: 8/22/25 @ 1805

INSPECTION ITEMS			
WELL IDENTIFICATION	**Y**	**N**	**NOTES/PHOTOGRAPHS**
Is the well number or ID clearly legible?	✓		added label
Is the well identification correct?	✓		
Does the outermost casing have a lockable cap or lid?	✓		
Is the lock present?	✓		Cap is openable even w/ lock (Master lock)
If flush mounted, is the cap lockable (and locked) or is a lock applied to the well plug?			N/A
If flush mounted, are all of the bolts present to secure the lid?			N/A
INNER WELL CASING	**Y**	**N**	**NOTES/PHOTOGRAPHS**
Is the inner or outer casing corroded, bent, dent, cracked, or frost jacked?		✓	
Has the well casing sustained vehicular or other damage?		✓	
Is the inner or outer casing loose (annular seal problem)?	✓		Outer casing is loose
If flush mounted, is the gasket seal in good condition?			N/A
DOWNHOLE CONDITION	**Y**	**N**	**NOTES/PHOTOGRAPHS**
Is dedicated sampling equipment present in the well?		✓	
Is a reference point clearly marked on the top of casing or top of well cap?	✓		
What is the measured depth of the well from top of casing (reference mark)?	12.06 ft BTOC		DTW: 11.60 ft BTOC
Do any obstructions occur within the well (comment on ice or other obstruction)?		✓	
Is the bottom of the well soft (mud on the measurement line)?		✓	
OUTER STRUCTURES	**Y**	**N**	**NOTES/PHOTOGRAPHS**
Are the protective posts damaged?			N/A none
Do the protective posts require painting for visibility?			N/A
Is a concrete pad installed?			N/A none
Is the concrete pad cracked or deteriorated?			N/A
Does the pad slope away from the casing?			N/A
WELL ACCESS	**Y**	**N**	**NOTES/PHOTOGRAPHS**
Is the well safely accessible?	✓		
Does the access road or general area require weed-eating, mowing, additional gravel or other maintenance?	✓		Access trail is primitive and brush in the area is dense.
Does accessing the well require special access considerations (e.g., within other restricted/specially authorized areas)?		✓	Future visits may require clearing due to overgrowth

MONITORING WELL INSPECTION CHECKLIST

NAME OF SITE: Kalaka Pet RRS #F002 LF1
NAME OF INSPECTOR: Patrick Schick
WEATHER CONDITIONS / TEMPERATURE (°F): Overcast, light gusty wind, 50°F, no precip.
WELL-ID: ~~LF1 MW3~~ LF15B03MW
WELL TYPE: 1" PVC, stick up
DATE/TIME: 8/22/25 1815

INSPECTION ITEMS			
WELL IDENTIFICATION	**Y**	**N**	**NOTES/PHOTOGRAPHS**
Is the well number or ID clearly legible?	✓		
Is the well identification correct?	✓		
Does the outermost casing have a lockable cap or lid?	✓		Lid is removable even when locked
Is the lock present?	✓		Red Lock, key location unknown
If flush mounted, is the cap lockable (and locked) or is a lock applied to the well plug?			N/A
If flush mounted, are all of the bolts present to secure the lid?			N/A
INNER WELL CASING	**Y**	**N**	**NOTES/PHOTOGRAPHS**
Is the inner or outer casing corroded, bent, dent, cracked, or frost jacked?		✓	
Has the well casing sustained vehicular or other damage?		✓	
Is the inner or outer casing loose (annular seal problem)?		✓	
If flush mounted, is the gasket seal in good condition?			N/A
DOWNHOLE CONDITION	**Y**	**N**	**NOTES/PHOTOGRAPHS**
Is dedicated sampling equipment present in the well?	✓		
Is a reference point clearly marked on the top of casing or top of well cap?	✓		
What is the measured depth of the well from top of casing (reference mark)?			8.96 ft BTOC DTW: 6.58 ft BTOC
Do any obstructions occur within the well (comment on ice or other obstruction)?	✓		Well is passable, but tubing catches at top of screen
Is the bottom of the well soft (mud on the measurement line)?	✓		
OUTER STRUCTURES	**Y**	**N**	**NOTES/PHOTOGRAPHS**
Are the protective posts damaged?			N/A
Do the protective posts require painting for visibility?			N/A
Is a concrete pad installed?		✓	~~N/A~~
Is the concrete pad cracked or deteriorated?			N/A
Does the pad slope away from the casing?			N/A
WELL ACCESS	**Y**	**N**	**NOTES/PHOTOGRAPHS**
Is the well safely accessible?	✓		
Does the access road or general area require weed-eating, mowing, additional gravel or other maintenance?	✓		Access trail is primitive, and brush in the area is dense.
Does accessing the well require special access considerations (e.g., within other restricted/specially authorized areas)?		✓	Future visits may require clearing due to overgrowth.

MONITORING WELL INSPECTION CHECKLIST

NAME OF SITE: Kalaheo Refinery LF002 LF1 WELL-ID: ~~LF1MW5~~ LF1SB05mw

NAME OF INSPECTOR: Patrick Schick WELL TYPE: 1" PVC, stick-up

WEATHER CONDITIONS / TEMPERATURE (°F) low clouds, 50°F, gusty wind, no precip DATE/TIME: 8/22/25 1825

INSPECTION ITEMS			
WELL IDENTIFICATION	**Y**	**N**	**NOTES/PHOTOGRAPHS**
Is the well number or ID clearly legible?	✓		
Is the well identification correct?	✓		
Does the outermost casing have a lockable cap or lid?	✓		Lid can be opened even with lock installed
Is the lock present?	✓		
If flush mounted, is the cap lockable (and locked) or is a lock applied to the well plug?			N/A
If flush mounted, are all of the bolts present to secure the lid?			N/A
INNER WELL CASING	**Y**	**N**	**NOTES/PHOTOGRAPHS**
Is the inner or outer casing corroded, bent, dent, cracked, or frost jacked?		✓	
Has the well casing sustained vehicular or other damage?		✓	
Is the inner or outer casing loose (annular seal problem)?	✓		Outer casing slightly loose
If flush mounted, is the gasket seal in good condition?			N/A
DOWNHOLE CONDITION	**Y**	**N**	**NOTES/PHOTOGRAPHS**
Is dedicated sampling equipment present in the well?		✓	
Is a reference point clearly marked on the top of casing or top of well cap?	✓		
What is the measured depth of the well from top of casing (reference mark)?			15.66 ft BTOC Well is dry
Do any obstructions occur within the well (comment on ice or other obstruction)?		✓	
Is the bottom of the well soft (mud on the measurement line)?	✓		
OUTER STRUCTURES	**Y**	**N**	**NOTES/PHOTOGRAPHS**
Are the protective posts damaged?			No protective posts
Do the protective posts require painting for visibility?			N/A
Is a concrete pad installed?		✓	
Is the concrete pad cracked or deteriorated?			N/A
Does the pad slope away from the casing?			N/A
WELL ACCESS	**Y**	**N**	**NOTES/PHOTOGRAPHS**
Is the well safely accessible?	✓		
Does the access road or general area require weed-eating, mowing, additional gravel or other maintenance?	✓		Access trail is primitive, and brush in the area is dense.
Does accessing the well require special access considerations (e.g., within other restricted/specially authorized areas)?		✓	Future visits may require clearing due to overgrowth.

MONITORING WELL INSPECTION CHECKLIST

NAME OF SITE: Kalaeloa PRS LF002 LF1 WELL-ID: ~~LF1 MW 7~~ LF1SB07mw

NAME OF INSPECTOR: Patrick Schick WELL TYPE: 1" PVC, stick-up

WEATHER CONDITIONS / TEMPERATURE (°F): low clouds, 50°F, gusty wind, no precip. DATE/TIME: 8/22/25 1740

INSPECTION ITEMS			
WELL IDENTIFICATION	**Y**	**N**	**NOTES/PHOTOGRAPHS**
Is the well number or ID clearly legible?	✓		
Is the well identification correct?	✓		
Does the outermost casing have a lockable cap or lid?	✓		Lid can be removed even while locked
Is the lock present?	✓		
If flush mounted, is the cap lockable (and locked) or is a lock applied to the well plug?		~~N~~	N/A
If flush mounted, are all of the bolts present to secure the lid?			N/A
INNER WELL CASING	**Y**	**N**	**NOTES/PHOTOGRAPHS**
Is the inner or outer casing corroded, bent, dent, cracked, or frost jacked?		✓	
Has the well casing sustained vehicular or other damage?		✓	
Is the inner or outer casing loose (annular seal problem)?	✓		Outer casing loose and filled with water
If flush mounted, is the gasket seal in good condition?			N/A
DOWNHOLE CONDITION	**Y**	**N**	**NOTES/PHOTOGRAPHS**
Is dedicated sampling equipment present in the well?	✓		
Is a reference point clearly marked on the top of casing or top of well cap?	✓		
What is the measured depth of the well from top of casing (reference mark)?			11.03 ft BTOC OTW: 8.49 ft BTOC
Do any obstructions occur within the well (comment on ice or other obstruction)?		✓	
Is the bottom of the well soft (mud on the measurement line)?	✓		
OUTER STRUCTURES	**Y**	**N**	**NOTES/PHOTOGRAPHS**
Are the protective posts damaged?			No protective posts
Do the protective posts require painting for visibility?		✓	N/A
Is a concrete pad installed?		✓	~~N/A~~
Is the concrete pad cracked or deteriorated?			N/A
Does the pad slope away from the casing?			N/A
WELL ACCESS	**Y**	**N**	**NOTES/PHOTOGRAPHS**
Is the well safely accessible?	✓		
Does the access road or general area require weed-eating, mowing, additional gravel or other maintenance?	✓		Access trail is primitive, and brush in the area is dense.
Does accessing the well require special access considerations (e.g., within other restricted/specially authorized areas)?		✓	Future visits may require clearing due to overgrowth.

MONITORING WELL INSPECTION CHECKLIST

NAME OF SITE: N. CRC
NAME OF INSPECTOR: PT/UK
WEATHER CONDITIONS / TEMPERATURE (°F): 52°F, Sunny

WELL-ID: PT/SBC1
WELL TYPE: Stickup
DATE/TIME: 9/24/25 1200

INSPECTION ITEMS			
WELL IDENTIFICATION	**Y**	**N**	**NOTES/PHOTOGRAPHS**
Is the well number or ID clearly legible?	✓		Added label to outer casing
Is the well identification correct?	✓		
Does the outermost casing have a lockable cap or lid?	✓		Lock + lid present, but lid comes off when locked
Is the lock present?	✓		
If flush mounted, is the cap lockable (and locked) or is a lock applied to the well plug?	–	–	N/A
If flush mounted, are all of the bolts present to secure the lid?	–	–	N/A
INNER WELL CASING	**Y**	**N**	**NOTES/PHOTOGRAPHS**
Is the inner or outer casing corroded, bent, dent, cracked, or frost jacked?		✓	
Has the well casing sustained vehicular or other damage?		✓	
Is the inner or outer casing loose (annular seal problem)?	✓		outer casing loose
If flush mounted, is the gasket seal in good condition?	–	–	N/A
DOWNHOLE CONDITION	**Y**	**N**	**NOTES/PHOTOGRAPHS**
Is dedicated sampling equipment present in the well?	✓		left dedicated tubing in well
Is a reference point clearly marked on the top of casing or top of well cap?	✓		Added reference marker
What is the measured depth of the well from top of casing (reference mark)?			DTW = 9.64'btoc / TD = 16.77'btoc
Do any obstructions occur within the well (comment on ice or other obstruction)?		✓	
Is the bottom of the well soft (mud on the measurement line)?	✓		
OUTER STRUCTURES	**Y**	**N**	**NOTES/PHOTOGRAPHS**
Are the protective posts damaged?	–	–	N/A
Do the protective posts require painting for visibility?	–	–	N/A
Is a concrete pad installed?		✓	
Is the concrete pad cracked or deteriorated?	–	–	N/A
Does the pad slope away from the casing?	–	–	N/A
WELL ACCESS	**Y**	**N**	**NOTES/PHOTOGRAPHS**
Is the well safely accessible?	✓		
Does the access road or general area require weed-eating, mowing, additional gravel or other maintenance?		✓	
Does accessing the well require special access considerations (e.g., within other restricted/specially authorized areas)?		✓	

MONITORING WELL INSPECTION CHECKLIST

NAME OF SITE: NSRL Kakaket
NAME OF INSPECTOR: PT IVK
WEATHER CONDITIONS / TEMPERATURE (°F) 34° F, Sunny

WELL-ID: PTISBC4
WELL TYPE: Stick-up
DATE/TIME: 9/24/25 1330

INSPECTION ITEMS			
WELL IDENTIFICATION	**Y**	**N**	**NOTES/PHOTOGRAPHS**
Is the well number or ID clearly legible?	✓		Added ID to outer casing
Is the well identification correct?	✓		
Does the outermost casing have a lockable cap or lid?	✓		Lid can be opened with lock on
Is the lock present?	✓		
If flush mounted, is the cap lockable (and locked) or is a lock applied to the well plug?	—	—	N/A
If flush mounted, are all of the bolts present to secure the lid?	—	—	N/A
INNER WELL CASING	**Y**	**N**	**NOTES/PHOTOGRAPHS**
Is the inner or outer casing corroded, bent, dent, cracked, or frost jacked?		✓	
Has the well casing sustained vehicular or other damage?		✓	
Is the inner or outer casing loose (annular seal problem)?		✓	
If flush mounted, is the gasket seal in good condition?	—	—	N/A
DOWNHOLE CONDITION	**Y**	**N**	**NOTES/PHOTOGRAPHS**
Is dedicated sampling equipment present in the well?	✓		Left dedicated tubing
Is a reference point clearly marked on the top of casing or top of well cap?	✓		Added reference Point
What is the measured depth of the well from top of casing (reference mark)?		✓	PTWS.01'btoc & TD=9.02'btoc
Do any obstructions occur within the well (comment on ice or other obstruction)?		✓	
Is the bottom of the well soft (mud on the measurement line)?		✓	
OUTER STRUCTURES	**Y**	**N**	**NOTES/PHOTOGRAPHS**
Are the protective posts damaged?	—	—	N/A
Do the protective posts require painting for visibility?	—	—	
Is a concrete pad installed?		✓	
Is the concrete pad cracked or deteriorated?	—	—	
Does the pad slope away from the casing?	—	—	
WELL ACCESS	**Y**	**N**	**NOTES/PHOTOGRAPHS**
Is the well safely accessible?	✓		
Does the access road or general area require weed-eating, mowing, additional gravel or other maintenance?	✓		Clearing of Alders
Does accessing the well require special access considerations (e.g., within other restricted/specially authorized areas)?		✓	

MONITORING WELL INSPECTION CHECKLIST

NAME OF SITE: N. Olzi Kalakaket
NAME OF INSPECTOR: PT/VK
WEATHER CONDITIONS / TEMPERATURE (°F) 35°F, Sunny

WELL-ID: PTISBC9
WELL TYPE: Stickup
DATE/TIME: 9/24/25 1415

INSPECTION ITEMS			
WELL IDENTIFICATION	**Y**	**N**	**NOTES/PHOTOGRAPHS**
Is the well number or ID clearly legible?		✓	well is not at figure location of SBC9. See field notes.
Is the well identification correct?			No well label present. well incorrectly identified on report figures.
Does the outermost casing have a lockable cap or lid?	✓		LID can be opened with fakon
Is the lock present?	✓		
If flush mounted, is the cap lockable (and locked) or is a lock applied to the well plug?	—	—	N/A
If flush mounted, are all of the bolts present to secure the lid?	—	—	N/A
INNER WELL CASING	**Y**	**N**	**NOTES/PHOTOGRAPHS**
Is the inner or outer casing corroded, bent, dent, cracked, or frost jacked?		✓	
Has the well casing sustained vehicular or other damage?		✓	
Is the inner or outer casing loose (annular seal problem)?		✓	
If flush mounted, is the gasket seal in good condition?	—	—	N/A
DOWNHOLE CONDITION	**Y**	**N**	**NOTES/PHOTOGRAPHS**
Is dedicated sampling equipment present in the well?	✓		left dedicated tubing in well
Is a reference point clearly marked on the top of casing or top of well cap?		✓	
What is the measured depth of the well from top of casing (reference mark)?		✓ PT	DTW = 4.50 ft btoc / TD = 12.80 ft btoc
Do any obstructions occur within the well (comment on ice or other obstruction)?		✓	
Is the bottom of the well soft (mud on the measurement line)?		✓	
OUTER STRUCTURES	**Y**	**N**	**NOTES/PHOTOGRAPHS**
Are the protective posts damaged?	—	—	N/A
Do the protective posts require painting for visibility?	—	—	
Is a concrete pad installed?		✓	
Is the concrete pad cracked or deteriorated?	—	—	
Does the pad slope away from the casing?	—	—	
WELL ACCESS	**Y**	**N**	**NOTES/PHOTOGRAPHS**
Is the well safely accessible?	✓		
Does the access road or general area require weed-eating, mowing, additional gravel or other maintenance?	✓		Alder clearing
Does accessing the well require special access considerations (e.g., within other restricted/specially authorized areas)?		✓	

GROUNDWATER SAMPLING DATA FORM

Well ID: ~~LF1MW1~~ LF1SB01MW ~~01~~

Project Name:	Kalakaket	**Date:**	8/22/25
Project Number:	120158	**Start Time:**	1845
Sampling Team:	K. Hrwska, C. Ede, P. Schick	**End Time:**	1846
Sample ID:	~~25LF002-LF1SB01MW~~	**Time:**	primary / dup / other:
Sample ID:	-	**Time:**	primary / dup / other:
Sample ID:	-	**Time:**	primary / dup / other:

Depth to Top of Product (BTOC):	n/a		**Total Depth (BTOC):**	12.06
Depth to Oil/Water Interface (BTOC):	n/a		**Depth to Water (BTOC)**	11.60
Casing Diameter:	(1 in.)	2 in. / 4 in.	**Water Column (ft)**	0.46
gal/ft of casing:	(0.041)	0.163 / 0.653	**Casing Volume (gal)**	0.019
Pump Intake Depth:	12.0		**Screen Interval**	9.56 - 12.06
Stable DTW (BTOC):	none/dry		**Measured Stick-up**	3.18

Method of Purging (circle one):

Pump: SUB BLDR (PERIST) OTHER: N/A

Pump Type: Alexis Flow Rate (~~gpm~~): 60 mL/min mL/min

Pump Time: 1 min

Bailer: TEFLON SS OTHER: Hydrosleeve

Required Pulls: n/a Bailer Vol. (gal): 0.25 / 0.33

Vol. Purged (gal): n/a

WELL STABILIZATION DATA

Time	Total Volume Purged (~~gallons~~) mL	Water Level (ft BTOC)	Draw Down	Temp. (°F or (°C))	pH	Conductivity (~~µS~~/cm) mS	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)
				± 3%	± 0.1	± 3%	± 10mV	± 10%	± 10% or <10 NTU
1845	60	11.60	-	8.5	6.42	0.166	62.7	13.11	71100
1846	Dry	12.06	0.46	-	-	-	-	-	-

Notes: Drawdown should be less than 0.3 feet from the original DTW. Minimal drawdown achieved and measured by: 1) pumping at a low rate (approx. 1 liter/3 minutes or 0.26 gallons/3 minutes or 50-500 mL/min) **and** 2) continually measuring water levels in the well.
Sample after 1) removing min. of 3 casing volumes **or** 2) min. of 3 parameters stabilize (4, if using temp.), **or** 3) for low yield wells, entire well casing is evacuated (ADEC, 2013).

Sensory Observations

Color: Clear, Amber, Tan, (Brown), Gray, Milky White, Other

Odor: None, Low, Medium, High, Very Strong, H_2S, Fuel-Like, Chemical ?, Unknown Organic - Smell

Turbidity: None, Low, Medium, High, (Very Turbid.), Heavy Silts

Comments: Not enough water to sample with hydrasleeve. Need at least 1 foot of water column. Purged Dry with peri-pump. Re-checked at ~~18~~ 1915 and no re-charge. CE 8/22/25 No sample collected.

Laboratory Analysis (circle):

GRO
DRO/RRO
VOCs
PAHs
EPH/VPH

GROUNDWATER SAMPLING DATA FORM

Well ID: ~~LF1MW30~~ LF1SB03mw

Project Name:	Kalakaket NorthORC	**Date:**	8/22/25
Project Number:	120158	**Start Time:**	1730
Sampling Team:	K. Hruska, C. Ede, P. Schick	**End Time:**	1745
Sample ID:	—	**Time:**	primary / dup / other:
Sample ID:	—	**Time:**	primary / dup / other:
Sample ID:	—	**Time:**	primary / dup / other:
Depth to Top of Product (BTOC):	—	**Total Depth (BTOC):**	8.96
Depth to Oil/Water Interface (BTOC):	—	**Depth to Water (BTOC)**	8.56
Casing Diameter:	*1 in.*	*2 in.*	*4 in.*	**Water Column (ft)**	0.4
gal/ft of casing:	*0.041*	*0.163*	*0.653*	**Casing Volume (gal)**	0.016
Pump Intake Depth:	—	**Screen Interval**	6.46 - 8.96 ft BTOC
Stable DTW (BTOC):	—	**Measured Stick-up**	

Method of Purging (circle one):

Pump: ~~SUB~~ ~~BLDR~~ PERIST OTHER:

Pump Type: Flow Rate (gpm):

Pump Time:

Bailer: TEFLON SS OTHER:

Required Pulls: Bailer Vol. (gal): ~~0.25~~ / 0.33

Vol. Purged (gal):

WELL STABILIZATION DATA

Time	Total Volume Purged (gallons)	Water Level (ft BTOC)	Draw Down	Temp. (°F or °C)	pH	Conductivity (µS/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)
				± 3%	± 0.1	± 3%	± 10mV	± 10%	± 10% or <10 NTU

Notes: Drawdown should be less than 0.3 feet from the original DTW. Minimal drawdown achieved and measured by: 1) pumping at a low rate (approx. 1 liter/3 minutes or 0.26 gallons/3 minutes or 50-500 mL/min) **and** 2) continually measuring water levels in the well.
Sample after 1) removing min. of 3 casing volumes **or** 2) min. of 3 parameters stabilize (4, if using temp.), **or** 3) for low yield wells, entire well casing is evacuated (ADEC, 2013).

Sensory Observations

Color: Clear, Amber, Tan, Brown, Gray, Milky White, Other

Odor: None, Low, Medium, High, Very Strong, H_2S, Fuel-Like, Chemical ?, Unknown

Turbidity: None, Low, Medium, High, Very Turbid, Heavy Silts

Comments: Water column and volume insufficient for sampling. No sample collected.

Laboratory Analysis (circle):

GRO
DRO/RRO
VOCs
PAHs
EPH/VPH

Reference: ADEC, 2013 Monitoring Well Guidance, September

LF1SB05mw

~~LF1MW5~~

GROUNDWATER SAMPLING DATA FORM

Well ID: ~~LF1SB05MW5~~

Project Name:	Kalakaket NorthORC	**Date:**	8/22/25
Project Number:	120158	**Start Time:**	1720
Sampling Team:	K. Hruska, C. Ede, P. Schick	**End Time:**	1725
Sample ID:	—	**Time:**	primary / dup / other:
Sample ID:	—	**Time:**	primary / dup / other:
Sample ID:	—	**Time:**	primary / dup / other:
Depth to Top of Product (BTOC):	—	**Total Depth (BTOC):**	15.66
Depth to Oil/Water Interface (BTOC):	—	**Depth to Water (BTOC)**	Dry
Casing Diameter:	(1 in.) 2 in. 4 in.	**Water Column (ft)**	0
gal/ft of casing:	(0.041) 0.163 0.653	**Casing Volume (gal)**	0
Pump Intake Depth:	—	**Screen Interval**	13.16 - 15.66 ft BTOC
Stable DTW (BTOC):	—	**Measured Stick-up**	

Method of Purging (circle one):

Pump: ~~SUB~~ BLDR PERIST OTHER:

Pump Type: Flow Rate (gpm):

Pump Time:

~~Bailer: TEFLON~~ SS OTHER:

Required Pulls: ~~Bailer Vol (gal): 0.25~~ / 0.33

~~Vol. Purged (gal):~~

WELL STABILIZATION DATA

Time	Total Volume Purged (gallons)	Water Level (ft BTOC)	Draw Down	Temp. (°F or °C)	pH	Conductivity (µS/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)
				± 3%	± 0.1	± 3%	± 10mV	± 10%	± 10% or <10 NTU

Notes: Drawdown should be less than 0.3 feet from the original DTW. Minimal drawdown achieved and measured by: 1) pumping at a low rate (approx. 1 liter/3 minutes or 0.26 gallons/3 minutes or 50-500 mL/min) and 2) continually measuring water levels in the well.
Sample after 1) removing min. of 3 casing volumes or 2) min. of 3 parameters stabilize (4, if using temp.), or 3) for low yield wells, entire well casing is evacuated (ADEC, 2013).

Sensory Observations

Color: Clear, Amber, Tan, Brown, Gray, Milky White, Other

Odor: None, Low, Medium, High, Very Strong, H_2S, Fuel-Like, Chemical ?, Unknown

Turbidity: None, Low, Medium, High, Very Turbid, Heavy Silts

Comments:

No water detected in well.
No sample collected.

Laboratory Analysis (circle):

GRO
DRO/RRO
VOCs
PAHs
EPH/VPH

LF15B07MW
LF1MW7 (10)

GROUNDWATER SAMPLING DATA FORM

Well ID: ~~LF15B07MW~~

Project Name:	Kalukakot		**Date:**	8/22/25	
Project Number:	120158		**Start Time:**	1619	
Sampling Team:	K. Hruska, K. Ede, P. Schick		**End Time:**	1700	
Sample ID:	25LF002-LF15B07MW	**Time:**	1650	(primary) dup	other: MS/MSD
Sample ID:	25LF002-LF15B07MW	**Time:**	1550	primary (dup)	other:
Sample ID:		**Time:**		primary dup	other:

Depth to Top of Product (BTOC):	N/A		**Total Depth (BTOC):**	11.03	
Depth to Oil/Water Interface (BTOC):	N/A		**Depth to Water (BTOC)**	8.49	
Casing Diameter:	(1 in.)	2 in. / 4 in.	**Water Column (ft)**	2.54	
gal/ft of casing:	0.041	0.163 / 0.653	**Casing Volume (gal)**	0.10	
Pump Intake Depth:	9.50		**Screen Interval**	8.5 - 11	
Stable DTW (BTOC):	8.49		**Measured Stick-up**	3.10	

Method of Purging (circle one):

Pump: SUB BLDR (PERIST) OTHER:

Pump Type: Alexis Flow Rate (gpm): 100 ml/min

Pump Time:

~~Bailer: TEFLON SS OTHER:~~

~~Required Pulls: Bailer Vol. (gal): 0.25 / 0.33~~

~~Vol. Purged (gal):~~

WELL STABILIZATION DATA

Time	Total Volume Purged (gallons)	Water Level (ft BTOC)	Draw Down	Temp. (°F or °C)	pH	Conductivity (µS/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)
				± 3%	± 0.1	± 3%	± 10mV	± 10%	± 10% or <10 NTU
1621	0.15	8.49	0.0	8.3	6.19	0.252	102.3	5.20	87.19
1626	0.30	8.49	0.0	7.6	6.22	0.241	97.2	3.52	26.79
1631	0.45	8.49	0.0	7.4	6.29	0.260	93.3	4.01	18.90
1636	0.60	8.49	0.0	7.4	6.30	0.261	91.2	3.35	13.00
1641	0.75	8.49	0.0	7.6	6.22	0.259	88.5	1.98	11.22
1646	0.90	8.49	0.0	7.3	6.28	0.259	87.1	3.22	10.68

Notes: Drawdown should be less than 0.3 feet from the original DTW. Minimal drawdown achieved and measured by: 1) pumping at a low rate (approx. 1 liter/3 minutes or 0.26 gallons/3 minutes or 50-500 mL/min) and 2) continually measuring water levels in the well.
Sample after 1) removing min. of 3 casing volumes or 2) min. of 3 parameters stabilize (4, if using temp.), or 3) for low yield wells, entire well casing is evacuated (ADEC, 2013).

Sensory Observations

Color: Clear, (Amber) Tan, Brown, Gray, Milky White, Other

Odor: None, (Low) Medium, High, Very Strong, H_2S, Fuel-Like, Chemical ?, Unknown musky smell

Turbidity: None, Low, (Medium), High, Very Turbid, Heavy Silts

Comments:

Total purge volume - 1.0 gallon

Laboratory Analysis (circle):

(GRO) (DRO/RRO) (VOCs) (PAHs)

EPH/VPH

GROUNDWATER SAMPLING DATA FORM

Well ID: PTISBC1

Project Name:	N. CRL Kalakakel	**Date:**	9/24/25		
Project Number:	12058	**Start Time:**	1200		
Sampling Team:	PT/VK	**End Time:**	1250		
Sample ID:	25CTCC1-PTISBC1	**Time:**	1200	primary / dup	other: MS/MSD
Sample ID:	—	**Time:**	—	primary / dup	other: —
Sample ID:	—	**Time:**	—	primary / dup	other: —
Depth to Top of Product (BTOC):	N/A	**Total Depth (BTOC):**	16.77		
Depth to Oil/Water Interface (BTOC):	N/A	**Depth to Water (BTOC)**	9.64		
Casing Diameter: (Approx)	1 in.	**Water Column (ft)**	7.13		
gal/ft of casing:	0.041	**Casing Volume (gal)**	0.29		
Pump Intake Depth:	~15.5	**Screen Interval**	2.5' screen		
Stable DTW (BTOC):	—	**Measured Stick-up**	3.3		

Method of Purging (circle one):

Pump: SUB BLDR (PERIST) OTHER:

Pump Type: Alexis Flow Rate (gpm): ~200 mL/min

Pump Time: 1200 – 1240

Bailer: TEFLON SS OTHER: N/A

Required Pulls: Bailer Vol. (gal): 0.25 / 0.33

Vol. Purged (gal):

WELL STABILIZATION DATA

Time	Total Volume Purged (gallons)	Water Level (ft BTOC)	Draw Down	Temp. (°F or °C)	pH	Conductivity (µS/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)
				± 3%	± 0.1	± 3%	± 10mV	± 10%	± 10% or <10 NTU
No Parameters Collected									

Notes: Drawdown should be less than 0.3 feet from the original DTW. Minimal drawdown achieved and measured by: 1) pumping at a low rate (approx. 1 liter/3 minutes or 0.26 gallons/3 minutes or 50-500 mL/min) **and** 2) continually measuring water levels in the well.
Sample after 1) removing min. of 3 casing volumes **or** 2) min. of 3 parameters stabilize (4, if using temp.), **or** 3) for low yield wells, entire well casing is evacuated (ADEC, 2013).

Sensory Observations

Color: (Clear), Amber, Tan, Brown, Gray, Milky White, Other

Odor: (None), Low, Medium, High, Very Strong, H_2S, Fuel-Like, Chemical ?, Unknown

Turbidity: None, (Low), Medium, High, Very Turbid, Heavy Silts

Comments: Collected all samples with Peri pump. Attempted pipette method for VOCs, but it wouldn't work on deeper well. Hydrasleeve assembly wouldn't fit in well because of thick outer wall of PVC. Left dedicated tubing in well.

Laboratory Analysis (circle):

GRO
(DRO/RRO
VOCs
PAHs)
EPH/VPH

Reference: ADEC, 2013 Monitoring Well Guidance, September.

GROUNDWATER SAMPLING DATA FORM

Well ID: PT1SBC4

Project Name:	N.ORC Kalakaket		**Date:**	9/24/25	
Project Number:	120158		**Start Time:**	1315	
Sampling Team:	ST/VK		**End Time:**	1350	
Sample ID:	250TOO1-PT1SBC4	**Time:** 1330	primary	dup	**other:**
Sample ID:	250TOO1-PT1SBC49	**Time:** 1230	primary	(dup)	**other:**
Sample ID:	—	**Time:** —	primary	dup	**other:** —
Depth to Top of Product (BTOC):	—	**Total Depth (BTOC):**	9.02		
Depth to Oil/Water Interface (BTOC):	—	**Depth to Water (BTOC)**	5.01		
Casing Diameter: (approx.)	1 in.	2 in.	4 in.	**Water Column (ft)**	4.01
gal/ft of casing:	0.041	0.163	0.653	**Casing Volume (gal)**	0.16
Pump Intake Depth:	~8.5'			**Screen Interval**	2.5' Screen
Stable DTW (BTOC):	—			**Measured Stick-up**	3.4

Method of Purging (circle one):

Pump: SUB BLDR (PERIST) OTHER:

Pump Type: Alexis Flow Rate (gpm):

Pump Time: 1330-1345

Bailer: TEFLON SS OTHER: N/A

Required Pulls: Bailer Vol. (gal): 0.25 / 0.33

Vol. Purged (gal):

WELL STABILIZATION DATA

Time	Total Volume Purged (gallons)	Water Level (ft BTOC)	Draw Down	Temp. (°F or °C)	pH	Conductivity (µS/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)
				± 3%	± 0.1	± 3%	± 10mV	± 10%	± 10% or <10 NTU
No Parameters Collected									

Notes: Drawdown should be less than 0.3 feet from the original DTW. Minimal drawdown achieved and measured by: 1) pumping at a low rate (approx. 1 liter/3 minutes or 0.26 gallons/3 minutes or 50-500 mL/min) **and** 2) continually measuring water levels in the well.
Sample after 1) removing min. of 3 casing volumes **or** 2) min. of 3 parameters stabilize (4, if using temp.), **or** 3) for low yield wells, entire well casing is evacuated (ADEC, 2013).

Sensory Observations

Color: Clear, Amber, (Tan), Brown, Gray, Milky White, Other

Odor: (None), Low, Medium, High, Very Strong, H_2S, Fuel-Like, Chemical ?, Unknown

Turbidity: None, Low, Medium, (High), Very Turbid, Heavy Silts

Comments:

Collected VOCs by Pipette method

Hydrasleeve assembly would not fit in well because of thick PVC wall

left dedicated tubing in well

Laboratory Analysis (circle):

(GRO
DRO/RRO
VOCs
PAHs
EPH/VPH)

GROUNDWATER SAMPLING DATA FORM

Well ID: PT1SB09

Project Name:	N.CRI Kalakaket		**Date:**	9/24/25		
Project Number:	120158		**Start Time:**	1415		
Sampling Team:	~~250TCC1 - PT1SB09~~ PT/UK		**End Time:**	1430		
Sample ID:	250TCC1 - PT1SB09	**Time:**	1420	primary	dup	**other:** —
Sample ID:	—	**Time:**	—	primary	dup	**other:** —
Sample ID:	—	**Time:**	—	primary	dup	**other:** —
Depth to Top of Product (BTOC):	—		**Total Depth (BTOC):**	12.80		
Depth to Oil/Water Interface (BTOC):	—		**Depth to Water (BTOC)**	4.50		
Casing Diameter:	*1 in.*	*2 in.*	*4 in.*	**Water Column (ft)**	8.30	
gal/ft of casing:	*approx 0.041*	*0.163*	*0.653*	**Casing Volume (gal)**	0.34	
Pump Intake Depth:	~12 ft btoc			**Screen Interval**	2.5' Screen	
Stable DTW (BTOC):	—			**Measured Stick-up**	1.2	

Method of Purging (circle one):

Pump: SUB BLDR (PERIST) OTHER:

Pump Type: Alexis Flow Rate (gpm): ~100 gpm

Pump Time: 1410-1420

Bailer: TEFLON SS OTHER:

Required Pulls: Bailer Vol. (gal): 0.25 / 0.33

Vol. Purged (gal):

WELL STABILIZATION DATA

Time	Total Volume Purged (gallons)	Water Level (ft BTOC)	Draw Down	Temp. (°F or °C)	pH	Conductivity (µS/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)
				± 3%	± 0.1	± 3%	± 10mV	± 10%	± 10% or <10 NTU
No Parameters Collected									

Notes: Drawdown should be less than 0.3 feet from the original DTW. Minimal drawdown achieved and measured by: 1) pumping at a low rate (approx. 1 liter/3 minutes or 0.26 gallons/3 minutes or 50-500 mL/min) and 2) continually measuring water levels in the well.
Sample after 1) removing min. of 3 casing volumes or 2) min. of 3 parameters stabilize (4, if using temp.), or 3) for low yield wells, entire well casing is evacuated (ADEC, 2013).

Sensory Observations

Color: Clear, Amber, (Tan), Brown, Gray, Milky White, Other

Odor: (None), Low, Medium, High, Very Strong, H_2S, Fuel-Like, Chemical ?, Unknown

Turbidity: None, Low, Medium, (High), Very Turbid, Heavy Silts

Comments: Could not collect VOCs by Pipette method because well is too deep. Hydrasleeve assembly would not fit in well because of thick PVC wall

Laboratory Analysis (circle):

GRO
(DRO/RRO
VOCs
PAHs)
EPH/VPH

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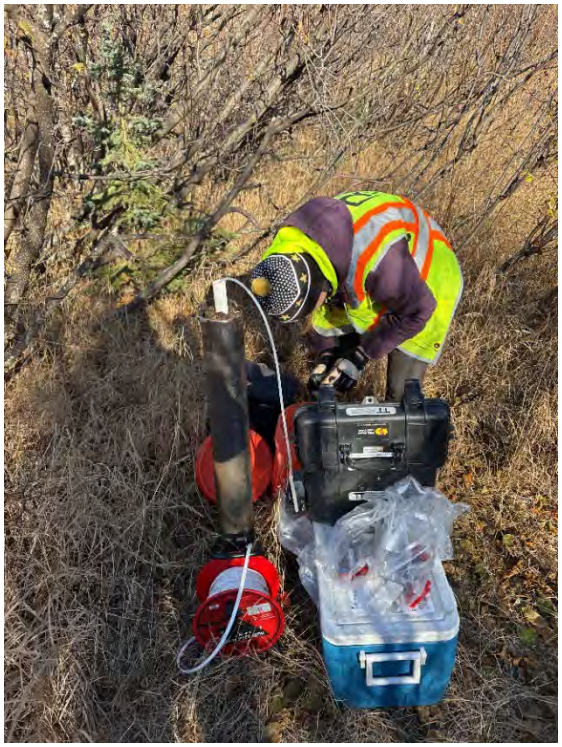

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APPENDIX D
CHEMICAL DATA QUALITY REPORT

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ACRONYMS AND ABBREVIATIONS

°C	degrees Celsius
µg/L	micrograms per liter
%R	percent recovery
AAC	Alaska Administrative Code
ADEC	Alaska Department of Environmental Conservation
CCV	continuing calibration verification
CDQR	Chemical Data Quality Report
CoC	chain-of-custody
DL	detection limit
DoD	Department of Defense
DQO	data quality objective
DRO	diesel range organics
EB	equipment blank
EPA	U.S. Environmental Protection Agency
FD	field duplicate
GC	gas chromatography
GC/MS	gas chromatography/mass spectrometry
GRO	gasoline range organics
ICV	initial calibration verification
LCL	lower control limit
LCS	laboratory control sample
LCSD	laboratory control sample duplicate
LL	low level
LOD	limit of detection
LOQ	limit of quantitation
MB	method blank
MS	matrix spike
MSD	matrix spike duplicate
ND	non-detect
Pace-TN	Pace National, Mt. Juliet, Tennessee
PAH	polycyclic aromatic hydrocarbon
PSL	project screening level
QA	quality assurance
QC	quality control
QSM	Quality Systems Manual
RPD	relative percent difference
SDG	sample delivery group
SIM	selected ion monitoring
SOP	standard operating procedure

ACRONYMS AND ABBREVIATIONS (CONTINUED)

TB	trip blank
UCL	upper control limit
USAF	U.S. Air Force
VOC	volatile organic compound

1.0 INTRODUCTION

This quality assurance (QA)/quality control (QC) report summarizes the evaluation of laboratory data collected during the 2025 long-term monitoring groundwater sampling at Kalakaket Creek Radio Relay Station (RRS) performed in September. The data has been reviewed to evaluate compliance with acceptance criteria based on data quality objectives (DQOs) specified in the approved *Final Work Plan Long-Term Management Kalakaket Radio Relay Station Site LF002 and Site OT001* (U.S. Air Force [USAF] 2025), hereafter referred to as the Work Plan.

This Chemical Data Quality Report (CDQR) includes the report narrative; a sample summary, including all samples collected and submitted to the laboratory for the associated sample delivery group (SDG) in Attachment D-1; complete analytical results presented in crosstab format in Attachment D-2; and the Alaska Department of Environmental Conservation (ADEC) Laboratory Data Review Checklist in Attachment D-3. The laboratory report(s) are included as Attachment D-4.

2.0 DATA VERIFICATION, DATA QUALITY REVIEW, AND QUALIFICATION

Pace Analytical of Mt. Juliet, Tennessee (Pace-TN) was the laboratory for this project. Pace-TN holds current ADEC laboratory approval and Department of Defense (DoD) Environmental Laboratory Accreditation Program certifications for all requested analyses, and chemical analyses for all parameters were performed in accordance with the DoD *Quality Systems Manual* (QSM) *for Environmental Laboratories, Version 5.4* (DoD 2021a), hereafter referred to as the QSM. Samples were prepared and analyzed in accordance with analytical methods specified in *Test Methods for Evaluating Solid Waste SW-846* (U.S. Environmental Protection Agency [EPA] 2023); *Underground Storage Tanks Procedures Manual* (ADEC 2017); and laboratory standard operating procedures (SOPs).

The data quality review and assessment were performed by an experienced QA chemist independent of the analytical laboratory. This evaluation included completion of the ADEC Laboratory Data Review Checklist and review of analytical data including QC sample results, field and laboratory documentation, and all data submittals for each SDG. Groundwater analytical results were compared to project screening levels (PSLs), which were defined as Title 18 of the Alaska Administrative Code (AAC), Chapter 75, Table C groundwater cleanup levels (ADEC 2023).

All project data was reviewed on an analytical-batch basis by assessing QC samples and associated field sample results. Data quality review and usability assessment were performed using the acceptance criteria defined in QSM (DoD 2021a); *General Data Validation Guidelines* (DoD 2019); *Data Validation Guidelines Module 1: Data Validation Procedure for Organic Analysis by GC/MS* (DoD 2020); *Data Validation Guidelines Module 4: Data Validation Procedure for Organic Analysis by GC* (DoD 2021b); ADEC *Technical Memorandum 22-001, Guidelines for Data Reporting* (ADEC 2022); and specific method guidance, such as the ADEC *Underground Storage Tanks Procedures Manual* (ADEC 2017), *Test Methods for Evaluating Solid Waste SW-846* (EPA 2023), and the laboratory SOPs, in that order.

The following information was reviewed as part of the data quality review and assessment:

- Sample handling and chain-of-custody (CoC)
- Sample preservation and holding time compliance
- Field QC samples, including trip blanks (TBs), equipment blanks (EBs), and field duplicates (FDs)
- Laboratory reporting limits, including limits of detection (LODs) and limits of quantitation (LOQs)
- Method blanks (MBs)
- Laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) recoveries
- Surrogate spike recoveries
- Matrix spike (MS) and matrix spike duplicate (MSD) recoveries
- Initial and continuing calibration summary information
- Internal standards performance (gas chromatography/mass spectrometry [GC/MS])
- Precision, including relative percent difference (RPD) values for duplicate analyses
- Case narrative review, laboratory flagging review, and other analytical method-specific criteria

The data quality review and assessment identified results requiring qualification and potential effects on data usability based on the acceptance criteria defined in the Work Plan. The following acceptance criteria were used for this data quality review and assessment:

- *Precision* is a measure of the reproducibility of measurements, which can be used to verify laboratory procedures, determine matrix effect, or sample homogeneity. Precision was measured by the RPD between LCS and LCSDs, MS and MSDs, or primary and FD results.
- *Accuracy* is a measure of the correctness or closeness to the true value. Accuracy was evaluated by reviewing the following elements: calibrations, surrogates, LCS, LCSD, MS, MSD, MBs, relative response factors and relative standard deviations, tune criteria, second column confirmations, and internal standards.
- *Representativeness* is a measure of the degree to which the samples reflect the site characteristics. Representativeness was measured by reviewing sampling design, sampling procedures, sample documentation, holding times, and preservations.
- *Completeness* is a measure of the amount of valid data obtained compared to the amount that was expected to be obtained under correct, normal conditions. For completeness requirements, valid results were all results not rejected and determined to be usable in the context of the DQOs. Completeness was evaluated for each analytical method for a particular sampling event with respect to each DQO or end data use. The completeness goal is 95% for this project.
- *Comparability* is a measure of the confidence with which one data set can be compared to another. The following were reviewed to confirm comparability: use of standard methods for sampling and analysis, reporting in standard units, operating instruments within calibrated ranges, and using standard and comprehensive reporting formats.
- *Sensitivity* is a measure of the ability of a method or instrument to detect the target analyte at the level of interest. The laboratory-specific limits were evaluated against the project PSLs to determine whether the analytical methods and/or laboratory procedures were able to meet the project DQOs.

The qualifiers listed in Table 1 were applied to the analytical data set, as appropriate.

Table 1 Data Qualifiers

QUALIFIER	DESCRIPTION
ND [LOD]	The analyte was not detected and was reported as less than the LOD. The LOD has been adjusted for any dilution or concentration of the sample.
J	Analyte is considered an estimated value because the result is greater than or equal to the DL and less than the LOQ.
B	Analyte result is considered a high estimated value due to contamination present in an associated blank (e.g., MB or TB).
H	Analyte result is considered a low estimate due to a holding time exceedance.
QH/QL/QN	Analyte result is considered an estimated value biased (high, low, uncertain) due to a QC failure.
X	The sample results (including ND) were affected by serious deficiencies in the ability to analyze the sample and to meet published method and acceptance criteria. The presence or absence of the analyte cannot be substantiated by the data provided. Acceptance or rejection of the data should be decided by the project team (which should include a project chemist), but exclusion of the data is recommended.
R	Analyte result is rejected due to serious QC failures – result is not usable. *Note that R replaces the chemical result in the final report (no result will be reported with an R flag).*

Notes:
For definitions, refer to the Acronyms and Abbreviations section.

Qualification may not be required in the following circumstances:

- Surrogate or MS recoveries were outside QC limits, and dilution of the sample resulted in surrogate or spike dilution to a level beyond quantitation.
- MS recoveries were outside QC limits, and the spiked concentration was less than that of the parent sample.
- An analyte was detected in the associated blank, but there was no detection in the associated sample.
- MS/MSD or LCS/LCSD recoveries exceeded upper control limits (UCLs) and there was no detection in the sample(s).

Data quality exceptions that do not result in qualifications are not discussed in this report and are addressed in the associated ADEC Laboratory Data Review Checklist (Attachment D-3).

3.0 CHEMICAL DATA QUALITY REPORT

The data verification and CDQR were performed to assess the overall quality and usability of the data collected to support sampling activities for Site LF002 and Site OT001 in Kalakaket. Complete details for the review and evaluation of field samples and associated QC samples are included in this CDQR and in the ADEC Laboratory Data Review Checklists (Attachment D-3). During the data quality review, analytical results or recoveries that fell outside acceptance criteria were identified and qualifiers were applied to the results, where appropriate, in accordance with the project Work Plan. Qualified results are considered estimated, and whenever possible, direction of potential bias was assigned and effects on usability are discussed.

3.1 Analytical Sample and Field Quality Control Sample Summary

A total of four primary groundwater samples, two FDs, and two TBs were collected and analyzed in support of project activities. The sample summary table in Attachment D-1 includes all field samples submitted to the analytical laboratory. Results are reported under Pace-TN work order numbers L1892109 (LF002) and L1902397 (OT001).

The project-required frequency of one FD for every 10 or fewer primary samples, per analyte, per matrix, was met. Sample 25LF002-LF1SB079MW was submitted as an FD of 25LF002-LF1SB07MW, and OT001-PT1SB049 was submitted as an FD for 25OT001-PT1SB04 for all methods.

MS/MSDs were collected and submitted to the laboratory at the project-required minimum frequency of one set for every 20 or fewer project samples (5%) and designated MS/MSD samples were included in both shipments. Sample 25LF002-LF1SB07MW was designated as the MS/MSD for L1892109 (LF002) and 25OT001-PT1SB01 was designate the MS/MSD for L1902397 (OT001).

A TB was included in each of the two coolers containing all samples: 25LF002-TB01 for LF002 in cooler 25KALET-01 and 25KCOT001-TB01 for OT001 in cooler Lone Wolf.

3.2 Sample Handling and Chain-of-Custody

CoC forms and laboratory case narratives were reviewed to assess sample handling procedures that may affect the integrity of the samples and quality of the resulting data. Copies of CoCs and cooler receipt forms are included in the final laboratory report. Samples were required to be maintained at 0 to 6 degrees Celsius (°C) following collection, during storage, and upon receipt at the laboratory.

Samples were packed with frozen gel packs in accordance with the Work Plan. Groundwater samples were shipped to Nashville, TN, via Alaska Airlines Goldstreak, then forwarded to Pace-TN, via courier. The sample coolers were received with a temperature blank temperature between 0 and 6°C at 0.7°C for "25KALET-01" and 0.2°C for "Lone Wolf". All samples were received in good condition, and no anomalies were noted at receipt.

3.3 Sample Preservation and Holding Time Compliance

All samples were extracted and/or analyzed within the recommended holding times and were properly preserved for the analytical procedures used for this project with the following exceptions:

- The 8270 PAH extraction of samples 25LF002-LF1SB07MW and 25LF002-LF1SB079MW were one day past holding time due to logistical constrictions. Affected results are qualified as estimated and flagged QL to indicate a possible low bias. Usability is not affected as the qualified results are either less than the PSL, or greater than the PSL.

3.4 Sample Limits of Detection and Limits of Quantitation

Sample LOQs and LODs for non-detects were compared to PSLs to determine whether the laboratory data met the acceptance criteria for sensitivity. PSLs for groundwater samples were defined as the ADEC 18 AAC 75 Table C Groundwater Cleanup Levels (ADEC 2023). All reported LODs for non-detect results met acceptance criteria for sensitivity, except as noted:

The undiluted 8260 LOD for 1,2,3-trichloropropane (0.5 micrograms per liter [µg/L]) and hexachloro-1,3-butadiene (2.0 µg/L) did not meet the CL (0.0075/1.4 µg/L, respectively) in all samples from both sites due to the sensitivity of the instrument. LODs were generally comparable to those listed in the approved Quality Assurance Project Plan (QAPP), with the method detection limit for hexachlorobutadiene (0.508 µg/L) meeting the PSL. Of 1.4 µg/L.

Non-detect results with LODs greater than PSLs are highlighted yellow in the data summary tables. These results cannot be used to verify the absence of these analytes less than the PSL.

3.5 Analytical Methods

The following sections describe the results of the review and assessment of data for each analytical method. QC parameters met acceptance criteria and QSM criteria except where noted. A complete summary of qualified results is presented in Table 2.

3.5.1 Gasoline Range Organics – ADEC Method AK101

3.5.1.1 Method Blank Analysis

An MB was included with each preparatory batch of 20 or fewer samples, as required. MB detections are indicative of laboratory cross-contamination.

No target analytes were detected in the MBs.

3.5.1.2 Laboratory Control Sample/Laboratory Control Sample Duplicate Analysis

An LCS or LCS/LCSD pair was included with each preparatory batch, as required by the ADEC method.

All LCS/LCSD recoveries and RPDs were within acceptance criteria.

3.5.1.3 Matrix Spike/Matrix Spike Duplicate Analysis

Project-specific MS/MSD samples were collected and submitted at the project-required frequency of one for each preparatory batch and one MS/MSD per 20 or fewer samples. Samples were analyzed in six batches. An MS/MSD was performed in each batch; however, only batch WG2591456 contained the MS/MSD performed on the project-specific sample.

SDG L1892109: Sample 25LF002-LF1SB07MW was submitted as an MS/MSD sample for this SDG, and it is reported in batch WG2591456. The MS/MSD met accuracy and precision limits.

SDG L1902397: This SDG did not have any samples submitted for gasoline range organic (GRO) analysis.

3.5.1.4 Surrogate Spike Recoveries

Surrogates were included with all laboratory QC and field samples, as required. Surrogate recoveries were reviewed and compared to method control limits.

All surrogate recoveries were within method control limits for laboratory QC and field samples.

3.5.1.5 Trip Blank Sample Analysis

A TB was included with each cooler containing volatile samples, as required. TB detections are indicative of shipment and storage cross-contamination. No target analytes were detected in the TB.

3.5.1.6 Initial Calibration Verification/Continuing Calibration Verification

Initial calibration verification (ICV) samples and all continuing calibration verification (CCV) samples met the AK101 method acceptance criteria of less than 25% difference.

3.5.1.7 Other Quality Control Items

SDG L1892109: the volatile analyses for samples LF1SB07MW and FD LF1SB079MW were collected by peri-pump after all other methods/attempts were exhausted. Because this was the only means of sampling, the GRO and VOC results for these samples are qualified as estimated and flagged QL to indicate a possible low bias.

3.5.2 Volatile Organic Compounds – EPA Methods SW8260D-LL

3.5.2.1 Method Blank Analysis

An MB was included with each preparatory batch of 20 or fewer samples, as required. MB detections are indicative of laboratory cross-contamination.

SDG L1892109: Chloroform was detected in MB R4267507-3 (batch WG2590564) at 0.021 J µg/L. This analyte was not detected in the associated samples; therefore, no qualifications were made.

SDG L1902397: Chloroform was detected in the 8260 batch WG2610527 at 0.06 µg/L, which is less than half the LOQ of 0.05 µg/L, tetrachloroethene was detected in 8260 batch WG2614994 at 0.075 µg/L and 2-hexanone was detected in 8260 batch WG2616140 at 0.433 µg/L. It was not detected in any project samples so no flags were applied for potential blank contamination

3.5.2.2 Laboratory Control Sample/Laboratory Control Sample Duplicate Analysis

An LCS or LCS/LCSD pair was included with each preparatory batch, as required. All LCS/LCSD recoveries were within control limits and LCS/LCSD precision was within the RPD limit, except as noted:

SDG L1892109:

- **Batch WG2591248:** The recoveries for dibromochloromethane (128/132%) and bromoform (140/142%) in the LCS and LCSD respectively, were greater than the UCLs (126/130%). These two analytes were not detected in the associated samples; therefore, no qualifications were made and usability is not affected.

SDG L1902397:

- **Batch WG2610527:** The recovery for 1,2,4-trichlorobenzene (138%) in the LCSD is greater than the UCL (130%). 1,2,4-trichlorobenzene was not detected in the associated samples; therefore, no qualifications were made and usability is not affected.
- **Batch WG2611132:** The recovery for hexachlorobutadiene (137/135%) in the LCS/LCSD is greater than the UCL (134%). Hexachlorobutadiene was not detected in the associated samples; therefore, no qualifications were made and usability is not affected.

Batch WG2614994: The LCS/LCSD RPD for naphthalene (23.1%) exceeded the 20% RPD limit. The detected results for naphthalene in the associated samples 25OT001-PT1SB09 and 25OT001-PT1SB049 are qualified as estimated and flagged QN.

The naphthalene result for 25OT001-PT1SB09 is significantly greater than the PSL. Sample 25OT001-PT1SB049 is the field duplicate for 25OT001-PT1SB04. Naphthalene was not detected in the parent sample, and significantly less than the PSL of 1.7 µg/L in the duplicate; usability is not impacted.

3.5.2.3 Matrix Spike/Matrix Spike Duplicate Analysis

Project-specific MS/MSD samples were collected and submitted at the project-required frequency of one for each preparatory batch and one MS/MSD per 20 or fewer samples. Samples were analyzed in six batches. An MS/MSD was performed in each batch; however, only batch WG2558641 contained the MS/MSD performed on the project-specific sample.

SDG L1892109:
Sample 25LF002-LF1SB07MW was submitted as an MS/MSD sample and it is reported in batch WG2591248. The following analytes recovered outside the lower acceptance limits in the MS and/or MSD:

Method	Field ID	Lab Sample ID	Analyte	QC Type	%R	LCL	UCL
8260D-LL	25LF002-LF1SB07MW	R4267618-4	1,1-Dichloroethane	MS	74.4	77	125
8260D-LL	25LF002-LF1SB07MW	R4267618-4	1,1-Dichloroethene	MS	64.8	71	131
8260D-LL	25LF002-LF1SB07MW	R4267618-5	1,1-Dichloroethene	MSD	64.4	71	131
8260D-LL	25LF002-LF1SB07MW	R4267618-4	1,1-Dichloropropene	MS	73.6	79	125
8260D-LL	25LF002-LF1SB07MW	R4267618-5	1,1-Dichloropropene	MSD	72.4	79	125
8260D-LL	25LF002-LF1SB07MW	R4267618-4	1,2,3-Trichlorobenzene	MS	66	69	129
8260D-LL	25LF002-LF1SB07MW	R4267618-4	1,2,4-Trichlorobenzene	MS	64	69	130
8260D-LL	25LF002-LF1SB07MW	R4267618-4	1,3,5-Trimethylbenzene	MS	74.4	75	124
8260D-LL	25LF002-LF1SB07MW	R4267618-4	1,4-Dichlorobenzene	MS	78.8	79	118
8260D-LL	25LF002-LF1SB07MW	R4267618-4	2,2-Dichloropropane	MS	56	60	139
8260D-LL	25LF002-LF1SB07MW	R4267618-5	2,2-Dichloropropane	MSD	56.4	60	139
8260D-LL	25LF002-LF1SB07MW	R4267618-4	4-Isopropyltoluene	MS	74.4	77	127
8260D-LL	25LF002-LF1SB07MW	R4267618-4	Benzene	MS	75.5	79	120
8260D-LL	25LF002-LF1SB07MW	R4267618-5	Benzene	MSD	75.5	79	120
8260D-LL	25LF002-LF1SB07MW	R4267618-4	Carbon Disulfide	MS	61.6	64	133
8260D-LL	25LF002-LF1SB07MW	R4267618-5	Carbon Disulfide	MSD	62.8	64	133
8260D-LL	25LF002-LF1SB07MW	R4267618-4	Chlorobenzene	MS	74.8	82	118
8260D-LL	25LF002-LF1SB07MW	R4267618-5	Chlorobenzene	MSD	77.2	82	118
8260D-LL	25LF002-LF1SB07MW	R4267618-4	Chloroform	MS	76.4	79	124
8260D-LL	25LF002-LF1SB07MW	R4267618-5	Chloroform	MSD	78.8	79	124
8260D-LL	25LF002-LF1SB07MW	R4267618-4	Ethylbenzene	MS	74.4	79	121
8260D-LL	25LF002-LF1SB07MW	R4267618-5	Ethylbenzene	MSD	75.6	79	121
8260D-LL	25LF002-LF1SB07MW	R4267618-4	Hexachloro-1,3-butadiene	MS	64	66	134
8260D-LL	25LF002-LF1SB07MW	R4267618-4	Isopropylbenzene	MS	70.4	72	131
8260D-LL	25LF002-LF1SB07MW	R4267618-5	Isopropylbenzene	MSD	71.2	72	131
8260D-LL	25LF002-LF1SB07MW	R4267618-4	n-Butylbenzene	MS	68.8	75	128
8260D-LL	25LF002-LF1SB07MW	R4267618-5	n-Butylbenzene	MSD	73.2	75	128
8260D-LL	25LF002-LF1SB07MW	R4267618-4	o-Xylene	MS	75.6	78	122
8260D-LL	25LF002-LF1SB07MW	R4267618-4	sec-Butylbenzene	MS	73.2	77	126
8260D-LL	25LF002-LF1SB07MW	R4267618-5	sec-Butylbenzene	MSD	76.4	77	126

Method	Field ID	Lab Sample ID	Analyte	QC Type	%R	LCL	UCL
8260D-LL	25LF002-LF1SB07MW	R4267618-4	tert-Butylbenzene	MS	76	78	124
8260D-LL	25LF002-LF1SB07MW	R4267618-4	Tetrachloroethene (PCE)	MS	68.4	74	129
8260D-LL	25LF002-LF1SB07MW	R4267618-5	Tetrachloroethene (PCE)	MSD	68.4	74	129
8260D-LL	25LF002-LF1SB07MW	R4267618-4	Toluene	MS	69.6	80	121
8260D-LL	25LF002-LF1SB07MW	R4267618-5	Toluene	MSD	70.8	80	121
8260D-LL	25LF002-LF1SB07MW	R4267618-4	trans-1,2-Dichloroethene	MS	69.6	75	124
8260D-LL	25LF002-LF1SB07MW	R4267618-5	trans-1,2-Dichloroethene	MSD	71.6	75	124
8260D-LL	25LF002-LF1SB07MW	R4267618-5	Trichloroethene (TCE)	MSD	78.4	79	123
8260D-LL	25LF002-LF1SB07MW	R4267618-4	Xylene, Isomers m & p	MS	72.8	80	121
8260D-LL	25LF002-LF1SB07MW	R4267618-5	Xylene, Isomers m & p	MSD	74.4	80	121
8260D-LL	25LF002-LF1SB07MW	R4267618-4	Xylenes	MS	73.7	79	121
8260D-LL	25LF002-LF1SB07MW	R4267618-5	Xylenes	MSD	75.7	79	121

Notes:
For definitions, refer to the Acronyms and Abbreviations section.

The RPD for chloromethane (22.7%) is greater than the limit of 20%.

A total of 26 analytes are qualified as estimated and flagged QL in parent sample to indicate a possible low bias. Table 2 presents the qualified results summary.

SDG L1902397:
Sample 25OT001-PT1SB01 was submitted as the MS/MSD and is reported in batch WG2614994. The recoveries for the following analytes are less than the LCLs:

Method	Field ID	Lab Sample ID	Analyte	QC Type	%R	LCL	UCL
8260D-LL	25OT001-PT1SB01	R4283555-4	2-Chlorotoluene	MS	76.2	79	122
8260D-LL	25OT001-PT1SB01	R4283555-4	4-Isopropyltoluene	MS	74.2	77	127
8260D-LL	25OT001-PT1SB01	R4283555-4	n-Butylbenzene	MS	74.8	75	128
8260D-LL	25OT001-PT1SB01	R4283555-4	n-Propylbenzene	MS	71.6	76	126
8260D-LL	25OT001-PT1SB01	R4283555-5	n-Propylbenzene	MSD	73	76	126
8260D-LL	25OT001-PT1SB01	R4283555-4	sec-Butylbenzene	MS	71	77	126
8260D-LL	25OT001-PT1SB01	R4283555-5	sec-Butylbenzene	MSD	74.5	77	126
8260D-LL	25OT001-PT1SB01	R4283555-4	tert-Butylbenzene	MS	73.5	78	124
8260D-LL	25OT001-PT1SB01	R4283555-5	tert-Butylbenzene	MSD	72.9	78	124

Notes:
For definitions, refer to the Acronyms and Abbreviations section.

The non-detect results for these analytes are qualified as estimated and flagged QL in the parent sample to indicate a possible low bias. Usability is not impacted as the LODs for the non-detect results are significantly less than the PSL. Table 2 presents the qualified results summary.

3.5.2.4 Surrogate Spike Recoveries

Surrogates were included with all laboratory QC and field samples, as required. Surrogate recoveries were reviewed and compared to acceptance criteria.

All samples and batch QC met surrogate recovery limits.

3.5.2.5 Trip Blank Sample Analysis

A TB was included with each cooler containing volatile samples, as required. TB detections are indicative of shipment and storage cross-contamination.

SDG L1892109: Trip blank 25LF002-TB01 was included in cooler 25KALET-01. Toluene was detected at 0.148 J µg/l, and m,p-xylenes were detected at 0.084 J µg/L. Associated samples were non-detect or greater than 5 times the concentration in the blank except for toluene detections in samples 25LF002-LF1SB07MW and FD 25LF002-LF1SB079MW. The toluene results in these two samples are qualified as estimated and flagged B to indicate a possible high bias. Usability is not affected as the qualified results are significantly less than the PSL of 1100 µg/L.

SDG L1902397: Trip Blank 25KCOT001-TB01 was included in cooler "Lone Wolf". Toluene was detected at 0.093 µg/L. The detected toluene results in samples 25OT001-PT1SB01, 25OT001-PT1SB049, and 25OT001-PT1SB09 are less than 5 times the concentration in the TB; therefore, results are qualified as estimated and flagged B to indicate a possible high bias. Usability is not affected as the qualified results are significantly less than the PSL of 1100 µg/L.

3.5.2.6 Initial Calibration Verification/Continuing Calibration Verification

ICV samples and all CCV samples met the QSM acceptance criteria of less than 20% difference (less than 50% for end of analytical-batch CCV) except as noted:

- **Batch WG2591248**: 1,2-dibromo-3-chloropropane, bromoform, chlorodibromomethane and naphthalene exceeded the upper control limit. Only the batch QC (LCS/LCSD, MS/MSD) were affected as all project sample results were ND so no flags were applied.
- **Batch WG2592901**: recoveries for vinyl acetate exceeded the upper control limit. Only the batch QC (LCS/LCSD) were affected as all project sample results were ND so no flags were applied.

3.5.2.7 Other Quality Control Items

The volatile analyses for samples LF1SB07MW and FD LF1SB079MW, PT1SB01 and PT1SB09 were collected by peri-pump after all other methods/attempts were exhausted. Because this was the only means of sampling, the VOC results for these samples are qualified as estimated and flagged QL to indicate a possible low bias.

3.5.3 Diesel Range and Residual Range Organics – ADEC Method AK102/AK103

3.5.3.1 Method Blank Analysis

An MB was included with each preparatory batch of 20 or fewer samples, as required. MB detections are indicative of laboratory cross-contamination.

No target analytes were detected in the MBs.

3.5.3.2 Laboratory Control Sample/Laboratory Control Sample Duplicate Analysis

An LCS and LCSD were included with each preparatory batch, as required. All LCS and LCSD recoveries and RPDs were within acceptance criteria.

3.5.3.3 Matrix Spike/Matrix Spike Duplicate Analysis

MS/MSD samples were collected and submitted at the project-required frequency of one for each preparatory batch and one MS/MSD per 20 or fewer samples. MS and MSD samples were prepared and analyzed for each laboratory batch.

SDG L1892109:

Sample 25LF002-LF1SB07MW was submitted as the MS/MSD for SDG L1892109 and is reported in batch WG2560303. MS/MSD recoveries and MS/MSD RPD met acceptance criteria.

SDG L1902397:

Sample 25OT001-PT1SB01 was submitted as the MS/MSD for and is reported in batch WG2611590. The recoveries for DRO (70.1/70.7%) in the MS/MSD, respectively, are less than the LCL of 75%. The non-detect result for DRO in the parent sample is qualified as estimated and flagged QL to indicate a possible low bias. Usability is not affected as the LOD for the qualified results are significantly less than the PSL.

3.5.3.4 Surrogate Spike Recoveries

Surrogates were included with all laboratory QC and field samples, as required. Surrogate recoveries were reviewed and compared to method control limits. All surrogate recoveries were within method control limits for laboratory QC and field samples.

3.5.3.5 Initial Calibration Verification/Continuing Calibration Verification

Second source ICV and all CCVs met acceptance criteria of less than 25% difference.

3.5.3.6 Other Quality Control Items

No additional QC items that required data qualification were identified.

3.5.4 Polycyclic Aromatic Hydrocarbons – EPA Method SW8270E-SIM

3.5.4.1 Method Blank Analysis

An MB was included with each preparatory batch of 20 or fewer samples, as required. MB detections are indicative of laboratory cross-contamination.

No target analytes were detected in the MBs.

3.5.4.2 Laboratory Control Sample/Laboratory Control Sample Duplicate Analysis

An LCS was included with each preparatory batch, as required. Recoveries were compared to the acceptance criteria, and all recoveries were within control limits with the following exception:

SDG L1892109:

- **Batch WG2590843:** The recovery for fluoranthene (122%) in the LCS is greater than the UCL (120%). This analyte was non-detect in the associated samples except for sample 25LF002-LF1SB07MW. Fluoranthene in this sample is qualified as estimated and flagged QH to indicate a possible high bias. Qualified results were less than the PSL with a high bias; therefore, usability is not impacted.

3.5.4.3 Matrix Spike/Matrix Spike Duplicate Analysis

Project-specific MS/MSD samples were collected and submitted at the project-required frequency of one for each preparatory batch and one MS/MSD per 20 or fewer samples. MS and MSD samples were prepared and analyzed for each laboratory batch.

SDG L1892109:

Sample 25LF002-LF1SB07MW was submitted as the MS/MSD and is reported in batch WG2590843. MS/MSD recoveries and MS/MSD RPD met acceptance criteria, except as noted:

Lab ID	Analyte	DF	QC Type	% Rec	LCL	UCL
R4267088-3	1-Methylnaphthalene	1	MS	24.0	41.0	115
R4267088-3	2-Chloronaphthalene	1	MS	23.3	34.0	111
R4267088-3	2-Methylnaphthalene	1	MS	23.0	39.0	114
R4267088-3	Acenaphthene	1	MS	25.8	48.0	114
R4267088-3	Acenaphthylene	1	MS	25.4	35.0	121
R4267088-3	Anthracene	1	MS	36.3	53.0	119
R4267088-3	Benzo(a)anthracene	1	MS	47.8	59.0	120
R4267088-3	Benzo(a)pyrene	1	MS	43.3	53.0	120
R4267088-3	Benzo(b)fluoranthene	1	MS	45.8	53.0	126
R4267088-3	Benzo(g,h,i)perylene	1	MS	43.0	44.0	128
R4267088-3	Benzo(k)fluoranthene	1	MS	49.4	54.0	125
R4267088-3	Chrysene	1	MS	50.4	57.0	120
R4267088-3	Fluoranthene	1	MS	49.0	58.0	120
R4267088-3	Fluorene	1	MS	33.3	50.0	118
R4267088-3	Indeno(1,2,3-cd)pyrene	1	MS	45.1	48.0	130
R4267088-3	Naphthalene	1	MS	22.5	43.0	114
R4267088-3	Phenanthrene	1	MS	38.7	53.0	115
R4267088-3	Pyrene	1	MS	45.4	53.0	121

Notes:
For definitions, refer to the Acronyms and Abbreviations section.

The following RPDs were greater than the UCL of 20%:

Batch	Lab ID	Analyte	RPD
WG2590843	R4267088-4	1-Methylnaphthalene	118
WG2590843	R4267088-4	2-Chloronaphthalene	117
WG2590843	R4267088-4	2-Methylnaphthalene	119
WG2590843	R4267088-4	Acenaphthene	111
WG2590843	R4267088-4	Acenaphthylene	112
WG2590843	R4267088-4	Anthracene	83.8
WG2590843	R4267088-4	Benzo(a)anthracene	66.2
WG2590843	R4267088-4	Benzo(a)pyrene	57.4
WG2590843	R4267088-4	Benzo(b)fluoranthene	56.4
WG2590843	R4267088-4	Benzo(g,h,i)perylene	42.1
WG2590843	R4267088-4	Benzo(k)fluoranthene	56.2
WG2590843	R4267088-4	Chrysene	62.4
WG2590843	R4267088-4	Fluoranthene	68.8
WG2590843	R4267088-4	Fluorene	98.3
WG2590843	R4267088-4	Indeno(1,2,3-cd)pyrene	43.1
WG2590843	R4267088-4	Naphthalene	118

Batch	Lab ID	Analyte	RPD
WG2590843	R4267088-4	Phenanthrene	82.2
WG2590843	R4267088-4	Pyrene	68.4

Notes:
For definitions, refer to the Acronyms and Abbreviations section.

A total of 52 results are qualified as estimated and flagged QL to indicate a possible low bias. Table 2 presents the qualified results summary.

SDG L1902397:

Sample 25OT001-PTSB01was submitted as an MS/MSD and is reported in batch WG2609699. MS/MSD recoveries and MS/MSD RPD met acceptance criteria, except as noted:

Method	Lab Sample ID	Analyte	QC Type	%R	LCL	UCL
8270E-SIM	R4281586-4	Benzo(a)pyrene	MSD	51.1	53	120
8270E-SIM	R4281586-4	Benzo(b)fluoranthene	MSD	50.1	53	126
8270E-SIM	R4281586-3	Benzo(g,h,i)perylene	MS	14.8	44	128
8270E-SIM	R4281586-4	Benzo(g,h,i)perylene	MSD	13.1	44	128
8270E-SIM	R4281586-4	Benzo(k)fluoranthene	MSD	50.9	54	125
8270E-SIM	R4281586-3	Dibenzo(a,h)anthracene	MS	15.1	44	131
8270E-SIM	R4281586-4	Dibenzo(a,h)anthracene	MSD	12.3	44	131
8270E-SIM	R4281586-3	Indeno(1,2,3-cd)pyrene	MS	18.2	48	130
8270E-SIM	R4281586-4	Indeno(1,2,3-cd)pyrene	MSD	15.2	48	130

Notes:
For definitions, refer to the Acronyms and Abbreviations section.

The RPD for dibenzo(a,h)anthracene (20.8%) is greater than the UCL of 20%. The non-detect results for these analytes are qualified as estimated and flagged QL to indicate a possible low bias. Usability is not affected as the qualified results are less than the PSL.

3.5.4.4 Surrogate Spike Recoveries

Surrogates were included with all laboratory QC and field samples, as required. Surrogate recoveries were reviewed and compared to acceptance criteria.

SDG L1892109:

Field sample surrogate recoveries met acceptance criteria. The surrogate recoveries in the following QC sample are less than the LCLs:

Sample ID	Lab Sample ID	QC Type	Surrogate	%R	LCL	UCL
25LF002-LF1SB07MW	R4267088-3	Matrix Spike	2-Fluorobiphenyl	25.0	53.0	106
25LF002-LF1SB07MW	R4267088-3	Matrix Spike	Fluoranthene-d10	49.7	50.0	150
25LF002-LF1SB07MW	R4267088-3	Matrix Spike	p-Terphenyl-d14	47.4	58.0	132
25LF002-LF1SB07MW	R4267088-3	Matrix Spike	Fluoranthene-d10	22.8	50.0	150

Notes:
For definitions, refer to the Acronyms and Abbreviations section.

All associated field sample surrogate recoveries met criteria; therefore, usability is not impacted and no qualifications were made.

SDG L1902397:

The recovery for p-terphenyl-d14 (51.3%) in sample 25OT001-PT1SB09 is less than the LCL of 58%. All PAH results are qualified as estimated and flagged QL to indicate a possible low bias. Qualified results are either non-detect or detected at concentrations much less than the PSL or detected at concentrations greater than the PSL.

3.5.4.5 Initial Calibration Verification/Continuing Calibration Verification

ICV and all CCVs met the QSM acceptance criteria of less than 20% difference (less than 50% for end of analytical-batch CCV).

3.5.4.6 Other Quality Control Items

No additional QC items that required data qualification were identified.

3.6 Field Duplicate Precision

FD precision was evaluated by calculating the RPD between the parent sample result and the FD result when both results were greater than the LOQ, and when one or both results fell between the LOD, and the LOQ. Acceptance criteria were less than 30% for water results.

SDG L1892109: Samples 25LF002-LF1SB07MW/25LF002-LF1SB079MW were submitted as a FD pair.

Method	Analyte	PSL	25LF002-LF1SB07MW	25LF002-LF1SB079MW	RPD	Valid Q
8260D-LL	Benzene	4.6	0.033	0.032	3.1%	
8260D-LL	Toluene	1100	0.099	0.11	11%	
8270E-SIM	Anthracene	43	0.039 J	0.0450 ND	NC	NQ
8270E-SIM	Benzo(a)anthracene	0.3	0.0631	0.0450 ND	NC	QN
8270E-SIM	Benzo(a)pyrene	0.25	0.0697	0.0450 ND	NC	QN
8270E-SIM	Benzo(b)fluoranthene	2.5	0.0691	0.0450 ND	NC	QN
8270E-SIM	Benzo(g,h,i)perylene	0.26	0.104	0.0450 ND	NC	QN
8270E-SIM	Chrysene	2	0.0621	0.0450 ND	NC	QN
8270E-SIM	Dibenzo(a,h)anthracene	0.25	0.112	0.0450 ND	NC	QN
8270E-SIM	Fluoranthene	260	0.0697	0.0450 ND	NC	QN
8270E-SIM	Indeno(1,2,3-cd)pyrene	0.19	0.0983	0.0450 ND	NC	QN
8270E-SIM	Phenanthrene	170	0.053	0.0450 ND	NC	QN
8270E-SIM	Pyrene	120	0.0671	0.0450 ND	NC	QN

Notes:
For definitions, refer to the Acronyms and Abbreviations section.
NC – not calculated
NQ – qualification not required

Analytes with RPDs greater than 30% or not calculated due to one sample being detected greater than the LOQ are qualified as estimated and flagged QN. When both results are less than the LOQ, no qualifications will be applied.

SDG L1902397:

Method	Analyte	PSL	25OT001-PT1SB04	25OT001-PT1SB049	RPD	Valid Q
8260D-LL	Benzene	4.6	0.143	0.176	21%	
8260D-LL	Isopropylbenzene	450	1.00 ND	0.043	NC	NQ
8260D-LL	Naphthalene	1.7	1.25 ND	1.04	NC	NQ
8260D-LL	sec-Butylbenzene	2000	1.74	2.56	38%	QN
8260D-LL	tert-Butylbenzene	690	0.500 ND	0.086	NC	NQ
8260D-LL	Toluene	1100	0.100 ND	0.063	NC	NQ
8270E-SIM	Acenaphthene	530	0.0782	0.0603	26%	
8270E-SIM	Fluorene	290	0.0868	0.0755	14%	

Notes:
For definitions, refer to the Acronyms and Abbreviations section.
NC – not calculated
NQ – qualification not required

Usability is not affected as the qualified results are either non-detect or detected at concentrations significantly less than the PSL.

4.0 COMPLETENESS

Completeness is a measure of the amount of valid data obtained compared with the amount that was expected to be obtained under correct, normal conditions. For completeness requirements, valid results are all results not rejected and determined to be usable in the context of project DQOs.

Completeness was evaluated using the following formula. The goal for completeness was 95% for all methods and matrices.

$$\%\ Completeness\ =\ 100\ x\ (\frac{V}{n})$$

Where: V = number of measurements judged valid (not rejected)
n = total number of measurements

A total of 657 results were reviewed, with 332 results qualified due to one or more of the following reasons: improper sampling methods, holding time exceedances, field duplicate imprecision, blank concentrations, spike recoveries or RPDs outside criteria, or surrogate recoveries. No results were rejected, and all results are considered usable as qualified. The analytical completeness goal of 95% for all methods and matrices was met.

5.0 OVERALL DATA QUALITY AND USABILITY ASSESSMENT

The overall quality of the project data was acceptable, and completeness goals were met.

All qualified data are considered acceptable for use with the limitations discussed within this QA/QC report and the ADEC Laboratory Data Review Checklist regarding the qualifiers applied to the results. Table 2 includes all qualified results and reasons for qualification.

6.0 REFERENCES

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Table 2 Qualified Results Summary

Lab ID	Location ID	Sample ID	Matrix	Method	Analyte	Result	Lab Q	Units	Qualifier	Reason Code
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	AK101	Gasoline Range Organics	ND	U	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	1,1,1,2-Tetrachloroethane	ND	U	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	1,1,1-Trichloroethane	ND	U	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	1,1,2,2-Tetrachloroethane	ND	U	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	1,1,2-Trichloroethane	ND	U	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	1,1-Dichloroethane	ND	J6 U	µg/L	QL	MSL,IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	1,1-Dichloroethene	ND	J6 U	µg/L	QL	MSL,IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	1,1-Dichloropropene	ND	J6 U	µg/L	QL	MSL,IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	1,2,3-Trichlorobenzene	ND	J6 U	µg/L	QL	MSL,IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	1,2,3-Trichloropropane	ND	U	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	1,2,4-Trichlorobenzene	ND	J6 U	µg/L	QL	MSL,IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	1,2,4-Trimethylbenzene	ND	U	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	1,2-Dibromo-3-chloropropane	ND	U	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	1,2-Dibromoethane	ND	U	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	1,2-Dichlorobenzene	ND	U	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	1,2-Dichloroethane	ND	U	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	1,2-Dichloropropane	ND	U	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	1,3,5-Trimethylbenzene	ND	J6 U	µg/L	QL	MSL,IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	1,3-Dichlorobenzene	ND	U	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	1,3-Dichloropropane	ND	U	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	1,4-Dichlorobenzene	ND	J6 U	µg/L	QL	MSL,IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	2,2-Dichloropropane	ND	J6 U	µg/L	QL	MSL,IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	2-Butanone	ND	U	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	2-Chlorotoluene	ND	U	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	2-Hexanone	ND	U	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	4-Chlorotoluene	ND	U	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	4-Isopropyltoluene	ND	J6 U	µg/L	QL	MSL,IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	4-Methyl-2-pentanone	ND	U	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	Benzene	0.0330	J J6	µg/L	J,QL	MSL,IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	Bromobenzene	ND	U	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	Bromochloromethane	ND	U	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	Bromodichloromethane	ND	U	µg/L	QL	IMPR

Table 2 Qualified Results Summary

Lab ID	Location ID	Sample ID	Matrix	Method	Analyte	Result	Lab Q	Units	Qualifier	Reason Code
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	Bromoform	ND	J4 U	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	Bromomethane	ND	U	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	Carbon disulfide	ND	J6 U	µg/L	QL	MSL,IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	Carbon tetrachloride	ND	U	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	Chlorobenzene	ND	J6 U	µg/L	QL	MSL,IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	Chloroethane	ND	U	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	Chloroform	ND	J6 U	µg/L	QL	MSL,IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	Chloromethane	ND	J3 U	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	cis-1,2-Dichloroethene	ND	U	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	cis-1,3-Dichloropropene	ND	U	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	Dibromochloromethane	ND	J4 U	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	Dibromomethane	ND	U	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	Dichlorodifluoromethane	ND	U	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	Ethylbenzene	ND	J6 U	µg/L	QL	MSL,IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	Hexachlorobutadiene	ND	J6 U	µg/L	QL	MSL,IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	Isopropylbenzene	ND	J6 U	µg/L	QL	MSL,IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	m,p-Xylene	ND	J6 U	µg/L	QL	MSL,IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	Methyl tert-butyl ether	ND	U	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	Methylene chloride	ND	U	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	Naphthalene	ND	U	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	n-Butylbenzene	ND	J6 U	µg/L	QL	MSL,IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	n-Propylbenzene	ND	U	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	o-Xylene	ND	J6 U	µg/L	QL	MSL,IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	sec-Butylbenzene	ND	J6 U	µg/L	QL	MSL,IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	Styrene	ND	U	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	tert-Butylbenzene	ND	J6 U	µg/L	QL	MSL,IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	Tetrachloroethene	ND	J6 U	µg/L	QL	MSL,IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	Toluene	0.0990	J J6	µg/L	J,B,QL	MSL,TBG, IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	trans-1,2-Dichloroethene	ND	J6 U	µg/L	QL	MSL,IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	trans-1,3-Dichloropropene	ND	U	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	Trichloroethene	ND	J6 U	µg/L	QL	MSL,IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	Trichlorofluoromethane	ND	U	µg/L	QL	IMPR

Table 2 Qualified Results Summary

Lab ID	Location ID	Sample ID	Matrix	Method	Analyte	Result	Lab Q	Units	Qualifier	Reason Code
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	Vinyl acetate	ND	U	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	Vinyl chloride	ND	U	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260D-LL	Xylenes (total)	ND	J6 U	µg/L	QL	MSL,IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8270E-SIM	1-Methylnaphthalene	ND	J3 J6 T8 U	µg/L	H,QL	HPHL,MSL
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8270E-SIM	2-Chloronaphthalene	ND	J3 J6 T8 U	µg/L	H,QL	HPHL,MSL
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8270E-SIM	2-Methylnaphthalene	ND	J3 J6 T8 U	µg/L	H,QL	HPHL,MSL
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8270E-SIM	Acenaphthene	ND	J3 J6 T8 U	µg/L	H,QL	HPHL,MSL
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8270E-SIM	Acenaphthylene	ND	J3 J6 T8 U	µg/L	H,QL	HPHL,MSL
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8270E-SIM	Anthracene	0.0390	J J3 J6 T8	µg/L	J,H,QL	HPHL,MSL
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8270E-SIM	Benzo(a)anthracene	0.0631	J3 J6 T8	µg/L	H,QN	HPHL,MSD,MSL,FDD
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8270E-SIM	Benzo(a)pyrene	0.0697	J3 J6 T8	µg/L	H,QN	HPHL,MSD,MSL,FDD
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8270E-SIM	Benzo(b)fluoranthene	0.0691	J3 J6 T8	µg/L	H,QN	HPHL,MSD,MSL,FDD
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8270E-SIM	Benzo(g,h,i)perylene	0.104	J3 J6 T8	µg/L	H,QN	HPHL,MSD,MSL,FDD
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8270E-SIM	Benzo(k)fluoranthene	ND	J3 J6 T8 U	µg/L	H,QL	HPHL,MSL
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8270E-SIM	Chrysene	0.0621	J3 J6 T8	µg/L	H,QN	HPHL,MSD,MSL,FDD
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8270E-SIM	Dibenzo(a,h)anthracene	0.112	J3 T8	µg/L	H,QN	HPHL,FDD
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8270E-SIM	Fluoranthene	0.0697	J3 J4 J6 T8	µg/L	H,QN	HPHL,MSD,LCH,MSL
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8270E-SIM	Fluorene	ND	J3 J6 T8 U	µg/L	H,QL	HPHL,MSL
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8270E-SIM	Indeno(1,2,3-cd)pyrene	0.0983	J3 J6 T8	µg/L	H,QN	HPHL,MSD,MSL,FDD
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8270E-SIM	Naphthalene	ND	J3 J6 T8 U	µg/L	H,QL	HPHL,MSL
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8270E-SIM	Phenanthrene	0.0530	J3 J6 T8	µg/L	H,QN	HPHL,MSD,MSL,FDD
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8270E-SIM	Pyrene	0.0671	J3 J6 T8	µg/L	H,QN	HPHL,MSD,MSL,FDD
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	AK101	Gasoline Range Organics	ND	U	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	1,1,1,2-Tetrachloroethane	ND	U	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	1,1,1-Trichloroethane	ND	U	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	1,1,2,2-Tetrachloroethane	ND	U	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	1,1,2-Trichloroethane	ND	U	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	1,1-Dichloroethane	ND	U	µg/L	QL	MSL,IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	1,1-Dichloroethene	ND	U	µg/L	QL	MSL,IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	1,1-Dichloropropene	ND	U	µg/L	QL	MSL,IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	1,2,3-Trichlorobenzene	ND	U	µg/L	QL	MSL,IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	1,2,3-Trichloropropane	ND	U	µg/L	QL	IMPR

Table 2 Qualified Results Summary

Lab ID	Location ID	Sample ID	Matrix	Method	Analyte	Result	Lab Q	Units	Qualifier	Reason Code
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	1,2,4-Trichlorobenzene	ND	U	µg/L	QL	MSL,IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	1,2,4-Trimethylbenzene	ND	U	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	1,2-Dibromo-3-chloropropane	ND	U	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	1,2-Dibromoethane	ND	U	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	1,2-Dichlorobenzene	ND	U	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	1,2-Dichloroethane	ND	U	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	1,2-Dichloropropane	ND	U	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	1,3,5-Trimethylbenzene	ND	U	µg/L	QL	MSL,IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	1,3-Dichlorobenzene	ND	U	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	1,3-Dichloropropane	ND	U	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	1,4-Dichlorobenzene	ND	U	µg/L	QL	MSL,IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	2,2-Dichloropropane	ND	U	µg/L	QL	MSL,IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	2-Butanone	ND	U	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	2-Chlorotoluene	ND	U	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	2-Hexanone	ND	U	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	4-Chlorotoluene	ND	U	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	4-Isopropyltoluene	ND	U	µg/L	QL	MSL,IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	4-Methyl-2-pentanone	ND	U	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	Benzene	0.0320	J	µg/L	J,QL	MSL,IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	Bromobenzene	ND	U	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	Bromochloromethane	ND	U	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	Bromodichloromethane	ND	U	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	Bromoform	ND	J4 U	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	Bromomethane	ND	U	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	Carbon disulfide	ND	U	µg/L	QL	MSL,IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	Carbon tetrachloride	ND	U	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	Chlorobenzene	ND	U	µg/L	QL	MSL,IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	Chloroethane	ND	U	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	Chloroform	ND	U	µg/L	QL	MSL,IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	Chloromethane	ND	U	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	cis-1,2-Dichloroethene	ND	U	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	cis-1,3-Dichloropropene	ND	U	µg/L	QL	IMPR

Table 2 Qualified Results Summary

Lab ID	Location ID	Sample ID	Matrix	Method	Analyte	Result	Lab Q	Units	Qualifier	Reason Code
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	Dibromochloromethane	ND	J4 U	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	Dibromomethane	ND	U	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	Dichlorodifluoromethane	ND	U	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	Ethylbenzene	ND	U	µg/L	QL	MSL,IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	Hexachlorobutadiene	ND	U	µg/L	QL	MSL,IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	Isopropylbenzene	ND	U	µg/L	QL	MSL,IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	m,p-Xylene	ND	U	µg/L	QL	MSL,IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	Methyl tert-butyl ether	ND	U	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	Methylene chloride	ND	U	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	Naphthalene	ND	U	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	n-Butylbenzene	ND	U	µg/L	QL	MSL,IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	n-Propylbenzene	ND	U	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	o-Xylene	ND	U	µg/L	QL	MSL,IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	sec-Butylbenzene	ND	U	µg/L	QL	MSL,IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	Styrene	ND	U	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	tert-Butylbenzene	ND	U	µg/L	QL	MSL,IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	Tetrachloroethene	ND	U	µg/L	QL	MSL,IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	Toluene	0.110	J	µg/L	J,B,QL	MSL,TBG,IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	trans-1,2-Dichloroethene	ND	U	µg/L	QL	MSL,IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	trans-1,3-Dichloropropene	ND	U	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	Trichloroethene	ND	U	µg/L	QL	MSL,IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	Trichlorofluoromethane	ND	U	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	Vinyl acetate	ND	U	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	Vinyl chloride	ND	U	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260D-LL	Xylenes (total)	ND	U	µg/L	QL	MSL,IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8270E-SIM	1-Methylnaphthalene	ND	T8 U	µg/L	QL	HPHL,MSL
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8270E-SIM	2-Chloronaphthalene	ND	T8 U	µg/L	QL	HPHL,MSL
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8270E-SIM	2-Methylnaphthalene	ND	T8 U	µg/L	QL	HPHL,MSL
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8270E-SIM	Acenaphthene	ND	T8 U	µg/L	QL	HPHL,MSL
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8270E-SIM	Acenaphthylene	ND	T8 U	µg/L	QL	HPHL,MSL
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8270E-SIM	Anthracene	ND	T8 U	µg/L	H,QL	HPHL,MSL
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8270E-SIM	Benzo(a)anthracene	ND	T8 U	µg/L	QN	HPHL,MSL,FDD

Table 2 Qualified Results Summary

Lab ID	Location ID	Sample ID	Matrix	Method	Analyte	Result	Lab Q	Units	Qualifier	Reason Code
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8270E-SIM	Benzo(a)pyrene	ND	T8 U	µg/L	QN	HPHL,MSL,FDD
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8270E-SIM	Benzo(b)fluoranthene	ND	T8 U	µg/L	QN	HPHL,MSL,FDD
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8270E-SIM	Benzo(g,h,i)perylene	ND	T8 U	µg/L	QN	HPHL,MSL,FDD
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8270E-SIM	Benzo(k)fluoranthene	ND	T8 U	µg/L	QL	HPHL,MSL
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8270E-SIM	Chrysene	ND	T8 U	µg/L	QN	HPHL,MSL,FDD
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8270E-SIM	Dibenzo(a,h)anthracene	ND	T8 U	µg/L	QN	HPHL,MSL,FDD
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8270E-SIM	Fluoranthene	ND	J4 T8 U	µg/L	QL	HPHL,MSL,FDD
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8270E-SIM	Fluorene	ND	T8 U	µg/L	QL	HPHL,MSL
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8270E-SIM	Indeno(1,2,3-cd)pyrene	ND	T8 U	µg/L	QN	HPHL,MSL,FDD
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8270E-SIM	Naphthalene	ND	T8 U	µg/L	QL	HPHL,MSL
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8270E-SIM	Phenanthrene	ND	T8 U	µg/L	QL	HPHL,MSL,FDD
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8270E-SIM	Pyrene	ND	T8 U	µg/L	QL	HPHL,MSL,FDD
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	AK102/103	Diesel Range Organics	ND	J6 U	µg/L	QL	MSL
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	1,1,1,2-Tetrachloroethane	ND	U	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	1,1,1-Trichloroethane	ND	U	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	1,1,2,2-Tetrachloroethane	ND	U	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	1,1,2-Trichloroethane	ND	U	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	1,1-Dichloroethane	ND	U	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	1,1-Dichloroethene	ND	U	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	1,1-Dichloropropene	ND	U	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	1,2,3-Trichlorobenzene	ND	U	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	1,2,3-Trichloropropane	ND	U	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	1,2,4-Trichlorobenzene	ND	U	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	1,2,4-Trimethylbenzene	0.0520	J	µg/L	J,QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	1,2-Dibromo-3-chloropropane	ND	U	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	1,2-Dibromoethane	ND	U	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	1,2-Dichlorobenzene	ND	U	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	1,2-Dichloroethane	ND	U	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	1,2-Dichloropropane	ND	U	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	1,3,5-Trimethylbenzene	ND	U	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	1,3-Dichlorobenzene	ND	U	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	1,3-Dichloropropane	ND	U	µg/L	QL	IMPR

Table 2 Qualified Results Summary

Lab ID	Location ID	Sample ID	Matrix	Method	Analyte	Result	Lab Q	Units	Qualifier	Reason Code
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	1,4-Dichlorobenzene	ND	U	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	2,2-Dichloropropane	ND	U	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	2-Butanone	0.880	J	µg/L	J,QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	2-Chlorotoluene	ND	J6 U	µg/L	QL	MSL,IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	2-Hexanone	ND	U	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	4-Chlorotoluene	ND	U	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	4-Isopropyltoluene	ND	J6 U	µg/L	QL	MSL,IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	4-Methyl-2-pentanone	ND	U	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	Benzene	0.0420	J	µg/L	J,QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	Bromobenzene	ND	U	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	Bromochloromethane	ND	U	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	Bromodichloromethane	ND	U	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	Bromoform	ND	U	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	Bromomethane	ND	U	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	Carbon disulfide	ND	U	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	Carbon tetrachloride	ND	U	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	Chlorobenzene	ND	U	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	Chloroethane	ND	U	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	Chloroform	ND	U	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	Chloromethane	ND	U	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	cis-1,2-Dichloroethene	ND	U	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	cis-1,3-Dichloropropene	ND	U	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	Dibromochloromethane	ND	U	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	Dibromomethane	ND	U	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	Dichlorodifluoromethane	ND	U	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	Ethylbenzene	ND	U	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	Hexachlorobutadiene	ND	U	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	Isopropylbenzene	ND	U	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	m,p-Xylene	0.0910	J	µg/L	J,QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	Methyl tert-butyl ether	ND	U	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	Methylene chloride	ND	U	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	Naphthalene	ND	U	µg/L	QL	IMPR

Table 2 Qualified Results Summary

Lab ID	Location ID	Sample ID	Matrix	Method	Analyte	Result	Lab Q	Units	Qualifier	Reason Code
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	n-Butylbenzene	ND	J6 U	µg/L	QL	MSL,IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	n-Propylbenzene	ND	J6 U	µg/L	QL	MSL,IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	o-Xylene	0.0420	J	µg/L	J,QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	sec-Butylbenzene	ND	J6 U	µg/L	QL	MSL,IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	Styrene	ND	U	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	tert-Butylbenzene	ND	J6 U	µg/L	QL	MSL,IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	Tetrachloroethene	ND	U	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	Toluene	0.369		µg/L	B,QL	TBL, IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	trans-1,2-Dichloroethene	ND	U	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	trans-1,3-Dichloropropene	ND	U	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	Trichloroethene	ND	U	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	Trichlorofluoromethane	ND	U	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	Vinyl acetate	ND	U	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	Vinyl chloride	ND	U	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260D-LL	Xylenes (total)	ND	U	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8270E-SIM	Benzo(a)pyrene	ND	J6 U	µg/L	QL	MSL
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8270E-SIM	Benzo(b)fluoranthene	ND	J6 U	µg/L	QL	MSL
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8270E-SIM	Benzo(g,h,i)perylene	ND	J6 U	µg/L	QL	MSL
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8270E-SIM	Benzo(k)fluoranthene	ND	J6 U	µg/L	QL	MSL
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8270E-SIM	Dibenzo(a,h)anthracene	ND	J3 J6 U	µg/L	QL	MSL
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8270E-SIM	Indeno(1,2,3-cd)pyrene	ND	J6 U	µg/L	QL	MSL
L1902397-03	PT1SB04	25OT001-PT1SB04	GW	SW8260D-LL	Isopropylbenzene	ND	U	µg/L	QN	FDD
L1902397-03	PT1SB04	25OT001-PT1SB04	GW	SW8260D-LL	Naphthalene	ND	U	µg/L	QN	FDD
L1902397-03	PT1SB04	25OT001-PT1SB04	GW	SW8260D-LL	sec-Butylbenzene	1.74		µg/L	QN	FDD
L1902397-03	PT1SB04	25OT001-PT1SB04	GW	SW8260D-LL	tert-Butylbenzene	ND	U	µg/L	QN	FDD
L1902397-03	PT1SB04	25OT001-PT1SB04	GW	SW8260D-LL	Toluene	ND	U	µg/L	QN	FDD
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	1,1,1,2-Tetrachloroethane	ND	U	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	1,1,1-Trichloroethane	ND	U	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	1,1,2,2-Tetrachloroethane	ND	U	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	1,1,2-Trichloroethane	ND	U	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	1,1-Dichloroethane	ND	U	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	1,1-Dichloroethene	ND	U	µg/L	QL	IMPR

Table 2 Qualified Results Summary

Lab ID	Location ID	Sample ID	Matrix	Method	Analyte	Result	Lab Q	Units	Qualifier	Reason Code
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	1,1-Dichloropropene	ND	U	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	1,2,3-Trichlorobenzene	ND	U	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	1,2,3-Trichloropropane	ND	U	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	1,2,4-Trichlorobenzene	ND	U	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	1,2,4-Trimethylbenzene	3.91		µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	1,2-Dibromo-3-chloropropane	ND	U	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	1,2-Dibromoethane	ND	U	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	1,2-Dichlorobenzene	ND	U	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	1,2-Dichloroethane	ND	U	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	1,2-Dichloropropane	ND	U	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	1,3,5-Trimethylbenzene	0.785		µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	1,3-Dichlorobenzene	ND	U	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	1,3-Dichloropropane	ND	U	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	1,4-Dichlorobenzene	ND	U	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	2,2-Dichloropropane	ND	U	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	2-Butanone	ND	U	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	2-Chlorotoluene	ND	U	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	2-Hexanone	ND	U	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	4-Chlorotoluene	ND	U	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	4-Isopropyltoluene	1.30		µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	4-Methyl-2-pentanone	ND	U	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	Benzene	ND	U	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	Bromobenzene	ND	U	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	Bromochloromethane	ND	U	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	Bromodichloromethane	ND	U	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	Bromoform	ND	U	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	Bromomethane	ND	U	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	Carbon disulfide	ND	U	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	Carbon tetrachloride	ND	U	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	Chlorobenzene	ND	U	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	Chloroethane	ND	U	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	Chloroform	ND	U	µg/L	QL	IMPR

Table 2 Qualified Results Summary

Lab ID	Location ID	Sample ID	Matrix	Method	Analyte	Result	Lab Q	Units	Qualifier	Reason Code
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	Chloromethane	ND	U	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	cis-1,2-Dichloroethene	ND	U	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	cis-1,3-Dichloropropene	ND	U	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	Dibromochloromethane	ND	U	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	Dibromomethane	ND	U	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	Dichlorodifluoromethane	ND	U	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	Ethylbenzene	2.85		µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	Hexachlorobutadiene	ND	U	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	Isopropylbenzene	7.74		µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	m,p-Xylene	0.521		µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	Methyl tert-butyl ether	ND	U	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	Methylene chloride	ND	U	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	Naphthalene	43.7	J3	µg/L	QN	LCD, IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	n-Butylbenzene	1.17		µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	n-Propylbenzene	5.33		µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	o-Xylene	0.0520	J	µg/L	J,QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	sec-Butylbenzene	4.77		µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	Styrene	ND	U	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	tert-Butylbenzene	ND	U	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	Tetrachloroethene	ND	U	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	Toluene	0.188	J	µg/L	J,B,QL	LBL,IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	trans-1,2-Dichloroethene	ND	U	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	trans-1,3-Dichloropropene	ND	U	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	Trichloroethene	ND	U	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	Trichlorofluoromethane	ND	U	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	Vinyl acetate	ND	U	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	Vinyl chloride	ND	U	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260D-LL	Xylenes (total)	0.573	J	µg/L	J,QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8270E-SIM	1-Methylnaphthalene	92.6		µg/L	QL	SGL
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8270E-SIM	2-Chloronaphthalene	ND	U	µg/L	QL	SGL
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8270E-SIM	Acenaphthene	1.12		µg/L	QL	SGL
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8270E-SIM	Acenaphthylene	0.299		µg/L	QL	SGL

Table 2 Qualified Results Summary

Lab ID	Location ID	Sample ID	Matrix	Method	Analyte	Result	Lab Q	Units	Qualifier	Reason Code
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8270E-SIM	Anthracene	ND	U	µg/L	QL	SGL
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8270E-SIM	Benzo(a)anthracene	ND	U	µg/L	QL	SGL
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8270E-SIM	Benzo(a)pyrene	ND	U	µg/L	QL	SGL
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8270E-SIM	Benzo(b)fluoranthene	ND	U	µg/L	QL	SGL
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8270E-SIM	Benzo(g,h,i)perylene	ND	U	µg/L	QL	SGL
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8270E-SIM	Benzo(k)fluoranthene	ND	U	µg/L	QL	SGL
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8270E-SIM	Chrysene	ND	U	µg/L	QL	SGL
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8270E-SIM	Dibenzo(a,h)anthracene	ND	U	µg/L	QL	SGL
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8270E-SIM	Fluoranthene	ND	U	µg/L	QL	SGL
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8270E-SIM	Fluorene	1.09		µg/L	QL	SGL
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8270E-SIM	Indeno(1,2,3-cd)pyrene	ND	U	µg/L	QL	SGL
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8270E-SIM	Phenanthrene	0.159		µg/L	QL	SGL
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8270E-SIM	Pyrene	ND	U	µg/L	QL	SGL
L1902397-05	PT1SB04	25OT001-PT1SB049	GW	SW8260D-LL	Naphthalene	1.04	J J3	µg/L	J,QN	LCD
L1902397-05	PT1SB04	25OT001-PT1SB049	GW	SW8260D-LL	Toluene	0.0630	J	µg/L	J,B	LBL

Notes:

FDD	field duplicate imprecision
GW	groundwater
HHL	holding time from collection to analysis exceeded
IMPR	Improper sampling method (peristaltic pump)
LBL	MB concentration less than the LOQ
LCD	LCS/LCSD RPD greater than UCL
MSL	Matrix spike or spike duplicate less than LCL
QL/QN/QH	result is qualified (low/unknown/high bias)
SGL	surrogate recovery less than LCL
TBL	TB concentration less than the LOQ

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Attachment D-1
Sample Summary

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SAMPLE SUMMARY TABLE
2025 611 CES North Group ORC
Kalakaket Creek LRRS

												ANALYSES:	AK101	AK102/103	SW8260DLL	SW8270ESIM
SAMPLE ID	**LOCATION ID**	**LAB ID**	**COLLECTION DATE**	**MATRIX**	**QC TYPE**	**SAMPLER**	**LAB SDG**	**LAB**	**COC**	**COOLER(S)**	**TEMP °C**	**CONTAINER(S)**	**GRO**	**DRO/RRO**	**VOC**	**PAH**
25LF002-TB01	FIELDQC	L1892109-01	08/22/25 08:00	QC	TB	CE	L1892109	Pace-TN	25KALET-01	25KALET-01	0.7	6 x 40-mL vial TLS	X		X	
25LF002-LF1SB07MW	LF1SB07	L1892109-02	08/22/25 16:50	GW	N, MS/MSD	CE	L1892109	Pace-TN	25KALET-01	25KALET-01	0.7	18 x 40-mL vial TLS, 12 x 100-mL amber glass TLC	X	X	X	X
25LF002-LF1SB079MW	LF1SB07	L1892109-03	08/22/25 15:50	GW	FD	CE	L1892109	Pace-TN	25KALET-01	25KALET-01	0.7	6 x 40-mL vial TLS, 4 x 100-mL amber glass TLC	X	X	X	X
25KCOT001-TB01	FIELDQC	L1902397-01	09/24/25 08:00	QC	TB	CE	L1902397	Pace-TN	25KALET-02	Lone Wolf	0.2	4 x 40-mL vial TLS			X	
25OT001-PT1SB01	PT1SB01	L1902397-02	09/24/25 12:00	GW	N, MS/MSD	PS	L1902397	Pace-TN	25KALET-02	Lone Wolf	0.2	9 x 40-mL vial TLS, 12 x 100-mL amber glass TLC		X	X	X
25OT001-PT1SB04	PT1SB04	L1902397-03	09/24/25 13:30	GW	N	PS	L1902397	Pace-TN	25KALET-02	Lone Wolf	0.2	3 x 40-mL vial TLS, 4 x 100-mL amber glass TLC		X	X	X
25OT001-PT1SB09	PT1SB09	L1902397-04	09/24/25 14:20	GW	N	PS	L1902397	Pace-TN	25KALET-02	Lone Wolf	0.2	3 x 40-mL vial TLS, 4 x 100-mL amber glass TLC		X	X	X
25OT001-PT1SB049	PT1SB04	L1902397-05	09/24/25 12:30	GW	FD	PS	L1902397	Pace-TN	25KALET-02	Lone Wolf	0.2	3 x 40-mL vial TLS, 4 x 100-mL amber glass TLC		X	X	X
												Preservative:	**HCl**	**HCl**	**HCl**	**None**

Notes:
All samples for the [Project Name] project were submitted under NPDL [25-051].
All sample results were requested on standard turnaround time.
°C – degrees Celsius
AG – amber glass
CE - Candace Ede
COC – chain-of-custody
DRO – diesel range organics
EB – equipment blank
FD – field duplicate
GW – groundwater
GRO - gasoline range organics
HCl – hydrochloric acid
mL – milliliter
MS/MSD – matrix spike/matrix spike duplicate
N – normal environmental sample
NPDL – north pacific division laboratory
PAH – polycyclic aromatic hydrocarbons
PS - Patrick Schick
QC – quality control
RRO - residual range organics
SDG – sample delivery group
TB – trip blank
TLC – teflon lined cap
TLS – teflon lined septa
VOA – volatile organic analysis vial
VOC - volatile organic compounds

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Attachment D-2
Data Summary Table

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DATA SUMMARY TABLE
611 CES North Group ORC – 2025 Analytical Results
Kalakaket Creek LRRS

				SAMPLE ID	25LF002-LF1SB07MW	25LF002-LF1SB079MW	25LF002-TB01
				LOCATION ID	LF1SB07	LF1SB07	FIELDQC
				LAB SAMPLE ID	L1892109-02	L1892109-03	L1892109-01
				COLLECTION DATE	8/22/2025	8/22/2025	8/22/2025
				MATRIX	Groundwater	Groundwater	Water QC
				QC TYPE	Primary	Duplicate of	Trip Blank
METHOD	**ANALYTE**	**PSL[1]**	**UNITS**			**25LF002-LF1SB07MW**	
AK101	Gasoline Range Organics (C6-C10)	2.2	mg/L		ND [0.0900] QL	ND [0.0900] QL	ND [0.0900]
AK102	Diesel Range Organics	1.5	mg/L		0.288 [0.408] J	0.269 [0.424] J	--
AK103	Residual Range Organics	1.1	mg/L		ND [0.612]	ND [0.636]	--
SW8260DLL	1,1,1,2-Tetrachloroethane	5.7	µg/L		ND [0.0500] QL	ND [0.0500] QL	ND [0.0500]
SW8260DLL	1,1,1-Trichloroethane	8000	µg/L		ND [0.0500] QL	ND [0.0500] QL	ND [0.0500]
SW8260DLL	1,1,2,2-Tetrachloroethane	0.76	µg/L		ND [0.0500] QL	ND [0.0500] QL	ND [0.0500]
SW8260DLL	1,1,2-Trichloroethane	0.41	µg/L		ND [0.100] QL	ND [0.100] QL	ND [0.100]
SW8260DLL	1,1-Dichloroethane	28	µg/L		ND [0.0500] QL	ND [0.0500] QL	ND [0.0500]
SW8260DLL	1,1-Dichloroethene	280	µg/L		ND [0.0500] QL	ND [0.0500] QL	ND [0.0500]
SW8260DLL	1,1-Dichloropropene	NS	µg/L		ND [0.100] QL	ND [0.100] QL	ND [0.100]
SW8260DLL	1,2,3-Trichlorobenzene	7	µg/L		ND [0.250] QL	ND [0.250] QL	ND [0.250]
SW8260DLL	1,2,3-Trichloropropane	0.0075	µg/L		***ND [0.500] QL***	***ND [0.500] QL***	***ND [0.500]***
SW8260DLL	1,2,4-Trichlorobenzene	4	µg/L		ND [0.500] QL	ND [0.500] QL	ND [0.500]
SW8260DLL	1,2,4-Trimethylbenzene	56	µg/L		ND [0.100] QL	ND [0.100] QL	ND [0.100]
SW8260DLL	1,2-Dibromo-3-chloropropane	NS	µg/L		ND [0.500] QL	ND [0.500] QL	ND [0.500]
SW8260DLL	1,2-Dibromoethane	0.075	µg/L		ND [0.0500] QL	ND [0.0500] QL	ND [0.0500]
SW8260DLL	1,2-Dichlorobenzene	300	µg/L		ND [0.200] QL	ND [0.200] QL	ND [0.200]
SW8260DLL	1,2-Dichloroethane	1.7	µg/L		ND [0.0500] QL	ND [0.0500] QL	ND [0.0500]
SW8260DLL	1,2-Dichloropropane	8.2	µg/L		ND [0.200] QL	ND [0.200] QL	ND [0.200]
SW8260DLL	1,3,5-Trimethylbenzene	60	µg/L		ND [0.100] QL	ND [0.100] QL	ND [0.100]
SW8260DLL	1,3-Dichlorobenzene	300	µg/L		ND [0.200] QL	ND [0.200] QL	ND [0.200]
SW8260DLL	1,3-Dichloropropane	NS	µg/L		ND [0.150] QL	ND [0.150] QL	ND [0.150]
SW8260DLL	1,4-Dichlorobenzene	4.8	µg/L		ND [0.250] QL	ND [0.250] QL	ND [0.250]
SW8260DLL	2,2-Dichloropropane	NS	µg/L		ND [0.100] QL	ND [0.100] QL	ND [0.100]
SW8260DLL	2-Butanone	5600	µg/L		ND [1.00] QL	ND [1.00] QL	ND [1.00]
SW8260DLL	2-Chlorotoluene	NS	µg/L		ND [0.100] QL	ND [0.100] QL	ND [0.100]
SW8260DLL	2-Hexanone	38	µg/L		ND [1.00] QL	ND [1.00] QL	ND [1.00]
SW8260DLL	4-Chlorotoluene	NS	µg/L		ND [0.100] QL	ND [0.100] QL	ND [0.100]
SW8260DLL	4-Isopropyltoluene	NS	µg/L		ND [0.300] QL	ND [0.300] QL	ND [0.300]
SW8260DLL	4-Methyl-2-pentanone	6300	µg/L		ND [1.00] QL	ND [1.00] QL	ND [1.00]
SW8260DLL	Benzene	4.6	µg/L		0.0330 [0.0500] J,QL	0.0320 [0.0500] J,QL	ND [0.0500]
SW8260DLL	Bromobenzene	62	µg/L		ND [0.250] QL	ND [0.250] QL	ND [0.250]
SW8260DLL	Bromochloromethane	NS	µg/L		ND [0.100] QL	ND [0.100] QL	ND [0.100]
SW8260DLL	Bromodichloromethane	1.3	µg/L		ND [0.100] QL	ND [0.100] QL	ND [0.100]
SW8260DLL	Bromoform	33	µg/L		ND [0.500] QL	ND [0.500] QL	ND [0.500]
SW8260DLL	Bromomethane	7.5	µg/L		ND [0.500] QL	ND [0.500] QL	ND [0.500]
SW8260DLL	Carbon disulfide	810	µg/L		ND [0.500] QL	ND [0.500] QL	ND [0.500]
SW8260DLL	Carbon tetrachloride	4.6	µg/L		ND [0.100] QL	ND [0.100] QL	ND [0.100]
SW8260DLL	Chlorobenzene	78	µg/L		ND [0.0500] QL	ND [0.0500] QL	ND [0.0500]
SW8260DLL	Chloroethane	21000	µg/L		ND [0.100] QL	ND [0.100] QL	ND [0.100]
SW8260DLL	Chloroform	2.2	µg/L		ND [0.0500] QL	ND [0.0500] QL	ND [0.0500]
SW8260DLL	Chloromethane	190	µg/L		ND [0.250] QL	ND [0.250] QL	ND [0.250]
SW8260DLL	cis-1,2-Dichloroethene	36	µg/L		ND [0.0750] QL	ND [0.0750] QL	ND [0.0750]

DATA SUMMARY TABLE
611 CES North Group ORC – 2025 Analytical Results
Kalakaket Creek LRRS

				SAMPLE ID	25LF002-LF1SB07MW	25LF002-LF1SB079MW	25LF002-TB01
				LOCATION ID	LF1SB07	LF1SB07	FIELDQC
				LAB SAMPLE ID	L1892109-02	L1892109-03	L1892109-01
				COLLECTION DATE	8/22/2025	8/22/2025	8/22/2025
				MATRIX	Groundwater	Groundwater	Water QC
				QC TYPE	Primary	Duplicate of	Trip Blank
METHOD	ANALYTE	PSL[1]	UNITS			25LF002-LF1SB07MW	
SW8260DLL	cis-1,3-Dichloropropene	4.7	µg/L		ND [0.100] QL	ND [0.100] QL	ND [0.100]
SW8260DLL	Dibromochloromethane	8.7	µg/L		ND [0.0500] QL	ND [0.0500] QL	ND [0.0500]
SW8260DLL	Dibromomethane	8.3	µg/L		ND [0.100] QL	ND [0.100] QL	ND [0.100]
SW8260DLL	Dichlorodifluoromethane	200	µg/L		ND [0.100] QL	ND [0.100] QL	ND [0.100]
SW8260DLL	Ethylbenzene	15	µg/L		ND [0.0500] QL	ND [0.0500] QL	ND [0.0500]
SW8260DLL	Hexachlorobutadiene	1.4	µg/L		***ND [2.00] QL***	***ND [2.00] QL***	***ND [2.00]***
SW8260DLL	Isopropylbenzene	450	µg/L		ND [1.00] QL	ND [1.00] QL	ND [1.00]
SW8260DLL	m,p-Xylene	190	µg/L		ND [0.200] QL	ND [0.200] QL	0.0840 [0.200] J
SW8260DLL	Methyl tert-butyl ether	140	µg/L		ND [0.0300] QL	ND [0.0300] QL	ND [0.0300]
SW8260DLL	Methylene chloride	110	µg/L		ND [0.750] QL	ND [0.750] QL	ND [0.750]
SW8260DLL	Naphthalene	1.7	µg/L		ND [1.25] QL	ND [1.25] QL	ND [1.25]
SW8260DLL	n-Butylbenzene	1000	µg/L		ND [0.500] QL	ND [0.500] QL	ND [0.500]
SW8260DLL	n-Propylbenzene	660	µg/L		ND [0.100] QL	ND [0.100] QL	ND [0.100]
SW8260DLL	o-Xylene	190	µg/L		ND [0.100] QL	ND [0.100] QL	ND [0.100]
SW8260DLL	sec-Butylbenzene	2000	µg/L		ND [0.250] QL	ND [0.250] QL	ND [0.250]
SW8260DLL	Styrene	1200	µg/L		ND [0.250] QL	ND [0.250] QL	ND [0.250]
SW8260DLL	tert-Butylbenzene	690	µg/L		ND [0.500] QL	ND [0.500] QL	ND [0.500]
SW8260DLL	Tetrachloroethene	41	µg/L		ND [0.0750] QL	ND [0.0750] QL	ND [0.0750]
SW8260DLL	Toluene	1100	µg/L		0.0990 [0.100] J,B,QL	0.110 [0.100] J,B,QL	0.148 [0.100] J
SW8260DLL	trans-1,2-Dichloroethene	360	µg/L		ND [0.300] QL	ND [0.300] QL	ND [0.300]
SW8260DLL	trans-1,3-Dichloropropene	4.7	µg/L		ND [0.150] QL	ND [0.150] QL	ND [0.150]
SW8260DLL	Trichloroethene	2.8	µg/L		ND [0.0400] QL	ND [0.0400] QL	ND [0.0400]
SW8260DLL	Trichlorofluoromethane	5200	µg/L		ND [0.0500] QL	ND [0.0500] QL	ND [0.0500]
SW8260DLL	Vinyl acetate	410	µg/L		ND [2.50] QL	ND [2.50] QL	ND [2.50]
SW8260DLL	Vinyl chloride	0.19	µg/L		ND [0.0750] QL	ND [0.0750] QL	ND [0.0750]
SW8260DLL	Xylenes (total)	190	µg/L		ND [0.400] QL	ND [0.400] QL	ND [0.400]
SW8270ESIM	1-Methylnaphthalene	11	µg/L		ND [0.250] H,QL	ND [0.250] QL	--
SW8270ESIM	2-Chloronaphthalene	750	µg/L		ND [0.250] H,QL	ND [0.250] QL	--
SW8270ESIM	2-Methylnaphthalene	36	µg/L		ND [0.250] H,QL	ND [0.250] QL	--
SW8270ESIM	Acenaphthene	530	µg/L		ND [0.0450] H,QL	ND [0.0450] QL	--
SW8270ESIM	Acenaphthylene	260	µg/L		ND [0.0450] H,QL	ND [0.0450] QL	--
SW8270ESIM	Anthracene	43	µg/L		0.0390 [0.0450] J,H	ND [0.0450] H,QL	--
SW8270ESIM	Benzo(a)anthracene	0.3	µg/L		0.0631 [0.0450] H,QN	ND [0.0450] QN	--
SW8270ESIM	Benzo(a)pyrene	0.25	µg/L		0.0697 [0.0450] H,QN	ND [0.0450] QN	--
SW8270ESIM	Benzo(b)fluoranthene	2.5	µg/L		0.0691 [0.0450] H,QN	ND [0.0450] QN	--
SW8270ESIM	Benzo(g,h,i)perylene	0.26	µg/L		0.104 [0.0450] H,QN	ND [0.0450] QN	--
SW8270ESIM	Benzo(k)fluoranthene	0.8	µg/L		ND [0.125] H,QL	ND [0.125] QL	--
SW8270ESIM	Chrysene	2	µg/L		0.0621 [0.0450] H,QN	ND [0.0450] QN	--
SW8270ESIM	Dibenzo(a,h)anthracene	0.25	µg/L		0.112 [0.0450] H,QN	ND [0.0450] QN	--
SW8270ESIM	Fluoranthene	260	µg/L		0.0697 [0.0450] H,QN	ND [0.0450] QL	--
SW8270ESIM	Fluorene	290	µg/L		ND [0.0450] H,QL	ND [0.0450] QL	--
SW8270ESIM	Indeno(1,2,3-cd)pyrene	0.19	µg/L		0.0983 [0.0450] H,QN	ND [0.0450] QN	--
SW8270ESIM	Naphthalene	1.7	µg/L		ND [0.250] H,QL	ND [0.250] QL	--

DATA SUMMARY TABLE
611 CES North Group ORC – 2025 Analytical Results
Kalakaket Creek LRRS

				SAMPLE ID	25LF002-LF1SB07MW	25LF002-LF1SB079MW	25LF002-TB01
				LOCATION ID	LF1SB07	LF1SB07	FIELDQC
				LAB SAMPLE ID	L1892109-02	L1892109-03	L1892109-01
				COLLECTION DATE	8/22/2025	8/22/2025	8/22/2025
				MATRIX	Groundwater	Groundwater	Water QC
				QC TYPE	Primary	Duplicate of	Trip Blank
METHOD	ANALYTE	PSL[1]	UNITS			25LF002-LF1SB07MW	
SW8270ESIM	Phenanthrene	170	µg/L		0.0530 [0.0450] H,QN	ND [0.0450] QL	--
SW8270ESIM	Pyrene	120	µg/L		0.0671 [0.0450] H,QN	ND [0.0450] QL	--

Notes:

[1] PSL is defined as 18 AAC 75 Table C Groundwater Cleanup criteria (ADEC 2023)

Blue highlight indicates that a detected result exceeds PSL[1].

Yellow highlight indicates the LOD for a non-detect results exceeds PSL[1].

LOD shown in brackets [ ].

µg/L - micrograms per liter

AAC – Alaska Administrative Code

ADEC – Alaska Department of Environmental Conservation

B - analyte detected in associated blank

DL – detection limit

H - holding time exceeded < 2x

J – the result is an estimated value greater than or equal to the DL and below the LOQ

LOD – limit of detection

LOQ – limit of quantitation

mg/L - milligram per Liter

ND – not detected

NS – not specified

PSL – project screening level

QC – quality control

QH/QL/QN – the result is an estimated value, bias high/low/indeterminate, due to a QC failure

DATA SUMMARY TABLE
611 CES North Group ORC – 2025 Analytical Results
Kalakaket Creek LRRS

				SAMPLE ID	25OT001-PT1SB01	25OT001-PT1SB04	25OT001-PT1SB049	25OT001-PT1SB09	25KCOT001-TB01
				LOCATION ID	PT1SB01	PT1SB04	PT1SB04	PT1SB09	FIELDQC
				LAB SAMPLE ID	L1902397-02	L1902397-03	L1902397-05	L1902397-04	L1902397-01
				COLLECTION DATE	9/24/2025	9/24/2025	9/24/2025	9/24/2025	9/24/2025
				MATRIX	Groundwater	Groundwater	Groundwater	Groundwater	Water QC
				QC TYPE	Primary, MS/MSD	Primary	Duplicate of	Primary	Trip Blank
METHOD	**ANALYTE**	**PSL[1]**	**UNITS**				**25OT001-PT1SB04**		
AK102	Diesel Range Organics	1.5	mg/L		ND [0.720] QL	ND [0.720]	ND [0.720]	**2.09 [0.720]**	--
AK103	Residual Range Organics	1.1	mg/L		ND [0.720]	ND [0.720]	ND [0.720]	ND [0.720]	--
SW8260DLL	1,1,1,2-Tetrachloroethane	5.7	µg/L		ND [0.0500] QL	ND [0.0500]	ND [0.0500]	ND [0.0500] QL	ND [0.0500]
SW8260DLL	1,1,1-Trichloroethane	8000	µg/L		ND [0.0500] QL	ND [0.0500]	ND [0.0500]	ND [0.0500] QL	ND [0.0500]
SW8260DLL	1,1,2,2-Tetrachloroethane	0.76	µg/L		ND [0.0500] QL	ND [0.0500]	ND [0.0500]	ND [0.0500] QL	ND [0.0500]
SW8260DLL	1,1,2-Trichloroethane	0.41	µg/L		ND [0.100] QL	ND [0.100]	ND [0.100]	ND [0.100] QL	ND [0.100]
SW8260DLL	1,1-Dichloroethane	28	µg/L		ND [0.0500] QL	ND [0.0500]	ND [0.0500]	ND [0.0500] QL	ND [0.0500]
SW8260DLL	1,1-Dichloroethene	280	µg/L		ND [0.0500] QL	ND [0.0500]	ND [0.0500]	ND [0.0500] QL	ND [0.0500]
SW8260DLL	1,1-Dichloropropene	NS	µg/L		ND [0.100] QL	ND [0.100]	ND [0.100]	ND [0.100] QL	ND [0.100]
SW8260DLL	1,2,3-Trichlorobenzene	7	µg/L		ND [0.250] QL	ND [0.250]	ND [0.250]	ND [0.250] QL	ND [0.250]
SW8260DLL	1,2,3-Trichloropropane	0.0075	µg/L		**ND [0.500] QL**	**ND [0.500]**	**ND [0.500]**	**ND [0.500] QL**	**ND [0.500]**
SW8260DLL	1,2,4-Trichlorobenzene	4	µg/L		ND [0.500] QL	ND [0.500]	ND [0.500]	ND [0.500] QL	ND [0.500]
SW8260DLL	1,2,4-Trimethylbenzene	56	µg/L		0.0520 [0.100] J,QL	ND [0.100]	ND [0.100]	3.91 [0.100] QL	ND [0.100]
SW8260DLL	1,2-Dibromo-3-chloropropane	NS	µg/L		ND [0.500] QL	ND [0.500]	ND [0.500]	ND [0.500] QL	ND [0.500]
SW8260DLL	1,2-Dibromoethane	0.075	µg/L		ND [0.0500] QL	ND [0.0500]	ND [0.0500]	ND [0.0500] QL	ND [0.0500]
SW8260DLL	1,2-Dichlorobenzene	300	µg/L		ND [0.200] QL	ND [0.200]	ND [0.200]	ND [0.200] QL	ND [0.200]
SW8260DLL	1,2-Dichloroethane	1.7	µg/L		ND [0.0500] QL	ND [0.0500]	ND [0.0500]	ND [0.0500] QL	ND [0.0500]
SW8260DLL	1,2-Dichloropropane	8.2	µg/L		ND [0.200] QL	ND [0.200]	ND [0.200]	ND [0.200] QL	ND [0.200]
SW8260DLL	1,3,5-Trimethylbenzene	60	µg/L		ND [0.100] QL	ND [0.100]	ND [0.100]	0.785 [0.100] QL	ND [0.100]
SW8260DLL	1,3-Dichlorobenzene	300	µg/L		ND [0.200] QL	ND [0.200]	ND [0.200]	ND [0.200] QL	ND [0.200]
SW8260DLL	1,3-Dichloropropane	NS	µg/L		ND [0.150] QL	ND [0.150]	ND [0.150]	ND [0.150] QL	ND [0.150]
SW8260DLL	1,4-Dichlorobenzene	4.8	µg/L		ND [0.250] QL	ND [0.250]	ND [0.250]	ND [0.250] QL	ND [0.250]
SW8260DLL	2,2-Dichloropropane	NS	µg/L		ND [0.100] QL	ND [0.100]	ND [0.100]	ND [0.100] QL	ND [0.100]
SW8260DLL	2-Butanone	5600	µg/L		0.880 [1.00] J,QL	ND [1.00]	ND [1.00]	ND [1.00] QL	ND [1.00]
SW8260DLL	2-Chlorotoluene	NS	µg/L		ND [0.100] QL	ND [0.100]	ND [0.100]	ND [0.100] QL	ND [0.100]
SW8260DLL	2-Hexanone	38	µg/L		ND [1.00] QL	ND [1.00]	ND [1.00]	ND [1.00] QL	ND [1.00]
SW8260DLL	4-Chlorotoluene	NS	µg/L		ND [0.100] QL	ND [0.100]	ND [0.100]	ND [0.100] QL	ND [0.100]
SW8260DLL	4-Isopropyltoluene	NS	µg/L		ND [0.300] QL	ND [0.300]	ND [0.300]	1.30 [0.300] QL	ND [0.300]
SW8260DLL	4-Methyl-2-pentanone	6300	µg/L		ND [1.00] QL	ND [1.00]	ND [1.00]	ND [1.00] QL	ND [1.00]
SW8260DLL	Benzene	4.6	µg/L		0.0420 [0.0500] J,QL	0.143 [0.0500]	0.176 [0.0500]	ND [0.0500] QL	ND [0.0500]
SW8260DLL	Bromobenzene	62	µg/L		ND [0.250] QL	ND [0.250]	ND [0.250]	ND [0.250] QL	ND [0.250]
SW8260DLL	Bromochloromethane	NS	µg/L		ND [0.100] QL	ND [0.100]	ND [0.100]	ND [0.100] QL	ND [0.100]
SW8260DLL	Bromodichloromethane	1.3	µg/L		ND [0.100] QL	ND [0.100]	ND [0.100]	ND [0.100] QL	ND [0.100]
SW8260DLL	Bromoform	33	µg/L		ND [0.500] QL	ND [0.500]	ND [0.500]	ND [0.500] QL	ND [0.500]
SW8260DLL	Bromomethane	7.5	µg/L		ND [0.500] QL	ND [0.500]	ND [0.500]	ND [0.500] QL	ND [0.500]
SW8260DLL	Carbon disulfide	810	µg/L		ND [0.500] QL	ND [0.500]	ND [0.500]	ND [0.500] QL	ND [0.500]
SW8260DLL	Carbon tetrachloride	4.6	µg/L		ND [0.100] QL	ND [0.100]	ND [0.100]	ND [0.100] QL	ND [0.100]
SW8260DLL	Chlorobenzene	78	µg/L		ND [0.0500] QL	ND [0.0500]	ND [0.0500]	ND [0.0500] QL	ND [0.0500]
SW8260DLL	Chloroethane	21000	µg/L		ND [0.100] QL	ND [0.100]	ND [0.100]	ND [0.100] QL	ND [0.100]
SW8260DLL	Chloroform	2.2	µg/L		ND [0.0500] QL	ND [0.0500]	ND [0.0500]	ND [0.0500] QL	ND [0.0500]
SW8260DLL	Chloromethane	190	µg/L		ND [0.250] QL	ND [0.250]	ND [0.250]	ND [0.250] QL	ND [0.250]
SW8260DLL	cis-1,2-Dichloroethene	36	µg/L		ND [0.0750] QL	ND [0.0750]	ND [0.0750]	ND [0.0750] QL	ND [0.0750]
SW8260DLL	cis-1,3-Dichloropropene	4.7	µg/L		ND [0.100] QL	ND [0.100]	ND [0.100]	ND [0.100] QL	ND [0.100]

DATA SUMMARY TABLE
611 CES North Group ORC – 2025 Analytical Results
Kalakaket Creek LRRS

				SAMPLE ID	25OT001-PT1SB01	25OT001-PT1SB04	25OT001-PT1SB049	25OT001-PT1SB09	25KCOT001-TB01
				LOCATION ID	PT1SB01	PT1SB04	PT1SB04	PT1SB09	FIELDQC
				LAB SAMPLE ID	L1902397-02	L1902397-03	L1902397-05	L1902397-04	L1902397-01
				COLLECTION DATE	9/24/2025	9/24/2025	9/24/2025	9/24/2025	9/24/2025
				MATRIX	Groundwater	Groundwater	Groundwater	Groundwater	Water QC
				QC TYPE	Primary, MS/MSD	Primary	Duplicate of	Primary	Trip Blank
METHOD	**ANALYTE**	**PSL[1]**	**UNITS**				**25OT001-PT1SB04**		
SW8260DLL	Dibromochloromethane	8.7	µg/L		ND [0.0500] QL	ND [0.0500]	ND [0.0500]	ND [0.0500] QL	ND [0.0500]
SW8260DLL	Dibromomethane	8.3	µg/L		ND [0.100] QL	ND [0.100]	ND [0.100]	ND [0.100] QL	ND [0.100]
SW8260DLL	Dichlorodifluoromethane	200	µg/L		ND [0.100] QL	ND [0.100]	ND [0.100]	ND [0.100] QL	ND [0.100]
SW8260DLL	Ethylbenzene	15	µg/L		ND [0.0500] QL	ND [0.0500]	ND [0.0500]	2.85 [0.0500] QL	ND [0.0500]
SW8260DLL	Hexachlorobutadiene	1.4	µg/L		***ND [2.00] QL***	***ND [2.00]***	***ND [2.00]***	***ND [2.00] QL***	***ND [2.00]***
SW8260DLL	Isopropylbenzene	450	µg/L		ND [1.00] QL	ND [1.00]	0.0430 [1.00] J	7.74 [1.00] QL	ND [1.00]
SW8260DLL	m,p-Xylene	190	µg/L		0.0910 [0.200] J,QL	ND [0.200]	ND [0.200]	0.521 [0.200] QL	ND [0.200]
SW8260DLL	Methyl tert-butyl ether	140	µg/L		ND [0.0300] QL	ND [0.0300]	ND [0.0300]	ND [0.0300] QL	ND [0.0300]
SW8260DLL	Methylene chloride	110	µg/L		ND [0.750] QL	ND [0.750]	ND [0.750]	ND [0.750] QL	ND [0.750]
SW8260DLL	Naphthalene	1.7	µg/L		ND [1.25] QL	ND [1.25]	1.04 [1.25] J,QN	**43.7 [6.25] QN**	ND [1.25]
SW8260DLL	n-Butylbenzene	1000	µg/L		ND [0.500] QL	ND [0.500]	ND [0.500]	1.17 [0.500] QL	ND [0.500]
SW8260DLL	n-Propylbenzene	660	µg/L		ND [0.100] QL	ND [0.100]	ND [0.100]	5.33 [0.100] QL	ND [0.100]
SW8260DLL	o-Xylene	190	µg/L		0.0420 [0.100] J,QL	ND [0.100]	ND [0.100]	0.0520 [0.100] J,QL	ND [0.100]
SW8260DLL	sec-Butylbenzene	2000	µg/L		ND [0.250] QL	1.74 [0.250] QN	2.56 [0.250] QN	4.77 [0.250] QL	ND [0.250]
SW8260DLL	Styrene	1200	µg/L		ND [0.250] QL	ND [0.250]	ND [0.250]	ND [0.250] QL	ND [0.250]
SW8260DLL	tert-Butylbenzene	690	µg/L		ND [0.500] QL	ND [0.500]	0.0860 [0.500] J	ND [0.500] QL	ND [0.500]
SW8260DLL	Tetrachloroethene	41	µg/L		ND [0.0750] QL	ND [0.0750]	ND [0.0750]	ND [0.0750] QL	ND [0.0750]
SW8260DLL	Toluene	1100	µg/L		0.369 [0.100] B,QL	ND [0.100]	0.0630 [0.100] J,B	0.188 [0.100] J,B,QL	0.0930 [0.100] J
SW8260DLL	trans-1,2-Dichloroethene	360	µg/L		ND [0.300] QL	ND [0.300]	ND [0.300]	ND [0.300] QL	ND [0.300]
SW8260DLL	trans-1,3-Dichloropropene	4.7	µg/L		ND [0.150] QL	ND [0.150]	ND [0.150]	ND [0.150] QL	ND [0.150]
SW8260DLL	Trichloroethene	2.8	µg/L		ND [0.0400] QL	ND [0.0400]	ND [0.0400]	ND [0.0400] QL	ND [0.0400]
SW8260DLL	Trichlorofluoromethane	5200	µg/L		ND [0.0500] QL	ND [0.0500]	ND [0.0500]	ND [0.0500] QL	ND [0.0500]
SW8260DLL	Vinyl acetate	410	µg/L		ND [2.50] QL	ND [2.50]	ND [2.50]	ND [2.50] QL	ND [2.50]
SW8260DLL	Vinyl chloride	0.19	µg/L		ND [0.0750] QL	ND [0.0750]	ND [0.0750]	ND [0.0750] QL	ND [0.0750]
SW8260DLL	Xylenes (total)	190	µg/L		ND [0.400] QL	ND [0.400]	ND [0.400]	0.573 [0.400] J,QL	ND [0.400]
SW8270ESIM	1-Methylnaphthalene	11	µg/L		ND [0.250]	ND [0.250]	ND [0.250]	**92.6 [0.250] QL**	--
SW8270ESIM	2-Chloronaphthalene	750	µg/L		ND [0.250]	ND [0.250]	ND [0.250]	ND [0.250] QL	--
SW8270ESIM	2-Methylnaphthalene	36	µg/L		ND [0.250]	ND [0.250]	ND [0.250]	**105 [2.50]**	--
SW8270ESIM	Acenaphthene	530	µg/L		ND [0.0450]	0.0782 [0.0450]	0.0603 [0.0450]	1.12 [0.0450] QL	--
SW8270ESIM	Acenaphthylene	260	µg/L		ND [0.0450]	ND [0.0450]	ND [0.0450]	0.299 [0.0450] QL	--
SW8270ESIM	Anthracene	43	µg/L		ND [0.0450]	ND [0.0450]	ND [0.0450]	ND [0.0450] QL	--
SW8270ESIM	Benzo(a)anthracene	0.3	µg/L		ND [0.0450]	ND [0.0450]	ND [0.0450]	ND [0.0450] QL	--
SW8270ESIM	Benzo(a)pyrene	0.25	µg/L		ND [0.0450] QL	ND [0.0450]	ND [0.0450]	ND [0.0450] QL	--
SW8270ESIM	Benzo(b)fluoranthene	2.5	µg/L		ND [0.0450] QL	ND [0.0450]	ND [0.0450]	ND [0.0450] QL	--
SW8270ESIM	Benzo(g,h,i)perylene	0.26	µg/L		ND [0.0450] QL	ND [0.0450]	ND [0.0450]	ND [0.0450] QL	--
SW8270ESIM	Benzo(k)fluoranthene	0.8	µg/L		ND [0.125] QL	ND [0.125]	ND [0.125]	ND [0.125] QL	--
SW8270ESIM	Chrysene	2	µg/L		ND [0.0450]	ND [0.0450]	ND [0.0450]	ND [0.0450] QL	--
SW8270ESIM	Dibenzo(a,h)anthracene	0.25	µg/L		ND [0.0450] QL	ND [0.0450]	ND [0.0450]	ND [0.0450] QL	--
SW8270ESIM	Fluoranthene	260	µg/L		ND [0.0450]	ND [0.0450]	ND [0.0450]	ND [0.0450] QL	--
SW8270ESIM	Fluorene	290	µg/L		ND [0.0450]	0.0868 [0.0450]	0.0755 [0.0450]	1.09 [0.0450] QL	--
SW8270ESIM	Indeno(1,2,3-cd)pyrene	0.19	µg/L		ND [0.0450] QL	ND [0.0450]	ND [0.0450]	ND [0.0450] QL	--
SW8270ESIM	Naphthalene	1.7	µg/L		ND [0.250]	ND [0.250]	ND [0.250]	**167 [2.50]**	--
SW8270ESIM	Phenanthrene	170	µg/L		ND [0.0450]	ND [0.0450]	ND [0.0450]	0.159 [0.0450] QL	--

DATA SUMMARY TABLE
611 CES North Group ORC – 2025 Analytical Results
Kalakaket Creek LRRS

			SAMPLE ID	25OT001-PT1SB01	25OT001-PT1SB04	25OT001-PT1SB049	25OT001-PT1SB09	25KCOT001-TB01
			LOCATION ID	PT1SB01	PT1SB04	PT1SB04	PT1SB09	FIELDQC
			LAB SAMPLE ID	L1902397-02	L1902397-03	L1902397-05	L1902397-04	L1902397-01
			COLLECTION DATE	9/24/2025	9/24/2025	9/24/2025	9/24/2025	9/24/2025
			MATRIX	Groundwater	Groundwater	Groundwater	Groundwater	Water QC
			QC TYPE	Primary, MS/MSD	Primary	Duplicate of	Primary	Trip Blank
METHOD	**ANALYTE**	**PSL[1]**	**UNITS**			**25OT001-PT1SB04**		
SW8270ESIM	Pyrene	120	µg/L	ND [0.0450]	ND [0.0450]	ND [0.0450]	ND [0.0450] QL	--

Notes:

[1] PSL is defined as 18 AAC 75 Table C Groundwater Cleanup criteria (ADEC 2023)

Blue highlight indicates that a detected result exceeds PSL[1].

Yellow highlight indicates the LOD for a non-detect results exceeds PSL[1].

LOD shown in brackets [ ].

µg/L - micrograms per liter

AAC – Alaska Administrative Code

ADEC – Alaska Department of Environmental Conservation

B - analyte detected in associated blank

DL – detection limit

H - holding time exceeded < 2x

J – the result is an estimated value greater than or equal to the DL and below the LOQ

LOD – limit of detection

LOQ – limit of quantitation

mg/L - milligram per Liter

ND – not detected

NS – not specified

PSL – project screening level

QC – quality control

QH/QL/QN – the result is an estimated value, bias high/low/indeterminate, due to a QC

Attachment D-3

ADEC Laboratory Data Review Checklist

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ADEC Contaminated Sites Program Laboratory Data Review Checklist

Completed By:	Marty Hannah/ Victoria Pennick	**CS Site Name:**	Kalakaket Creek LF002	**Lab Name:**	Pace National-Mt. Juliet, TN
Title:	Chemist III	**ADEC File No.:**	860.38.008	**Lab Report No.:**	L1892109
Consulting Firm:	Brice Engineering LLC	**Hazard ID No.:**	4677	**Lab Report Date:**	September 19, 2025

Note: *Any N/A or No box checked must have an explanation in the comments box.*

1. **Laboratory**

   a. Did an ADEC Contaminated Sites Laboratory Approval Program (CS-LAP) approved laboratory receive and perform all of the submitted sample analyses?

   Yes ☒ No ☐ N/A ☐

   Comments:

   b. If the samples were transferred to another "network" laboratory or sub-contracted to an alternate laboratory, was the laboratory performing the analyses CS-LAP approved?

   Yes ☐ No ☐ N/A ☒

   Comments: All samples were received and analyzed by Pace National-TN

2. **Chain of Custody (CoC)**

   a. Is the CoC information completed, signed, and dated (including released/received by)?

   Yes ☒ No ☐ N/A ☐

   Comments:

   b. Were the correct analyses requested?

   Yes ☒ No ☐ N/A ☐

   Analyses requested: AK101, AK102/AK103, SW8260D, SW8270E-SIM

   Comments:

3. Laboratory Sample Receipt Documentation

a. Is the sample/cooler temperature documented and within range at receipt (0° to 6°C)?

Yes ☒ No ☐ N/A ☐
Cooler temperature(s): 0.7
Sample temperature(s): 0.7
Comments:

b. Is the sample preservation acceptable – acidified waters, methanol preserved soil (GRO, BTEX, VOCs, etc.)?

Yes ☒ No ☐ N/A ☐
Comments:

c. Is the sample condition documented – broken, leaking, zero headspace (VOA vials); canister vacuum/pressure checked and no open valves, etc.?

Yes ☒ No ☐ N/A ☐
Comments: All samples were received in good condition.

d. If there were any discrepancies, were they documented? For example, incorrect sample containers/preservation, sample temperature outside of acceptable range, insufficient or missing samples, canister not holding a vacuum, etc.?

Yes ☐ No ☒ N/A ☐
Comments: No discrepancies were noted or discovered during data review.

e. Is the data quality or usability affected?

Yes ☐ No ☒ N/A ☐
Comments: Sample results are usable for project purposes without qualification with respect to sample shipment and documentation.

4. Case Narrative

a. Is the case narrative present and understandable?

Yes ☒ No ☐ N/A ☐
Comments:

b. Are there discrepancies, errors, or QC failures identified by the lab?

Yes ☒ No ☐ N/A ☐
Comments:

c. Were all the corrective actions documented?

Yes ☐ No ☒ N/A ☐
Comments: No corrective actions were discussed in the case narrative.

d. What is the effect on data quality/usability according to the case narrative?

Comments: Usability is not discussed in the case narrative, but is discussed in the sections below..

5. Sample Results

a. Are the correct analyses performed/reported as requested on CoC?

Yes ☒ No ☐ N/A ☐
Comments:

b. Are all applicable holding times met?

Yes ☐ No ☒ N/A ☐
Comments: The 8270 PAH extraction of samples 25LF002-LF1SB07MW and 25LF002-LF1SB079MW were one day past holding time.

c. Are all soils reported on a dry weight basis?

Yes ☐ No ☐ N/A ☒
Comments: All samples were water samples.

d. Are the reported limits of quantitation (LOQ) or limits of detections (LOD), or reporting limits (RL) less than the Cleanup Level or the action level for the project?

Yes ☐ No ☒ N/A ☐
Comments: The 8260 analytes 1,2,3-trichloropropane and hexachlorobutadiene had LODs greater than their respective PSLs. The DL for hexachlorobutadiene was less than the PSL.

e. Is the data quality or usability affected?

Yes ☐ No ☒ N/A ☐
Comments: Non-detect results with LODs that exceed the PSLs are highlighted yellow in the data summary tables. These results cannot be used to verify the absence of these analytes below the PSL. However, reporting limits are comparable to those listed in the QAPP; therefore, impact to usability is considered minimal.

6. QC Samples

a. Method Blank

i. Was one method blank reported per matrix, analysis, and 20 samples?

Yes ☒ No ☐ N/A ☐
Comments:

ii. Are all method blank results less than LOQ (or RL)?

Yes ☐ No ☒
Comments: SW8260D: Chloroform was detected in batch WG2590564 at 0.021 J µg/L, which is less than half the LOQ of 0.05 µg/L.

iii. If above LOQ or RL, what samples are affected?

Comments: All associated samples were non-detect for chloroform.

iv. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?

Yes ☐ No ☒ N/A ☐
Comments: None- All project sample results were ND for chloroform so no samples were affected.

v. Data quality or usability affected?

Yes ☐ No ☒ N/A ☐
Comments: Usability is not affected as no qualifications were required.

b. Laboratory Control Sample/Duplicate (LCS/LCSD)

i. Organics – Are one LCS/LCSD reported per matrix, analysis and 20 samples? (LCS/LCSD required per AK methods, LCS required per SW846)

Yes ☒ No ☐ N/A ☐
Comments:

ii. Metals/Inorganics – Are one LCS and one sample duplicate reported per matrix, analysis and 20 samples?

Yes ☐ No ☐ N/A ☒
Comments: All analyses were for organics only.

iii. Accuracy – Are all percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable? (AK Petroleum methods: AK101 60%-120%, AK102 75%-125%, AK103 60%-120%; all other analyses see the laboratory QC pages)

Yes ☐ No ☒ N/A ☐
Comments: The following recoveries were greater than their respective UCLs:

Method	Batch	Lab Sample ID	Analyte	QC Type	%R	LCL	UCL
8270ESIM	WG2590843	R4267088-1	Fluoranthene	LCS	122	58	120
8260D-LL	WG2591248	R4267618-1	Bromoform	LCS	140	66	130
8260D-LL	WG2591248	R4267618-2	Bromoform	LCSD	142	66	130
8260D-LL	WG2591248	R4267618-1	Dibromochloromethane	LCS	128	74	126
8260D-LL	WG2591248	R4267618-2	Dibromochloromethane	LCSD	132	74	126

iv. Precision – Are all relative percent differences (RPD) reported and less than method or laboratory limits and project specified objectives, if applicable? Was the RPD reported from LCS/LCSD, and or sample/sample duplicate? (AK Petroleum methods 20%; all other analyses see the laboratory QC pages)

Yes ☒ No ☐ N/A ☐
Comments:

v. If %R or RPD is outside of acceptable limits, what samples are affected?

Comments: Associated results were non-detect except for sample 25LF002-LF1SB07MW.

vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?

Yes ☐ No ☒ N/A ☐
Comments: Fluoranthene in sample 25LF002-LF1SB079MW is qualified as estimated and flagged QH to indicate a possible high bias. Qualified results were less than the PSL with a high bias; therefore, usability is not impacted.

vii. Is the data quality or usability affected?

Yes ☐ No ☒ N/A ☐
Comments: Usability is not affected as the qualified results are less than the PSL.

c. Matrix Spike/Matrix Spike Duplicate (MS/MSD)

i. Organics – Are one MS/MSD reported per matrix, analysis and 20 samples?

Yes ☒ No ☐ N/A ☐
Comments: Sample 25LF002-LF1SB07MW was submitted as an MS/MSD for all analyses.

ii. Metals/Inorganics – Are one MS/MSD reported per matrix, analysis and 20 samples?

Yes ☐ No ☐ N/A ☒
Comments: Samples were analyzed for organic analyses only.

iii. Accuracy – Are all percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable?

Yes ☐ No ☒ N/A ☐
Comments: SW8260: The recovery for 16 analytes are less than the LCL in the MS and/or MSD.
SW8270E-SIM: The recovery for 18 analytes are less than the LCL in the MS.

iv. Precision – Are all relative percent differences (RPD) reported and less than method or laboratory limits and project specified objectives, if applicable? RPD reported from MS/MSD, and or sample/sample duplicate.

Yes ☐ No ☒ N/A ☐
Comments: SW8260D – the RPD for chloromethane (22.7%) is greater than the UCL of 20%.
SW8270E-SIM – the RPD for 19 analytes is greater than the UCL.

Method	Batch	Lab Sample ID	Analyte	RPD
8270ESIM	WG2590843	R4267088-4	1-Methylnaphthalene	118
8270ESIM	WG2590843	R4267088-4	2-Chloronaphthalene	117
8270ESIM	WG2590843	R4267088-4	2-Methylnaphthalene	119

Method	Batch	Lab Sample ID	Analyte	RPD
8270ESIM	WG2590843	R4267088-4	Acenaphthene	111
8270ESIM	WG2590843	R4267088-4	Acenaphthylene	112
8270ESIM	WG2590843	R4267088-4	Anthracene	83.8
8270ESIM	WG2590843	R4267088-4	Benzo(a)anthracene	66.2
8270ESIM	WG2590843	R4267088-4	Benzo(a)pyrene	57.4
8270ESIM	WG2590843	R4267088-4	Benzo(b)fluoranthene	56.4
8270ESIM	WG2590843	R4267088-4	Benzo(g,h,i)perylene	42.1
8270ESIM	WG2590843	R4267088-4	Benzo(k)fluoranthene	56.2
8270ESIM	WG2590843	R4267088-4	Chrysene	62.4
8270ESIM	WG2590843	R4267088-4	Dibenzo(a,h)anthracene	39.7
8270ESIM	WG2590843	R4267088-4	Fluoranthene	68.8
8270ESIM	WG2590843	R4267088-4	Fluorene	98.3
8270ESIM	WG2590843	R4267088-4	Indeno(1,2,3-cd)pyrene	43.1
8270ESIM	WG2590843	R4267088-4	Naphthalene	118
8270ESIM	WG2590843	R4267088-4	Phenanthrene	82.2
8270ESIM	WG2590843	R4267088-4	Pyrene	68.4

v. If %R or RPD is outside of acceptable limits, what samples are affected?

Comments: Sample 25LF002-LF1SB07MW.

vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?

Yes ☒ No ☐ N/A ☐
Comments: A total of 44 analytes (26 SW8260D, and 18 SW8270E-SIM) are qualified as estimated and flagged QL to indicate a possible low bias due to spike recoveries and/or RPDs (see Qualified Results Summary at end of checklist).

vii. Is the data quality or usability affected?

Yes ☐ No ☒ N/A ☐
Comments: While the data quality is slightly impacted from the flagging the results are still usable to demonstrate all results are well below project PSLs.

d. Surrogates – Organics Only or Isotope Dilution Analytes (IDA) – Isotope Dilution Methods Only

i. Are surrogate/IDA recoveries reported for organic analyses – field, QC, and laboratory samples?

Yes ☒ No ☐ N/A ☐
Comments:

ii. Accuracy – Are all percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable? (AK Petroleum

methods 50-150 %R for field samples and 60-120 %R for QC samples; all other analyses see the laboratory report pages)

Yes ☐ No ☒ N/A ☐
Comments: All field sample surrogate recoveries were within criteria. SW8270E-SIM: four surrogate recoveries in the MS performed on sample 25LF002-LF1SB07MW were less than their respective LCLs:

Field ID	Lab Sample ID	Batch	Surrogate	%R	LCL	UCL
25LF002-LF1SB07MW	R4267088-3	WG2590843	2-Methylnaphthalene-d10	22.8	50	150
25LF002-LF1SB07MW	R4267088-3	WG2590843	2-Fluorobiphenyl	25	53	106
25LF002-LF1SB07MW	R4267088-3	WG2590843	Fluoranthene-d10	49.7	50	150
25LF002-LF1SB07MW	R4267088-3	WG2590843	p-Terphenyl-d14	47.4	58	132

iii. Do the sample results with failed surrogate/IDA recoveries have data flags? If so, are the data flags clearly defined?

Yes ☐ No ☐ N/A ☒
Comments: The surrogate recoveries in the parent sample met criteria; therefore, no qualifications were made.

iv. Is the data quality or usability affected?

Yes ☐ No ☒ N/A ☐
Comments: Usability is not affected as no qualifications were required..

e. Trip Blanks

i. Is one trip blank reported per matrix, analysis, and for each cooler containing volatile samples?

Yes ☒ No ☐ N/A ☐
Comments: 25LF002-TB01 was included in cooler 1 with volatile samples.

ii. Are all results less than LOQ or RL?

Yes ☐ No ☒ N/A ☐
Comments: The following analytes were detected in the TB:

Field ID	Cooler ID	Lab SDG	Method	Analyte	Result	Lab Q	Units	LOD
25LF002-TB01	1	L1892109-01	8260D-LL	Xylene, Isomers m & p	0.084	J	µg/L	0.2
25LF002-TB01	1	L1892109-01	8260D-LL	Toluene	0.148	J	µg/L	0.1

iii. If above LOQ or RL, what samples are affected?

Comments: Associated xylene results were non-detect and therefore not qualified. Detected results in samples 25LF002-LF1SB079MW and 25LF002-LF1SB07MW were less than 5 times the TB concentration. These results are qualified as estimated and flagged B to indicate a possible high bias.

iv. Is the data quality or usability affected?

Yes ☐ No ☒ N/A ☐
Comments: Usability is not affected as the qualified results are less than the PSL.

f. Field Duplicate

i. Are one field duplicate submitted per matrix, analysis, and 10 project samples?

Yes ☒ No ☐ N/A ☐
Comments:

ii. Was the duplicate submitted blind to lab?

Yes ☒ No ☐ N/A ☐
Comments:

iii. Precision – All relative percent differences (RPD) less than specified project objectives? (Recommended: 30% water or air, 50% soil)

$$RPD\ (\%) = \left| \frac{R_1 - R_2}{\left(\frac{R_1 + R_2}{2}\right)} \right| X\ 100$$

Where R_1 = Sample Concentration

R_2 = Field Duplicate Concentration

Yes ☐ No ☒ N/A ☐
Comments: Calculated RPDs:

Method	Analyte	Units	PSL	25LF002-LF1SB07MW	25LF002-LF1SB079MW	RPD	Qual
8260D-LL	Benzene	µg/L	4.6	0.033	0.032	3.1%	
8260D-LL	Toluene	µg/L	1100	0.099	0.11	11%	
8270ESIM	Anthracene	µg/L	43	0.039 J	0.0450 ND	NC	NQ
8270ESIM	Benzo(a)anthracene	µg/L	0.3	0.0631	0.0450 ND	33%	QN
8270ESIM	Benzo(a)pyrene	µg/L	0.25	0.0697	0.0450 ND	43%	QN
8270ESIM	Benzo(b)fluoranthene	µg/L	2.5	0.0691	0.0450 ND	42%	QN
8270ESIM	Benzo(g,h,i)perylene	µg/L	0.26	0.104	0.0450 ND	79%	QN
8270ESIM	Chrysene	µg/L	2	0.0621	0.0450 ND	32%	QN
8270ESIM	Dibenzo(a,h)anthracene	µg/L	0.25	0.112	0.0450 ND	85%	QN
8270ESIM	Fluoranthene	µg/L	260	0.0697	0.0450 ND	43%	QN
8270ESIM	Indeno(1,2,3-cd)pyrene	µg/L	0.19	0.0983	0.0450 ND	74%	QN
8270ESIM	Phenanthrene	µg/L	170	0.053	0.0450 ND	16%	
8270ESIM	Pyrene	µg/L	120	0.0671	0.0450 ND	39%	QN
AK102	Diesel Range Organics	mg/L	1.5	0.288	0.269	6.8%	

NC – not calculated
NQ – qualification not required

A total of 10 PAH analytes were qualified QN in the primary and duplicate samples due to RPDs greater than 30% for waters. All others met criteria.

iv. Is the data quality or usability affected? (Explain)

Yes ☐ No ☒ N/A ☐
Comments: Usability is not affected as the qualified results are less than the PSL.

g. Decontamination or Equipment Blanks

i. Were decontamination or equipment blanks collected?

Yes ☐ No ☒ N/A ☐
Comments: Dedicated equipment was used to collect samples; no EB.

ii. Are all results less than LOQ or RL?

Yes ☐ No ☐ N/A ☒
Comments: No equipment blanks were collected.

iii. If above LOQ or RL, specify what samples are affected.

Comments: No equipment blanks were collected

iv. Are data quality or usability affected?

Yes ☐ No ☐ N/A ☒
Comments: No equipment blanks were collected

7. Other Data Flags/Qualifiers (ACOE, AFCEE, Lab Specific, etc.)

a. Are they defined and appropriate?

Yes ☒ No ☐ N/A ☐
Comments:

SW8260LL:
The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).

Batch Lab Sample	ID	Analytes
WG2591248 (LCS)	R4267618-1	1,2-Dibromo-3-Chloropropane, Bromoform, Chlorodibromomethane and Naphthalene
WG2591248 (LCSD)	R4267618-2	1,2-Dibromo-3-Chloropropane, Bromoform, Chlorodibromomethane and Naphthalene
WG2591248 (MS)	R4267618-4	1,2-Dibromo-3-Chloropropane, Bromoform and Chlorodibromomethane
WG2591248 (MSD)	R4267618-5	1,2-Dibromo-3-Chloropropane, Bromoform and Chlorodibromomethane
WG2591248 (MS)	R4267618-6	1,2-Dibromo-3-Chloropropane, Bromoform, Chlorodibromomethane and Naphthalene
WG2591248 (MSD)	R4267618-7	1,2-Dibromo-3-Chloropropane, Bromoform, Chlorodibromomethane and Naphthalene
WG2592901 (LCS)	R4267891-1	Vinyl acetate
WG2592901 (LCSD)	R4267891-2	Vinyl acetate

The laboratory's response to why this happened was that during the time that this QC was analyzed they were in a transition of having to adjust their spiking amount due to DL update. Several of the poor performers and difficult compounds were being spiked at the upper limit of our calibration before they could recalibrate all of the instruments for the new lower DLs and adjust our spike amount to the new DLs. The recoveries either met criteria or were biased high, and all associated parent sample results were non-detect; therefore, no qualifications were made.

In addition, the volatile analyses for samples LF1SB07MW and FD LF1SB079MW were collected by peri-pump after all other methods/attempts were exhausted. Because this was the only means of sampling, the GRO and VOC results for these samples are qualified as estimated and flagged QL to indicate a possible low bias.

Qualified Results summary

Lab ID	Location ID	Sample ID	Matrix	Method	Analyte	Result	Units	Qualifier	Reason Code
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	AK101	Gasoline Range Organics	ND	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	1,1,1,2-Tetrachloroethane	ND	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	1,1,1-Trichloroethane	ND	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	1,1,2,2-Tetrachloroethane	ND	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	1,1,2-Trichloroethane	ND	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	1,1-Dichloroethane	ND	µg/L	QL	MSL,IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	1,1-Dichloroethene	ND	µg/L	QL	MSL,IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	1,1-Dichloropropene	ND	µg/L	QL	MSL,IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	1,2,3-Trichlorobenzene	ND	µg/L	QL	MSL,IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	1,2,3-Trichloropropane	ND	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	1,2,4-Trichlorobenzene	ND	µg/L	QL	MSL,IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	1,2,4-Trimethylbenzene	ND	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	1,2-Dibromo-3-chloropropane	ND	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	1,2-Dibromoethane	ND	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	1,2-Dichlorobenzene	ND	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	1,2-Dichloroethane	ND	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	1,2-Dichloropropane	ND	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	1,3,5-Trimethylbenzene	ND	µg/L	QL	MSL,IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	1,3-Dichlorobenzene	ND	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	1,3-Dichloropropane	ND	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	1,4-Dichlorobenzene	ND	µg/L	QL	MSL,IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	2,2-Dichloropropane	ND	µg/L	QL	MSL,IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	2-Butanone	ND	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	2-Chlorotoluene	ND	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	2-Hexanone	ND	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	4-Chlorotoluene	ND	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	4-Isopropyltoluene	ND	µg/L	QL	MSL,IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	4-Methyl-2-pentanone	ND	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	Benzene	0.0330	µg/L	J,QL	MSL,IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	Bromobenzene	ND	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	Bromochloromethane	ND	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	Bromodichloromethane	ND	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	Bromoform	ND	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	Bromomethane	ND	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	Carbon disulfide	ND	µg/L	QL	MSL,IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	Carbon tetrachloride	ND	µg/L	QL	IMPR

CS Site Name: Kalakaket Creek LF002
Lab Report No.: L1892109

Qualified Results summary

Lab ID	Location ID	Sample ID	Matrix	Method	Analyte	Result	Units	Qualifier	Reason Code
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	Chlorobenzene	ND	µg/L	QL	MSL,IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	Chloroethane	ND	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	Chloroform	ND	µg/L	QL	MSL,IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	Chloromethane	ND	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	cis-1,2-Dichloroethene	ND	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	cis-1,3-Dichloropropene	ND	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	Dibromochloromethane	ND	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	Dibromomethane	ND	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	Dichlorodifluoromethane	ND	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	Ethylbenzene	ND	µg/L	QL	MSL,IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	Hexachlorobutadiene	ND	µg/L	QL	MSL,IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	Isopropylbenzene	ND	µg/L	QL	MSL,IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	m,p-Xylene	ND	µg/L	QL	MSL,IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	Methyl tert-butyl ether	ND	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	Methylene chloride	ND	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	Naphthalene	ND	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	n-Butylbenzene	ND	µg/L	QL	MSL,IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	n-Propylbenzene	ND	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	o-Xylene	ND	µg/L	QL	MSL,IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	sec-Butylbenzene	ND	µg/L	QL	MSL,IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	Styrene	ND	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	tert-Butylbenzene	ND	µg/L	QL	MSL,IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	Tetrachloroethene	ND	µg/L	QL	MSL,IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	Toluene	0.0990	µg/L	J,B,QL	MSL,TBG, IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	trans-1,2-Dichloroethene	ND	µg/L	QL	MSL,IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	trans-1,3-Dichloropropene	ND	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	Trichloroethene	ND	µg/L	QL	MSL,IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	Trichlorofluoromethane	ND	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	Vinyl acetate	ND	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	Vinyl chloride	ND	µg/L	QL	IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8260DLL	Xylenes (total)	ND	µg/L	QL	MSL,IMPR
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8270ESIM	1-Methylnaphthalene	ND	µg/L	H,QL	HPHL,MSL

CS Site Name: Kalakaket Creek LF002
Lab Report No.: L1892109

Qualified Results summary

Lab ID	Location ID	Sample ID	Matrix	Method	Analyte	Result	Units	Qualifier	Reason Code
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8270ESIM	2-Chloronaphthalene	ND	µg/L	H,QL	HPHL,MSL
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8270ESIM	2-Methylnaphthalene	ND	µg/L	H,QL	HPHL,MSL
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8270ESIM	Acenaphthene	ND	µg/L	H,QL	HPHL,MSL
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8270ESIM	Acenaphthylene	ND	µg/L	H,QL	HPHL,MSL
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8270ESIM	Anthracene	0.0390	µg/L	J,H,QN	HPHL,MSD,MSL
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8270ESIM	Benzo(a)anthracene	0.0631	µg/L	H,QN	HPHL,MSD,MSL,FDD
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8270ESIM	Benzo(a)pyrene	0.0697	µg/L	H,QN	HPHL,MSD,MSL,FDD
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8270ESIM	Benzo(b)fluoranthene	0.0691	µg/L	H,QN	HPHL,MSD,MSL,FDD
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8270ESIM	Benzo(g,h,i)perylene	0.104	µg/L	H,QN	HPHL,MSD,MSL,FDD
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8270ESIM	Benzo(k)fluoranthene	ND	µg/L	H,QL	HPHL,MSL
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8270ESIM	Chrysene	0.0621	µg/L	H,QN	HPHL,MSD,MSL,FDD
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8270ESIM	Dibenzo(a,h)anthracene	0.112	µg/L	H,QN	HPHL,FDD
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8270ESIM	Fluoranthene	0.0697	µg/L	H,QN	HPHL,MSD,LCH,MSL
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8270ESIM	Fluorene	ND	µg/L	H,QL	HPHL,MSL
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8270ESIM	Indeno(1,2,3-cd)pyrene	0.0983	µg/L	H,QN	HPHL,MSD,MSL,FDD
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8270ESIM	Naphthalene	ND	µg/L	H,QL	HPHL,MSL
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8270ESIM	Phenanthrene	0.0530	µg/L	H,QN	HPHL,MSD,MSL,FDD
L1892109-02	LF1SB07	25LF002-LF1SB07MW	GW	SW8270ESIM	Pyrene	0.0671	µg/L	H,QN	HPHL,MSD,MSL,FDD
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	AK101	Gasoline Range Organics	ND	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	1,1,1,2-Tetrachloroethane	ND	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	1,1,1-Trichloroethane	ND	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	1,1,2,2-Tetrachloroethane	ND	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	1,1,2-Trichloroethane	ND	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	1,1-Dichloroethane	ND	µg/L	QL	MSL,IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	1,1-Dichloroethene	ND	µg/L	QL	MSL,IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	1,1-Dichloropropene	ND	µg/L	QL	MSL,IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	1,2,3-Trichlorobenzene	ND	µg/L	QL	MSL,IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	1,2,3-Trichloropropane	ND	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	1,2,4-Trichlorobenzene	ND	µg/L	QL	MSL,IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	1,2,4-Trimethylbenzene	ND	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	1,2-Dibromo-3-chloropropane	ND	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	1,2-Dibromoethane	ND	µg/L	QL	IMPR

CS Site Name: Kalakaket Creek LF002
Lab Report No.: L1892109

Qualified Results summary

Lab ID	Location ID	Sample ID	Matrix	Method	Analyte	Result	Units	Qualifier	Reason Code
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	1,2-Dichlorobenzene	ND	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	1,2-Dichloroethane	ND	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	1,2-Dichloropropane	ND	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	1,3,5-Trimethylbenzene	ND	µg/L	QL	MSL,IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	1,3-Dichlorobenzene	ND	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	1,3-Dichloropropane	ND	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	1,4-Dichlorobenzene	ND	µg/L	QL	MSL,IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	2,2-Dichloropropane	ND	µg/L	QL	MSL,IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	2-Butanone	ND	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	2-Chlorotoluene	ND	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	2-Hexanone	ND	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	4-Chlorotoluene	ND	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	4-Isopropyltoluene	ND	µg/L	QL	MSL,IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	4-Methyl-2-pentanone	ND	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	Benzene	0.0320	µg/L	J,QL	MSL,IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	Bromobenzene	ND	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	Bromochloromethane	ND	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	Bromodichloromethane	ND	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	Bromoform	ND	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	Bromomethane	ND	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	Carbon disulfide	ND	µg/L	QL	MSL,IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	Carbon tetrachloride	ND	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	Chlorobenzene	ND	µg/L	QL	MSL,IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	Chloroethane	ND	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	Chloroform	ND	µg/L	QL	MSL,IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	Chloromethane	ND	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	cis-1,2-Dichloroethene	ND	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	cis-1,3-Dichloropropene	ND	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	Dibromochloromethane	ND	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	Dibromomethane	ND	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	Dichlorodifluoromethane	ND	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	Ethylbenzene	ND	µg/L	QL	MSL,IMPR

CS Site Name: Kalakaket Creek LF002
Lab Report No.: L1892109

Qualified Results summary

Lab ID	Location ID	Sample ID	Matrix	Method	Analyte	Result	Units	Qualifier	Reason Code
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	Hexachlorobutadiene	ND	µg/L	QL	MSL,IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	Isopropylbenzene	ND	µg/L	QL	MSL,IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	m,p-Xylene	ND	µg/L	QL	MSL,IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	Methyl tert-butyl ether	ND	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	Methylene chloride	ND	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	Naphthalene	ND	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	n-Butylbenzene	ND	µg/L	QL	MSL,IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	n-Propylbenzene	ND	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	o-Xylene	ND	µg/L	QL	MSL,IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	sec-Butylbenzene	ND	µg/L	QL	MSL,IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	Styrene	ND	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	tert-Butylbenzene	ND	µg/L	QL	MSL,IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	Tetrachloroethene	ND	µg/L	QL	MSL,IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	Toluene	0.110	µg/L	J,B,QL	MSL,TBG,IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	trans-1,2-Dichloroethene	ND	µg/L	QL	MSL,IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	trans-1,3-Dichloropropene	ND	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	Trichloroethene	ND	µg/L	QL	MSL,IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	Trichlorofluoromethane	ND	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	Vinyl acetate	ND	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	Vinyl chloride	ND	µg/L	QL	IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8260DLL	Xylenes (total)	ND	µg/L	QL	MSL,IMPR
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8270ESIM	1-Methylnaphthalene	ND	µg/L	QL	HPHL,MSL
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8270ESIM	2-Chloronaphthalene	ND	µg/L	QL	HPHL,MSL
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8270ESIM	2-Methylnaphthalene	ND	µg/L	QL	HPHL,MSL
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8270ESIM	Acenaphthene	ND	µg/L	QL	HPHL,MSL
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8270ESIM	Acenaphthylene	ND	µg/L	QL	HPHL,MSL
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8270ESIM	Anthracene	ND	µg/L	H,QN	HPHL,MSL
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8270ESIM	Benzo(a)anthracene	ND	µg/L	QN	HPHL,MSL,FDD
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8270ESIM	Benzo(a)pyrene	ND	µg/L	QN	HPHL,MSL,FDD
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8270ESIM	Benzo(b)fluoranthene	ND	µg/L	QN	HPHL,MSL,FDD
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8270ESIM	Benzo(g,h,i)perylene	ND	µg/L	QN	HPHL,MSL,FDD
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8270ESIM	Benzo(k)fluoranthene	ND	µg/L	QL	HPHL,MSL

CS Site Name: Kalakaket Creek LF002
Lab Report No.: L1892109

Qualified Results summary

Lab ID	Location ID	Sample ID	Matrix	Method	Analyte	Result	Units	Qualifier	Reason Code
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8270ESIM	Chrysene	ND	µg/L	QN	HPHL,MSL,FDD
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8270ESIM	Dibenzo(a,h)anthracene	ND	µg/L	QN	HPHL,MSL,FDD
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8270ESIM	Fluoranthene	ND	µg/L	QL	HPHL,MSL,FDD
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8270ESIM	Fluorene	ND	µg/L	QL	HPHL,MSL
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8270ESIM	Indeno(1,2,3-cd)pyrene	ND	µg/L	QN	HPHL,MSL,FDD
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8270ESIM	Naphthalene	ND	µg/L	QL	HPHL,MSL
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8270ESIM	Phenanthrene	ND	µg/L	QL	HPHL,MSL,FDD
L1892109-03	LF1SB07	25LF002-LF1SB079MW	GW	SW8270ESIM	Pyrene	ND	µg/L	QL	HPHL,MSL,FDD

Notes

FDD	field duplicate imprecision
GW	groundwater
HPHL	holding time from collection to extraction exceeded
IMPR	improper sampling method (peristaltic pump)
LBL	MB concentration less than the LOQ
MSL	Matrix spike or spike duplicate less than LCL
QL/QN/QH	result is qualified (low/unknown/high bias)
SGL	surrogate recovery less than LCL
TBL	TB concentration less than the LOQ
µg/L	Micrograms per liter

ADEC Contaminated Sites Program Laboratory Data Review Checklist

Completed By:	Marty Hannah/ Victoria Pennick	**CS Site Name:**	Kalakaket Creek RRS POL Tank 1, OT001	**Lab Name:**	Pace National-Mt. Juliet, TN
Title:	Chemist III	**ADEC File No.:**	860.38.008	**Lab Report No.:**	L1902397
Consulting Firm:	Brice Engineering LLC	**Hazard ID No.:**	4669	**Lab Report Date:**	15 Oct 2025

Note: *Any N/A or No box checked must have an explanation in the comments box.*

1. **Laboratory**

   a. Did an ADEC Contaminated Sites Laboratory Approval Program (CS-LAP) approved laboratory receive and perform all of the submitted sample analyses?

   Yes ☒ No ☐ N/A ☐

   Comments:

   b. If the samples were transferred to another "network" laboratory or sub-contracted to an alternate laboratory, was the laboratory performing the analyses CS-LAP approved?

   Yes ☐ No ☐ N/A ☒

   Comments: All samples were received and analyzed by Pace National-TN

2. **Chain of Custody (CoC)**

   a. Is the CoC information completed, signed, and dated (including released/received by)?

   Yes ☒ No ☐ N/A ☐

   Comments:

   b. Were the correct analyses requested?

   Yes ☒ No ☐ N/A ☐

   Analyses requested: AK102/AK103, SW8260D, SW88270E-SIM

   Comments:

3. Laboratory Sample Receipt Documentation

a. Is the sample/cooler temperature documented and within range at receipt (0° to 6°C)?

Yes ☒ No ☐ N/A ☐
Cooler temperature(s): 0.2
Sample temperature(s): 0.2
Comments:

b. Is the sample preservation acceptable – acidified waters, methanol preserved soil (GRO, BTEX, VOCs, etc.)?

Yes ☒ No ☐ N/A ☐
Comments:

c. Is the sample condition documented – broken, leaking, zero headspace (VOA vials); canister vacuum/pressure checked and no open valves, etc.?

Yes ☒ No ☐ N/A ☐
Comments: All samples were received in good condition.

d. If there were any discrepancies, were they documented? For example, incorrect sample containers/preservation, sample temperature outside of acceptable range, insufficient or missing samples, canister not holding a vacuum, etc.?

Yes ☐ No ☒ N/A ☐
Comments: No discrepancies were noted at receipt

e. Is the data quality or usability affected?

Yes ☐ No ☒ N/A ☐
Comments: Sample results are usable for project purposes without qualification with respect to sample shipment and documentation.

4. Case Narrative

a. Is the case narrative present and understandable?

Yes ☒ No ☐ N/A ☐
Comments:

b. Are there discrepancies, errors, or QC failures identified by the lab?

Yes ☒ No ☐ N/A ☐
Comments: QC failures are further described in the applicable sections below.

c. Were all the corrective actions documented?

Yes ☐ No ☒ N/A ☐
Comments: No corrective actions were required. Results were properly qualified.

d. What is the effect on data quality/usability according to the case narrative?

Comments: Usability is not discussed in the case narrative, but is discussed in the sections below.

5. Sample Results

a. Are the correct analyses performed/reported as requested on CoC?

Yes ☒ No ☐ N/A ☐
Comments:

b. Are all applicable holding times met?

Yes ☒ No ☐ N/A ☐
Comments:

c. Are all soils reported on a dry weight basis?

Yes ☐ No ☐ N/A ☒
Comments: All samples were water samples.

d. Are the reported limits of quantitation (LOQ) or limits of detections (LOD), or reporting limits (RL) less than the Cleanup Level or the action level for the project?

Yes ☐ No ☒ N/A ☐
Comments: The 8260 analytes 1,2,3-trichloropropane and hexachlorobutadiene had LODs greater than their respective PSLs. The DL for hexachlorobutadiene was less than the PSL.

e. Is the data quality or usability affected?

Yes ☒ No ☐ N/A ☐
Comments: Non-detect results with DLs that exceed the PSLs are highlighted yellow in the data summary tables. These results cannot be used to verify the absence of these analytes below the PSL. However, the reporting limits are comparable to those listed in the QAPP. Impact to usability is considered to be minimal.

6. QC Samples

a. Method Blank

i. Was one method blank reported per matrix, analysis, and 20 samples?

Yes ☒ No ☐ N/A ☐
Comments:

ii. Are all method blank results less than LOQ (or RL)?

Yes ☐ No ☒
Comments: The following analytes were detected in the method blanks:

Method	Batch	Lab Sample ID	Analyte	Blank Result	Lab Q	Units	LOD
8260D-LL	WG2610527	R4280200-3	Chloroform	0.06	J	µg/L	0.05
8260D-LL	WG2614994	R4283555-2	Tetrachloroethene (PCE)	0.075	J	µg/L	0.075
8260D-LL	WG2616140	R4284636-3	2-Hexanone	0.433	J	µg/L	1

iii. If above LOQ or RL, what samples are affected?

Comments: None – All associated results were non-detect.

iv. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?

Yes ☐ No ☐ N/A ☒
Comments: All associated results were non-detect.

v. Data quality or usability affected?

Yes ☐ No ☒ N/A ☐
Comments: Usability is not affected as no qualifications were required.

b. Laboratory Control Sample/Duplicate (LCS/LCSD)

i. Organics – Are one LCS/LCSD reported per matrix, analysis and 20 samples? (LCS/LCSD required per AK methods, LCS required per SW846)

Yes ☒ No ☐ N/A ☐
Comments:

ii. Metals/Inorganics – Are one LCS and one sample duplicate reported per matrix, analysis and 20 samples?

Yes ☐ No ☐ N/A ☒
Comments: All analyses were for organics only.

iii. Accuracy – Are all percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable? (AK Petroleum methods: AK101 60%-120%, AK102 75%-125%, AK103 60%-120%; all other analyses see the laboratory QC pages)

Yes ☐ No ☒ N/A ☐
Comments: The recoveries for the following analytes are greater than their UCLs:

Method	Batch	Lab Sample ID	Analyte	QC Type	%R	LCL	UCL
8260D-LL	WG2610527	R4280200-2	1,2,4-Trichlorobenzene	LCSD	138	69	130
8260D-LL	WG2611132	R4281435-1	Hexachloro-1,3-butadiene	LCS	137	66	134
8260D-LL	WG2611132	R4281435-2	Hexachloro-1,3-butadiene	LCSD	135	66	134

iv. Precision – Are all relative percent differences (RPD) reported and less than method or laboratory limits and project specified objectives, if applicable? Was

the RPD reported from LCS/LCSD, and or sample/sample duplicate? (AK Petroleum methods 20%; all other analyses see the laboratory QC pages)

Yes ☐ No ☒ N/A ☐
Comments: The LCS/LCSD RPD for naphthalene (23.1%) was greater than the 20% UCL.

v. If %R or RPD is outside of acceptable limits, what samples are affected?

Comments: No samples were affected by these exceedances.

vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?

Yes ☐ No ☒ N/A ☐
Comments: All associated sample results are non-detect for 1,2,4-Trichlorobenzene and Hexachloro-1,3-butadiene, and not affected by a high bias. Naphthalene was detected in samples 25OT001-PT1SB09 (43.7 µg/L) and 25OT001-PT1SB049 (1.04 J µg/L[1.25]); results for naphthalene were flagged QN in these samples. Non-detect samples were not qualified.

vii. Is the data quality or usability affected?

Yes ☐ No ☒ N/A ☐
Comments: The naphthalene result for 25OT001-PT1SB09 is significantly greater than the PSL. Sample 25OT001-PT1SB049 is the field duplicate for 25OT001-PT1SB04. Naphthalene was not detected in the parent sample, and significantly less than the PSL of 1.7 µg/L in the duplicate; usability is not impacted.

c. Matrix Spike/Matrix Spike Duplicate (MS/MSD)

i. Organics – Are one MS/MSD reported per matrix, analysis and 20 samples?

Yes ☒ No ☐ N/A ☐
Comments: Sample 25OT001-PT1SB01 was submitted as an MS/MSD for this SDG.

ii. Metals/Inorganics – Are one MS/MSD reported per matrix, analysis and 20 samples?

Yes ☐ No ☐ N/A ☒
Comments: Samples were analyzed for organic analyses only.

iii. Accuracy – Are all percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable?

Yes ☐ No ☒ N/A ☐
Comments: The recoveries for the following analytes were less than their respective LCLs:

Method	Batch	Lab Sample ID	Analyte	QC Type	%R	LCL	UCL
8260D-LL	WG2614994	R4283555-4	2-Chlorotoluene	MS	76.2	79	122

Method	Batch	Lab Sample ID	Analyte	QC Type	%R	LCL	UCL
8260D-LL	WG2614994	R4283555-4	4-Isopropyltoluene	MS	74.2	77	127
8260D-LL	WG2614994	R4283555-4	n-Butylbenzene	MS	74.8	75	128
8260D-LL	WG2614994	R4283555-4	n-Propylbenzene	MS	71.6	76	126
8260D-LL	WG2614994	R4283555-5	n-Propylbenzene	MSD	73	76	126
8260D-LL	WG2614994	R4283555-4	sec-Butylbenzene	MS	71	77	126
8260D-LL	WG2614994	R4283555-5	sec-Butylbenzene	MSD	74.5	77	126
8260D-LL	WG2614994	R4283555-4	tert-Butylbenzene	MS	73.5	78	124
8260D-LL	WG2614994	R4283555-5	tert-Butylbenzene	MSD	72.9	78	124
8270ESIM	WG2609699	R4281586-4	Benzo(a)pyrene	MSD	51.1	53	120
8270ESIM	WG2609699	R4281586-4	Benzo(b)fluoranthene	MSD	50.1	53	126
8270ESIM	WG2609699	R4281586-3	Benzo(g,h,i)perylene	MS	14.8	44	128
8270ESIM	WG2609699	R4281586-4	Benzo(g,h,i)perylene	MSD	13.1	44	128
8270ESIM	WG2609699	R4281586-4	Benzo(k)fluoranthene	MSD	50.9	54	125
8270ESIM	WG2609699	R4281586-3	Dibenzo(a,h)anthracene	MS	15.1	44	131
8270ESIM	WG2609699	R4281586-4	Dibenzo(a,h)anthracene	MSD	12.3	44	131
8270ESIM	WG2609699	R4281586-3	Indeno(1,2,3-cd)pyrene	MS	18.2	48	130
8270ESIM	WG2609699	R4281586-4	Indeno(1,2,3-cd)pyrene	MSD	15.2	48	130
AK102_103	WG2611590	R4284543-8	Diesel Range Organics	MS	70.1	75	125
AK102_103	WG2611590	R4284543-9	Diesel Range Organics	MSD	70.7	75	125

iv. Precision – Are all relative percent differences (RPD) reported and less than method or laboratory limits and project specified objectives, if applicable? RPD reported from MS/MSD, and or sample/sample duplicate.

Yes ☐ No ☒ N/A ☐
Comments: The RPD for dibenzo(a,h,)anthracene (20.8%) was greater than the UCL of 20%.

v. If %R or RPD is outside of acceptable limits, what samples are affected?

Comments: 25OT001-PT1SB01.

vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?

Yes ☒ No ☐ N/A ☐
Comments: The following 13 non-detect results are qualified as estimated and flagged QL to indicate a possible low bias:

Parent Sample	Batch	Method	Analyte
25OT001-PT1SB01	WG2614994	8260D-LL	2-Chlorotoluene
25OT001-PT1SB01	WG2614994	8260D-LL	4-Isopropyltoluene
25OT001-PT1SB01	WG2614994	8260D-LL	n-Butylbenzene
25OT001-PT1SB01	WG2614994	8260D-LL	n-Propylbenzene
25OT001-PT1SB01	WG2614994	8260D-LL	sec-Butylbenzene
25OT001-PT1SB01	WG2614994	8260D-LL	tert-Butylbenzene
25OT001-PT1SB01	WG2609699	8270ESIM	Benzo(a)pyrene

Parent Sample	Batch	Method	Analyte
25OT001-PT1SB01	WG2609699	8270ESIM	Benzo(b)fluoranthene
25OT001-PT1SB01	WG2609699	8270ESIM	Benzo(g,h,i)perylene
25OT001-PT1SB01	WG2609699	8270ESIM	Benzo(k)fluoranthene
25OT001-PT1SB01	WG2609699	8270ESIM	Dibenzo(a,h)anthracene
25OT001-PT1SB01	WG2609699	8270ESIM	Indeno(1,2,3-cd)pyrene
25OT001-PT1SB01	WG2611590	AK102_103	Diesel Range Organics

vii. Is the data quality or usability affected?

Yes ☐ No ☒ N/A ☐
Comments: All associated results in sample 25OT001-PT1SB01 were non-detect with PSLs significantly less than the PSL, or a PSL was not specified; usability is not impacted.

d. Surrogates – Organics Only or Isotope Dilution Analytes (IDA) – Isotope Dilution Methods Only

i. Are surrogate/IDA recoveries reported for organic analyses – field, QC, and laboratory samples?

Yes ☒ No ☐ N/A ☐
Comments:

ii. Accuracy – Are all percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable? (AK Petroleum methods 50-150 %R for field samples and 60-120 %R for QC samples; all other analyses see the laboratory report pages)

Yes ☐ No ☒ N/A ☐
Comments: SW8270E-SIM: the recovery for p-terphenyl-d14 (51.3%) in sample 25OT001-PT1SB09 was less than the LCL of 58%.

iii. Do the sample results with failed surrogate/IDA recoveries have data flags? If so, are the data flags clearly defined?

Yes ☒ No ☐ N/A ☐
Comments: All PAH results for sample 25OT001-PT1SB09 are qualified as estimated and flagged QL to indicate a possible low bias.

iv. Is the data quality or usability affected?

Yes ☐ No ☒ N/A ☐
Comments: Detected results for 1-methylnaphthalene, 2-methylnaphthalene, and naphthalene were significantly greater than the PSL. Detected results for acenaphthene, acenaphthylene, fluorene, and phenanthrene are significantly less than the PSL. The LODs for the remaining non-detect results (evaluated to the DL) are significantly less than the PSL. Usability of all qualified results in sample 25OT001-PT1SB09 is not impacted.

e. Trip Blanks

i. Is one trip blank reported per matrix, analysis, and for each cooler containing volatile samples?

Yes ☒ No ☐ N/A ☐
Comments: 25KCOT001-TB01 was included in the cooler with volatile samples.

ii. Are all results less than LOQ or RL?

Yes ☐ No ☒ N/A ☐
Comments: Toluene was detected in the trip blank 25KCOT001-TB01 at 0.093 J µg/L.

iii. If above LOQ or RL, what samples are affected?

Comments: Toluene was detected in samples 25OT001-PT1SB01, 25OT001-PT1SB049 and 25OT001-PT1SB09 at concentrations less than 5 times the blank concentration.

iv. Is the data quality or usability affected?

Yes ☐ No ☒ N/A ☐
Comments: Qualified results are all significantly less than the PSL of 1100 µg/L; usability is not impacted.

f. Field Duplicate

i. Are one field duplicate submitted per matrix, analysis, and 10 project samples?

Yes ☒ No ☐ N/A ☐
Comments: Sample 25OT001-PT1SB049 was submitted as a blind duplicate for 25OT001-PT1SB04.

ii. Was the duplicate submitted blind to lab?

Yes ☒ No ☐ N/A ☐
Comments:

iii. Precision – All relative percent differences (RPD) less than specified project objectives? (Recommended: 30% water or air, 50% soil)

$$RPD\ (\%) = \left| \frac{R_1 - R_2}{\left(\frac{R_1 + R_2}{2}\right)} \right| X\ 100$$

Where R_1 = Sample Concentration

R_2 = Field Duplicate Concentration

Yes ☐ No ☒ N/A ☐
Comments: The RPDs for the following analytes were calculated:

Method	Analyte	PSL	25OT001-PT1SB04	25OT001-PT1SB049	RPD	Qual
8260D-LL	Benzene	4.6	0.143	0.176	21%	
8260D-LL	Isopropylbenzene	450	1.00 ND	0.0430 J	NC	NQ
8260D-LL	Naphthalene	1.7	1.25 ND	1.04 J	NC	NQ
8260D-LL	sec-Butylbenzene	2000	1.74	2.56	38%	QN
8260D-LL	tert-Butylbenzene	690	0.500 ND	0.0860 J	NC	NQ
8260D-LL	Toluene	1100	0.100 ND	0.0630 J	NC	NQ
8270ESIM	Acenaphthene	530	0.0782	0.0603	26%	
8270ESIM	Fluorene	290	0.0868	0.0755	14%	

Several were not calculated due to one sample being detected and the other non-detect.

iv. Is the data quality or usability affected? (Explain)

Yes ☐ No ☒ N/A ☐
Comments: While there is some degraded data quality for failed FD RPDs, the results are usable to show that all volatile analytes at the site have reported concentrations less than site PSLs.

g. Decontamination or Equipment Blanks

i. Were decontamination or equipment blanks collected?

Yes ☐ No ☒ N/A ☐
Comments: Disposable or dedicated equipment was used for collection.

ii. Are all results less than LOQ or RL?

Yes ☐ No ☐ N/A ☒
Comments: No equipment blanks were collected.

iii. If above LOQ or RL, specify what samples are affected.

Comments: No equipment blanks were collected

iv. Are data quality or usability affected?

Yes ☐ No ☐ N/A ☒
Comments: Usability is not affected as no qualifications were required.

7. Other Data Flags/Qualifiers (ACOE, AFCEE, Lab Specific, etc.)

a. Are they defined and appropriate?

Yes ☒ No ☐ N/A ☐
Comments:
The volatile analyses for PT1SB01 and PT1SB09 were collected using a peri-pump after all other methods/attempts were exhausted. Because this was the only means of sampling, the VOC results for these samples are qualified as estimated and flagged QL to indicate a possible low bias.

Qualified Results Summary

Lab ID	Location ID	Sample ID	Matrix	Method	Analyte	Result	Units	Qualifier	Reason Code
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	AK102/103	Diesel Range Organics	ND	µg/L	QL	MSL
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	1,1,1,2-Tetrachloroethane	ND	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	1,1,1-Trichloroethane	ND	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	1,1,2,2-Tetrachloroethane	ND	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	1,1,2-Trichloroethane	ND	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	1,1-Dichloroethane	ND	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	1,1-Dichloroethene	ND	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	1,1-Dichloropropene	ND	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	1,2,3-Trichlorobenzene	ND	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	1,2,3-Trichloropropane	ND	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	1,2,4-Trichlorobenzene	ND	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	1,2,4-Trimethylbenzene	0.0520	µg/L	J,QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	1,2-Dibromo-3-chloropropane	ND	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	1,2-Dibromoethane	ND	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	1,2-Dichlorobenzene	ND	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	1,2-Dichloroethane	ND	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	1,2-Dichloropropane	ND	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	1,3,5-Trimethylbenzene	ND	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	1,3-Dichlorobenzene	ND	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	1,3-Dichloropropane	ND	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	1,4-Dichlorobenzene	ND	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	2,2-Dichloropropane	ND	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	2-Butanone	0.880	µg/L	J,QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	2-Chlorotoluene	ND	µg/L	QL	MSL,IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	2-Hexanone	ND	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	4-Chlorotoluene	ND	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	4-Isopropyltoluene	ND	µg/L	QL	MSL,IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	4-Methyl-2-pentanone	ND	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	Benzene	0.0420	µg/L	J,QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	Bromobenzene	ND	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	Bromochloromethane	ND	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	Bromodichloromethane	ND	µg/L	QL	IMPR

CS Site Name: Kalakaket Creek RRS POL Tank 1, OT001
Lab Report No.: L1902397

Qualified Results Summary

Lab ID	Location ID	Sample ID	Matrix	Method	Analyte	Result	Units	Qualifier	Reason Code
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	Bromoform	ND	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	Bromomethane	ND	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	Carbon disulfide	ND	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	Carbon tetrachloride	ND	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	Chlorobenzene	ND	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	Chloroethane	ND	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	Chloroform	ND	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	Chloromethane	ND	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	cis-1,2-Dichloroethene	ND	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	cis-1,3-Dichloropropene	ND	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	Dibromochloromethane	ND	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	Dibromomethane	ND	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	Dichlorodifluoromethane	ND	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	Ethylbenzene	ND	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	Hexachlorobutadiene	ND	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	Isopropylbenzene	ND	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	m,p-Xylene	0.0910	µg/L	J,QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	Methyl tert-butyl ether	ND	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	Methylene chloride	ND	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	Naphthalene	ND	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	n-Butylbenzene	ND	µg/L	QL	MSL,IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	n-Propylbenzene	ND	µg/L	QL	MSL,IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	o-Xylene	0.0420	µg/L	J,QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	sec-Butylbenzene	ND	µg/L	QL	MSL,IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	Styrene	ND	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	tert-Butylbenzene	ND	µg/L	QL	MSL,IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	Tetrachloroethene	ND	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	Toluene	0.369	µg/L	B,QL	TBL, IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	trans-1,2-Dichloroethene	ND	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	trans-1,3-Dichloropropene	ND	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	Trichloroethene	ND	µg/L	QL	IMPR

CS Site Name: Kalakaket Creek RRS POL Tank 1, OT001
Lab Report No.: L1902397

Qualified Results Summary

Lab ID	Location ID	Sample ID	Matrix	Method	Analyte	Result	Units	Qualifier	Reason Code
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	Trichlorofluoromethane	ND	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	Vinyl acetate	ND	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	Vinyl chloride	ND	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8260DLL	Xylenes (total)	ND	µg/L	QL	IMPR
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8270ESIM	Benzo(a)pyrene	ND	µg/L	QL	MSL
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8270ESIM	Benzo(b)fluoranthene	ND	µg/L	QL	MSL
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8270ESIM	Benzo(g,h,i)perylene	ND	µg/L	QL	MSL
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8270ESIM	Benzo(k)fluoranthene	ND	µg/L	QL	MSL
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8270ESIM	Dibenzo(a,h)anthracene	ND	µg/L	QL	MSL
L1902397-02	PT1SB01	25OT001-PT1SB01	GW	SW8270ESIM	Indeno(1,2,3-cd)pyrene	ND	µg/L	QL	MSL
L1902397-03	PT1SB04	25OT001-PT1SB04	GW	SW8260DLL	sec-Butylbenzene	1.74	µg/L	QN	FDD
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	1,1,1,2-Tetrachloroethane	ND	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	1,1,1-Trichloroethane	ND	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	1,1,2,2-Tetrachloroethane	ND	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	1,1,2-Trichloroethane	ND	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	1,1-Dichloroethane	ND	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	1,1-Dichloroethene	ND	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	1,1-Dichloropropene	ND	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	1,2,3-Trichlorobenzene	ND	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	1,2,3-Trichloropropane	ND	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	1,2,4-Trichlorobenzene	ND	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	1,2,4-Trimethylbenzene	3.91	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	1,2-Dibromo-3-chloropropane	ND	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	1,2-Dibromoethane	ND	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	1,2-Dichlorobenzene	ND	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	1,2-Dichloroethane	ND	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	1,2-Dichloropropane	ND	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	1,3,5-Trimethylbenzene	0.785	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	1,3-Dichlorobenzene	ND	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	1,3-Dichloropropane	ND	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	1,4-Dichlorobenzene	ND	µg/L	QL	IMPR

CS Site Name: Kalakaket Creek RRS POL Tank 1, OT001
Lab Report No.: L1902397

Qualified Results Summary

Lab ID	Location ID	Sample ID	Matrix	Method	Analyte	Result	Units	Qualifier	Reason Code
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	2,2-Dichloropropane	ND	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	2-Butanone	ND	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	2-Chlorotoluene	ND	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	2-Hexanone	ND	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	4-Chlorotoluene	ND	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	4-Isopropyltoluene	1.30	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	4-Methyl-2-pentanone	ND	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	Benzene	ND	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	Bromobenzene	ND	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	Bromochloromethane	ND	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	Bromodichloromethane	ND	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	Bromoform	ND	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	Bromomethane	ND	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	Carbon disulfide	ND	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	Carbon tetrachloride	ND	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	Chlorobenzene	ND	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	Chloroethane	ND	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	Chloroform	ND	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	Chloromethane	ND	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	cis-1,2-Dichloroethene	ND	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	cis-1,3-Dichloropropene	ND	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	Dibromochloromethane	ND	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	Dibromomethane	ND	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	Dichlorodifluoromethane	ND	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	Ethylbenzene	2.85	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	Hexachlorobutadiene	ND	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	Isopropylbenzene	7.74	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	m,p-Xylene	0.521	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	Methyl tert-butyl ether	ND	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	Methylene chloride	ND	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	Naphthalene	43.7	µg/L	QN	LCD, IMPR

CS Site Name: Kalakaket Creek RRS POL Tank 1, OT001
Lab Report No.: L1902397

Qualified Results Summary

Lab ID	Location ID	Sample ID	Matrix	Method	Analyte	Result	Units	Qualifier	Reason Code
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	n-Butylbenzene	1.17	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	n-Propylbenzene	5.33	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	o-Xylene	0.0520	µg/L	J,QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	sec-Butylbenzene	4.77	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	Styrene	ND	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	tert-Butylbenzene	ND	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	Tetrachloroethene	ND	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	Toluene	0.188	µg/L	J,B,QL	LBL,IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	trans-1,2-Dichloroethene	ND	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	trans-1,3-Dichloropropene	ND	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	Trichloroethene	ND	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	Trichlorofluoromethane	ND	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	Vinyl acetate	ND	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	Vinyl chloride	ND	µg/L	QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8260DLL	Xylenes (total)	0.573	µg/L	J,QL	IMPR
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8270ESIM	1-Methylnaphthalene	92.6	µg/L	QL	SGL
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8270ESIM	2-Chloronaphthalene	ND	µg/L	QL	SGL
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8270ESIM	Acenaphthene	1.12	µg/L	QL	SGL
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8270ESIM	Acenaphthylene	0.299	µg/L	QL	SGL
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8270ESIM	Anthracene	ND	µg/L	QL	SGL
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8270ESIM	Benzo(a)anthracene	ND	µg/L	QL	SGL
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8270ESIM	Benzo(a)pyrene	ND	µg/L	QL	SGL
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8270ESIM	Benzo(b)fluoranthene	ND	µg/L	QL	SGL
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8270ESIM	Benzo(g,h,i)perylene	ND	µg/L	QL	SGL
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8270ESIM	Benzo(k)fluoranthene	ND	µg/L	QL	SGL
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8270ESIM	Chrysene	ND	µg/L	QL	SGL
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8270ESIM	Dibenzo(a,h)anthracene	ND	µg/L	QL	SGL
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8270ESIM	Fluoranthene	ND	µg/L	QL	SGL
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8270ESIM	Fluorene	1.09	µg/L	QL	SGL
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8270ESIM	Indeno(1,2,3-cd)pyrene	ND	µg/L	QL	SGL
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8270ESIM	Phenanthrene	0.159	µg/L	QL	SGL

CS Site Name: Kalakaket Creek RRS POL Tank 1, OT001
Lab Report No.: L1902397

Qualified Results Summary

Lab ID	Location ID	Sample ID	Matrix	Method	Analyte	Result	Units	Qualifier	Reason Code
L1902397-04	PT1SB09	25OT001-PT1SB09	GW	SW8270ESIM	Pyrene	ND	µg/L	QL	SGL
L1902397-05	PT1SB04	25OT001-PT1SB049	GW	SW8260DLL	Naphthalene	1.04	µg/L	J,QN	LCD
L1902397-05	PT1SB04	25OT001-PT1SB049	GW	SW8260DLL	sec-Butylbenzene	2.56	µg/L	QN	FDD
L1902397-05	PT1SB04	25OT001-PT1SB049	GW	SW8260DLL	Toluene	0.0630	µg/L	J,B	LBL

Notes:

FDD	field duplicate imprecision
GW	groundwater
IMPR	Improper sampling method (peristaltic pump)
LBL	MB concentration less than the LOQ
LCD	LCS/LCSD RPD greater than UCL
MSL	Matrix spike or spike duplicate less than LCL
QL/QN/QH	result is qualified (low/unknown/high bias)
SGL	surrogate recovery less than LCL
TBL	TB concentration less than the LOQ
µg/L	Micrograms per liter

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Attachment D-4
Laboratory Reports

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ANALYTICAL REPORT

September 19, 2025

Brice Engineering, LLC

Sample Delivery Group:	L1892109
Samples Received:	08/26/2025
Project Number:	W911KB-20-D-0002
Description:	North ORC/Kalakaket Creek 25-051
Site:	FIELDQC
Report To:	Brice Engineering 3700 Centerpoint Drive, Suite 800 Anchorage, AK 99503

Entire Report Reviewed By:

Shane Gambill
Project Manager

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

TABLE OF CONTENTS

25LF002-TB01 L1892109-01

Collected by	Collected date/time	Received date/time
	08/22/25 08:00	08/26/25 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method AK101	WG2592734	1	09/03/25 16:44	09/03/25 16:44	NCD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260 D-LL	WG2590564	1	08/30/25 00:05	08/30/25 00:05	JHH	Mt. Juliet, TN

25LF002-LF1SB07MW L1892109-02

Collected by	Collected date/time	Received date/time
	08/22/25 16:50	08/26/25 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method AK101	WG2591456	1	08/30/25 20:44	08/30/25 20:44	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260 D-LL	WG2591248	1	08/30/25 12:46	08/30/25 12:46	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260 D-LL	WG2592901	1	09/03/25 00:53	09/03/25 00:53	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method AK102/103	WG2593414	1.02	09/04/25 15:50	09/07/25 03:42	TJD	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG2590843	1	08/30/25 08:17	08/31/25 17:41	JRM	Mt. Juliet, TN

25LF002-LF1SB079MW L1892109-03

Collected by	Collected date/time	Received date/time
	08/22/25 15:50	08/26/25 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method AK101	WG2591456	1	08/30/25 21:07	08/30/25 21:07	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260 D-LL	WG2591248	1	08/30/25 13:05	08/30/25 13:05	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260 D-LL	WG2592901	1	09/03/25 01:13	09/03/25 01:13	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method AK102/103	WG2593414	1.06	09/04/25 15:50	09/07/25 05:31	TJD	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG2590843	1	08/30/25 08:17	08/31/25 18:33	JRM	Mt. Juliet, TN

Unless qualified or notated within the narrative below, all sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. 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.

Shane Gambill
Project Manager

Project Comments

L1892109-02 - insufficient volume for MS/MSD due to QC failure/re-analysis, there were enough containers left to re-run a client requested AK102 MS/MSD but not enough for AK103 MS/MSD.

Sample Delivery Group (SDG) Narrative

The following samples were prepared and/or analyzed past recommended holding time. Concentrations should be considered minimum values.

Batch	Method	Lab Sample ID
WG2590843	8270E-SIM	L1892109-02, 03

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

The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).

Batch	Lab Sample ID	Analytes
WG2591248	(LCS) R4267618-1	1,2-Dibromo-3-Chloropropane, Bromoform, Chlorodibromomethane and Naphthalene
WG2591248	(LCSD) R4267618-2	1,2-Dibromo-3-Chloropropane, Bromoform, Chlorodibromomethane and Naphthalene
WG2591248	(MS) R4267618-4	1,2-Dibromo-3-Chloropropane, Bromoform and Chlorodibromomethane
WG2591248	(MSD) R4267618-5	1,2-Dibromo-3-Chloropropane, Bromoform and Chlorodibromomethane
WG2591248	(MS) R4267618-6	1,2-Dibromo-3-Chloropropane, Bromoform, Chlorodibromomethane and Naphthalene
WG2591248	(MSD) R4267618-7	1,2-Dibromo-3-Chloropropane, Bromoform, Chlorodibromomethane and Naphthalene
WG2592901	(LCS) R4267891-1	Vinyl acetate
WG2592901	(LCSD) R4267891-2	Vinyl acetate

The associated batch QC was above the established quality control range for accuracy.

Batch	Lab Sample ID	Analytes
WG2591248	(LCS) R4267618-1, (LCSD) R4267618-2, L1892109-02, 03	Bromoform and Chlorodibromomethane

The sample matrix interfered with the ability to make any accurate determination; spike value is low.

Batch	Lab Sample ID	Analytes
WG2591248	(MS) R4267618-4, (MS) R4267618-6, (MSD) R4267618-7, (MSD) R4267618-5, L1892109-02	26 analytes

The sample matrix interfered with the ability to make any accurate determination; spike value is high.

Batch	Lab Sample ID	Analytes
WG2591248	(MS) R4267618-6, (MSD) R4267618-7	Bromoform and Chlorodibromomethane

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

The associated batch QC was outside the established quality control range for precision.

Batch	Lab Sample ID	Analytes
WG2591248	(MSD) R4267618-7, (MSD) R4267618-5, L1892109-02	Chloromethane

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

Surrogate recovery limits have been exceeded; values are outside lower control limits.

Batch	Analyte	Lab Sample ID
WG2590843	2-Fluorobiphenyl	(MS) R4267088-3
WG2590843	2-Methylnaphthalene-d10	(MS) R4267088-3
WG2590843	Fluoranthene-d10	(MS) R4267088-3
WG2590843	p-Terphenyl-d14	(MS) R4267088-3

The associated batch QC was above the established quality control range for accuracy.

Batch	Lab Sample ID	Analytes
WG2590843	(LCS) R4267088-1, L1892109-02, 03	Fluoranthene

The sample matrix interfered with the ability to make any accurate determination; spike value is low.

Batch	Lab Sample ID	Analytes
WG2590843	(MS) R4267088-3, L1892109-02	18 analytes

The associated batch QC was outside the established quality control range for precision.

Batch	Lab Sample ID	Analytes
WG2590843	(MSD) R4267088-4, L1892109-02	19 analytes

DETECTION SUMMARY

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

Client ID	Lab Sample ID	Analyte	CAS #	Result	Qualifier	DL	LOD	LOQ	Dilution	Analysis	Batch
				ug/l		ug/l	ug/l	ug/l		date / time	
25LF002-TB01	L1892109-01	m&p-Xylenes		0.0840	J	0.0600	0.200	0.400	1	08/30/2025 00:05	WG2590564
25LF002-TB01	L1892109-01	Toluene	108-88-3	0.148	J	0.0500	0.100	0.200	1	08/30/2025 00:05	WG2590564
25LF002-LF1SB07MW	L1892109-02	Benzene	71-43-2	0.0330	J J6	0.0160	0.0500	0.100	1	08/30/2025 12:46	WG2591248
25LF002-LF1SB07MW	L1892109-02	Toluene	108-88-3	0.0990	J J6	0.0500	0.100	0.200	1	08/30/2025 12:46	WG2591248
25LF002-LF1SB079MW	L1892109-03	Benzene	71-43-2	0.0320	J	0.0160	0.0500	0.100	1	08/30/2025 13:05	WG2591248
25LF002-LF1SB079MW	L1892109-03	Toluene	108-88-3	0.110	J	0.0500	0.100	0.200	1	08/30/2025 13:05	WG2591248

Semi-Volatile Organic Compounds (GC) by Method AK102/103

Client ID	Lab Sample ID	Analyte	CAS #	Result	Qualifier	DL	LOD	LOQ	Dilution	Analysis	Batch
				ug/l		ug/l	ug/l	ug/l		date / time	
25LF002-LF1SB07MW	L1892109-02	AK102 DRO C10-C25	C10-C25	288	J	173	408	816	1.02	09/07/2025 03:42	WG2593414
25LF002-LF1SB079MW	L1892109-03	AK102 DRO C10-C25	C10-C25	269	J	180	424	848	1.06	09/07/2025 05:31	WG2593414

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

Client ID	Lab Sample ID	Analyte	CAS #	Result	Qualifier	DL	LOD	LOQ	Dilution	Analysis	Batch
				ug/l		ug/l	ug/l	ug/l		date / time	
25LF002-LF1SB07MW	L1892109-02	Anthracene	120-12-7	0.0390	J J3 J6 T8	0.0292	0.0450	0.0500	1	08/31/2025 17:41	WG2590843
25LF002-LF1SB07MW	L1892109-02	Benzo(a)anthracene	56-55-3	0.0631	J3 J6 T8	0.0333	0.0450	0.0500	1	08/31/2025 17:41	WG2590843
25LF002-LF1SB07MW	L1892109-02	Benzo(a)pyrene	50-32-8	0.0697	J3 J6 T8	0.0320	0.0450	0.0500	1	08/31/2025 17:41	WG2590843
25LF002-LF1SB07MW	L1892109-02	Benzo(b)fluoranthene	205-99-2	0.0691	J3 J6 T8	0.0343	0.0450	0.0500	1	08/31/2025 17:41	WG2590843
25LF002-LF1SB07MW	L1892109-02	Benzo(g,h,i)perylene	191-24-2	0.104	J3 J6 T8	0.0309	0.0450	0.0500	1	08/31/2025 17:41	WG2590843
25LF002-LF1SB07MW	L1892109-02	Chrysene	218-01-9	0.0621	J3 J6 T8	0.0347	0.0450	0.0500	1	08/31/2025 17:41	WG2590843
25LF002-LF1SB07MW	L1892109-02	Dibenz(a,h)anthracene	53-70-3	0.112	J3 T8	0.0314	0.0450	0.0500	1	08/31/2025 17:41	WG2590843
25LF002-LF1SB07MW	L1892109-02	Fluoranthene	206-44-0	0.0697	J3 J4 J6 T8	0.0431	0.0450	0.0500	1	08/31/2025 17:41	WG2590843
25LF002-LF1SB07MW	L1892109-02	Indeno(1,2,3-cd)pyrene	193-39-5	0.0983	J3 J6 T8	0.0348	0.0450	0.0500	1	08/31/2025 17:41	WG2590843
25LF002-LF1SB07MW	L1892109-02	Phenanthrene	85-01-8	0.0530	J3 J6 T8	0.0394	0.0450	0.0500	1	08/31/2025 17:41	WG2590843
25LF002-LF1SB07MW	L1892109-02	Pyrene	129-00-0	0.0671	J3 J6 T8	0.0430	0.0450	0.0500	1	08/31/2025 17:41	WG2590843

Additional Information - Results for field analyses are not accredited to ISO 17025

Analyte	Result	Units
Cooler#	1	
Cooler Temperature	0.7	Deg. C

Volatile Organic Compounds (GC) by Method AK101

Analyte	CAS #	Result ug/l	Qualifier	DL ug/l	LOD ug/l	LOQ ug/l	Dilution	Analysis date / time	Batch
TPHGAK C6 to C10	TPH C6-C10	90.0	U	59.4	90.0	100	1	09/03/2025 16:44	WG2592734
(S) a,a,a-Trifluorotoluene(FID)	*98-08-8*	*87.6*				*50.0-150*		*09/03/2025 16:44*	WG2592734

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

Analyte	CAS #	Result ug/l	Qualifier	DL ug/l	LOD ug/l	LOQ ug/l	Dilution	Analysis date / time	Batch
1,1,1,2-Tetrachloroethane	630-20-6	0.0500	U	0.0200	0.0500	0.100	1	08/30/2025 00:05	WG2590564
1,1,1-Trichloroethane	71-55-6	0.0500	U	0.0110	0.0500	0.100	1	08/30/2025 00:05	WG2590564
1,1,2,2-Tetrachloroethane	79-34-5	0.0500	U	0.0156	0.0500	0.100	1	08/30/2025 00:05	WG2590564
1,1,2-Trichloroethane	79-00-5	0.100	U	0.0353	0.100	0.200	1	08/30/2025 00:05	WG2590564
1,1-Dichloroethane	75-34-3	0.0500	U	0.0230	0.0500	0.100	1	08/30/2025 00:05	WG2590564
1,1-Dichloroethene	75-35-4	0.0500	U	0.0200	0.0500	0.100	1	08/30/2025 00:05	WG2590564
1,1-Dichloropropene	563-58-6	0.100	U	0.0280	0.100	0.200	1	08/30/2025 00:05	WG2590564
1,2,3-Trichlorobenzene	87-61-6	0.250	U	0.0250	0.250	0.500	1	08/30/2025 00:05	WG2590564
1,2,3-Trichloropropane	96-18-4	0.500	U	0.204	0.500	1.00	1	08/30/2025 00:05	WG2590564
1,2,4-Trichlorobenzene	120-82-1	0.500	U	0.193	0.500	1.00	1	08/30/2025 00:05	WG2590564
1,2,4-Trimethylbenzene	95-63-6	0.100	U	0.0464	0.100	0.200	1	08/30/2025 00:05	WG2590564
1,2-Dibromo-3-Chloropropane	96-12-8	0.500	U	0.204	0.500	1.00	1	08/30/2025 00:05	WG2590564
1,2-Dibromoethane	106-93-4	0.0500	U	0.0210	0.0500	0.100	1	08/30/2025 00:05	WG2590564
1,2-Dichlorobenzene	95-50-1	0.200	U	0.0580	0.200	0.400	1	08/30/2025 00:05	WG2590564
1,2-Dichloroethane	107-06-2	0.0500	U	0.0190	0.0500	0.100	1	08/30/2025 00:05	WG2590564
1,2-Dichloropropane	78-87-5	0.200	U	0.0508	0.200	0.400	1	08/30/2025 00:05	WG2590564
1,3,5-Trimethylbenzene	108-67-8	0.100	U	0.0432	0.100	0.200	1	08/30/2025 00:05	WG2590564
1,3-Dichlorobenzene	541-73-1	0.200	U	0.0680	0.200	0.400	1	08/30/2025 00:05	WG2590564
1,3-Dichloropropane	142-28-9	0.150	U	0.0700	0.150	0.300	1	08/30/2025 00:05	WG2590564
1,4-Dichlorobenzene	106-46-7	0.250	U	0.0788	0.250	0.500	1	08/30/2025 00:05	WG2590564
2,2-Dichloropropane	594-20-7	0.100	U	0.0317	0.100	0.200	1	08/30/2025 00:05	WG2590564
2-Butanone (MEK)	78-93-3	1.00	U	0.500	1.00	2.00	1	08/30/2025 00:05	WG2590564
2-Hexanone	591-78-6	1.00	U	0.400	1.00	2.00	1	08/30/2025 00:05	WG2590564
2-Chlorotoluene	95-49-8	0.100	U	0.0368	0.100	0.200	1	08/30/2025 00:05	WG2590564
4-Chlorotoluene	106-43-4	0.100	U	0.0452	0.100	0.200	1	08/30/2025 00:05	WG2590564
p-Isopropyltoluene	99-87-6	0.300	U	0.0932	0.300	0.600	1	08/30/2025 00:05	WG2590564
4-Methyl-2-pentanone (MIBK)	108-10-1	1.00	U	0.400	1.00	2.00	1	08/30/2025 00:05	WG2590564
Benzene	71-43-2	0.0500	U	0.0160	0.0500	0.100	1	08/30/2025 00:05	WG2590564
Bromobenzene	108-86-1	0.250	U	0.0420	0.250	0.500	1	08/30/2025 00:05	WG2590564
Bromochloromethane	74-97-5	0.100	U	0.0452	0.100	0.200	1	08/30/2025 00:05	WG2590564
Bromodichloromethane	75-27-4	0.100	U	0.0315	0.100	0.200	1	08/30/2025 00:05	WG2590564
Bromoform	75-25-2	0.500	U	0.239	0.500	1.00	1	08/30/2025 00:05	WG2590564
Bromomethane	74-83-9	0.500	U	0.148	0.500	1.00	1	08/30/2025 00:05	WG2590564
Carbon Disulfide	75-15-0	0.500	U	0.162	0.500	1.00	1	08/30/2025 00:05	WG2590564
Carbon tetrachloride	56-23-5	0.100	U	0.0432	0.100	0.200	1	08/30/2025 00:05	WG2590564
Chlorobenzene	108-90-7	0.0500	U	0.0229	0.0500	0.100	1	08/30/2025 00:05	WG2590564
Chloroethane	75-00-3	0.100	U	0.0432	0.100	0.200	1	08/30/2025 00:05	WG2590564
Chloroform	67-66-3	0.0500	U	0.0166	0.0500	0.100	1	08/30/2025 00:05	WG2590564
Chloromethane	74-87-3	0.250	U	0.0556	0.250	0.500	1	08/30/2025 00:05	WG2590564
cis-1,2-Dichloroethene	156-59-2	0.0750	U	0.0276	0.0750	0.150	1	08/30/2025 00:05	WG2590564
cis-1,3-Dichloropropene	10061-01-5	0.100	U	0.0271	0.100	0.200	1	08/30/2025 00:05	WG2590564
Chlorodibromomethane	124-48-1	0.0500	U	0.0180	0.0500	0.100	1	08/30/2025 00:05	WG2590564

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

Analyte	CAS #	Result ug/l	Qualifier	DL ug/l	LOD ug/l	LOQ ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	74-95-3	0.100	U	0.0400	0.100	0.200	1	08/30/2025 00:05	WG2590564
Dichlorodifluoromethane	75-71-8	0.100	U	0.0327	0.100	0.200	1	08/30/2025 00:05	WG2590564
Ethylbenzene	100-41-4	0.0500	U	0.0212	0.0500	0.100	1	08/30/2025 00:05	WG2590564
Hexachloro-1,3-butadiene	87-68-3	2.00	U	0.508	2.00	4.00	1	08/30/2025 00:05	WG2590564
Isopropylbenzene	98-82-8	1.00	U	0.0345	1.00	2.00	1	08/30/2025 00:05	WG2590564
Methyl tert-butyl ether	1634-04-4	0.0300	U	0.0118	0.0300	0.0600	1	08/30/2025 00:05	WG2590564
Methylene Chloride	75-09-2	0.750	U	0.266	0.750	1.50	1	08/30/2025 00:05	WG2590564
Naphthalene	91-20-3	1.25	U	1.00	1.25	5.00	1	08/30/2025 00:05	WG2590564
n-Butylbenzene	104-51-8	0.500	U	0.154	0.500	1.00	1	08/30/2025 00:05	WG2590564
n-Propylbenzene	103-65-1	0.100	U	0.0472	0.100	0.200	1	08/30/2025 00:05	WG2590564
o-Xylene	95-47-6	0.100	U	0.0400	0.100	0.200	1	08/30/2025 00:05	WG2590564
m&p-Xylenes		0.0840	J	0.0600	0.200	0.400	1	08/30/2025 00:05	WG2590564
sec-Butylbenzene	135-98-8	0.250	U	0.101	0.250	0.500	1	08/30/2025 00:05	WG2590564
Styrene	100-42-5	0.250	U	0.109	0.250	0.500	1	08/30/2025 00:05	WG2590564
tert-Butylbenzene	98-06-6	0.500	U	0.0620	0.500	1.00	1	08/30/2025 00:05	WG2590564
Tetrachloroethene	127-18-4	0.0750	U	0.0280	0.0750	0.150	1	08/30/2025 00:05	WG2590564
Toluene	108-88-3	0.148	J	0.0500	0.100	0.200	1	08/30/2025 00:05	WG2590564
trans-1,2-Dichloroethene	156-60-5	0.300	U	0.0572	0.300	0.600	1	08/30/2025 00:05	WG2590564
trans-1,3-Dichloropropene	10061-02-6	0.150	U	0.0612	0.150	0.300	1	08/30/2025 00:05	WG2590564
Trichloroethene	79-01-6	0.0400	U	0.0160	0.0400	0.0800	1	08/30/2025 00:05	WG2590564
Trichlorofluoromethane	75-69-4	0.0500	U	0.0200	0.0500	0.100	1	08/30/2025 00:05	WG2590564
Vinyl acetate	108-05-4	2.50	U	0.692	2.50	10.0	1	08/30/2025 00:05	WG2590564
Vinyl chloride	75-01-4	0.0750	U	0.0273	0.0750	0.150	1	08/30/2025 00:05	WG2590564
Xylenes, Total	1330-20-7	0.400	U	0.191	0.400	0.800	1	08/30/2025 00:05	WG2590564
(S) Toluene-d8	*2037-26-5*	*99.4*				*89.0-112*		*08/30/2025 00:05*	WG2590564
(S) 4-Bromofluorobenzene	*460-00-4*	*98.4*				*85.0-114*		*08/30/2025 00:05*	WG2590564
(S) 1,2-Dichloroethane-d4	*17060-07-0*	*97.4*				*81.0-118*		*08/30/2025 00:05*	WG2590564

Additional Information - Results for field analyses are not accredited to ISO 17025

Analyte	Result	Units
Cooler#	1	
Cooler Temperature	0.7	Deg. C

Volatile Organic Compounds (GC) by Method AK101

Analyte	CAS #	Result	Qualifier	DL	LOD	LOQ	Dilution	Analysis	Batch
		ug/l		ug/l	ug/l	ug/l		date / time	
TPHGAK C6 to C10	TPH C6-C10	90.0	U	59.4	90.0	100	1	08/30/2025 20:44	WG2591456
(S) a,a,a-Trifluorotoluene(FID)	*98-08-8*	*83.2*				*50.0-150*		*08/30/2025 20:44*	WG2591456

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

Analyte	CAS #	Result	Qualifier	DL	LOD	LOQ	Dilution	Analysis	Batch
		ug/l		ug/l	ug/l	ug/l		date / time	
1,1,1,2-Tetrachloroethane	630-20-6	0.0500	U	0.0200	0.0500	0.100	1	08/30/2025 12:46	WG2591248
1,1,1-Trichloroethane	71-55-6	0.0500	U	0.0110	0.0500	0.100	1	08/30/2025 12:46	WG2591248
1,1,2,2-Tetrachloroethane	79-34-5	0.0500	U	0.0156	0.0500	0.100	1	08/30/2025 12:46	WG2591248
1,1,2-Trichloroethane	79-00-5	0.100	U	0.0353	0.100	0.200	1	08/30/2025 12:46	WG2591248
1,1-Dichloroethane	75-34-3	0.0500	J6 U	0.0230	0.0500	0.100	1	08/30/2025 12:46	WG2591248
1,1-Dichloroethene	75-35-4	0.0500	J6 U	0.0200	0.0500	0.100	1	08/30/2025 12:46	WG2591248
1,1-Dichloropropene	563-58-6	0.100	J6 U	0.0280	0.100	0.200	1	08/30/2025 12:46	WG2591248
1,2,3-Trichlorobenzene	87-61-6	0.250	J6 U	0.0250	0.250	0.500	1	08/30/2025 12:46	WG2591248
1,2,3-Trichloropropane	96-18-4	0.500	U	0.204	0.500	1.00	1	08/30/2025 12:46	WG2591248
1,2,4-Trichlorobenzene	120-82-1	0.500	J6 U	0.193	0.500	1.00	1	08/30/2025 12:46	WG2591248
1,2,4-Trimethylbenzene	95-63-6	0.100	U	0.0464	0.100	0.200	1	08/30/2025 12:46	WG2591248
1,2-Dibromo-3-Chloropropane	96-12-8	0.500	U	0.204	0.500	1.00	1	08/30/2025 12:46	WG2591248
1,2-Dibromoethane	106-93-4	0.0500	U	0.0210	0.0500	0.100	1	08/30/2025 12:46	WG2591248
1,2-Dichlorobenzene	95-50-1	0.200	U	0.0580	0.200	0.400	1	08/30/2025 12:46	WG2591248
1,2-Dichloroethane	107-06-2	0.0500	U	0.0190	0.0500	0.100	1	08/30/2025 12:46	WG2591248
1,2-Dichloropropane	78-87-5	0.200	U	0.0508	0.200	0.400	1	08/30/2025 12:46	WG2591248
1,3,5-Trimethylbenzene	108-67-8	0.100	J6 U	0.0432	0.100	0.200	1	08/30/2025 12:46	WG2591248
1,3-Dichlorobenzene	541-73-1	0.200	U	0.0680	0.200	0.400	1	08/30/2025 12:46	WG2591248
1,3-Dichloropropane	142-28-9	0.150	U	0.0700	0.150	0.300	1	08/30/2025 12:46	WG2591248
1,4-Dichlorobenzene	106-46-7	0.250	J6 U	0.0788	0.250	0.500	1	08/30/2025 12:46	WG2591248
2,2-Dichloropropane	594-20-7	0.100	J6 U	0.0317	0.100	0.200	1	08/30/2025 12:46	WG2591248
2-Butanone (MEK)	78-93-3	1.00	U	0.500	1.00	2.00	1	08/30/2025 12:46	WG2591248
2-Hexanone	591-78-6	1.00	U	0.400	1.00	2.00	1	08/30/2025 12:46	WG2591248
2-Chlorotoluene	95-49-8	0.100	U	0.0368	0.100	0.200	1	08/30/2025 12:46	WG2591248
4-Chlorotoluene	106-43-4	0.100	U	0.0452	0.100	0.200	1	08/30/2025 12:46	WG2591248
p-Isopropyltoluene	99-87-6	0.300	J6 U	0.0932	0.300	0.600	1	08/30/2025 12:46	WG2591248
4-Methyl-2-pentanone (MIBK)	108-10-1	1.00	U	0.400	1.00	2.00	1	08/30/2025 12:46	WG2591248
Benzene	71-43-2	0.0330	J J6	0.0160	0.0500	0.100	1	08/30/2025 12:46	WG2591248
Bromobenzene	108-86-1	0.250	U	0.0420	0.250	0.500	1	08/30/2025 12:46	WG2591248
Bromochloromethane	74-97-5	0.100	U	0.0452	0.100	0.200	1	08/30/2025 12:46	WG2591248
Bromodichloromethane	75-27-4	0.100	U	0.0315	0.100	0.200	1	08/30/2025 12:46	WG2591248
Bromoform	75-25-2	0.500	J4 U	0.239	0.500	1.00	1	08/30/2025 12:46	WG2591248
Bromomethane	74-83-9	0.500	U	0.148	0.500	1.00	1	08/30/2025 12:46	WG2591248
Carbon Disulfide	75-15-0	0.500	J6 U	0.162	0.500	1.00	1	08/30/2025 12:46	WG2591248
Carbon tetrachloride	56-23-5	0.100	U	0.0432	0.100	0.200	1	08/30/2025 12:46	WG2591248
Chlorobenzene	108-90-7	0.0500	J6 U	0.0229	0.0500	0.100	1	08/30/2025 12:46	WG2591248
Chloroethane	75-00-3	0.100	U	0.0432	0.100	0.200	1	08/30/2025 12:46	WG2591248
Chloroform	67-66-3	0.0500	J6 U	0.0166	0.0500	0.100	1	08/30/2025 12:46	WG2591248
Chloromethane	74-87-3	0.250	J3 U	0.0556	0.250	0.500	1	08/30/2025 12:46	WG2591248
cis-1,2-Dichloroethene	156-59-2	0.0750	U	0.0276	0.0750	0.150	1	08/30/2025 12:46	WG2591248
cis-1,3-Dichloropropene	10061-01-5	0.100	U	0.0271	0.100	0.200	1	08/30/2025 12:46	WG2591248
Chlorodibromomethane	124-48-1	0.0500	J4 U	0.0180	0.0500	0.100	1	08/30/2025 12:46	WG2591248

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

Analyte	CAS #	Result ug/l	Qualifier	DL ug/l	LOD ug/l	LOQ ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	74-95-3	0.100	U	0.0400	0.100	0.200	1	08/30/2025 12:46	WG2591248
Dichlorodifluoromethane	75-71-8	0.100	U	0.0327	0.100	0.200	1	08/30/2025 12:46	WG2591248
Ethylbenzene	100-41-4	0.0500	J6 U	0.0212	0.0500	0.100	1	08/30/2025 12:46	WG2591248
Hexachloro-1,3-butadiene	87-68-3	2.00	J6 U	0.508	2.00	4.00	1	08/30/2025 12:46	WG2591248
Isopropylbenzene	98-82-8	1.00	J6 U	0.0345	1.00	2.00	1	08/30/2025 12:46	WG2591248
Methyl tert-butyl ether	1634-04-4	0.0300	U	0.0118	0.0300	0.0600	1	08/30/2025 12:46	WG2591248
Methylene Chloride	75-09-2	0.750	U	0.266	0.750	1.50	1	08/30/2025 12:46	WG2591248
Naphthalene	91-20-3	1.25	U	1.00	1.25	5.00	1	08/30/2025 12:46	WG2591248
n-Butylbenzene	104-51-8	0.500	J6 U	0.154	0.500	1.00	1	08/30/2025 12:46	WG2591248
n-Propylbenzene	103-65-1	0.100	U	0.0472	0.100	0.200	1	08/30/2025 12:46	WG2591248
o-Xylene	95-47-6	0.100	J6 U	0.0400	0.100	0.200	1	08/30/2025 12:46	WG2591248
m&p-Xylenes		0.200	J6 U	0.0600	0.200	0.400	1	08/30/2025 12:46	WG2591248
sec-Butylbenzene	135-98-8	0.250	J6 U	0.101	0.250	0.500	1	08/30/2025 12:46	WG2591248
Styrene	100-42-5	0.250	U	0.109	0.250	0.500	1	08/30/2025 12:46	WG2591248
tert-Butylbenzene	98-06-6	0.500	J6 U	0.0620	0.500	1.00	1	08/30/2025 12:46	WG2591248
Tetrachloroethene	127-18-4	0.0750	J6 U	0.0280	0.0750	0.150	1	08/30/2025 12:46	WG2591248
Toluene	108-88-3	0.0990	J J6	0.0500	0.100	0.200	1	08/30/2025 12:46	WG2591248
trans-1,2-Dichloroethene	156-60-5	0.300	J6 U	0.0572	0.300	0.600	1	08/30/2025 12:46	WG2591248
trans-1,3-Dichloropropene	10061-02-6	0.150	U	0.0612	0.150	0.300	1	08/30/2025 12:46	WG2591248
Trichloroethene	79-01-6	0.0400	J6 U	0.0160	0.0400	0.0800	1	08/30/2025 12:46	WG2591248
Trichlorofluoromethane	75-69-4	0.0500	U	0.0200	0.0500	0.100	1	08/30/2025 12:46	WG2591248
Vinyl acetate	108-05-4	2.50	U	0.692	2.50	10.0	1	09/03/2025 00:53	WG2592901
Vinyl chloride	75-01-4	0.0750	U	0.0273	0.0750	0.150	1	08/30/2025 12:46	WG2591248
Xylenes, Total	1330-20-7	0.400	J6 U	0.191	0.400	0.800	1	08/30/2025 12:46	WG2591248
(S) Toluene-d8	*2037-26-5*	*100*				*89.0-112*		*08/30/2025 12:46*	WG2591248
(S) Toluene-d8	*2037-26-5*	*108*				*89.0-112*		*09/03/2025 00:53*	WG2592901
(S) 4-Bromofluorobenzene	*460-00-4*	*99.0*				*85.0-114*		*08/30/2025 12:46*	WG2591248
(S) 4-Bromofluorobenzene	*460-00-4*	*96.0*				*85.0-114*		*09/03/2025 00:53*	WG2592901
(S) 1,2-Dichloroethane-d4	*17060-07-0*	*98.0*				*81.0-118*		*08/30/2025 12:46*	WG2591248
(S) 1,2-Dichloroethane-d4	*17060-07-0*	*90.4*				*81.0-118*		*09/03/2025 00:53*	WG2592901

Semi-Volatile Organic Compounds (GC) by Method AK102/103

Analyte	CAS #	Result ug/l	Qualifier	DL ug/l	LOD ug/l	LOQ ug/l	Dilution	Analysis date / time	Batch
AK102 DRO C10-C25	C10-C25	288	J	173	408	816	1.02	09/07/2025 03:42	WG2593414
AK103 RRO C25-C36	C25-C36	612	U	469	612	816	1.02	09/07/2025 03:42	WG2593414
(S) o-Terphenyl	*84-15-1*	*95.6*				*50.0-150*		*09/07/2025 03:42*	WG2593414
(S) n-Triacontane d62	*93952-07-9*	*84.3*				*10.0-163*		*09/07/2025 03:42*	WG2593414

Sample Narrative:

L1892109-02 WG2593414: Duplicate Analysis performed due to QC failure, no LCSDs. Results confirm; reporting in hold data.

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

Analyte	CAS #	Result ug/l	Qualifier	DL ug/l	LOD ug/l	LOQ ug/l	Dilution	Analysis date / time	Batch
Anthracene	120-12-7	0.0390	J J3 J6 T8	0.0292	0.0450	0.0500	1	08/31/2025 17:41	WG2590843
Acenaphthene	83-32-9	0.0450	J3 J6 T8 U	0.0396	0.0450	0.0500	1	08/31/2025 17:41	WG2590843
Acenaphthylene	208-96-8	0.0450	J3 J6 T8 U	0.0296	0.0450	0.0500	1	08/31/2025 17:41	WG2590843
Benzo(a)anthracene	56-55-3	0.0631	J3 J6 T8	0.0333	0.0450	0.0500	1	08/31/2025 17:41	WG2590843
Benzo(a)pyrene	50-32-8	0.0697	J3 J6 T8	0.0320	0.0450	0.0500	1	08/31/2025 17:41	WG2590843
Benzo(b)fluoranthene	205-99-2	0.0691	J3 J6 T8	0.0343	0.0450	0.0500	1	08/31/2025 17:41	WG2590843
Benzo(g,h,i)perylene	191-24-2	0.104	J3 J6 T8	0.0309	0.0450	0.0500	1	08/31/2025 17:41	WG2590843
Benzo(k)fluoranthene	207-08-9	0.125	J3 J6 T8 U	0.0909	0.125	0.250	1	08/31/2025 17:41	WG2590843
Chrysene	218-01-9	0.0621	J3 J6 T8	0.0347	0.0450	0.0500	1	08/31/2025 17:41	WG2590843
Dibenz(a,h)anthracene	53-70-3	0.112	J3 T8	0.0314	0.0450	0.0500	1	08/31/2025 17:41	WG2590843

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

Analyte	CAS #	Result ug/l	Qualifier	DL ug/l	LOD ug/l	LOQ ug/l	Dilution	Analysis date / time	Batch
Fluoranthene	206-44-0	0.0697	J3 J4 J6 T8	0.0431	0.0450	0.0500	1	08/31/2025 17:41	WG2590843
Fluorene	86-73-7	0.0450	J3 J6 T8 U	0.0437	0.0450	0.0500	1	08/31/2025 17:41	WG2590843
Indeno(1,2,3-cd)pyrene	193-39-5	0.0983	J3 J6 T8	0.0348	0.0450	0.0500	1	08/31/2025 17:41	WG2590843
Naphthalene	91-20-3	0.250	J3 J6 T8 U	0.188	0.250	0.500	1	08/31/2025 17:41	WG2590843
Phenanthrene	85-01-8	0.0530	J3 J6 T8	0.0394	0.0450	0.0500	1	08/31/2025 17:41	WG2590843
Pyrene	129-00-0	0.0671	J3 J6 T8	0.0430	0.0450	0.0500	1	08/31/2025 17:41	WG2590843
1-Methylnaphthalene	90-12-0	0.250	J3 J6 T8 U	0.0764	0.250	0.500	1	08/31/2025 17:41	WG2590843
2-Methylnaphthalene	91-57-6	0.250	J3 J6 T8 U	0.146	0.250	0.500	1	08/31/2025 17:41	WG2590843
2-Chloronaphthalene	91-58-7	0.250	J3 J6 T8 U	0.0646	0.250	0.500	1	08/31/2025 17:41	WG2590843
(S) 2-Fluorobiphenyl	*321-60-8*	*81.5*				*53.0-106*		*08/31/2025 17:41*	WG2590843
(S) p-Terphenyl-d14	*1718-51-0*	*93.0*				*58.0-132*		*08/31/2025 17:41*	WG2590843
(S) 2-Methylnaphthalene-D10	*7297-45-2*	*78.5*				*50.0-150*		*08/31/2025 17:41*	WG2590843
(S) Fluoranthene-D10	*93951-69-0*	*103*				*50.0-150*		*08/31/2025 17:41*	WG2590843

Additional Information - Results for field analyses are not accredited to ISO 17025

Analyte	Result	Units
Cooler#	1	
Cooler Temperature	0.7	Deg. C

Volatile Organic Compounds (GC) by Method AK101

Analyte	CAS #	Result	Qualifier	DL	LOD	LOQ	Dilution	Analysis	Batch
		ug/l		ug/l	ug/l	ug/l		date / time	
TPHGAK C6 to C10	TPH C6-C10	90.0	U	59.4	90.0	100	1	08/30/2025 21:07	WG2591456
(S) a,a,a-Trifluorotoluene(FID)	*98-08-8*	*86.3*				*50.0-150*		*08/30/2025 21:07*	WG2591456

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

Analyte	CAS #	Result	Qualifier	DL	LOD	LOQ	Dilution	Analysis	Batch
		ug/l		ug/l	ug/l	ug/l		date / time	
1,1,1,2-Tetrachloroethane	630-20-6	0.0500	U	0.0200	0.0500	0.100	1	08/30/2025 13:05	WG2591248
1,1,1-Trichloroethane	71-55-6	0.0500	U	0.0110	0.0500	0.100	1	08/30/2025 13:05	WG2591248
1,1,2,2-Tetrachloroethane	79-34-5	0.0500	U	0.0156	0.0500	0.100	1	08/30/2025 13:05	WG2591248
1,1,2-Trichloroethane	79-00-5	0.100	U	0.0353	0.100	0.200	1	08/30/2025 13:05	WG2591248
1,1-Dichloroethane	75-34-3	0.0500	U	0.0230	0.0500	0.100	1	08/30/2025 13:05	WG2591248
1,1-Dichloroethene	75-35-4	0.0500	U	0.0200	0.0500	0.100	1	08/30/2025 13:05	WG2591248
1,1-Dichloropropene	563-58-6	0.100	U	0.0280	0.100	0.200	1	08/30/2025 13:05	WG2591248
1,2,3-Trichlorobenzene	87-61-6	0.250	U	0.0250	0.250	0.500	1	08/30/2025 13:05	WG2591248
1,2,3-Trichloropropane	96-18-4	0.500	U	0.204	0.500	1.00	1	08/30/2025 13:05	WG2591248
1,2,4-Trichlorobenzene	120-82-1	0.500	U	0.193	0.500	1.00	1	08/30/2025 13:05	WG2591248
1,2,4-Trimethylbenzene	95-63-6	0.100	U	0.0464	0.100	0.200	1	08/30/2025 13:05	WG2591248
1,2-Dibromo-3-Chloropropane	96-12-8	0.500	U	0.204	0.500	1.00	1	08/30/2025 13:05	WG2591248
1,2-Dibromoethane	106-93-4	0.0500	U	0.0210	0.0500	0.100	1	08/30/2025 13:05	WG2591248
1,2-Dichlorobenzene	95-50-1	0.200	U	0.0580	0.200	0.400	1	08/30/2025 13:05	WG2591248
1,2-Dichloroethane	107-06-2	0.0500	U	0.0190	0.0500	0.100	1	08/30/2025 13:05	WG2591248
1,2-Dichloropropane	78-87-5	0.200	U	0.0508	0.200	0.400	1	08/30/2025 13:05	WG2591248
1,3,5-Trimethylbenzene	108-67-8	0.100	U	0.0432	0.100	0.200	1	08/30/2025 13:05	WG2591248
1,3-Dichlorobenzene	541-73-1	0.200	U	0.0680	0.200	0.400	1	08/30/2025 13:05	WG2591248
1,3-Dichloropropane	142-28-9	0.150	U	0.0700	0.150	0.300	1	08/30/2025 13:05	WG2591248
1,4-Dichlorobenzene	106-46-7	0.250	U	0.0788	0.250	0.500	1	08/30/2025 13:05	WG2591248
2,2-Dichloropropane	594-20-7	0.100	U	0.0317	0.100	0.200	1	08/30/2025 13:05	WG2591248
2-Butanone (MEK)	78-93-3	1.00	U	0.500	1.00	2.00	1	08/30/2025 13:05	WG2591248
2-Hexanone	591-78-6	1.00	U	0.400	1.00	2.00	1	08/30/2025 13:05	WG2591248
2-Chlorotoluene	95-49-8	0.100	U	0.0368	0.100	0.200	1	08/30/2025 13:05	WG2591248
4-Chlorotoluene	106-43-4	0.100	U	0.0452	0.100	0.200	1	08/30/2025 13:05	WG2591248
p-Isopropyltoluene	99-87-6	0.300	U	0.0932	0.300	0.600	1	08/30/2025 13:05	WG2591248
4-Methyl-2-pentanone (MIBK)	108-10-1	1.00	U	0.400	1.00	2.00	1	08/30/2025 13:05	WG2591248
Benzene	71-43-2	0.0320	J	0.0160	0.0500	0.100	1	08/30/2025 13:05	WG2591248
Bromobenzene	108-86-1	0.250	U	0.0420	0.250	0.500	1	08/30/2025 13:05	WG2591248
Bromochloromethane	74-97-5	0.100	U	0.0452	0.100	0.200	1	08/30/2025 13:05	WG2591248
Bromodichloromethane	75-27-4	0.100	U	0.0315	0.100	0.200	1	08/30/2025 13:05	WG2591248
Bromoform	75-25-2	0.500	J4 U	0.239	0.500	1.00	1	08/30/2025 13:05	WG2591248
Bromomethane	74-83-9	0.500	U	0.148	0.500	1.00	1	08/30/2025 13:05	WG2591248
Carbon Disulfide	75-15-0	0.500	U	0.162	0.500	1.00	1	08/30/2025 13:05	WG2591248
Carbon tetrachloride	56-23-5	0.100	U	0.0432	0.100	0.200	1	08/30/2025 13:05	WG2591248
Chlorobenzene	108-90-7	0.0500	U	0.0229	0.0500	0.100	1	08/30/2025 13:05	WG2591248
Chloroethane	75-00-3	0.100	U	0.0432	0.100	0.200	1	08/30/2025 13:05	WG2591248
Chloroform	67-66-3	0.0500	U	0.0166	0.0500	0.100	1	08/30/2025 13:05	WG2591248
Chloromethane	74-87-3	0.250	U	0.0556	0.250	0.500	1	08/30/2025 13:05	WG2591248
cis-1,2-Dichloroethene	156-59-2	0.0750	U	0.0276	0.0750	0.150	1	08/30/2025 13:05	WG2591248
cis-1,3-Dichloropropene	10061-01-5	0.100	U	0.0271	0.100	0.200	1	08/30/2025 13:05	WG2591248
Chlorodibromomethane	124-48-1	0.0500	J4 U	0.0180	0.0500	0.100	1	08/30/2025 13:05	WG2591248

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

Analyte	CAS #	Result ug/l	Qualifier	DL ug/l	LOD ug/l	LOQ ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	74-95-3	0.100	U	0.0400	0.100	0.200	1	08/30/2025 13:05	WG2591248
Dichlorodifluoromethane	75-71-8	0.100	U	0.0327	0.100	0.200	1	08/30/2025 13:05	WG2591248
Ethylbenzene	100-41-4	0.0500	U	0.0212	0.0500	0.100	1	08/30/2025 13:05	WG2591248
Hexachloro-1,3-butadiene	87-68-3	2.00	U	0.508	2.00	4.00	1	08/30/2025 13:05	WG2591248
Isopropylbenzene	98-82-8	1.00	U	0.0345	1.00	2.00	1	08/30/2025 13:05	WG2591248
Methyl tert-butyl ether	1634-04-4	0.0300	U	0.0118	0.0300	0.0600	1	08/30/2025 13:05	WG2591248
Methylene Chloride	75-09-2	0.750	U	0.266	0.750	1.50	1	08/30/2025 13:05	WG2591248
Naphthalene	91-20-3	1.25	U	1.00	1.25	5.00	1	08/30/2025 13:05	WG2591248
n-Butylbenzene	104-51-8	0.500	U	0.154	0.500	1.00	1	08/30/2025 13:05	WG2591248
n-Propylbenzene	103-65-1	0.100	U	0.0472	0.100	0.200	1	08/30/2025 13:05	WG2591248
o-Xylene	95-47-6	0.100	U	0.0400	0.100	0.200	1	08/30/2025 13:05	WG2591248
m&p-Xylenes		0.200	U	0.0600	0.200	0.400	1	08/30/2025 13:05	WG2591248
sec-Butylbenzene	135-98-8	0.250	U	0.101	0.250	0.500	1	08/30/2025 13:05	WG2591248
Styrene	100-42-5	0.250	U	0.109	0.250	0.500	1	08/30/2025 13:05	WG2591248
tert-Butylbenzene	98-06-6	0.500	U	0.0620	0.500	1.00	1	08/30/2025 13:05	WG2591248
Tetrachloroethene	127-18-4	0.0750	U	0.0280	0.0750	0.150	1	08/30/2025 13:05	WG2591248
Toluene	108-88-3	0.110	J	0.0500	0.100	0.200	1	08/30/2025 13:05	WG2591248
trans-1,2-Dichloroethene	156-60-5	0.300	U	0.0572	0.300	0.600	1	08/30/2025 13:05	WG2591248
trans-1,3-Dichloropropene	10061-02-6	0.150	U	0.0612	0.150	0.300	1	08/30/2025 13:05	WG2591248
Trichloroethene	79-01-6	0.0400	U	0.0160	0.0400	0.0800	1	08/30/2025 13:05	WG2591248
Trichlorofluoromethane	75-69-4	0.0500	U	0.0200	0.0500	0.100	1	08/30/2025 13:05	WG2591248
Vinyl acetate	108-05-4	2.50	U	0.692	2.50	10.0	1	09/03/2025 01:13	WG2592901
Vinyl chloride	75-01-4	0.0750	U	0.0273	0.0750	0.150	1	08/30/2025 13:05	WG2591248
Xylenes, Total	1330-20-7	0.400	U	0.191	0.400	0.800	1	08/30/2025 13:05	WG2591248
(S) Toluene-d8	*2037-26-5*	*99.2*				*89.0-112*		*08/30/2025 13:05*	WG2591248
(S) Toluene-d8	*2037-26-5*	*106*				*89.0-112*		*09/03/2025 01:13*	WG2592901
(S) 4-Bromofluorobenzene	*460-00-4*	*98.3*				*85.0-114*		*08/30/2025 13:05*	WG2591248
(S) 4-Bromofluorobenzene	*460-00-4*	*94.1*				*85.0-114*		*09/03/2025 01:13*	WG2592901
(S) 1,2-Dichloroethane-d4	*17060-07-0*	*98.6*				*81.0-118*		*08/30/2025 13:05*	WG2591248
(S) 1,2-Dichloroethane-d4	*17060-07-0*	*87.9*				*81.0-118*		*09/03/2025 01:13*	WG2592901

Semi-Volatile Organic Compounds (GC) by Method AK102/103

Analyte	CAS #	Result ug/l	Qualifier	DL ug/l	LOD ug/l	LOQ ug/l	Dilution	Analysis date / time	Batch
AK102 DRO C10-C25	C10-C25	269	J	180	424	848	1.06	09/07/2025 05:31	WG2593414
AK103 RRO C25-C36	C25-C36	636	U	488	636	848	1.06	09/07/2025 05:31	WG2593414
(S) o-Terphenyl	*84-15-1*	*90.7*				*50.0-150*		*09/07/2025 05:31*	WG2593414
(S) n-Triacontane d62	*93952-07-9*	*83.6*				*10.0-163*		*09/07/2025 05:31*	WG2593414

Sample Narrative:

L1892109-03 WG2593414: Duplicate Analysis performed due to QC failure, no LCSDs. Results confirm; reporting in hold data.

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

Analyte	CAS #	Result ug/l	Qualifier	DL ug/l	LOD ug/l	LOQ ug/l	Dilution	Analysis date / time	Batch
Anthracene	120-12-7	0.0450	T8 U	0.0292	0.0450	0.0500	1	08/31/2025 18:33	WG2590843
Acenaphthene	83-32-9	0.0450	T8 U	0.0396	0.0450	0.0500	1	08/31/2025 18:33	WG2590843
Acenaphthylene	208-96-8	0.0450	T8 U	0.0296	0.0450	0.0500	1	08/31/2025 18:33	WG2590843
Benzo(a)anthracene	56-55-3	0.0450	T8 U	0.0333	0.0450	0.0500	1	08/31/2025 18:33	WG2590843
Benzo(a)pyrene	50-32-8	0.0450	T8 U	0.0320	0.0450	0.0500	1	08/31/2025 18:33	WG2590843
Benzo(b)fluoranthene	205-99-2	0.0450	T8 U	0.0343	0.0450	0.0500	1	08/31/2025 18:33	WG2590843
Benzo(g,h,i)perylene	191-24-2	0.0450	T8 U	0.0309	0.0450	0.0500	1	08/31/2025 18:33	WG2590843
Benzo(k)fluoranthene	207-08-9	0.125	T8 U	0.0909	0.125	0.250	1	08/31/2025 18:33	WG2590843
Chrysene	218-01-9	0.0450	T8 U	0.0347	0.0450	0.0500	1	08/31/2025 18:33	WG2590843
Dibenz(a,h)anthracene	53-70-3	0.0450	T8 U	0.0314	0.0450	0.0500	1	08/31/2025 18:33	WG2590843

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

Analyte	CAS #	Result ug/l	Qualifier	DL ug/l	LOD ug/l	LOQ ug/l	Dilution	Analysis date / time	Batch
Fluoranthene	206-44-0	0.0450	J4 T8 U	0.0431	0.0450	0.0500	1	08/31/2025 18:33	WG2590843
Fluorene	86-73-7	0.0450	T8 U	0.0437	0.0450	0.0500	1	08/31/2025 18:33	WG2590843
Indeno(1,2,3-cd)pyrene	193-39-5	0.0450	T8 U	0.0348	0.0450	0.0500	1	08/31/2025 18:33	WG2590843
Naphthalene	91-20-3	0.250	T8 U	0.188	0.250	0.500	1	08/31/2025 18:33	WG2590843
Phenanthrene	85-01-8	0.0450	T8 U	0.0394	0.0450	0.0500	1	08/31/2025 18:33	WG2590843
Pyrene	129-00-0	0.0450	T8 U	0.0430	0.0450	0.0500	1	08/31/2025 18:33	WG2590843
1-Methylnaphthalene	90-12-0	0.250	T8 U	0.0764	0.250	0.500	1	08/31/2025 18:33	WG2590843
2-Methylnaphthalene	91-57-6	0.250	T8 U	0.146	0.250	0.500	1	08/31/2025 18:33	WG2590843
2-Chloronaphthalene	91-58-7	0.250	T8 U	0.0646	0.250	0.500	1	08/31/2025 18:33	WG2590843
(S) 2-Fluorobiphenyl	*321-60-8*	*97.5*				*53.0-106*		*08/31/2025 18:33*	WG2590843
(S) p-Terphenyl-d14	*1718-51-0*	*99.5*				*58.0-132*		*08/31/2025 18:33*	WG2590843
(S) 2-Methylnaphthalene-D10	*7297-45-2*	*96.5*				*50.0-150*		*08/31/2025 18:33*	WG2590843
(S) Fluoranthene-D10	*93951-69-0*	*112*				*50.0-150*		*08/31/2025 18:33*	WG2590843

Method Blank (MB)

(MB) R4267312-3 08/30/25 13:50

Analyte	MB Result ug/l	MB Qualifier	MB DL ug/l	MB LOD ug/l	MB LOQ ug/l
TPHGAK C6 to C10	90.0	U	59.4	90.0	100
(S) a,a,a-Trifluorotoluene(FID)	*81.0*				*60.0-120*

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

(LCS) R4267312-1 08/30/25 12:41 • (LCSD) R4267312-2 08/30/25 13:04

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPHGAK C6 to C10	5000	4890	4790	97.8	95.8	78.0-122			2.07	20
(S) a,a,a-Trifluorotoluene(FID)				*99.6*	*99.6*	*60.0-120*				

L1892109-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1892109-02 08/30/25 20:44 • (MS) R4267312-4 08/30/25 23:26 • (MSD) R4267312-5 08/31/25 00:21

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPHGAK C6 to C10	5000	90.0	4140	4290	82.8	85.8	1	78.0-122			3.56	20
(S) a,a,a-Trifluorotoluene(FID)					*95.4*	*103*		*50.0-150*				

L1892412-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1892412-10 08/30/25 21:53 • (MS) R4267312-6 08/31/25 00:44 • (MSD) R4267312-7 08/31/25 01:07

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPHGAK C6 to C10	5000	491	4610	4620	82.4	82.6	1	78.0-122			0.217	20
(S) a,a,a-Trifluorotoluene(FID)					*96.4*	*97.1*		*50.0-150*				

Method Blank (MB)

(MB) R4268400-2 09/03/25 11:15

Analyte	MB Result ug/l	MB Qualifier	MB DL ug/l	MB LOD ug/l	MB LOQ ug/l
TPHGAK C6 to C10	90.0	U	59.4	90.0	100
(S) a,a,a-Trifluorotoluene(FID)	*88.2*				*60.0-120*

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

(LCS) R4268400-1 09/03/25 10:06 • (LCSD) R4268400-3 09/03/25 15:10

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPHGAK C6 to C10	5000	4120	4860	82.4	97.2	78.0-122			16.5	20
(S) a,a,a-Trifluorotoluene(FID)				*99.3*	*107*	*60.0-120*				

L1891661-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1891661-02 09/03/25 17:30 • (MS) R4268400-4 09/03/25 20:37 • (MSD) R4268400-5 09/03/25 21:00

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPHGAK C6 to C10	5000	90.0	4820	4370	96.4	87.4	1	78.0-122			9.79	20
(S) a,a,a-Trifluorotoluene(FID)					*106*	*103*		*50.0-150*				

Method Blank (MB)

(MB) R4267507-3 08/29/25 23:19

Analyte	MB Result ug/l	MB Qualifier	MB DL ug/l	MB LOD ug/l	MB LOQ ug/l
1,1,1,2-Tetrachloroethane	0.0500	U	0.0200	0.0500	0.100
1,1,1-Trichloroethane	0.0500	U	0.0110	0.0500	0.100
1,1,2,2-Tetrachloroethane	0.0500	U	0.0156	0.0500	0.100
1,1,2-Trichloroethane	0.100	U	0.0353	0.100	0.200
1,1-Dichloroethane	0.0500	U	0.0230	0.0500	0.100
1,1-Dichloroethene	0.0500	U	0.0200	0.0500	0.100
1,1-Dichloropropene	0.100	U	0.0280	0.100	0.200
1,2,3-Trichlorobenzene	0.250	U	0.0250	0.250	0.500
1,2,3-Trichloropropane	0.500	U	0.204	0.500	1.00
1,2,4-Trichlorobenzene	0.500	U	0.193	0.500	1.00
1,2,4-Trimethylbenzene	0.100	U	0.0464	0.100	0.200
1,2-Dibromo-3-Chloropropane	0.500	U	0.204	0.500	1.00
1,2-Dibromoethane	0.0500	U	0.0210	0.0500	0.100
1,2-Dichlorobenzene	0.200	U	0.0580	0.200	0.400
1,2-Dichloroethane	0.0500	U	0.0190	0.0500	0.100
1,2-Dichloropropane	0.200	U	0.0508	0.200	0.400
1,3,5-Trimethylbenzene	0.100	U	0.0432	0.100	0.200
1,3-Dichlorobenzene	0.200	U	0.0680	0.200	0.400
1,3-Dichloropropane	0.150	U	0.0700	0.150	0.300
1,4-Dichlorobenzene	0.250	U	0.0788	0.250	0.500
2,2-Dichloropropane	0.100	U	0.0317	0.100	0.200
2-Butanone (MEK)	1.00	U	0.500	1.00	2.00
2-Hexanone	1.00	U	0.400	1.00	2.00
2-Chlorotoluene	0.100	U	0.0368	0.100	0.200
4-Chlorotoluene	0.100	U	0.0452	0.100	0.200
p-Isopropyltoluene	0.300	U	0.0932	0.300	0.600
4-Methyl-2-pentanone (MIBK)	1.00	U	0.400	1.00	2.00
Benzene	0.0500	U	0.0160	0.0500	0.100
Bromobenzene	0.250	U	0.0420	0.250	0.500
Bromochloromethane	0.100	U	0.0452	0.100	0.200
Bromodichloromethane	0.100	U	0.0315	0.100	0.200
Bromoform	0.500	U	0.239	0.500	1.00
Bromomethane	0.500	U	0.148	0.500	1.00
Carbon Disulfide	0.500	U	0.162	0.500	1.00
Carbon tetrachloride	0.100	U	0.0432	0.100	0.200
Chlorobenzene	0.0500	U	0.0229	0.0500	0.100
Chloroethane	0.100	U	0.0432	0.100	0.200
Chloroform	0.0210	J	0.0166	0.0500	0.100
Chloromethane	0.250	U	0.0556	0.250	0.500
cis-1,2-Dichloroethene	0.0750	U	0.0276	0.0750	0.150

Method Blank (MB)

(MB) R4267507-3 08/29/25 23:19

Analyte	MB Result ug/l	MB Qualifier	MB DL ug/l	MB LOD ug/l	MB LOQ ug/l
cis-1,3-Dichloropropene	0.100	U	0.0271	0.100	0.200
Chlorodibromomethane	0.0500	U	0.0180	0.0500	0.100
Dibromomethane	0.100	U	0.0400	0.100	0.200
Dichlorodifluoromethane	0.100	U	0.0327	0.100	0.200
Ethylbenzene	0.0500	U	0.0212	0.0500	0.100
Hexachloro-1,3-butadiene	2.00	U	0.508	2.00	4.00
Isopropylbenzene	1.00	U	0.0345	1.00	2.00
Methyl tert-butyl ether	0.0300	U	0.0118	0.0300	0.0600
Methylene Chloride	0.750	U	0.266	0.750	1.50
Naphthalene	1.25	U	1.00	1.25	5.00
n-Butylbenzene	0.500	U	0.154	0.500	1.00
n-Propylbenzene	0.100	U	0.0472	0.100	0.200
o-Xylene	0.100	U	0.0400	0.100	0.200
m&p-Xylenes	0.200	U	0.0600	0.200	0.400
sec-Butylbenzene	0.250	U	0.101	0.250	0.500
Styrene	0.250	U	0.109	0.250	0.500
tert-Butylbenzene	0.500	U	0.0620	0.500	1.00
Tetrachloroethene	0.0750	U	0.0280	0.0750	0.150
Toluene	0.100	U	0.0500	0.100	0.200
trans-1,2-Dichloroethene	0.300	U	0.0572	0.300	0.600
trans-1,3-Dichloropropene	0.150	U	0.0612	0.150	0.300
Trichloroethene	0.0400	U	0.0160	0.0400	0.0800
Trichlorofluoromethane	0.0500	U	0.0200	0.0500	0.100
Vinyl acetate	2.50	U	0.692	2.50	10.0
Vinyl chloride	0.0750	U	0.0273	0.0750	0.150
Xylenes, Total	0.400	U	0.191	0.400	0.800
(S) Toluene-d8	*100*				*89.0-112*
(S) 4-Bromofluorobenzene	*97.2*				*85.0-114*
(S) 1,2-Dichloroethane-d4	*96.5*				*81.0-118*

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

(LCS) R4267507-1 08/29/25 21:20 • (LCSD) R4267507-2 08/29/25 21:40

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,1,1,2-Tetrachloroethane	25.0	23.9	25.1	95.6	100	78.0-124			4.90	20
1,1,1-Trichloroethane	25.0	26.2	26.1	105	104	74.0-131			0.382	20
1,1,2,2-Tetrachloroethane	25.0	26.2	25.2	105	101	71.0-121			3.89	20
1,1,2-Trichloroethane	25.0	23.3	24.9	93.2	99.6	80.0-119			6.64	20

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

(LCS) R4267507-1 08/29/25 21:20 • (LCSD) R4267507-2 08/29/25 21:40

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,1-Dichloroethane	25.0	25.7	26.2	103	105	77.0-125			1.93	20
1,1-Dichloroethene	25.0	27.1	27.5	108	110	71.0-131			1.47	20
1,1-Dichloropropene	25.0	26.2	26.8	105	107	79.0-125			2.26	20
1,2,3-Trichlorobenzene	25.0	24.4	24.1	97.6	96.4	69.0-129			1.24	20
1,2,3-Trichloropropane	25.0	25.8	25.3	103	101	73.0-122			1.96	20
1,2,4-Trichlorobenzene	25.0	25.1	25.1	100	100	69.0-130			0.000	20
1,2,4-Trimethylbenzene	25.0	27.6	27.1	110	108	76.0-124			1.83	20
1,2-Dibromo-3-Chloropropane	25.0	24.6	25.5	98.4	102	62.0-128			3.59	20
1,2-Dibromoethane	25.0	24.3	25.8	97.2	103	77.0-121			5.99	20
1,2-Dichlorobenzene	25.0	25.0	25.0	100	100	80.0-119			0.000	20
1,2-Dichloroethane	25.0	23.8	23.7	95.2	94.8	73.0-128			0.421	20
1,2-Dichloropropane	25.0	25.5	26.2	102	105	78.0-122			2.71	20
1,3,5-Trimethylbenzene	25.0	28.0	27.7	112	111	75.0-124			1.08	20
1,3-Dichlorobenzene	25.0	25.3	24.9	101	99.6	80.0-119			1.59	20
1,3-Dichloropropane	25.0	25.1	26.4	100	106	80.0-119			5.05	20
1,4-Dichlorobenzene	25.0	24.1	23.7	96.4	94.8	79.0-118			1.67	20
2,2-Dichloropropane	25.0	23.6	24.0	94.4	96.0	60.0-139			1.68	20
2-Butanone (MEK)	125	129	135	103	108	56.0-143			4.55	20
2-Hexanone	125	138	147	110	118	57.0-139			6.32	20
2-Chlorotoluene	25.0	26.4	26.1	106	104	79.0-122			1.14	20
4-Chlorotoluene	25.0	27.7	27.0	111	108	78.0-122			2.56	20
p-Isopropyltoluene	25.0	29.2	28.8	117	115	77.0-127			1.38	20
4-Methyl-2-pentanone (MIBK)	125	132	141	106	113	67.0-130			6.59	20
Benzene	25.0	24.7	25.0	98.8	100	79.0-120			1.21	20
Bromobenzene	25.0	26.6	25.8	106	103	80.0-120			3.05	20
Bromochloromethane	25.0	26.0	26.5	104	106	78.0-123			1.90	20
Bromodichloromethane	25.0	25.7	26.0	103	104	79.0-125			1.16	20
Bromoform	25.0	22.8	24.6	91.2	98.4	66.0-130			7.59	20
Bromomethane	25.0	26.4	26.6	106	106	53.0-141			0.755	20
Carbon Disulfide	25.0	28.3	28.4	113	114	64.0-133			0.353	20
Carbon tetrachloride	25.0	26.2	26.2	105	105	72.0-136			0.000	20
Chlorobenzene	25.0	22.9	24.6	91.6	98.4	82.0-118			7.16	20
Chloroethane	25.0	25.9	25.5	104	102	60.0-138			1.56	20
Chloroform	25.0	24.6	24.9	98.4	99.6	79.0-124			1.21	20
Chloromethane	25.0	28.3	28.8	113	115	50.0-139			1.75	20
cis-1,2-Dichloroethene	25.0	25.6	25.9	102	104	78.0-123			1.17	20
cis-1,3-Dichloropropene	25.0	26.8	27.2	107	109	75.0-124			1.48	20
Chlorodibromomethane	25.0	24.0	25.8	96.0	103	74.0-126			7.23	20
Dibromomethane	25.0	25.5	26.2	102	105	79.0-123			2.71	20
Dichlorodifluoromethane	25.0	32.2	32.0	129	128	32.0-152			0.623	20

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

(LCS) R4267507-1 08/29/25 21:20 • (LCSD) R4267507-2 08/29/25 21:40

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	25.0	24.0	25.7	96.0	103	79.0-121			6.84	20
Hexachloro-1,3-butadiene	25.0	21.9	21.8	87.6	87.2	66.0-134			0.458	20
Isopropylbenzene	25.0	25.9	27.6	104	110	72.0-131			6.36	20
Methyl tert-butyl ether	25.0	26.4	26.7	106	107	71.0-124			1.13	20
Methylene Chloride	25.0	26.3	26.6	105	106	74.0-124			1.13	20
Naphthalene	25.0	25.0	25.5	100	102	61.0-128			1.98	20
n-Butylbenzene	25.0	27.9	27.3	112	109	75.0-128			2.17	20
n-Propylbenzene	25.0	28.0	27.4	112	110	76.0-126			2.17	20
o-Xylene	25.0	25.2	27.2	101	109	78.0-122			7.63	20
m&p-Xylenes	50.0	50.0	53.2	100	106	80.0-121			6.20	20
sec-Butylbenzene	25.0	29.2	29.1	117	116	77.0-126			0.343	20
Styrene	25.0	25.7	27.6	103	110	78.0-123			7.13	20
tert-Butylbenzene	25.0	27.8	27.5	111	110	78.0-124			1.08	20
Tetrachloroethene	25.0	24.1	25.6	96.4	102	74.0-129			6.04	20
Toluene	25.0	24.0	25.6	96.0	102	80.0-121			6.45	20
trans-1,2-Dichloroethene	25.0	26.4	26.6	106	106	75.0-124			0.755	20
trans-1,3-Dichloropropene	25.0	24.8	26.3	99.2	105	73.0-127			5.87	20
Trichloroethene	25.0	25.2	25.9	101	104	79.0-123			2.74	20
Trichlorofluoromethane	25.0	27.5	26.9	110	108	65.0-141			2.21	20
Vinyl acetate	125	153	139	122	111	54.0-146			9.59	20
Vinyl chloride	25.0	26.1	27.5	104	110	58.0-137			5.22	20
Xylenes, Total	75.0	75.2	80.4	100	107	79.0-121			6.68	20
(S) Toluene-d8				*94.8*	*100*	*89.0-112*				
(S) 4-Bromofluorobenzene				*93.7*	*99.7*	*85.0-114*				
(S) 1,2-Dichloroethane-d4				*106*	*108*	*81.0-118*				

Method Blank (MB)

(MB) R4267618-3 08/30/25 11:10

Analyte	MB Result ug/l	MB Qualifier	MB DL ug/l	MB LOD ug/l	MB LOQ ug/l
1,1,1,2-Tetrachloroethane	0.0500	U	0.0200	0.0500	0.100
1,1,1-Trichloroethane	0.0500	U	0.0110	0.0500	0.100
1,1,2,2-Tetrachloroethane	0.0500	U	0.0156	0.0500	0.100
1,1,2-Trichloroethane	0.100	U	0.0353	0.100	0.200
1,1-Dichloroethane	0.0500	U	0.0230	0.0500	0.100
1,1-Dichloroethene	0.0500	U	0.0200	0.0500	0.100
1,1-Dichloropropene	0.100	U	0.0280	0.100	0.200
1,2,3-Trichlorobenzene	0.250	U	0.0250	0.250	0.500
1,2,3-Trichloropropane	0.500	U	0.204	0.500	1.00
1,2,4-Trichlorobenzene	0.500	U	0.193	0.500	1.00
1,2,4-Trimethylbenzene	0.100	U	0.0464	0.100	0.200
1,2-Dibromo-3-Chloropropane	0.500	U	0.204	0.500	1.00
1,2-Dibromoethane	0.0500	U	0.0210	0.0500	0.100
1,2-Dichlorobenzene	0.200	U	0.0580	0.200	0.400
1,2-Dichloroethane	0.0500	U	0.0190	0.0500	0.100
1,2-Dichloropropane	0.200	U	0.0508	0.200	0.400
1,3,5-Trimethylbenzene	0.100	U	0.0432	0.100	0.200
1,3-Dichlorobenzene	0.200	U	0.0680	0.200	0.400
1,3-Dichloropropane	0.150	U	0.0700	0.150	0.300
1,4-Dichlorobenzene	0.250	U	0.0788	0.250	0.500
2,2-Dichloropropane	0.100	U	0.0317	0.100	0.200
2-Butanone (MEK)	1.00	U	0.500	1.00	2.00
2-Hexanone	1.00	U	0.400	1.00	2.00
2-Chlorotoluene	0.100	U	0.0368	0.100	0.200
4-Chlorotoluene	0.100	U	0.0452	0.100	0.200
p-Isopropyltoluene	0.300	U	0.0932	0.300	0.600
4-Methyl-2-pentanone (MIBK)	1.00	U	0.400	1.00	2.00
Benzene	0.0500	U	0.0160	0.0500	0.100
Bromobenzene	0.250	U	0.0420	0.250	0.500
Bromochloromethane	0.100	U	0.0452	0.100	0.200
Bromodichloromethane	0.100	U	0.0315	0.100	0.200
Bromoform	0.500	U	0.239	0.500	1.00
Bromomethane	0.500	U	0.148	0.500	1.00
Carbon Disulfide	0.500	U	0.162	0.500	1.00
Carbon tetrachloride	0.100	U	0.0432	0.100	0.200
Chlorobenzene	0.0500	U	0.0229	0.0500	0.100
Chloroethane	0.100	U	0.0432	0.100	0.200
Chloroform	0.0500	U	0.0166	0.0500	0.100
Chloromethane	0.250	U	0.0556	0.250	0.500
cis-1,2-Dichloroethene	0.0750	U	0.0276	0.0750	0.150

Method Blank (MB)

(MB) R4267618-3 08/30/25 11:10

Analyte	MB Result ug/l	MB Qualifier	MB DL ug/l	MB LOD ug/l	MB LOQ ug/l
cis-1,3-Dichloropropene	0.100	U	0.0271	0.100	0.200
Chlorodibromomethane	0.0500	U	0.0180	0.0500	0.100
Dibromomethane	0.100	U	0.0400	0.100	0.200
Dichlorodifluoromethane	0.100	U	0.0327	0.100	0.200
Ethylbenzene	0.0500	U	0.0212	0.0500	0.100
Hexachloro-1,3-butadiene	2.00	U	0.508	2.00	4.00
Isopropylbenzene	1.00	U	0.0345	1.00	2.00
Methyl tert-butyl ether	0.0300	U	0.0118	0.0300	0.0600
Methylene Chloride	0.750	U	0.266	0.750	1.50
Naphthalene	1.25	U	1.00	1.25	5.00
n-Butylbenzene	0.500	U	0.154	0.500	1.00
n-Propylbenzene	0.100	U	0.0472	0.100	0.200
o-Xylene	0.100	U	0.0400	0.100	0.200
m&p-Xylenes	0.200	U	0.0600	0.200	0.400
sec-Butylbenzene	0.250	U	0.101	0.250	0.500
Styrene	0.250	U	0.109	0.250	0.500
tert-Butylbenzene	0.500	U	0.0620	0.500	1.00
Tetrachloroethene	0.0750	U	0.0280	0.0750	0.150
Toluene	0.100	U	0.0500	0.100	0.200
trans-1,2-Dichloroethene	0.300	U	0.0572	0.300	0.600
trans-1,3-Dichloropropene	0.150	U	0.0612	0.150	0.300
Trichloroethene	0.0400	U	0.0160	0.0400	0.0800
Trichlorofluoromethane	0.0500	U	0.0200	0.0500	0.100
Vinyl chloride	0.0750	U	0.0273	0.0750	0.150
Xylenes, Total	0.400	U	0.191	0.400	0.800
(S) Toluene-d8	*95.9*				*89.0-112*
(S) 4-Bromofluorobenzene	*101*				*85.0-114*
(S) 1,2-Dichloroethane-d4	*102*				*81.0-118*

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

(LCS) R4267618-1 08/30/25 09:04 • (LCSD) R4267618-2 08/30/25 09:23

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,1,1,2-Tetrachloroethane	25.0	24.4	24.2	97.6	96.8	78.0-124			0.823	20
1,1,1-Trichloroethane	25.0	27.2	27.1	109	108	74.0-131			0.368	20
1,1,2,2-Tetrachloroethane	25.0	24.0	24.1	96.0	96.4	71.0-121			0.416	20
1,1,2-Trichloroethane	25.0	24.4	24.6	97.6	98.4	80.0-119			0.816	20
1,1-Dichloroethane	25.0	24.9	25.3	99.6	101	77.0-125			1.59	20

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

(LCS) R4267618-1 08/30/25 09:04 • (LCSD) R4267618-2 08/30/25 09:23

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,1-Dichloroethene	25.0	23.9	24.1	95.6	96.4	71.0-131			0.833	20
1,1-Dichloropropene	25.0	25.3	26.4	101	106	79.0-125			4.26	20
1,2,3-Trichlorobenzene	25.0	22.2	22.5	88.8	90.0	69.0-129			1.34	20
1,2,3-Trichloropropane	25.0	25.8	26.1	103	104	73.0-122			1.16	20
1,2,4-Trichlorobenzene	25.0	22.1	23.3	88.4	93.2	69.0-130			5.29	20
1,2,4-Trimethylbenzene	25.0	25.1	26.1	100	104	76.0-124			3.91	20
1,2-Dibromo-3-Chloropropane	25.0	29.6	30.2	118	121	62.0-128	E	E	2.01	20
1,2-Dibromoethane	25.0	26.4	26.6	106	106	77.0-121			0.755	20
1,2-Dichlorobenzene	25.0	24.9	25.9	99.6	104	80.0-119			3.94	20
1,2-Dichloroethane	25.0	26.2	26.3	105	105	73.0-128			0.381	20
1,2-Dichloropropane	25.0	26.2	26.5	105	106	78.0-122			1.14	20
1,3,5-Trimethylbenzene	25.0	23.5	24.6	94.0	98.4	75.0-124			4.57	20
1,3-Dichlorobenzene	25.0	25.5	26.7	102	107	80.0-119			4.60	20
1,3-Dichloropropane	25.0	24.5	24.7	98.0	98.8	80.0-119			0.813	20
1,4-Dichlorobenzene	25.0	24.1	25.0	96.4	100	79.0-118			3.67	20
2,2-Dichloropropane	25.0	23.4	22.7	93.6	90.8	60.0-139			3.04	20
2-Butanone (MEK)	125	140	142	112	114	56.0-143			1.42	20
2-Hexanone	125	137	137	110	110	57.0-139			0.000	20
2-Chlorotoluene	25.0	25.5	26.4	102	106	79.0-122			3.47	20
4-Chlorotoluene	25.0	25.8	26.3	103	105	78.0-122			1.92	20
p-Isopropyltoluene	25.0	25.0	25.8	100	103	77.0-127			3.15	20
4-Methyl-2-pentanone (MIBK)	125	126	127	101	102	67.0-130			0.791	20
Benzene	25.0	24.2	24.8	96.8	99.2	79.0-120			2.45	20
Bromobenzene	25.0	25.7	26.3	103	105	80.0-120			2.31	20
Bromochloromethane	25.0	25.0	25.2	100	101	78.0-123			0.797	20
Bromodichloromethane	25.0	29.5	29.8	118	119	79.0-125			1.01	20
Bromoform	25.0	35.1	35.6	140	142	66.0-130	E J4	E J4	1.41	20
Bromomethane	25.0	25.0	25.0	100	100	53.0-141			0.000	20
Carbon Disulfide	25.0	26.0	26.7	104	107	64.0-133			2.66	20
Carbon tetrachloride	25.0	26.8	26.8	107	107	72.0-136			0.000	20
Chlorobenzene	25.0	23.9	24.4	95.6	97.6	82.0-118			2.07	20
Chloroethane	25.0	25.0	25.6	100	102	60.0-138			2.37	20
Chloroform	25.0	24.5	24.5	98.0	98.0	79.0-124			0.000	20
Chloromethane	25.0	25.1	26.2	100	105	50.0-139			4.29	20
cis-1,2-Dichloroethene	25.0	25.1	25.4	100	102	78.0-123			1.19	20
cis-1,3-Dichloropropene	25.0	27.7	28.0	111	112	75.0-124			1.08	20
Chlorodibromomethane	25.0	32.0	33.0	128	132	74.0-126	E J4	E J4	3.08	20
Dibromomethane	25.0	26.9	27.3	108	109	79.0-123			1.48	20
Dichlorodifluoromethane	25.0	28.1	28.1	112	112	32.0-152			0.000	20
Ethylbenzene	25.0	24.1	25.0	96.4	100	79.0-121			3.67	20

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

(LCS) R4267618-1 08/30/25 09:04 • (LCSD) R4267618-2 08/30/25 09:23

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Hexachloro-1,3-butadiene	25.0	23.6	24.2	94.4	96.8	66.0-134			2.51	20
Isopropylbenzene	25.0	23.1	23.5	92.4	94.0	72.0-131			1.72	20
Methyl tert-butyl ether	25.0	28.4	27.6	114	110	71.0-124			2.86	20
Methylene Chloride	25.0	26.1	25.3	104	101	74.0-124			3.11	20
Naphthalene	25.0	26.6	28.7	106	115	61.0-128	E	E	7.59	20
n-Butylbenzene	25.0	23.8	24.7	95.2	98.8	75.0-128			3.71	20
n-Propylbenzene	25.0	24.7	25.5	98.8	102	76.0-126			3.19	20
o-Xylene	25.0	24.2	24.7	96.8	98.8	78.0-122			2.04	20
m&p-Xylenes	50.0	47.7	49.1	95.4	98.2	80.0-121			2.89	20
sec-Butylbenzene	25.0	24.2	25.0	96.8	100	77.0-126			3.25	20
Styrene	25.0	26.6	27.2	106	109	78.0-123			2.23	20
tert-Butylbenzene	25.0	24.6	25.1	98.4	100	78.0-124			2.01	20
Tetrachloroethene	25.0	23.6	24.5	94.4	98.0	74.0-129			3.74	20
Toluene	25.0	22.9	23.4	91.6	93.6	80.0-121			2.16	20
trans-1,2-Dichloroethene	25.0	24.9	25.1	99.6	100	75.0-124			0.800	20
trans-1,3-Dichloropropene	25.0	26.3	25.8	105	103	73.0-127			1.92	20
Trichloroethene	25.0	27.8	28.6	111	114	79.0-123			2.84	20
Trichlorofluoromethane	25.0	27.8	28.3	111	113	65.0-141			1.78	20
Vinyl chloride	25.0	25.2	25.7	101	103	58.0-137			1.96	20
Xylenes, Total	75.0	71.9	73.8	95.9	98.4	79.0-121			2.61	20
(S) Toluene-d8				*92.8*	*93.3*	*89.0-112*				
(S) 4-Bromofluorobenzene				*99.0*	*98.5*	*85.0-114*				
(S) 1,2-Dichloroethane-d4				*103*	*104*	*81.0-118*				

L1892109-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1892109-02 08/30/25 12:46 • (MS) R4267618-4 08/30/25 18:29 • (MSD) R4267618-5 08/30/25 18:48

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
1,1,1,2-Tetrachloroethane	25.0	0.0500	19.6	20.6	78.4	82.4	1	71.0-121			4.98	20
1,1,1-Trichloroethane	25.0	0.0500	19.8	19.6	79.2	78.4	1	10.0-144			1.02	20
1,1,2,2-Tetrachloroethane	25.0	0.0500	24.5	25.8	98.0	103	1	10.0-160			5.17	20
1,1,2-Trichloroethane	25.0	0.100	21.0	22.3	84.0	89.2	1	80.0-119			6.00	20
1,1-Dichloroethane	25.0	0.0500	18.6	19.3	74.4	77.2	1	77.0-125	J6		3.69	20
1,1-Dichloroethene	25.0	0.0500	16.2	16.1	64.8	64.4	1	71.0-131	J6	J6	0.619	20
1,1-Dichloropropene	25.0	0.100	18.4	18.1	73.6	72.4	1	79.0-125	J6	J6	1.64	20
1,2,3-Trichlorobenzene	25.0	0.250	16.5	19.1	66.0	76.4	1	69.0-129	J6		14.6	20
1,2,3-Trichloropropane	25.0	0.500	23.7	25.0	94.8	100	1	73.0-122			5.34	20
1,2,4-Trichlorobenzene	25.0	0.500	16.0	18.0	64.0	72.0	1	69.0-130	J6		11.8	20

L1892109-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1892109-02 08/30/25 12:46 • (MS) R4267618-4 08/30/25 18:29 • (MSD) R4267618-5 08/30/25 18:48

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
1,2,4-Trimethylbenzene	25.0	0.100	19.9	20.4	79.6	81.6	1	76.0-124			2.48	20
1,2-Dibromo-3-Chloropropane	25.0	0.500	27.5	28.7	110	115	1	62.0-128	E	E	4.27	20
1,2-Dibromoethane	25.0	0.0500	22.3	23.6	89.2	94.4	1	77.0-121			5.66	20
1,2-Dichlorobenzene	25.0	0.200	20.6	21.4	82.4	85.6	1	80.0-119			3.81	20
1,2-Dichloroethane	25.0	0.0500	23.2	23.9	92.8	95.6	1	73.0-128			2.97	20
1,2-Dichloropropane	25.0	0.200	21.5	22.1	86.0	88.4	1	78.0-122			2.75	20
1,3,5-Trimethylbenzene	25.0	0.100	18.6	19.4	74.4	77.6	1	75.0-124	J6		4.21	20
1,3-Dichlorobenzene	25.0	0.200	20.6	21.1	82.4	84.4	1	80.0-119			2.40	20
1,3-Dichloropropane	25.0	0.150	20.8	22.0	83.2	88.0	1	80.0-119			5.61	20
1,4-Dichlorobenzene	25.0	0.250	19.7	20.4	78.8	81.6	1	79.0-118	J6		3.49	20
2,2-Dichloropropane	25.0	0.100	14.0	14.1	56.0	56.4	1	60.0-139	J6	J6	0.712	20
2-Butanone (MEK)	125	1.00	121	125	96.8	100	1	56.0-143			3.25	20
2-Hexanone	125	1.00	123	130	98.4	104	1	57.0-139			5.53	20
2-Chlorotoluene	25.0	0.100	20.5	21.1	82.0	84.4	1	79.0-122			2.88	20
4-Chlorotoluene	25.0	0.100	20.4	20.9	81.6	83.6	1	78.0-122			2.42	20
p-Isopropyltoluene	25.0	0.300	18.6	19.7	74.4	78.8	1	77.0-127	J6		5.74	20
4-Methyl-2-pentanone (MIBK)	125	1.00	118	124	94.4	99.2	1	67.0-130			4.96	20
Benzene	25.0	0.0330	18.9	18.9	75.5	75.5	1	79.0-120	J6	J6	0.000	20
Bromobenzene	25.0	0.250	21.3	22.3	85.2	89.2	1	80.0-120			4.59	20
Bromochloromethane	25.0	0.100	20.5	22.0	82.0	88.0	1	78.0-123			7.06	20
Bromodichloromethane	25.0	0.100	24.7	25.4	98.8	102	1	79.0-125			2.79	20
Bromoform	25.0	0.500	30.3	31.6	121	126	1	66.0-130	E	E	4.20	20
Bromomethane	25.0	0.500	16.8	16.4	67.2	65.6	1	53.0-141			2.41	20
Carbon Disulfide	25.0	0.500	15.4	15.7	61.6	62.8	1	64.0-133	J6	J6	1.93	20
Carbon tetrachloride	25.0	0.100	19.2	18.5	76.8	74.0	1	72.0-136			3.71	20
Chlorobenzene	25.0	0.0500	18.7	19.3	74.8	77.2	1	82.0-118	J6	J6	3.16	20
Chloroethane	25.0	0.100	17.4	17.7	69.6	70.8	1	60.0-138			1.71	20
Chloroform	25.0	0.0500	19.1	19.7	76.4	78.8	1	79.0-124	J6	J6	3.09	20
Chloromethane	25.0	0.250	16.4	20.6	65.6	82.4	1	50.0-139		J3	22.7	20
cis-1,2-Dichloroethene	25.0	0.0750	19.8	19.9	79.2	79.6	1	78.0-123			0.504	20
cis-1,3-Dichloropropene	25.0	0.100	22.0	22.7	88.0	90.8	1	75.0-124			3.13	20
Chlorodibromomethane	25.0	0.0500	27.0	28.5	108	114	1	74.0-126	E	E	5.41	20
Dibromomethane	25.0	0.100	23.3	23.7	93.2	94.8	1	79.0-123			1.70	20
Dichlorodifluoromethane	25.0	0.100	17.9	17.8	71.6	71.2	1	32.0-152			0.560	20
Ethylbenzene	25.0	0.0500	18.6	18.9	74.4	75.6	1	79.0-121	J6	J6	1.60	20
Hexachloro-1,3-butadiene	25.0	2.00	16.0	18.0	64.0	72.0	1	66.0-134	J6		11.8	20
Isopropylbenzene	25.0	1.00	17.6	17.8	70.4	71.2	1	72.0-131	J6	J6	1.13	20
Methyl tert-butyl ether	25.0	0.0300	23.9	24.7	95.6	98.8	1	71.0-124			3.29	20
Methylene Chloride	25.0	0.750	20.0	20.7	80.0	82.8	1	74.0-124			3.44	20
Naphthalene	25.0	1.25	21.3	24.2	85.2	96.8	1	61.0-128			12.7	20

L1892109-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1892109-02 08/30/25 12:46 • (MS) R4267618-4 08/30/25 18:29 • (MSD) R4267618-5 08/30/25 18:48

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
n-Butylbenzene	25.0	0.500	17.2	18.3	68.8	73.2	1	75.0-128	J6	J6	6.20	20
n-Propylbenzene	25.0	0.100	19.3	19.6	77.2	78.4	1	76.0-126			1.54	20
o-Xylene	25.0	0.100	18.9	19.6	75.6	78.4	1	78.0-122	J6		3.64	20
m&p-Xylenes	50.0	0.200	36.4	37.2	72.8	74.4	1	80.0-121	J6	J6	2.17	20
sec-Butylbenzene	25.0	0.250	18.3	19.1	73.2	76.4	1	77.0-126	J6	J6	4.28	20
Styrene	25.0	0.250	20.8	21.4	83.2	85.6	1	78.0-123			2.84	20
tert-Butylbenzene	25.0	0.500	19.0	19.7	76.0	78.8	1	78.0-124	J6		3.62	20
Tetrachloroethene	25.0	0.0750	17.1	17.1	68.4	68.4	1	74.0-129	J6	J6	0.000	20
Toluene	25.0	0.0990	17.5	17.8	69.6	70.8	1	80.0-121	J6	J6	1.70	20
trans-1,2-Dichloroethene	25.0	0.300	17.4	17.9	69.6	71.6	1	75.0-124	J6	J6	2.83	20
trans-1,3-Dichloropropene	25.0	0.150	20.9	22.0	83.6	88.0	1	73.0-127			5.13	20
Trichloroethene	25.0	0.0400	19.8	19.6	79.2	78.4	1	79.0-123		J6	1.02	20
Trichlorofluoromethane	25.0	0.0500	18.5	18.3	74.0	73.2	1	65.0-141			1.09	20
Vinyl chloride	25.0	0.0750	16.8	16.5	67.2	66.0	1	58.0-137			1.80	20
Xylenes, Total	75.0	0.400	55.3	56.8	73.7	75.7	1	79.0-121	J6	J6	2.68	20
(S) Toluene-d8					*94.1*	*94.8*		*89.0-112*				
(S) 4-Bromofluorobenzene					*96.9*	*96.6*		*85.0-114*				
(S) 1,2-Dichloroethane-d4					*108*	*104*		*81.0-118*				

L1892220-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1892220-04 08/30/25 13:24 • (MS) R4267618-6 08/30/25 19:07 • (MSD) R4267618-7 08/30/25 19:26

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
1,1,1,2-Tetrachloroethane	25.0	0.0500	23.4	22.1	93.6	88.4	1	71.0-121			5.71	20
1,1,1-Trichloroethane	25.0	0.0500	21.9	21.2	87.6	84.8	1	10.0-144			3.25	20
1,1,2,2-Tetrachloroethane	25.0	0.0500	29.2	27.1	117	108	1	10.0-160			7.46	20
1,1,2-Trichloroethane	25.0	0.100	25.7	24.6	103	98.4	1	80.0-119			4.37	20
1,1-Dichloroethane	25.0	0.681	22.8	22.2	88.5	86.1	1	77.0-125			2.67	20
1,1-Dichloroethene	25.0	0.0500	17.7	17.5	70.8	70.0	1	71.0-131	J6	J6	1.14	20
1,1-Dichloropropene	25.0	0.100	20.5	20.2	82.0	80.8	1	79.0-125			1.47	20
1,2,3-Trichlorobenzene	25.0	0.250	24.0	23.5	96.0	94.0	1	69.0-129			2.11	20
1,2,3-Trichloropropane	25.0	0.500	28.4	26.9	114	108	1	73.0-122			5.42	20
1,2,4-Trichlorobenzene	25.0	0.500	23.6	23.1	94.4	92.4	1	69.0-130			2.14	20
1,2,4-Trimethylbenzene	25.0	0.100	24.7	23.5	98.8	94.0	1	76.0-124			4.98	20
1,2-Dibromo-3-Chloropropane	25.0	0.500	31.4	30.3	126	121	1	62.0-128	E	E	3.57	20
1,2-Dibromoethane	25.0	0.0500	27.4	25.8	110	103	1	77.0-121			6.02	20
1,2-Dichlorobenzene	25.0	0.200	26.2	24.5	105	98.0	1	80.0-119			6.71	20
1,2-Dichloroethane	25.0	0.0500	27.8	26.7	111	107	1	73.0-128			4.04	20

L1892220-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1892220-04 08/30/25 13:24 • (MS) R4267618-6 08/30/25 19:07 • (MSD) R4267618-7 08/30/25 19:26

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
1,2-Dichloropropane	25.0	0.200	25.9	24.7	104	98.8	1	78.0-122			4.74	20
1,3,5-Trimethylbenzene	25.0	0.100	22.7	22.2	90.8	88.8	1	75.0-124			2.23	20
1,3-Dichlorobenzene	25.0	0.200	26.2	24.4	105	97.6	1	80.0-119			7.11	20
1,3-Dichloropropane	25.0	0.150	25.7	23.9	103	95.6	1	80.0-119			7.26	20
1,4-Dichlorobenzene	25.0	0.250	24.9	23.4	99.6	93.6	1	79.0-118			6.21	20
2,2-Dichloropropane	25.0	0.100	15.1	15.1	60.4	60.4	1	60.0-139			0.000	20
2-Butanone (MEK)	125	1.00	141	137	113	110	1	56.0-143			2.88	20
2-Hexanone	125	1.00	148	142	118	114	1	57.0-139			4.14	20
2-Chlorotoluene	25.0	0.100	25.0	23.9	100	95.6	1	79.0-122			4.50	20
4-Chlorotoluene	25.0	0.100	25.3	23.8	101	95.2	1	78.0-122			6.11	20
p-Isopropyltoluene	25.0	0.300	23.8	23.7	95.2	94.8	1	77.0-127			0.421	20
4-Methyl-2-pentanone (MIBK)	125	1.00	141	134	113	107	1	67.0-130			5.09	20
Benzene	25.0	0.0500	21.9	21.3	87.6	85.2	1	79.0-120			2.78	20
Bromobenzene	25.0	0.250	26.7	24.8	107	99.2	1	80.0-120			7.38	20
Bromochloromethane	25.0	0.100	26.0	24.3	104	97.2	1	78.0-123			6.76	20
Bromodichloromethane	25.0	0.100	30.0	28.6	120	114	1	79.0-125			4.78	20
Bromoform	25.0	0.500	37.2	35.0	149	140	1	66.0-130	E J5	E J5	6.09	20
Bromomethane	25.0	0.500	18.4	18.3	73.6	73.2	1	53.0-141			0.545	20
Carbon Disulfide	25.0	0.500	16.8	16.4	67.2	65.6	1	64.0-133			2.41	20
Carbon tetrachloride	25.0	0.100	20.9	20.6	83.6	82.4	1	72.0-136			1.45	20
Chlorobenzene	25.0	0.0500	22.8	21.5	91.2	86.0	1	82.0-118			5.87	20
Chloroethane	25.0	0.100	19.7	19.8	78.8	79.2	1	60.0-138			0.506	20
Chloroform	25.0	0.0500	22.7	21.9	90.8	87.6	1	79.0-124			3.59	20
Chloromethane	25.0	0.250	18.8	23.3	75.2	93.2	1	50.0-139		J3	21.4	20
cis-1,2-Dichloroethene	25.0	0.198	23.8	22.3	94.4	88.4	1	78.0-123			6.51	20
cis-1,3-Dichloropropene	25.0	0.100	26.8	25.9	107	104	1	75.0-124			3.42	20
Chlorodibromomethane	25.0	0.0500	33.8	31.8	135	127	1	74.0-126	E J5	E J5	6.10	20
Dibromomethane	25.0	0.100	28.1	27.2	112	109	1	79.0-123			3.25	20
Dichlorodifluoromethane	25.0	0.100	16.6	16.4	66.4	65.6	1	32.0-152			1.21	20
Ethylbenzene	25.0	0.0500	22.2	21.2	88.8	84.8	1	79.0-121			4.61	20
Hexachloro-1,3-butadiene	25.0	2.00	23.6	23.4	94.4	93.6	1	66.0-134			0.851	20
Isopropylbenzene	25.0	1.00	20.6	20.2	82.4	80.8	1	72.0-131			1.96	20
Methyl tert-butyl ether	25.0	0.0300	28.3	25.5	113	102	1	71.0-124			10.4	20
Methylene Chloride	25.0	0.750	23.7	22.0	94.8	88.0	1	74.0-124			7.44	20
Naphthalene	25.0	1.25	29.8	29.8	119	119	1	61.0-128	E	E	0.000	20
n-Butylbenzene	25.0	0.500	22.5	22.5	90.0	90.0	1	75.0-128			0.000	20
n-Propylbenzene	25.0	0.100	23.3	22.4	93.2	89.6	1	76.0-126			3.94	20
o-Xylene	25.0	0.100	22.6	21.6	90.4	86.4	1	78.0-122			4.52	20
m&p-Xylenes	50.0	0.200	43.6	41.5	87.2	83.0	1	80.0-121			4.94	20
sec-Butylbenzene	25.0	0.250	22.7	22.9	90.8	91.6	1	77.0-126			0.877	20

L1892220-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1892220-04 08/30/25 13:24 • (MS) R4267618-6 08/30/25 19:07 • (MSD) R4267618-7 08/30/25 19:26

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Styrene	25.0	0.250	25.4	23.7	102	94.8	1	78.0-123			6.92	20
tert-Butylbenzene	25.0	0.500	23.3	23.0	93.2	92.0	1	78.0-124			1.30	20
Tetrachloroethene	25.0	0.0750	19.7	19.1	78.8	76.4	1	74.0-129			3.09	20
Toluene	25.0	0.100	20.9	19.8	83.6	79.2	1	80.0-121		J6	5.41	20
trans-1,2-Dichloroethene	25.0	0.300	20.6	20.1	82.4	80.4	1	75.0-124			2.46	20
trans-1,3-Dichloropropene	25.0	0.150	26.1	24.5	104	98.0	1	73.0-127			6.32	20
Trichloroethene	25.0	0.0400	22.6	22.3	90.4	89.2	1	79.0-123			1.34	20
Trichlorofluoromethane	25.0	0.0500	20.6	20.7	82.4	82.8	1	65.0-141			0.484	20
Vinyl chloride	25.0	0.0750	17.6	17.4	70.4	69.6	1	58.0-137			1.14	20
Xylenes, Total	75.0	0.400	66.2	63.1	88.3	84.1	1	79.0-121			4.80	20
(S) Toluene-d8					*94.6*	*93.3*		*89.0-112*				
(S) 4-Bromofluorobenzene					*96.4*	*96.3*		*85.0-114*				
(S) 1,2-Dichloroethane-d4					*108*	*105*		*81.0-118*				

Method Blank (MB)

(MB) R4267891-3 09/02/25 21:52

Analyte	MB Result ug/l	MB Qualifier	MB DL ug/l	MB LOD ug/l	MB LOQ ug/l
Vinyl acetate	2.50	U	0.692	2.50	10.0
(S) Toluene-d8	*108*				*89.0-112*
(S) 4-Bromofluorobenzene	*94.7*				*85.0-114*
(S) 1,2-Dichloroethane-d4	*89.3*				*81.0-118*

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

(LCS) R4267891-1 09/02/25 20:39 • (LCSD) R4267891-2 09/02/25 20:59

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Vinyl acetate	125	126	131	101	105	54.0-146	E	E	3.89	20
(S) Toluene-d8				*102*	*101*	*89.0-112*				
(S) 4-Bromofluorobenzene				*92.3*	*93.0*	*85.0-114*				
(S) 1,2-Dichloroethane-d4				*92.1*	*91.3*	*81.0-118*				

Method Blank (MB)

(MB) R4271157-1 09/07/25 02:36

Analyte	MB Result ug/l	MB Qualifier	MB DL ug/l	MB LOD ug/l	MB LOQ ug/l
AK102 DRO C10-C25	400	U	170	400	800
AK103 RRO C25-C36	600	U	460	600	800
(S) o-Terphenyl	*99.5*				*60.0-120*
(S) n-Triacontane d62	*87.0*				*10.0-163*

Laboratory Control Sample (LCS)

(LCS) R4271157-2 09/07/25 02:58

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
AK102 DRO C10-C25	6000	7130	119	75.0-125	
(S) o-Terphenyl			*115*	*60.0-120*	
(S) n-Triacontane d62			*84.5*	*10.0-163*	

Laboratory Control Sample (LCS)

(LCS) R4271157-3 09/07/25 03:20

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
AK103 RRO C25-C36	6000	4430	73.8	21.0-158	
(S) o-Terphenyl			*98.5*	*60.0-120*	
(S) n-Triacontane d62			*89.5*	*10.0-163*	

L1892109-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1892109-02 09/07/25 03:42 • (MS) R4271157-4 09/07/25 04:03 • (MSD) R4271157-5 09/07/25 04:25

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
AK102 DRO C10-C25	6000	288	6570	6390	105	103	1	75.0-125			2.78	20
(S) o-Terphenyl					*108*	*106*		*50.0-150*				
(S) n-Triacontane d62					*76.0*	*79.3*		*10.0-163*				

Sample Narrative:

OS: Duplicate Analysis performed due to QC failure, no LCSDs. Results confirm; reporting in hold data.

L1892109-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1892109-02 09/07/25 03:42 • (MS) R4271157-6 09/07/25 04:47 • (MSD) R4271157-7 09/07/25 05:09

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
AK103 RRO C25-C36	7060	612	5340	4160	75.6	65.8	1.18	10.0-159			24.8	49
(S) o-Terphenyl					*96.9*	*95.3*		*50.0-150*				
(S) n-Triacontane d62					*89.4*	*80.6*		*10.0-163*				

Sample Narrative:

OS: Duplicate Analysis performed due to QC failure, no LCSDs. Results confirm; reporting in hold data.

Method Blank (MB)

(MB) R4267088-2 08/31/25 17:24

Analyte	MB Result ug/l	MB Qualifier	MB DL ug/l	MB LOD ug/l	MB LOQ ug/l
Anthracene	0.0450	U	0.0292	0.0450	0.0500
Acenaphthene	0.0450	U	0.0396	0.0450	0.0500
Acenaphthylene	0.0450	U	0.0296	0.0450	0.0500
Benzo(a)anthracene	0.0450	U	0.0333	0.0450	0.0500
Benzo(a)pyrene	0.0450	U	0.0320	0.0450	0.0500
Benzo(b)fluoranthene	0.0450	U	0.0343	0.0450	0.0500
Benzo(g,h,i)perylene	0.0450	U	0.0309	0.0450	0.0500
Benzo(k)fluoranthene	0.125	U	0.0909	0.125	0.250
Chrysene	0.0450	U	0.0347	0.0450	0.0500
Dibenz(a,h)anthracene	0.0450	U	0.0314	0.0450	0.0500
Fluoranthene	0.0450	U	0.0431	0.0450	0.0500
Fluorene	0.0450	U	0.0437	0.0450	0.0500
Indeno(1,2,3-cd)pyrene	0.0450	U	0.0348	0.0450	0.0500
Naphthalene	0.250	U	0.188	0.250	0.500
Phenanthrene	0.0450	U	0.0394	0.0450	0.0500
Pyrene	0.0450	U	0.0430	0.0450	0.0500
1-Methylnaphthalene	0.250	U	0.0764	0.250	0.500
2-Methylnaphthalene	0.250	U	0.146	0.250	0.500
2-Chloronaphthalene	0.250	U	0.0646	0.250	0.500
(S) 2-Fluorobiphenyl	*88.5*				*53.0-106*
(S) p-Terphenyl-d14	*104*				*58.0-132*
(S) 2-Methylnaphthalene-d10	*88.0*				*50.0-150*
(S) Fluoranthene-d10	*109*				*50.0-150*

Laboratory Control Sample (LCS)

(LCS) R4267088-1 08/31/25 17:07

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Anthracene	2.00	2.08	104	53.0-119	
Acenaphthene	2.00	1.93	96.5	48.0-114	
Acenaphthylene	2.00	1.91	95.5	35.0-121	
Benzo(a)anthracene	2.00	2.33	117	59.0-120	
Benzo(a)pyrene	2.00	2.08	104	53.0-120	
Benzo(b)fluoranthene	2.00	2.23	111	53.0-126	
Benzo(g,h,i)perylene	2.00	2.17	108	44.0-128	
Benzo(k)fluoranthene	2.00	2.14	107	54.0-125	
Chrysene	2.00	2.36	118	57.0-120	
Dibenz(a,h)anthracene	2.00	2.35	117	44.0-131	

Laboratory Control Sample (LCS)

(LCS) R4267088-1 08/31/25 17:07

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Fluoranthene	2.00	2.43	122	58.0-120	J4
Fluorene	2.00	2.19	109	50.0-118	
Indeno(1,2,3-cd)pyrene	2.00	2.37	118	48.0-130	
Naphthalene	2.00	1.94	97.0	43.0-114	
Phenanthrene	2.00	2.21	111	53.0-115	
Pyrene	2.00	2.26	113	53.0-121	
1-Methylnaphthalene	2.00	2.02	101	41.0-115	
2-Methylnaphthalene	2.00	1.93	96.5	39.0-114	
2-Chloronaphthalene	2.00	1.89	94.5	34.0-111	
(S) 2-Fluorobiphenyl			*95.5*	*53.0-106*	
(S) p-Terphenyl-d14			*108*	*58.0-132*	
(S) 2-Methylnaphthalene-d10			*95.5*	*50.0-150*	
(S) Fluoranthene-d10			*116*	*50.0-150*	

L1892109-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1892109-02 08/31/25 17:41 • (MS) R4267088-3 08/31/25 17:58 • (MSD) R4267088-4 08/31/25 18:16

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Anthracene	2.00	0.0390	0.766	1.87	36.3	91.5	1	53.0-119	J6	J3	83.8	20
Acenaphthene	2.00	0.0450	0.517	1.80	25.8	90.0	1	48.0-114	J6	J3	111	20
Acenaphthylene	2.00	0.0450	0.509	1.81	25.4	90.5	1	35.0-121	J6	J3	112	20
Benzo(a)anthracene	2.00	0.0631	1.02	2.03	47.8	98.3	1	59.0-120	J6	J3	66.2	20
Benzo(a)pyrene	2.00	0.0697	0.936	1.69	43.3	81.0	1	53.0-120	J6	J3	57.4	20
Benzo(b)fluoranthene	2.00	0.0691	0.986	1.76	45.8	84.5	1	53.0-126	J6	J3	56.4	20
Benzo(g,h,i)perylene	2.00	0.104	0.965	1.48	43.0	68.8	1	44.0-128	J6	J3	42.1	20
Benzo(k)fluoranthene	2.00	0.125	0.988	1.76	49.4	88.0	1	54.0-125	J6	J3	56.2	20
Chrysene	2.00	0.0621	1.07	2.04	50.4	98.9	1	57.0-120	J6	J3	62.4	20
Dibenz(a,h)anthracene	2.00	0.112	1.05	1.57	46.9	72.9	1	44.0-131		J3	39.7	20
Fluoranthene	2.00	0.0697	1.05	2.15	49.0	104	1	58.0-120	J6	J3	68.8	20
Fluorene	2.00	0.0450	0.665	1.95	33.3	97.5	1	50.0-118	J6	J3	98.3	20
Indeno(1,2,3-cd)pyrene	2.00	0.0983	1.00	1.55	45.1	72.6	1	48.0-130	J6	J3	43.1	20
Naphthalene	2.00	0.250	0.450	1.75	22.5	87.5	1	43.0-114	J J6	J3	118	20
Phenanthrene	2.00	0.0530	0.827	1.98	38.7	96.3	1	53.0-115	J6	J3	82.2	20
Pyrene	2.00	0.0671	0.976	1.99	45.4	96.1	1	53.0-121	J6	J3	68.4	20
1-Methylnaphthalene	2.00	0.250	0.481	1.87	24.0	93.5	1	41.0-115	J J6	J3	118	20
2-Methylnaphthalene	2.00	0.250	0.460	1.82	23.0	91.0	1	39.0-114	J J6	J3	119	20
2-Chloronaphthalene	2.00	0.250	0.466	1.77	23.3	88.5	1	34.0-111	J J6	J3	117	20
(S) 2-Fluorobiphenyl					*25.0*	*86.5*		*53.0-106*	J2			

L1892109-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1892109-02 08/31/25 17:41 • (MS) R4267088-3 08/31/25 17:58 • (MSD) R4267088-4 08/31/25 18:16

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
(S) p-Terphenyl-d14					*47.4*	*88.5*		*58.0-132*	J2			
(S) 2-Methylnaphthalene-d10					*22.8*	*87.5*		*50.0-150*	J2			
(S) Fluoranthene-d10					*49.7*	*100*		*50.0-150*	J2			

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.
U (Radiochemistry)	Result + Error < MDA.
J (Radiochemistry)	Result < MDA; Result + Error > MDA.

Qualifier	Description
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
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.
T8	Sample(s) received past/too close to holding time expiration.
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	LA000356
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.

COOLER RECEIPT FORM
(ONE PER COOLER)

Please email this form and the completed CoC records to the Brice Project Chemist within 24 hours of sample receipt.

COC Number 25KALET-01
Cooler Number/Name on COC 25KALET-01
Temperature (temp blank, °C) TDA9 0.8 0.1=0.7
Temperature (cooler, °C) TDA9 0.8 0.1=0.7
Thermometer Type/ID TDA9
Laboratory/Location
Laboratory SDG L1892109
Shipment Method _____ **Tracking Number** _____

			Circle:	
1.	Were custody seals present? (Yes) No If no, were samples hand del?		Yes	No
	If yes, how many and where? Front / Back / Intact?		(Yes)	No
	Signature/date present on custody seals?		(Yes)	No
2.	Were custody papers taped to lid inside cooler?		(Yes)	No
3.	Were custody papers properly filled out (ink, signed, etc.)?		(Yes)	No
4.	Custody forms signed/dated and properly accepted/relinquished?		(Yes)	No
5.	Has the shipper/tracking number been documented on the paperwork?		(Yes)	No
6.	Was sufficient ice used (if appropriate)?	N/A	(Yes)	No
	Type used: ☐ Wet ☒ Gel Still frozen? (Yes) No			
7.	Were all samples/bottles sealed in separate plastic bags?	N/A	(Yes)	No
8.	Did all bottles arrive in good condition? (intact, not leaking, etc.)		(Yes)	No
9.	Were all bottle labels complete (sample ID, date, analysis, preservative, etc.) ?		(Yes)	No
10.	Did all bottle labels agree with the custody papers?		(Yes)	No
11.	Were the appropriate containers used for the analyses?		(Yes)	No
12.	Are all VOA vials free of headspace > 6mm in diameter?	N/A	(Yes)	No
	If no, note samples and number of vials affected below.			
	If no, are there vials without headspace to perform the analysis?	N/A	Yes	No
13.	Was sufficient volume sent in each bottle to perform analysis?	N/A	(Yes)	No
14.	If there are volatiles present, is there a trip blank present in this cooler?	N/A	(Yes)	No
15.	Is the temperature within 0-6°C?	N/A	(Yes)	No
16.	Were labels correctly associated with pre-tared containers (not placed directly on jars for methanol-preserved volatiles)?	N/A	(Yes)	No
17.	Were non-volatile sample checked for appropriate preservation?	N/A	(Yes)	No
18.	Were methanol-preserved soil containers accompanied by an unpreserved aliquot for percent moisture content?	(N/A)	Yes	No
	(If checked at the bench, include prep logs or narrative with final report.)			

Explain any discrepancies/deficiencies (attach additional sheets if required):

_____
_____
_____
_____
_____

If discrepancies/deficiencies are noted, was the Brice chemist contacted*?
Chemist: _____ Date/Time: _____ Contact Method: phone email

Email or phone notes should be included with final report, if applicable, or at a minimum documented in the case narrative.

BRICE ENGINEERING, LLC.

CHAIN OF CUSTODY RECORD

K155

Section 1

CLIENT: **Brice Engineering, LLC**
3700 Centerpoint Drive, Suite 8223, Anchorage, AK 99503

CONTACT: Victoria Pennick PHONE #: 907-205-9892

PROJECT: North ORC/Kalakaket Creek RRS/LF002/OT001 Project numbers: NPDL WO#: 25-051 Contract #: W911KB-20-D-0002 Task Order #: 0135

REPORTS TO: Victoria Pennick E-MAIL: vpennick@briceenvironmental.com

INVOICE TO: accountspayable@calistacorp.com QUOTE #: W.O. #: 700200-006

COC number: 25KALET-01

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L1892109

Section 3

Preservative: 40 ML HCL; 100 ML AG HCL; 100 ML AG NONE

Analysis: DODAK101 (GRO); DOD8260DLL (VOCs); DODAK102/103 (DRO/RRO); DOD8270PAHSIMD (PAH); MS/MSD

BRIENGAAK-KALAKAKET
Prelogin# - T274306
JARED STARKEY

Section 2

RESERVED for lab use	SAMPLE IDENTIFICATION	DATE mm/dd/yyyy	TIME HHMM	MATRIX CODE	# CONTAINERS	TYPE	DODAK101 (GRO)	DOD8260DLL (VOCs)	DODAK102/103 (DRO/RRO)	DOD8270PAHSIMD (PAH)	MS/MSD	Location
	25LF002-TB01	8/22/25	0800	WQ	6	TB	X	X				FIELDQC -01
	25LF002-LF1SB07MW	8/22/25	1650	WG	10 30 CE 8/24/25	Grab	X	X	X	X	✓	LF1SB07 -02
	25LF002-LF1SB079MW	8/22/25	1550	WG	10	Grab	X	X	X	X		LF1SB079 -03
	~~25OT001-PT1SB01~~			~~WG~~	~~7~~	~~Grab~~		~~X~~	~~X~~	X		PT1SB01
	25OT001-PT1SB04			WG	7	Grab		X	X	X		PT1SB04
	25OT001-PT1SB05			WG	7	Grab		X	X	X		PT1SB05
	25OT001-PT1SB09			WG	7	Grab		X	X	X		PT1SB09
	~~25OT001-PT1SB15~~			~~WG~~	~~7~~	~~Grab~~		~~X~~	~~X~~	~~X~~		PT1SB15

CE 8/24/25

TDA9 0.8 DI = 0.7

Sample Receipt Checklist

COC Seal Present/Intact:	X Y N NP	If Applicable	
COC Signed/Accurate:	X Y N	VOA Zero Headspace:	X Y N
Bottles arrive intact:	X Y N	Pres. Correct/Check:	X Y N
Correct bottles used:	X Y N		
Sufficient volume sent:	X Y N	Condition: NCF	X OK
RA Screen <0.5 mR/hr:	X Y N	Comf = 40	

Section 3

Data Deliverables: Level II/IV, AK_SEDD 5.2a (POA instructional set), ERPIMS EDD, and Brice EQEDD

Relinquished By: (1)	Date	Time	Received By:
Candace Edl Candace Edl	8/24/25	1325	TO 8/26 Steve Davis 8/26/25 8/26/25 8am
Relinquished By: (2)	Date	Time	Received By:
Relinquished By: (3)	Date	Time	Received By:
Relinquished By: (4)	Date	Time	Received For Laboratory By:

Section 4 — DOD Project? Yes

Cooler ID: _____

☐ check if multi-cooler shipment
If multi-cooler shipment is checked, please log all coolers as one SDG.

Requested Turnaround Time and/or Special Instructions:
Standard TAT
Send confirmation of receipt to Victoria Pennick and receipt.cooler@usace.army.mil, within 24 hours of sample receipt. Please communicate any issues immediately.

PH - 10BDH0941
TRC - 3223A228

Brice Eng - LKLOU

ANALYTICAL REPORT

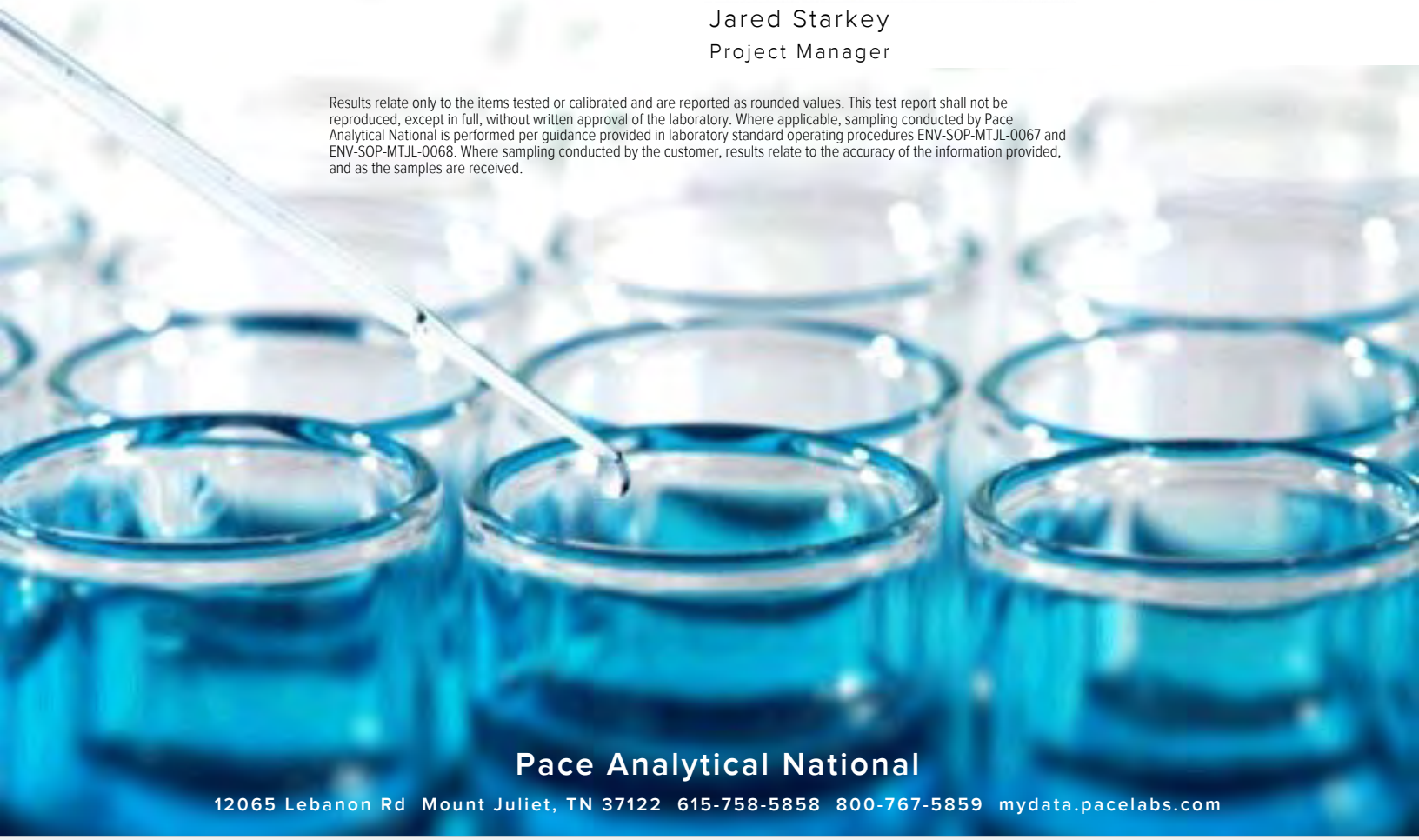
October 10, 2025

Brice Engineering, LLC

Sample Delivery Group:	L1902397
Samples Received:	09/26/2025
Project Number:	W911KB-20-D-0002
Description:	North ORC, Kalakaket Creek 25-051
Site:	FIELD QC
Report To:	Brice Engineering 3700 Centerpoint Drive, Suite 800 Anchorage, AK 99503

Entire Report Reviewed By:

Jared Starkey
Project Manager



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

TABLE OF CONTENTS

25OT001-TB01 L1902397-01

Collected by	Collected date/time	Received date/time
	09/24/25 08:00	09/26/25 17:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260 D-LL	WG2610527	1	09/30/25 01:43	09/30/25 01:43	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260 D-LL	WG2611132	1	10/02/25 00:13	10/02/25 00:13	ADM	Mt. Juliet, TN

25OT001-PT1SB01 L1902397-02

Collected by	Collected date/time	Received date/time
	09/24/25 12:00	09/26/25 17:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260 D-LL	WG2614994	1	10/07/25 00:26	10/07/25 00:26	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260 D-LL	WG2616140	1	10/08/25 20:46	10/08/25 20:46	KST	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method AK102/103	WG2611590	1	10/02/25 07:46	10/08/25 17:39	TJD	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG2609699	1	09/28/25 14:00	10/01/25 14:39	DMG	Mt. Juliet, TN

25OT001-PT1SB04 L1902397-03

Collected by	Collected date/time	Received date/time
	09/24/25 13:30	09/26/25 17:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260 D-LL	WG2612402	1	10/02/25 03:31	10/02/25 03:31	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method AK102/103	WG2611590	1	10/02/25 07:46	10/08/25 19:23	TJD	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG2609699	1	09/28/25 14:00	10/01/25 16:27	DMG	Mt. Juliet, TN

25OT001-PT1SB09 L1902397-04

Collected by	Collected date/time	Received date/time
	09/24/25 14:20	09/26/25 17:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260 D-LL	WG2612402	1	10/02/25 03:50	10/02/25 03:50	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260 D-LL	WG2614994	5	10/07/25 00:45	10/07/25 00:45	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method AK102/103	WG2611590	1	10/02/25 07:46	10/08/25 19:44	TJD	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG2609699	1	09/28/25 14:00	10/01/25 16:45	DMG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG2609699	10	09/28/25 14:00	10/08/25 05:36	DMG	Mt. Juliet, TN

25OT001-PT1SB049 L1902397-05

Collected by	Collected date/time	Received date/time
	09/24/25 12:30	09/26/25 17:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260 D-LL	WG2612402	1	10/02/25 04:09	10/02/25 04:09	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260 D-LL	WG2614994	1	10/07/25 01:04	10/07/25 01:04	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method AK102/103	WG2611590	1	10/02/25 07:46	10/08/25 20:04	TJD	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG2609699	1	09/28/25 14:00	10/01/25 17:03	DMG	Mt. Juliet, TN

Unless qualified or notated within the narrative below, all sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. 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.

Jared Starkey
Project Manager

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

The associated batch QC was above the established quality control range for accuracy.

Batch	Lab Sample ID	Analytes
WG2610527	(LCSD) R4280200-2, L1902397-01	1,2,4-Trichlorobenzene
WG2611132	(LCS) R4281435-1, (LCSD) R4281435-2, L1902397-01	Hexachloro-1,3-butadiene

The associated batch QC was outside the established quality control range for precision.

Batch	Lab Sample ID	Analytes
WG2614994	(LCSD) R4283555-3, L1902397-04, 05	Naphthalene

The sample matrix interfered with the ability to make any accurate determination; spike value is low.

Batch	Lab Sample ID	Analytes
WG2614994	(MS) R4283555-4, (MSD) R4283555-5, L1902397-02	2-Chlorotoluene, n-Butylbenzene, n-Propylbenzene, p-Isopropyltoluene, sec-Butylbenzene and tert-Butylbenzene

Semi-Volatile Organic Compounds (GC) by Method AK102/103

The sample matrix interfered with the ability to make any accurate determination; spike value is low.

Batch	Lab Sample ID	Analytes
WG2611590	(MS) R4284543-8, (MSD) R4284543-9, L1902397-02	AK102 DRO C10-C25

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

Surrogate recovery limits have been exceeded; values are outside lower control limits.

Batch	Analyte	Lab Sample ID
WG2609699	p-Terphenyl-d14	L1902397-04

The sample matrix interfered with the ability to make any accurate determination; spike value is low.

Batch	Lab Sample ID	Analytes
WG2609699	(MS) R4281586-3, (MSD) R4281586-4, L1902397-02	Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Dibenz(a,h)anthracene and Indeno(1,2,3-cd)pyrene

The associated batch QC was outside the established quality control range for precision.

Batch	Lab Sample ID	Analytes
WG2609699	(MSD) R4281586-4, L1902397-02	Dibenz(a,h)anthracene

DETECTION SUMMARY

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

Client ID	Lab Sample ID	Analyte	CAS #	Result	Qualifier	DL	LOD	LOQ	Dilution	Analysis	Batch
				ug/l		ug/l	ug/l	ug/l		date / time	
25OT001-TB01	L1902397-01	Toluene	108-88-3	0.0930	J	0.0500	0.100	0.200	1	09/30/2025 01:43	WG2610527
25OT001-PT1SB01	L1902397-02	1,2,4-Trimethylbenzene	95-63-6	0.0520	J	0.0464	0.100	0.200	1	10/07/2025 00:26	WG2614994
25OT001-PT1SB01	L1902397-02	2-Butanone (MEK)	78-93-3	0.880	J	0.500	1.00	2.00	1	10/07/2025 00:26	WG2614994
25OT001-PT1SB01	L1902397-02	Benzene	71-43-2	0.0420	J	0.0160	0.0500	0.100	1	10/07/2025 00:26	WG2614994
25OT001-PT1SB01	L1902397-02	o-Xylene	95-47-6	0.0420	J	0.0400	0.100	0.200	1	10/07/2025 00:26	WG2614994
25OT001-PT1SB01	L1902397-02	m&p-Xylenes		0.0910	J	0.0600	0.200	0.400	1	10/07/2025 00:26	WG2614994
25OT001-PT1SB01	L1902397-02	Toluene	108-88-3	0.369		0.0500	0.100	0.200	1	10/07/2025 00:26	WG2614994
25OT001-PT1SB04	L1902397-03	Benzene	71-43-2	0.143		0.0160	0.0500	0.100	1	10/02/2025 03:31	WG2612402
25OT001-PT1SB04	L1902397-03	sec-Butylbenzene	135-98-8	1.74		0.101	0.250	0.500	1	10/02/2025 03:31	WG2612402
25OT001-PT1SB09	L1902397-04	1,2,4-Trimethylbenzene	95-63-6	3.91		0.0464	0.100	0.200	1	10/02/2025 03:50	WG2612402
25OT001-PT1SB09	L1902397-04	1,3,5-Trimethylbenzene	108-67-8	0.785		0.0432	0.100	0.200	1	10/02/2025 03:50	WG2612402
25OT001-PT1SB09	L1902397-04	p-Isopropyltoluene	99-87-6	1.30		0.0932	0.300	0.600	1	10/02/2025 03:50	WG2612402
25OT001-PT1SB09	L1902397-04	Ethylbenzene	100-41-4	2.85		0.0212	0.0500	0.100	1	10/02/2025 03:50	WG2612402
25OT001-PT1SB09	L1902397-04	Isopropylbenzene	98-82-8	7.74		0.0345	1.00	2.00	1	10/02/2025 03:50	WG2612402
25OT001-PT1SB09	L1902397-04	Naphthalene	91-20-3	43.7	J3	5.00	6.25	25.0	5	10/07/2025 00:45	WG2614994
25OT001-PT1SB09	L1902397-04	n-Butylbenzene	104-51-8	1.17		0.154	0.500	1.00	1	10/02/2025 03:50	WG2612402
25OT001-PT1SB09	L1902397-04	n-Propylbenzene	103-65-1	5.33		0.0472	0.100	0.200	1	10/02/2025 03:50	WG2612402
25OT001-PT1SB09	L1902397-04	o-Xylene	95-47-6	0.0520	J	0.0400	0.100	0.200	1	10/02/2025 03:50	WG2612402
25OT001-PT1SB09	L1902397-04	m&p-Xylenes		0.521		0.0600	0.200	0.400	1	10/02/2025 03:50	WG2612402
25OT001-PT1SB09	L1902397-04	sec-Butylbenzene	135-98-8	4.77		0.101	0.250	0.500	1	10/02/2025 03:50	WG2612402
25OT001-PT1SB09	L1902397-04	Toluene	108-88-3	0.188	J	0.0500	0.100	0.200	1	10/02/2025 03:50	WG2612402
25OT001-PT1SB09	L1902397-04	Xylenes, Total	1330-20-7	0.573	J	0.191	0.400	0.800	1	10/02/2025 03:50	WG2612402
25OT001-PT1SB049	L1902397-05	Benzene	71-43-2	0.176		0.0160	0.0500	0.100	1	10/02/2025 04:09	WG2612402
25OT001-PT1SB049	L1902397-05	Isopropylbenzene	98-82-8	0.0430	J	0.0345	1.00	2.00	1	10/02/2025 04:09	WG2612402
25OT001-PT1SB049	L1902397-05	Naphthalene	91-20-3	1.04	J J3	1.00	1.25	5.00	1	10/07/2025 01:04	WG2614994
25OT001-PT1SB049	L1902397-05	sec-Butylbenzene	135-98-8	2.56		0.101	0.250	0.500	1	10/02/2025 04:09	WG2612402
25OT001-PT1SB049	L1902397-05	tert-Butylbenzene	98-06-6	0.0860	J	0.0620	0.500	1.00	1	10/02/2025 04:09	WG2612402
25OT001-PT1SB049	L1902397-05	Toluene	108-88-3	0.0630	J	0.0500	0.100	0.200	1	10/02/2025 04:09	WG2612402

Semi-Volatile Organic Compounds (GC) by Method AK102/103

Client ID	Lab Sample ID	Analyte	CAS #	Result	Qualifier	DL	LOD	LOQ	Dilution	Analysis	Batch
				ug/l		ug/l	ug/l	ug/l		date / time	
25OT001-PT1SB09	L1902397-04	AK102 DRO C10-C25	C10-C25	2090		571	720	800	1	10/08/2025 19:44	WG2611590

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

Client ID	Lab Sample ID	Analyte	CAS #	Result	Qualifier	DL	LOD	LOQ	Dilution	Analysis	Batch
				ug/l		ug/l	ug/l	ug/l		date / time	
25OT001-PT1SB04	L1902397-03	Acenaphthene	83-32-9	0.0782		0.0396	0.0450	0.0500	1	10/01/2025 16:27	WG2609699
25OT001-PT1SB04	L1902397-03	Fluorene	86-73-7	0.0868		0.0437	0.0450	0.0500	1	10/01/2025 16:27	WG2609699
25OT001-PT1SB09	L1902397-04	Acenaphthene	83-32-9	1.12		0.0396	0.0450	0.0500	1	10/01/2025 16:45	WG2609699
25OT001-PT1SB09	L1902397-04	Acenaphthylene	208-96-8	0.299		0.0296	0.0450	0.0500	1	10/01/2025 16:45	WG2609699
25OT001-PT1SB09	L1902397-04	Fluorene	86-73-7	1.09		0.0437	0.0450	0.0500	1	10/01/2025 16:45	WG2609699
25OT001-PT1SB09	L1902397-04	Naphthalene	91-20-3	167		1.88	2.50	5.00	10	10/08/2025 05:36	WG2609699
25OT001-PT1SB09	L1902397-04	Phenanthrene	85-01-8	0.159		0.0394	0.0450	0.0500	1	10/01/2025 16:45	WG2609699
25OT001-PT1SB09	L1902397-04	1-Methylnaphthalene	90-12-0	92.6		0.0764	0.250	0.500	1	10/01/2025 16:45	WG2609699
25OT001-PT1SB09	L1902397-04	2-Methylnaphthalene	91-57-6	105		1.46	2.50	5.00	10	10/08/2025 05:36	WG2609699

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

Client ID	Lab Sample ID	Analyte	CAS #	Result	Qualifier	DL	LOD	LOQ	Dilution	Analysis	Batch
				ug/l		ug/l	ug/l	ug/l		date / time	
25OT001-PT1SB049	L1902397-05	Acenaphthene	83-32-9	0.0603		0.0396	0.0450	0.0500	1	10/01/2025 17:03	WG2609699
25OT001-PT1SB049	L1902397-05	Fluorene	86-73-7	0.0755		0.0437	0.0450	0.0500	1	10/01/2025 17:03	WG2609699

Additional Information - Results for field analyses are not accredited to ISO 17025

Analyte	Result	Units
Cooler#	Lonewolf	
Cooler Temperature	0.2	Deg. C

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

Analyte	CAS #	Result ug/l	Qualifier	DL ug/l	LOD ug/l	LOQ ug/l	Dilution	Analysis date / time	Batch
1,1,1,2-Tetrachloroethane	630-20-6	0.0500	U	0.0200	0.0500	0.100	1	09/30/2025 01:43	WG2610527
1,1,1-Trichloroethane	71-55-6	0.0500	U	0.0110	0.0500	0.100	1	09/30/2025 01:43	WG2610527
1,1,2,2-Tetrachloroethane	79-34-5	0.0500	U	0.0156	0.0500	0.100	1	09/30/2025 01:43	WG2610527
1,1,2-Trichloroethane	79-00-5	0.100	U	0.0353	0.100	0.200	1	09/30/2025 01:43	WG2610527
1,1-Dichloroethane	75-34-3	0.0500	U	0.0230	0.0500	0.100	1	09/30/2025 01:43	WG2610527
1,1-Dichloroethene	75-35-4	0.0500	U	0.0200	0.0500	0.100	1	09/30/2025 01:43	WG2610527
1,1-Dichloropropene	563-58-6	0.100	U	0.0280	0.100	0.200	1	09/30/2025 01:43	WG2610527
1,2,3-Trichlorobenzene	87-61-6	0.250	U	0.0250	0.250	0.500	1	09/30/2025 01:43	WG2610527
1,2,3-Trichloropropane	96-18-4	0.500	U	0.204	0.500	1.00	1	09/30/2025 01:43	WG2610527
1,2,4-Trichlorobenzene	120-82-1	0.500	J4 U	0.193	0.500	1.00	1	09/30/2025 01:43	WG2610527
1,2,4-Trimethylbenzene	95-63-6	0.100	U	0.0464	0.100	0.200	1	09/30/2025 01:43	WG2610527
1,2-Dibromo-3-Chloropropane	96-12-8	0.500	U	0.204	0.500	1.00	1	09/30/2025 01:43	WG2610527
1,2-Dibromoethane	106-93-4	0.0500	U	0.0210	0.0500	0.100	1	09/30/2025 01:43	WG2610527
1,2-Dichlorobenzene	95-50-1	0.200	U	0.0580	0.200	0.400	1	09/30/2025 01:43	WG2610527
1,2-Dichloroethane	107-06-2	0.0500	U	0.0190	0.0500	0.100	1	09/30/2025 01:43	WG2610527
1,2-Dichloropropane	78-87-5	0.200	U	0.0508	0.200	0.400	1	09/30/2025 01:43	WG2610527
1,3,5-Trimethylbenzene	108-67-8	0.100	U	0.0432	0.100	0.200	1	09/30/2025 01:43	WG2610527
1,3-Dichlorobenzene	541-73-1	0.200	U	0.0680	0.200	0.400	1	09/30/2025 01:43	WG2610527
1,3-Dichloropropane	142-28-9	0.150	U	0.0700	0.150	0.300	1	09/30/2025 01:43	WG2610527
1,4-Dichlorobenzene	106-46-7	0.250	U	0.0788	0.250	0.500	1	09/30/2025 01:43	WG2610527
2,2-Dichloropropane	594-20-7	0.100	U	0.0317	0.100	0.200	1	09/30/2025 01:43	WG2610527
2-Butanone (MEK)	78-93-3	1.00	U	0.500	1.00	2.00	1	09/30/2025 01:43	WG2610527
2-Hexanone	591-78-6	1.00	U	0.400	1.00	2.00	1	09/30/2025 01:43	WG2610527
2-Chlorotoluene	95-49-8	0.100	U	0.0368	0.100	0.200	1	09/30/2025 01:43	WG2610527
4-Chlorotoluene	106-43-4	0.100	U	0.0452	0.100	0.200	1	09/30/2025 01:43	WG2610527
p-Isopropyltoluene	99-87-6	0.300	U	0.0932	0.300	0.600	1	09/30/2025 01:43	WG2610527
4-Methyl-2-pentanone (MIBK)	108-10-1	1.00	U	0.400	1.00	2.00	1	09/30/2025 01:43	WG2610527
Benzene	71-43-2	0.0500	U	0.0160	0.0500	0.100	1	09/30/2025 01:43	WG2610527
Bromobenzene	108-86-1	0.250	U	0.0420	0.250	0.500	1	09/30/2025 01:43	WG2610527
Bromochloromethane	74-97-5	0.100	U	0.0452	0.100	0.200	1	09/30/2025 01:43	WG2610527
Bromodichloromethane	75-27-4	0.100	U	0.0315	0.100	0.200	1	09/30/2025 01:43	WG2610527
Bromoform	75-25-2	0.500	U	0.239	0.500	1.00	1	09/30/2025 01:43	WG2610527
Bromomethane	74-83-9	0.500	U	0.148	0.500	1.00	1	09/30/2025 01:43	WG2610527
Carbon Disulfide	75-15-0	0.500	U	0.162	0.500	1.00	1	10/02/2025 00:13	WG2611132
Carbon tetrachloride	56-23-5	0.100	U	0.0432	0.100	0.200	1	09/30/2025 01:43	WG2610527
Chlorobenzene	108-90-7	0.0500	U	0.0229	0.0500	0.100	1	09/30/2025 01:43	WG2610527
Chloroethane	75-00-3	0.100	U	0.0432	0.100	0.200	1	09/30/2025 01:43	WG2610527
Chloroform	67-66-3	0.0500	U	0.0166	0.0500	0.100	1	09/30/2025 01:43	WG2610527
Chloromethane	74-87-3	0.250	U	0.0556	0.250	0.500	1	09/30/2025 01:43	WG2610527
cis-1,2-Dichloroethene	156-59-2	0.0750	U	0.0276	0.0750	0.150	1	09/30/2025 01:43	WG2610527
cis-1,3-Dichloropropene	10061-01-5	0.100	U	0.0271	0.100	0.200	1	09/30/2025 01:43	WG2610527
Chlorodibromomethane	124-48-1	0.0500	U	0.0180	0.0500	0.100	1	09/30/2025 01:43	WG2610527
Dibromomethane	74-95-3	0.100	U	0.0400	0.100	0.200	1	09/30/2025 01:43	WG2610527
Dichlorodifluoromethane	75-71-8	0.100	U	0.0327	0.100	0.200	1	09/30/2025 01:43	WG2610527
Ethylbenzene	100-41-4	0.0500	U	0.0212	0.0500	0.100	1	09/30/2025 01:43	WG2610527
Hexachloro-1,3-butadiene	87-68-3	2.00	J4 U	0.508	2.00	4.00	1	10/02/2025 00:13	WG2611132
Isopropylbenzene	98-82-8	1.00	U	0.0345	1.00	2.00	1	09/30/2025 01:43	WG2610527
Methyl tert-butyl ether	1634-04-4	0.0300	U	0.0118	0.0300	0.0600	1	09/30/2025 01:43	WG2610527
Methylene Chloride	75-09-2	0.750	U	0.266	0.750	1.50	1	09/30/2025 01:43	WG2610527

1 Cp
2 Tc
3 Ss
4 Cn
5 Ds
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

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

Analyte	CAS #	Result ug/l	Qualifier	DL ug/l	LOD ug/l	LOQ ug/l	Dilution	Analysis date / time	Batch
Naphthalene	91-20-3	1.25	U	1.00	1.25	5.00	1	09/30/2025 01:43	WG2610527
n-Butylbenzene	104-51-8	0.500	U	0.154	0.500	1.00	1	09/30/2025 01:43	WG2610527
n-Propylbenzene	103-65-1	0.100	U	0.0472	0.100	0.200	1	09/30/2025 01:43	WG2610527
o-Xylene	95-47-6	0.100	U	0.0400	0.100	0.200	1	09/30/2025 01:43	WG2610527
m&p-Xylenes		0.200	U	0.0600	0.200	0.400	1	09/30/2025 01:43	WG2610527
sec-Butylbenzene	135-98-8	0.250	U	0.101	0.250	0.500	1	09/30/2025 01:43	WG2610527
Styrene	100-42-5	0.250	U	0.109	0.250	0.500	1	09/30/2025 01:43	WG2610527
tert-Butylbenzene	98-06-6	0.500	U	0.0620	0.500	1.00	1	09/30/2025 01:43	WG2610527
Tetrachloroethene	127-18-4	0.0750	U	0.0280	0.0750	0.150	1	09/30/2025 01:43	WG2610527
Toluene	108-88-3	0.0930	J	0.0500	0.100	0.200	1	09/30/2025 01:43	WG2610527
trans-1,2-Dichloroethene	156-60-5	0.300	U	0.0572	0.300	0.600	1	09/30/2025 01:43	WG2610527
trans-1,3-Dichloropropene	10061-02-6	0.150	U	0.0612	0.150	0.300	1	09/30/2025 01:43	WG2610527
Trichloroethene	79-01-6	0.0400	U	0.0160	0.0400	0.0800	1	09/30/2025 01:43	WG2610527
Trichlorofluoromethane	75-69-4	0.0500	U	0.0200	0.0500	0.100	1	09/30/2025 01:43	WG2610527
Vinyl acetate	108-05-4	2.50	U	0.692	2.50	10.0	1	09/30/2025 01:43	WG2610527
Vinyl chloride	75-01-4	0.0750	U	0.0273	0.0750	0.150	1	09/30/2025 01:43	WG2610527
Xylenes, Total	1330-20-7	0.400	U	0.191	0.400	0.800	1	09/30/2025 01:43	WG2610527
(S) Toluene-d8	*2037-26-5*	*94.8*				*89.0-112*		*09/30/2025 01:43*	WG2610527
(S) Toluene-d8	*2037-26-5*	*101*				*89.0-112*		*10/02/2025 00:13*	WG2611132
(S) 4-Bromofluorobenzene	*460-00-4*	*104*				*85.0-114*		*09/30/2025 01:43*	WG2610527
(S) 4-Bromofluorobenzene	*460-00-4*	*104*				*85.0-114*		*10/02/2025 00:13*	WG2611132
(S) 1,2-Dichloroethane-d4	*17060-07-0*	*102*				*81.0-118*		*09/30/2025 01:43*	WG2610527
(S) 1,2-Dichloroethane-d4	*17060-07-0*	*96.5*				*81.0-118*		*10/02/2025 00:13*	WG2611132

Additional Information - Results for field analyses are not accredited to ISO 17025

Analyte	Result	Units
Cooler#	Lonewolf	
Cooler Temperature	0.2	Deg. C

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

Analyte	CAS #	Result ug/l	Qualifier	DL ug/l	LOD ug/l	LOQ ug/l	Dilution	Analysis date / time	Batch
1,1,1,2-Tetrachloroethane	630-20-6	0.0500	U	0.0200	0.0500	0.100	1	10/07/2025 00:26	WG2614994
1,1,1-Trichloroethane	71-55-6	0.0500	U	0.0110	0.0500	0.100	1	10/07/2025 00:26	WG2614994
1,1,2,2-Tetrachloroethane	79-34-5	0.0500	U	0.0156	0.0500	0.100	1	10/07/2025 00:26	WG2614994
1,1,2-Trichloroethane	79-00-5	0.100	U	0.0353	0.100	0.200	1	10/07/2025 00:26	WG2614994
1,1-Dichloroethane	75-34-3	0.0500	U	0.0230	0.0500	0.100	1	10/07/2025 00:26	WG2614994
1,1-Dichloroethene	75-35-4	0.0500	U	0.0200	0.0500	0.100	1	10/07/2025 00:26	WG2614994
1,1-Dichloropropene	563-58-6	0.100	U	0.0280	0.100	0.200	1	10/07/2025 00:26	WG2614994
1,2,3-Trichlorobenzene	87-61-6	0.250	U	0.0250	0.250	0.500	1	10/07/2025 00:26	WG2614994
1,2,3-Trichloropropane	96-18-4	0.500	U	0.204	0.500	1.00	1	10/07/2025 00:26	WG2614994
1,2,4-Trichlorobenzene	120-82-1	0.500	U	0.193	0.500	1.00	1	10/07/2025 00:26	WG2614994
1,2,4-Trimethylbenzene	95-63-6	0.0520	J	0.0464	0.100	0.200	1	10/07/2025 00:26	WG2614994
1,2-Dibromo-3-Chloropropane	96-12-8	0.500	U	0.204	0.500	1.00	1	10/07/2025 00:26	WG2614994
1,2-Dibromoethane	106-93-4	0.0500	U	0.0210	0.0500	0.100	1	10/07/2025 00:26	WG2614994
1,2-Dichlorobenzene	95-50-1	0.200	U	0.0580	0.200	0.400	1	10/07/2025 00:26	WG2614994
1,2-Dichloroethane	107-06-2	0.0500	U	0.0190	0.0500	0.100	1	10/07/2025 00:26	WG2614994
1,2-Dichloropropane	78-87-5	0.200	U	0.0508	0.200	0.400	1	10/07/2025 00:26	WG2614994
1,3,5-Trimethylbenzene	108-67-8	0.100	U	0.0432	0.100	0.200	1	10/07/2025 00:26	WG2614994
1,3-Dichlorobenzene	541-73-1	0.200	U	0.0680	0.200	0.400	1	10/07/2025 00:26	WG2614994
1,3-Dichloropropane	142-28-9	0.150	U	0.0700	0.150	0.300	1	10/07/2025 00:26	WG2614994
1,4-Dichlorobenzene	106-46-7	0.250	U	0.0788	0.250	0.500	1	10/07/2025 00:26	WG2614994
2,2-Dichloropropane	594-20-7	0.100	U	0.0317	0.100	0.200	1	10/07/2025 00:26	WG2614994
2-Butanone (MEK)	78-93-3	0.880	J	0.500	1.00	2.00	1	10/07/2025 00:26	WG2614994
2-Hexanone	591-78-6	1.00	U	0.400	1.00	2.00	1	10/08/2025 20:46	WG2616140
2-Chlorotoluene	95-49-8	0.100	J6 U	0.0368	0.100	0.200	1	10/07/2025 00:26	WG2614994
4-Chlorotoluene	106-43-4	0.100	U	0.0452	0.100	0.200	1	10/07/2025 00:26	WG2614994
p-Isopropyltoluene	99-87-6	0.300	J6 U	0.0932	0.300	0.600	1	10/07/2025 00:26	WG2614994
4-Methyl-2-pentanone (MIBK)	108-10-1	1.00	U	0.400	1.00	2.00	1	10/07/2025 00:26	WG2614994
Benzene	71-43-2	0.0420	J	0.0160	0.0500	0.100	1	10/07/2025 00:26	WG2614994
Bromobenzene	108-86-1	0.250	U	0.0420	0.250	0.500	1	10/07/2025 00:26	WG2614994
Bromochloromethane	74-97-5	0.100	U	0.0452	0.100	0.200	1	10/07/2025 00:26	WG2614994
Bromodichloromethane	75-27-4	0.100	U	0.0315	0.100	0.200	1	10/07/2025 00:26	WG2614994
Bromoform	75-25-2	0.500	U	0.239	0.500	1.00	1	10/07/2025 00:26	WG2614994
Bromomethane	74-83-9	0.500	U	0.148	0.500	1.00	1	10/07/2025 00:26	WG2614994
Carbon Disulfide	75-15-0	0.500	U	0.162	0.500	1.00	1	10/07/2025 00:26	WG2614994
Carbon tetrachloride	56-23-5	0.100	U	0.0432	0.100	0.200	1	10/07/2025 00:26	WG2614994
Chlorobenzene	108-90-7	0.0500	U	0.0229	0.0500	0.100	1	10/07/2025 00:26	WG2614994
Chloroethane	75-00-3	0.100	U	0.0432	0.100	0.200	1	10/07/2025 00:26	WG2614994
Chloroform	67-66-3	0.0500	U	0.0166	0.0500	0.100	1	10/07/2025 00:26	WG2614994
Chloromethane	74-87-3	0.250	U	0.0556	0.250	0.500	1	10/07/2025 00:26	WG2614994
cis-1,2-Dichloroethene	156-59-2	0.0750	U	0.0276	0.0750	0.150	1	10/07/2025 00:26	WG2614994
cis-1,3-Dichloropropene	10061-01-5	0.100	U	0.0271	0.100	0.200	1	10/07/2025 00:26	WG2614994
Chlorodibromomethane	124-48-1	0.0500	U	0.0180	0.0500	0.100	1	10/07/2025 00:26	WG2614994
Dibromomethane	74-95-3	0.100	U	0.0400	0.100	0.200	1	10/07/2025 00:26	WG2614994
Dichlorodifluoromethane	75-71-8	0.100	U	0.0327	0.100	0.200	1	10/08/2025 20:46	WG2616140
Ethylbenzene	100-41-4	0.0500	U	0.0212	0.0500	0.100	1	10/07/2025 00:26	WG2614994
Hexachloro-1,3-butadiene	87-68-3	2.00	U	0.508	2.00	4.00	1	10/07/2025 00:26	WG2614994
Isopropylbenzene	98-82-8	1.00	U	0.0345	1.00	2.00	1	10/07/2025 00:26	WG2614994
Methyl tert-butyl ether	1634-04-4	0.0300	U	0.0118	0.0300	0.0600	1	10/07/2025 00:26	WG2614994
Methylene Chloride	75-09-2	0.750	U	0.266	0.750	1.50	1	10/07/2025 00:26	WG2614994

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

Analyte	CAS #	Result ug/l	Qualifier	DL ug/l	LOD ug/l	LOQ ug/l	Dilution	Analysis date / time	Batch
Naphthalene	91-20-3	1.25	U	1.00	1.25	5.00	1	10/07/2025 00:26	WG2614994
n-Butylbenzene	104-51-8	0.500	J6 U	0.154	0.500	1.00	1	10/07/2025 00:26	WG2614994
n-Propylbenzene	103-65-1	0.100	J6 U	0.0472	0.100	0.200	1	10/07/2025 00:26	WG2614994
o-Xylene	95-47-6	0.0420	J	0.0400	0.100	0.200	1	10/07/2025 00:26	WG2614994
m&p-Xylenes		0.0910	J	0.0600	0.200	0.400	1	10/07/2025 00:26	WG2614994
sec-Butylbenzene	135-98-8	0.250	J6 U	0.101	0.250	0.500	1	10/07/2025 00:26	WG2614994
Styrene	100-42-5	0.250	U	0.109	0.250	0.500	1	10/07/2025 00:26	WG2614994
tert-Butylbenzene	98-06-6	0.500	J6 U	0.0620	0.500	1.00	1	10/07/2025 00:26	WG2614994
Tetrachloroethene	127-18-4	0.0750	U	0.0280	0.0750	0.150	1	10/07/2025 00:26	WG2614994
Toluene	108-88-3	0.369		0.0500	0.100	0.200	1	10/07/2025 00:26	WG2614994
trans-1,2-Dichloroethene	156-60-5	0.300	U	0.0572	0.300	0.600	1	10/07/2025 00:26	WG2614994
trans-1,3-Dichloropropene	10061-02-6	0.150	U	0.0612	0.150	0.300	1	10/07/2025 00:26	WG2614994
Trichloroethene	79-01-6	0.0400	U	0.0160	0.0400	0.0800	1	10/07/2025 00:26	WG2614994
Trichlorofluoromethane	75-69-4	0.0500	U	0.0200	0.0500	0.100	1	10/07/2025 00:26	WG2614994
Vinyl acetate	108-05-4	2.50	U	0.692	2.50	10.0	1	10/07/2025 00:26	WG2614994
Vinyl chloride	75-01-4	0.0750	U	0.0273	0.0750	0.150	1	10/07/2025 00:26	WG2614994
Xylenes, Total	1330-20-7	0.400	U	0.191	0.400	0.800	1	10/07/2025 00:26	WG2614994
(S) Toluene-d8	*2037-26-5*	*97.7*				*89.0-112*		*10/07/2025 00:26*	WG2614994
(S) Toluene-d8	*2037-26-5*	*104*				*89.0-112*		*10/08/2025 20:46*	WG2616140
(S) 4-Bromofluorobenzene	*460-00-4*	*106*				*85.0-114*		*10/07/2025 00:26*	WG2614994
(S) 4-Bromofluorobenzene	*460-00-4*	*98.6*				*85.0-114*		*10/08/2025 20:46*	WG2616140
(S) 1,2-Dichloroethane-d4	*17060-07-0*	*108*				*81.0-118*		*10/07/2025 00:26*	WG2614994
(S) 1,2-Dichloroethane-d4	*17060-07-0*	*114*				*81.0-118*		*10/08/2025 20:46*	WG2616140

Semi-Volatile Organic Compounds (GC) by Method AK102/103

Analyte	CAS #	Result ug/l	Qualifier	DL ug/l	LOD ug/l	LOQ ug/l	Dilution	Analysis date / time	Batch
AK102 DRO C10-C25	C10-C25	720	J6 U	571	720	800	1	10/08/2025 17:39	WG2611590
AK103 RRO C25-C36	C25-C36	720	U	460	720	800	1	10/08/2025 17:39	WG2611590
(S) o-Terphenyl	*84-15-1*	*92.7*				*50.0-150*		*10/08/2025 17:39*	WG2611590
(S) n-Triacontane d62	*93952-07-9*	*97.9*				*10.0-163*		*10/08/2025 17:39*	WG2611590

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

Analyte	CAS #	Result ug/l	Qualifier	DL ug/l	LOD ug/l	LOQ ug/l	Dilution	Analysis date / time	Batch
Anthracene	120-12-7	0.0450	U	0.0292	0.0450	0.0500	1	10/01/2025 14:39	WG2609699
Acenaphthene	83-32-9	0.0450	U	0.0396	0.0450	0.0500	1	10/01/2025 14:39	WG2609699
Acenaphthylene	208-96-8	0.0450	U	0.0296	0.0450	0.0500	1	10/01/2025 14:39	WG2609699
Benzo(a)anthracene	56-55-3	0.0450	U	0.0333	0.0450	0.0500	1	10/01/2025 14:39	WG2609699
Benzo(a)pyrene	50-32-8	0.0450	J6 U	0.0320	0.0450	0.0500	1	10/01/2025 14:39	WG2609699
Benzo(b)fluoranthene	205-99-2	0.0450	J6 U	0.0343	0.0450	0.0500	1	10/01/2025 14:39	WG2609699
Benzo(g,h,i)perylene	191-24-2	0.0450	J6 U	0.0309	0.0450	0.0500	1	10/01/2025 14:39	WG2609699
Benzo(k)fluoranthene	207-08-9	0.125	J6 U	0.0909	0.125	0.250	1	10/01/2025 14:39	WG2609699
Chrysene	218-01-9	0.0450	U	0.0347	0.0450	0.0500	1	10/01/2025 14:39	WG2609699
Dibenz(a,h)anthracene	53-70-3	0.0450	J3 J6 U	0.0314	0.0450	0.0500	1	10/01/2025 14:39	WG2609699
Fluoranthene	206-44-0	0.0450	U	0.0431	0.0450	0.0500	1	10/01/2025 14:39	WG2609699
Fluorene	86-73-7	0.0450	U	0.0437	0.0450	0.0500	1	10/01/2025 14:39	WG2609699
Indeno(1,2,3-cd)pyrene	193-39-5	0.0450	J6 U	0.0348	0.0450	0.0500	1	10/01/2025 14:39	WG2609699
Naphthalene	91-20-3	0.250	U	0.188	0.250	0.500	1	10/01/2025 14:39	WG2609699
Phenanthrene	85-01-8	0.0450	U	0.0394	0.0450	0.0500	1	10/01/2025 14:39	WG2609699
Pyrene	129-00-0	0.0450	U	0.0430	0.0450	0.0500	1	10/01/2025 14:39	WG2609699
1-Methylnaphthalene	90-12-0	0.250	U	0.0764	0.250	0.500	1	10/01/2025 14:39	WG2609699
2-Methylnaphthalene	91-57-6	0.250	U	0.146	0.250	0.500	1	10/01/2025 14:39	WG2609699
2-Chloronaphthalene	91-58-7	0.250	U	0.0646	0.250	0.500	1	10/01/2025 14:39	WG2609699
(S) 2-Fluorobiphenyl	*321-60-8*	*77.8*				*53.0-106*		*10/01/2025 14:39*	WG2609699

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

Analyte	CAS #	Result	Qualifier	DL	LOD	LOQ	Dilution	Analysis	Batch
		ug/l		ug/l	ug/l	ug/l		date / time	
(S) p-Terphenyl-d14	*1718-51-0*	*70.8*				*58.0-132*		*10/01/2025 14:39*	WG2609699
(S) 2-Methylnaphthalene-D10	*7297-45-2*	*80.0*				*50.0-150*		*10/01/2025 14:39*	WG2609699
(S) Fluoranthene-D10	*93951-69-0*	*93.5*				*50.0-150*		*10/01/2025 14:39*	WG2609699

Additional Information - Results for field analyses are not accredited to ISO 17025

Analyte	Result	Units
Cooler#	Lonewolf	
Cooler Temperature	0.2	Deg. C

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

Analyte	CAS #	Result	Qualifier	DL	LOD	LOQ	Dilution	Analysis	Batch
		ug/l		ug/l	ug/l	ug/l		date / time	
1,1,1,2-Tetrachloroethane	630-20-6	0.0500	U	0.0200	0.0500	0.100	1	10/02/2025 03:31	WG2612402
1,1,1-Trichloroethane	71-55-6	0.0500	U	0.0110	0.0500	0.100	1	10/02/2025 03:31	WG2612402
1,1,2,2-Tetrachloroethane	79-34-5	0.0500	U	0.0156	0.0500	0.100	1	10/02/2025 03:31	WG2612402
1,1,2-Trichloroethane	79-00-5	0.100	U	0.0353	0.100	0.200	1	10/02/2025 03:31	WG2612402
1,1-Dichloroethane	75-34-3	0.0500	U	0.0230	0.0500	0.100	1	10/02/2025 03:31	WG2612402
1,1-Dichloroethene	75-35-4	0.0500	U	0.0200	0.0500	0.100	1	10/02/2025 03:31	WG2612402
1,1-Dichloropropene	563-58-6	0.100	U	0.0280	0.100	0.200	1	10/02/2025 03:31	WG2612402
1,2,3-Trichlorobenzene	87-61-6	0.250	U	0.0250	0.250	0.500	1	10/02/2025 03:31	WG2612402
1,2,3-Trichloropropane	96-18-4	0.500	U	0.204	0.500	1.00	1	10/02/2025 03:31	WG2612402
1,2,4-Trichlorobenzene	120-82-1	0.500	U	0.193	0.500	1.00	1	10/02/2025 03:31	WG2612402
1,2,4-Trimethylbenzene	95-63-6	0.100	U	0.0464	0.100	0.200	1	10/02/2025 03:31	WG2612402
1,2-Dibromo-3-Chloropropane	96-12-8	0.500	U	0.204	0.500	1.00	1	10/02/2025 03:31	WG2612402
1,2-Dibromoethane	106-93-4	0.0500	U	0.0210	0.0500	0.100	1	10/02/2025 03:31	WG2612402
1,2-Dichlorobenzene	95-50-1	0.200	U	0.0580	0.200	0.400	1	10/02/2025 03:31	WG2612402
1,2-Dichloroethane	107-06-2	0.0500	U	0.0190	0.0500	0.100	1	10/02/2025 03:31	WG2612402
1,2-Dichloropropane	78-87-5	0.200	U	0.0508	0.200	0.400	1	10/02/2025 03:31	WG2612402
1,3,5-Trimethylbenzene	108-67-8	0.100	U	0.0432	0.100	0.200	1	10/02/2025 03:31	WG2612402
1,3-Dichlorobenzene	541-73-1	0.200	U	0.0680	0.200	0.400	1	10/02/2025 03:31	WG2612402
1,3-Dichloropropane	142-28-9	0.150	U	0.0700	0.150	0.300	1	10/02/2025 03:31	WG2612402
1,4-Dichlorobenzene	106-46-7	0.250	U	0.0788	0.250	0.500	1	10/02/2025 03:31	WG2612402
2,2-Dichloropropane	594-20-7	0.100	U	0.0317	0.100	0.200	1	10/02/2025 03:31	WG2612402
2-Butanone (MEK)	78-93-3	1.00	U	0.500	1.00	2.00	1	10/02/2025 03:31	WG2612402
2-Hexanone	591-78-6	1.00	U	0.400	1.00	2.00	1	10/02/2025 03:31	WG2612402
2-Chlorotoluene	95-49-8	0.100	U	0.0368	0.100	0.200	1	10/02/2025 03:31	WG2612402
4-Chlorotoluene	106-43-4	0.100	U	0.0452	0.100	0.200	1	10/02/2025 03:31	WG2612402
p-Isopropyltoluene	99-87-6	0.300	U	0.0932	0.300	0.600	1	10/02/2025 03:31	WG2612402
4-Methyl-2-pentanone (MIBK)	108-10-1	1.00	U	0.400	1.00	2.00	1	10/02/2025 03:31	WG2612402
Benzene	71-43-2	0.143		0.0160	0.0500	0.100	1	10/02/2025 03:31	WG2612402
Bromobenzene	108-86-1	0.250	U	0.0420	0.250	0.500	1	10/02/2025 03:31	WG2612402
Bromochloromethane	74-97-5	0.100	U	0.0452	0.100	0.200	1	10/02/2025 03:31	WG2612402
Bromodichloromethane	75-27-4	0.100	U	0.0315	0.100	0.200	1	10/02/2025 03:31	WG2612402
Bromoform	75-25-2	0.500	U	0.239	0.500	1.00	1	10/02/2025 03:31	WG2612402
Bromomethane	74-83-9	0.500	U	0.148	0.500	1.00	1	10/02/2025 03:31	WG2612402
Carbon Disulfide	75-15-0	0.500	U	0.162	0.500	1.00	1	10/02/2025 03:31	WG2612402
Carbon tetrachloride	56-23-5	0.100	U	0.0432	0.100	0.200	1	10/02/2025 03:31	WG2612402
Chlorobenzene	108-90-7	0.0500	U	0.0229	0.0500	0.100	1	10/02/2025 03:31	WG2612402
Chloroethane	75-00-3	0.100	U	0.0432	0.100	0.200	1	10/02/2025 03:31	WG2612402
Chloroform	67-66-3	0.0500	U	0.0166	0.0500	0.100	1	10/02/2025 03:31	WG2612402
Chloromethane	74-87-3	0.250	U	0.0556	0.250	0.500	1	10/02/2025 03:31	WG2612402
cis-1,2-Dichloroethene	156-59-2	0.0750	U	0.0276	0.0750	0.150	1	10/02/2025 03:31	WG2612402
cis-1,3-Dichloropropene	10061-01-5	0.100	U	0.0271	0.100	0.200	1	10/02/2025 03:31	WG2612402
Chlorodibromomethane	124-48-1	0.0500	U	0.0180	0.0500	0.100	1	10/02/2025 03:31	WG2612402
Dibromomethane	74-95-3	0.100	U	0.0400	0.100	0.200	1	10/02/2025 03:31	WG2612402
Dichlorodifluoromethane	75-71-8	0.100	U	0.0327	0.100	0.200	1	10/02/2025 03:31	WG2612402
Ethylbenzene	100-41-4	0.0500	U	0.0212	0.0500	0.100	1	10/02/2025 03:31	WG2612402
Hexachloro-1,3-butadiene	87-68-3	2.00	U	0.508	2.00	4.00	1	10/02/2025 03:31	WG2612402
Isopropylbenzene	98-82-8	1.00	U	0.0345	1.00	2.00	1	10/02/2025 03:31	WG2612402
Methyl tert-butyl ether	1634-04-4	0.0300	U	0.0118	0.0300	0.0600	1	10/02/2025 03:31	WG2612402
Methylene Chloride	75-09-2	0.750	U	0.266	0.750	1.50	1	10/02/2025 03:31	WG2612402

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

Analyte	CAS #	Result	Qualifier	DL	LOD	LOQ	Dilution	Analysis	Batch
		ug/l		ug/l	ug/l	ug/l		date / time	
Naphthalene	91-20-3	1.25	U	1.00	1.25	5.00	1	10/02/2025 03:31	WG2612402
n-Butylbenzene	104-51-8	0.500	U	0.154	0.500	1.00	1	10/02/2025 03:31	WG2612402
n-Propylbenzene	103-65-1	0.100	U	0.0472	0.100	0.200	1	10/02/2025 03:31	WG2612402
o-Xylene	95-47-6	0.100	U	0.0400	0.100	0.200	1	10/02/2025 03:31	WG2612402
m&p-Xylenes		0.200	U	0.0600	0.200	0.400	1	10/02/2025 03:31	WG2612402
sec-Butylbenzene	135-98-8	1.74		0.101	0.250	0.500	1	10/02/2025 03:31	WG2612402
Styrene	100-42-5	0.250	U	0.109	0.250	0.500	1	10/02/2025 03:31	WG2612402
tert-Butylbenzene	98-06-6	0.500	U	0.0620	0.500	1.00	1	10/02/2025 03:31	WG2612402
Tetrachloroethene	127-18-4	0.0750	U	0.0280	0.0750	0.150	1	10/02/2025 03:31	WG2612402
Toluene	108-88-3	0.100	U	0.0500	0.100	0.200	1	10/02/2025 03:31	WG2612402
trans-1,2-Dichloroethene	156-60-5	0.300	U	0.0572	0.300	0.600	1	10/02/2025 03:31	WG2612402
trans-1,3-Dichloropropene	10061-02-6	0.150	U	0.0612	0.150	0.300	1	10/02/2025 03:31	WG2612402
Trichloroethene	79-01-6	0.0400	U	0.0160	0.0400	0.0800	1	10/02/2025 03:31	WG2612402
Trichlorofluoromethane	75-69-4	0.0500	U	0.0200	0.0500	0.100	1	10/02/2025 03:31	WG2612402
Vinyl acetate	108-05-4	2.50	U	0.692	2.50	10.0	1	10/02/2025 03:31	WG2612402
Vinyl chloride	75-01-4	0.0750	U	0.0273	0.0750	0.150	1	10/02/2025 03:31	WG2612402
Xylenes, Total	1330-20-7	0.400	U	0.191	0.400	0.800	1	10/02/2025 03:31	WG2612402
(S) Toluene-d8	*2037-26-5*	*98.3*				*89.0-112*		*10/02/2025 03:31*	WG2612402
(S) 4-Bromofluorobenzene	*460-00-4*	*101*				*85.0-114*		*10/02/2025 03:31*	WG2612402
(S) 1,2-Dichloroethane-d4	*17060-07-0*	*94.9*				*81.0-118*		*10/02/2025 03:31*	WG2612402

Semi-Volatile Organic Compounds (GC) by Method AK102/103

Analyte	CAS #	Result	Qualifier	DL	LOD	LOQ	Dilution	Analysis	Batch
		ug/l		ug/l	ug/l	ug/l		date / time	
AK102 DRO C10-C25	C10-C25	720	U	571	720	800	1	10/08/2025 19:23	WG2611590
AK103 RRO C25-C36	C25-C36	720	U	460	720	800	1	10/08/2025 19:23	WG2611590
(S) o-Terphenyl	*84-15-1*	*84.9*				*50.0-150*		*10/08/2025 19:23*	WG2611590
(S) n-Triacontane d62	*93952-07-9*	*90.7*				*10.0-163*		*10/08/2025 19:23*	WG2611590

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

Analyte	CAS #	Result	Qualifier	DL	LOD	LOQ	Dilution	Analysis	Batch
		ug/l		ug/l	ug/l	ug/l		date / time	
Anthracene	120-12-7	0.0450	U	0.0292	0.0450	0.0500	1	10/01/2025 16:27	WG2609699
Acenaphthene	83-32-9	0.0782		0.0396	0.0450	0.0500	1	10/01/2025 16:27	WG2609699
Acenaphthylene	208-96-8	0.0450	U	0.0296	0.0450	0.0500	1	10/01/2025 16:27	WG2609699
Benzo(a)anthracene	56-55-3	0.0450	U	0.0333	0.0450	0.0500	1	10/01/2025 16:27	WG2609699
Benzo(a)pyrene	50-32-8	0.0450	U	0.0320	0.0450	0.0500	1	10/01/2025 16:27	WG2609699
Benzo(b)fluoranthene	205-99-2	0.0450	U	0.0343	0.0450	0.0500	1	10/01/2025 16:27	WG2609699
Benzo(g,h,i)perylene	191-24-2	0.0450	U	0.0309	0.0450	0.0500	1	10/01/2025 16:27	WG2609699
Benzo(k)fluoranthene	207-08-9	0.125	U	0.0909	0.125	0.250	1	10/01/2025 16:27	WG2609699
Chrysene	218-01-9	0.0450	U	0.0347	0.0450	0.0500	1	10/01/2025 16:27	WG2609699
Dibenz(a,h)anthracene	53-70-3	0.0450	U	0.0314	0.0450	0.0500	1	10/01/2025 16:27	WG2609699
Fluoranthene	206-44-0	0.0450	U	0.0431	0.0450	0.0500	1	10/01/2025 16:27	WG2609699
Fluorene	86-73-7	0.0868		0.0437	0.0450	0.0500	1	10/01/2025 16:27	WG2609699
Indeno(1,2,3-cd)pyrene	193-39-5	0.0450	U	0.0348	0.0450	0.0500	1	10/01/2025 16:27	WG2609699
Naphthalene	91-20-3	0.250	U	0.188	0.250	0.500	1	10/01/2025 16:27	WG2609699
Phenanthrene	85-01-8	0.0450	U	0.0394	0.0450	0.0500	1	10/01/2025 16:27	WG2609699
Pyrene	129-00-0	0.0450	U	0.0430	0.0450	0.0500	1	10/01/2025 16:27	WG2609699
1-Methylnaphthalene	90-12-0	0.250	U	0.0764	0.250	0.500	1	10/01/2025 16:27	WG2609699
2-Methylnaphthalene	91-57-6	0.250	U	0.146	0.250	0.500	1	10/01/2025 16:27	WG2609699
2-Chloronaphthalene	91-58-7	0.250	U	0.0646	0.250	0.500	1	10/01/2025 16:27	WG2609699
(S) 2-Fluorobiphenyl	*321-60-8*	*75.3*				*53.0-106*		*10/01/2025 16:27*	WG2609699
(S) p-Terphenyl-d14	*1718-51-0*	*58.4*				*58.0-132*		*10/01/2025 16:27*	WG2609699
(S) 2-Methylnaphthalene-D10	*7297-45-2*	*76.8*				*50.0-150*		*10/01/2025 16:27*	WG2609699
(S) Fluoranthene-D10	*93951-69-0*	*84.2*				*50.0-150*		*10/01/2025 16:27*	WG2609699

Additional Information - Results for field analyses are not accredited to ISO 17025

Analyte	Result	Units
Cooler#	Lonewolf	
Cooler Temperature	0.2	Deg. C

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

Analyte	CAS #	Result ug/l	Qualifier	DL ug/l	LOD ug/l	LOQ ug/l	Dilution	Analysis date / time	Batch
1,1,1,2-Tetrachloroethane	630-20-6	0.0500	U	0.0200	0.0500	0.100	1	10/02/2025 03:50	WG2612402
1,1,1-Trichloroethane	71-55-6	0.0500	U	0.0110	0.0500	0.100	1	10/02/2025 03:50	WG2612402
1,1,2,2-Tetrachloroethane	79-34-5	0.0500	U	0.0156	0.0500	0.100	1	10/02/2025 03:50	WG2612402
1,1,2-Trichloroethane	79-00-5	0.100	U	0.0353	0.100	0.200	1	10/02/2025 03:50	WG2612402
1,1-Dichloroethane	75-34-3	0.0500	U	0.0230	0.0500	0.100	1	10/02/2025 03:50	WG2612402
1,1-Dichloroethene	75-35-4	0.0500	U	0.0200	0.0500	0.100	1	10/02/2025 03:50	WG2612402
1,1-Dichloropropene	563-58-6	0.100	U	0.0280	0.100	0.200	1	10/02/2025 03:50	WG2612402
1,2,3-Trichlorobenzene	87-61-6	0.250	U	0.0250	0.250	0.500	1	10/02/2025 03:50	WG2612402
1,2,3-Trichloropropane	96-18-4	0.500	U	0.204	0.500	1.00	1	10/02/2025 03:50	WG2612402
1,2,4-Trichlorobenzene	120-82-1	0.500	U	0.193	0.500	1.00	1	10/02/2025 03:50	WG2612402
1,2,4-Trimethylbenzene	95-63-6	3.91		0.0464	0.100	0.200	1	10/02/2025 03:50	WG2612402
1,2-Dibromo-3-Chloropropane	96-12-8	0.500	U	0.204	0.500	1.00	1	10/02/2025 03:50	WG2612402
1,2-Dibromoethane	106-93-4	0.0500	U	0.0210	0.0500	0.100	1	10/02/2025 03:50	WG2612402
1,2-Dichlorobenzene	95-50-1	0.200	U	0.0580	0.200	0.400	1	10/02/2025 03:50	WG2612402
1,2-Dichloroethane	107-06-2	0.0500	U	0.0190	0.0500	0.100	1	10/02/2025 03:50	WG2612402
1,2-Dichloropropane	78-87-5	0.200	U	0.0508	0.200	0.400	1	10/02/2025 03:50	WG2612402
1,3,5-Trimethylbenzene	108-67-8	0.785		0.0432	0.100	0.200	1	10/02/2025 03:50	WG2612402
1,3-Dichlorobenzene	541-73-1	0.200	U	0.0680	0.200	0.400	1	10/02/2025 03:50	WG2612402
1,3-Dichloropropane	142-28-9	0.150	U	0.0700	0.150	0.300	1	10/02/2025 03:50	WG2612402
1,4-Dichlorobenzene	106-46-7	0.250	U	0.0788	0.250	0.500	1	10/02/2025 03:50	WG2612402
2,2-Dichloropropane	594-20-7	0.100	U	0.0317	0.100	0.200	1	10/02/2025 03:50	WG2612402
2-Butanone (MEK)	78-93-3	1.00	U	0.500	1.00	2.00	1	10/02/2025 03:50	WG2612402
2-Hexanone	591-78-6	1.00	U	0.400	1.00	2.00	1	10/02/2025 03:50	WG2612402
2-Chlorotoluene	95-49-8	0.100	U	0.0368	0.100	0.200	1	10/02/2025 03:50	WG2612402
4-Chlorotoluene	106-43-4	0.100	U	0.0452	0.100	0.200	1	10/02/2025 03:50	WG2612402
p-Isopropyltoluene	99-87-6	1.30		0.0932	0.300	0.600	1	10/02/2025 03:50	WG2612402
4-Methyl-2-pentanone (MIBK)	108-10-1	1.00	U	0.400	1.00	2.00	1	10/02/2025 03:50	WG2612402
Benzene	71-43-2	0.0500	U	0.0160	0.0500	0.100	1	10/02/2025 03:50	WG2612402
Bromobenzene	108-86-1	0.250	U	0.0420	0.250	0.500	1	10/02/2025 03:50	WG2612402
Bromochloromethane	74-97-5	0.100	U	0.0452	0.100	0.200	1	10/02/2025 03:50	WG2612402
Bromodichloromethane	75-27-4	0.100	U	0.0315	0.100	0.200	1	10/02/2025 03:50	WG2612402
Bromoform	75-25-2	0.500	U	0.239	0.500	1.00	1	10/02/2025 03:50	WG2612402
Bromomethane	74-83-9	0.500	U	0.148	0.500	1.00	1	10/02/2025 03:50	WG2612402
Carbon Disulfide	75-15-0	0.500	U	0.162	0.500	1.00	1	10/02/2025 03:50	WG2612402
Carbon tetrachloride	56-23-5	0.100	U	0.0432	0.100	0.200	1	10/02/2025 03:50	WG2612402
Chlorobenzene	108-90-7	0.0500	U	0.0229	0.0500	0.100	1	10/02/2025 03:50	WG2612402
Chloroethane	75-00-3	0.100	U	0.0432	0.100	0.200	1	10/02/2025 03:50	WG2612402
Chloroform	67-66-3	0.0500	U	0.0166	0.0500	0.100	1	10/02/2025 03:50	WG2612402
Chloromethane	74-87-3	0.250	U	0.0556	0.250	0.500	1	10/02/2025 03:50	WG2612402
cis-1,2-Dichloroethene	156-59-2	0.0750	U	0.0276	0.0750	0.150	1	10/02/2025 03:50	WG2612402
cis-1,3-Dichloropropene	10061-01-5	0.100	U	0.0271	0.100	0.200	1	10/02/2025 03:50	WG2612402
Chlorodibromomethane	124-48-1	0.0500	U	0.0180	0.0500	0.100	1	10/02/2025 03:50	WG2612402
Dibromomethane	74-95-3	0.100	U	0.0400	0.100	0.200	1	10/02/2025 03:50	WG2612402
Dichlorodifluoromethane	75-71-8	0.100	U	0.0327	0.100	0.200	1	10/02/2025 03:50	WG2612402
Ethylbenzene	100-41-4	2.85		0.0212	0.0500	0.100	1	10/02/2025 03:50	WG2612402
Hexachloro-1,3-butadiene	87-68-3	2.00	U	0.508	2.00	4.00	1	10/02/2025 03:50	WG2612402
Isopropylbenzene	98-82-8	7.74		0.0345	1.00	2.00	1	10/02/2025 03:50	WG2612402
Methyl tert-butyl ether	1634-04-4	0.0300	U	0.0118	0.0300	0.0600	1	10/02/2025 03:50	WG2612402
Methylene Chloride	75-09-2	0.750	U	0.266	0.750	1.50	1	10/02/2025 03:50	WG2612402

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

Analyte	CAS #	Result ug/l	Qualifier	DL ug/l	LOD ug/l	LOQ ug/l	Dilution	Analysis date / time	Batch
Naphthalene	91-20-3	43.7	J3	5.00	6.25	25.0	5	10/07/2025 00:45	WG2614994
n-Butylbenzene	104-51-8	1.17		0.154	0.500	1.00	1	10/02/2025 03:50	WG2612402
n-Propylbenzene	103-65-1	5.33		0.0472	0.100	0.200	1	10/02/2025 03:50	WG2612402
o-Xylene	95-47-6	0.0520	J	0.0400	0.100	0.200	1	10/02/2025 03:50	WG2612402
m&p-Xylenes		0.521		0.0600	0.200	0.400	1	10/02/2025 03:50	WG2612402
sec-Butylbenzene	135-98-8	4.77		0.101	0.250	0.500	1	10/02/2025 03:50	WG2612402
Styrene	100-42-5	0.250	U	0.109	0.250	0.500	1	10/02/2025 03:50	WG2612402
tert-Butylbenzene	98-06-6	0.500	U	0.0620	0.500	1.00	1	10/02/2025 03:50	WG2612402
Tetrachloroethene	127-18-4	0.0750	U	0.0280	0.0750	0.150	1	10/02/2025 03:50	WG2612402
Toluene	108-88-3	0.188	J	0.0500	0.100	0.200	1	10/02/2025 03:50	WG2612402
trans-1,2-Dichloroethene	156-60-5	0.300	U	0.0572	0.300	0.600	1	10/02/2025 03:50	WG2612402
trans-1,3-Dichloropropene	10061-02-6	0.150	U	0.0612	0.150	0.300	1	10/02/2025 03:50	WG2612402
Trichloroethene	79-01-6	0.0400	U	0.0160	0.0400	0.0800	1	10/02/2025 03:50	WG2612402
Trichlorofluoromethane	75-69-4	0.0500	U	0.0200	0.0500	0.100	1	10/02/2025 03:50	WG2612402
Vinyl acetate	108-05-4	2.50	U	0.692	2.50	10.0	1	10/02/2025 03:50	WG2612402
Vinyl chloride	75-01-4	0.0750	U	0.0273	0.0750	0.150	1	10/02/2025 03:50	WG2612402
Xylenes, Total	1330-20-7	0.573	J	0.191	0.400	0.800	1	10/02/2025 03:50	WG2612402
(S) Toluene-d8	*2037-26-5*	*100*				*89.0-112*		*10/02/2025 03:50*	WG2612402
(S) Toluene-d8	*2037-26-5*	*99.1*				*89.0-112*		*10/07/2025 00:45*	WG2614994
(S) 4-Bromofluorobenzene	*460-00-4*	*95.3*				*85.0-114*		*10/02/2025 03:50*	WG2612402
(S) 4-Bromofluorobenzene	*460-00-4*	*105*				*85.0-114*		*10/07/2025 00:45*	WG2614994
(S) 1,2-Dichloroethane-d4	*17060-07-0*	*94.8*				*81.0-118*		*10/02/2025 03:50*	WG2612402
(S) 1,2-Dichloroethane-d4	*17060-07-0*	*106*				*81.0-118*		*10/07/2025 00:45*	WG2614994

Semi-Volatile Organic Compounds (GC) by Method AK102/103

Analyte	CAS #	Result ug/l	Qualifier	DL ug/l	LOD ug/l	LOQ ug/l	Dilution	Analysis date / time	Batch
AK102 DRO C10-C25	C10-C25	2090		571	720	800	1	10/08/2025 19:44	WG2611590
AK103 RRO C25-C36	C25-C36	720	U	460	720	800	1	10/08/2025 19:44	WG2611590
(S) o-Terphenyl	*84-15-1*	*79.3*				*50.0-150*		*10/08/2025 19:44*	WG2611590
(S) n-Triacontane d62	*93952-07-9*	*85.2*				*10.0-163*		*10/08/2025 19:44*	WG2611590

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

Analyte	CAS #	Result ug/l	Qualifier	DL ug/l	LOD ug/l	LOQ ug/l	Dilution	Analysis date / time	Batch
Anthracene	120-12-7	0.0450	U	0.0292	0.0450	0.0500	1	10/01/2025 16:45	WG2609699
Acenaphthene	83-32-9	1.12		0.0396	0.0450	0.0500	1	10/01/2025 16:45	WG2609699
Acenaphthylene	208-96-8	0.299		0.0296	0.0450	0.0500	1	10/01/2025 16:45	WG2609699
Benzo(a)anthracene	56-55-3	0.0450	U	0.0333	0.0450	0.0500	1	10/01/2025 16:45	WG2609699
Benzo(a)pyrene	50-32-8	0.0450	U	0.0320	0.0450	0.0500	1	10/01/2025 16:45	WG2609699
Benzo(b)fluoranthene	205-99-2	0.0450	U	0.0343	0.0450	0.0500	1	10/01/2025 16:45	WG2609699
Benzo(g,h,i)perylene	191-24-2	0.0450	U	0.0309	0.0450	0.0500	1	10/01/2025 16:45	WG2609699
Benzo(k)fluoranthene	207-08-9	0.125	U	0.0909	0.125	0.250	1	10/01/2025 16:45	WG2609699
Chrysene	218-01-9	0.0450	U	0.0347	0.0450	0.0500	1	10/01/2025 16:45	WG2609699
Dibenz(a,h)anthracene	53-70-3	0.0450	U	0.0314	0.0450	0.0500	1	10/01/2025 16:45	WG2609699
Fluoranthene	206-44-0	0.0450	U	0.0431	0.0450	0.0500	1	10/01/2025 16:45	WG2609699
Fluorene	86-73-7	1.09		0.0437	0.0450	0.0500	1	10/01/2025 16:45	WG2609699
Indeno(1,2,3-cd)pyrene	193-39-5	0.0450	U	0.0348	0.0450	0.0500	1	10/01/2025 16:45	WG2609699
Naphthalene	91-20-3	167		1.88	2.50	5.00	10	10/08/2025 05:36	WG2609699
Phenanthrene	85-01-8	0.159		0.0394	0.0450	0.0500	1	10/01/2025 16:45	WG2609699
Pyrene	129-00-0	0.0450	U	0.0430	0.0450	0.0500	1	10/01/2025 16:45	WG2609699
1-Methylnaphthalene	90-12-0	92.6		0.0764	0.250	0.500	1	10/01/2025 16:45	WG2609699
2-Methylnaphthalene	91-57-6	105		1.46	2.50	5.00	10	10/08/2025 05:36	WG2609699
2-Chloronaphthalene	91-58-7	0.250	U	0.0646	0.250	0.500	1	10/01/2025 16:45	WG2609699
(S) 2-Fluorobiphenyl	*321-60-8*	*75.7*				*53.0-106*		*10/08/2025 05:36*	WG2609699

1 Cp
2 Tc
3 Ss
4 Cn
5 Ds
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

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

Analyte	CAS #	Result ug/l	Qualifier	DL ug/l	LOD ug/l	LOQ ug/l	Dilution	Analysis date / time	Batch
(S) 2-Fluorobiphenyl	*321-60-8*	*73.0*				*53.0-106*		*10/01/2025 16:45*	WG2609699
(S) p-Terphenyl-d14	*1718-51-0*	*64.6*				*58.0-132*		*10/08/2025 05:36*	WG2609699
(S) p-Terphenyl-d14	*1718-51-0*	*51.3*	J2			*58.0-132*		*10/01/2025 16:45*	WG2609699
(S) 2-Methylnaphthalene-D10	*7297-45-2*	*74.6*				*50.0-150*		*10/01/2025 16:45*	WG2609699
(S) 2-Methylnaphthalene-D10	*7297-45-2*	*64.6*				*50.0-150*		*10/08/2025 05:36*	WG2609699
(S) Fluoranthene-D10	*93951-69-0*	*59.3*				*50.0-150*		*10/08/2025 05:36*	WG2609699
(S) Fluoranthene-D10	*93951-69-0*	*72.0*				*50.0-150*		*10/01/2025 16:45*	WG2609699

Sample Narrative:

L1902397-04 WG2609699: Surrogate recovery within historical limits.

Additional Information - Results for field analyses are not accredited to ISO 17025

Analyte	Result	Units
Cooler#	Lonewolf	
Cooler Temperature	0.2	Deg. C

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

Analyte	CAS #	Result ug/l	Qualifier	DL ug/l	LOD ug/l	LOQ ug/l	Dilution	Analysis date / time	Batch
1,1,1,2-Tetrachloroethane	630-20-6	0.0500	U	0.0200	0.0500	0.100	1	10/02/2025 04:09	WG2612402
1,1,1-Trichloroethane	71-55-6	0.0500	U	0.0110	0.0500	0.100	1	10/02/2025 04:09	WG2612402
1,1,2,2-Tetrachloroethane	79-34-5	0.0500	U	0.0156	0.0500	0.100	1	10/02/2025 04:09	WG2612402
1,1,2-Trichloroethane	79-00-5	0.100	U	0.0353	0.100	0.200	1	10/02/2025 04:09	WG2612402
1,1-Dichloroethane	75-34-3	0.0500	U	0.0230	0.0500	0.100	1	10/02/2025 04:09	WG2612402
1,1-Dichloroethene	75-35-4	0.0500	U	0.0200	0.0500	0.100	1	10/02/2025 04:09	WG2612402
1,1-Dichloropropene	563-58-6	0.100	U	0.0280	0.100	0.200	1	10/02/2025 04:09	WG2612402
1,2,3-Trichlorobenzene	87-61-6	0.250	U	0.0250	0.250	0.500	1	10/02/2025 04:09	WG2612402
1,2,3-Trichloropropane	96-18-4	0.500	U	0.204	0.500	1.00	1	10/02/2025 04:09	WG2612402
1,2,4-Trichlorobenzene	120-82-1	0.500	U	0.193	0.500	1.00	1	10/02/2025 04:09	WG2612402
1,2,4-Trimethylbenzene	95-63-6	0.100	U	0.0464	0.100	0.200	1	10/02/2025 04:09	WG2612402
1,2-Dibromo-3-Chloropropane	96-12-8	0.500	U	0.204	0.500	1.00	1	10/02/2025 04:09	WG2612402
1,2-Dibromoethane	106-93-4	0.0500	U	0.0210	0.0500	0.100	1	10/02/2025 04:09	WG2612402
1,2-Dichlorobenzene	95-50-1	0.200	U	0.0580	0.200	0.400	1	10/02/2025 04:09	WG2612402
1,2-Dichloroethane	107-06-2	0.0500	U	0.0190	0.0500	0.100	1	10/02/2025 04:09	WG2612402
1,2-Dichloropropane	78-87-5	0.200	U	0.0508	0.200	0.400	1	10/02/2025 04:09	WG2612402
1,3,5-Trimethylbenzene	108-67-8	0.100	U	0.0432	0.100	0.200	1	10/02/2025 04:09	WG2612402
1,3-Dichlorobenzene	541-73-1	0.200	U	0.0680	0.200	0.400	1	10/02/2025 04:09	WG2612402
1,3-Dichloropropane	142-28-9	0.150	U	0.0700	0.150	0.300	1	10/02/2025 04:09	WG2612402
1,4-Dichlorobenzene	106-46-7	0.250	U	0.0788	0.250	0.500	1	10/02/2025 04:09	WG2612402
2,2-Dichloropropane	594-20-7	0.100	U	0.0317	0.100	0.200	1	10/02/2025 04:09	WG2612402
2-Butanone (MEK)	78-93-3	1.00	U	0.500	1.00	2.00	1	10/02/2025 04:09	WG2612402
2-Hexanone	591-78-6	1.00	U	0.400	1.00	2.00	1	10/02/2025 04:09	WG2612402
2-Chlorotoluene	95-49-8	0.100	U	0.0368	0.100	0.200	1	10/02/2025 04:09	WG2612402
4-Chlorotoluene	106-43-4	0.100	U	0.0452	0.100	0.200	1	10/02/2025 04:09	WG2612402
p-Isopropyltoluene	99-87-6	0.300	U	0.0932	0.300	0.600	1	10/02/2025 04:09	WG2612402
4-Methyl-2-pentanone (MIBK)	108-10-1	1.00	U	0.400	1.00	2.00	1	10/02/2025 04:09	WG2612402
Benzene	71-43-2	0.176		0.0160	0.0500	0.100	1	10/02/2025 04:09	WG2612402
Bromobenzene	108-86-1	0.250	U	0.0420	0.250	0.500	1	10/02/2025 04:09	WG2612402
Bromochloromethane	74-97-5	0.100	U	0.0452	0.100	0.200	1	10/02/2025 04:09	WG2612402
Bromodichloromethane	75-27-4	0.100	U	0.0315	0.100	0.200	1	10/02/2025 04:09	WG2612402
Bromoform	75-25-2	0.500	U	0.239	0.500	1.00	1	10/02/2025 04:09	WG2612402
Bromomethane	74-83-9	0.500	U	0.148	0.500	1.00	1	10/02/2025 04:09	WG2612402
Carbon Disulfide	75-15-0	0.500	U	0.162	0.500	1.00	1	10/02/2025 04:09	WG2612402
Carbon tetrachloride	56-23-5	0.100	U	0.0432	0.100	0.200	1	10/02/2025 04:09	WG2612402
Chlorobenzene	108-90-7	0.0500	U	0.0229	0.0500	0.100	1	10/02/2025 04:09	WG2612402
Chloroethane	75-00-3	0.100	U	0.0432	0.100	0.200	1	10/02/2025 04:09	WG2612402
Chloroform	67-66-3	0.0500	U	0.0166	0.0500	0.100	1	10/02/2025 04:09	WG2612402
Chloromethane	74-87-3	0.250	U	0.0556	0.250	0.500	1	10/02/2025 04:09	WG2612402
cis-1,2-Dichloroethene	156-59-2	0.0750	U	0.0276	0.0750	0.150	1	10/02/2025 04:09	WG2612402
cis-1,3-Dichloropropene	10061-01-5	0.100	U	0.0271	0.100	0.200	1	10/02/2025 04:09	WG2612402
Chlorodibromomethane	124-48-1	0.0500	U	0.0180	0.0500	0.100	1	10/02/2025 04:09	WG2612402
Dibromomethane	74-95-3	0.100	U	0.0400	0.100	0.200	1	10/02/2025 04:09	WG2612402
Dichlorodifluoromethane	75-71-8	0.100	U	0.0327	0.100	0.200	1	10/02/2025 04:09	WG2612402
Ethylbenzene	100-41-4	0.0500	U	0.0212	0.0500	0.100	1	10/02/2025 04:09	WG2612402
Hexachloro-1,3-butadiene	87-68-3	2.00	U	0.508	2.00	4.00	1	10/02/2025 04:09	WG2612402
Isopropylbenzene	98-82-8	0.0430	J	0.0345	1.00	2.00	1	10/02/2025 04:09	WG2612402
Methyl tert-butyl ether	1634-04-4	0.0300	U	0.0118	0.0300	0.0600	1	10/02/2025 04:09	WG2612402
Methylene Chloride	75-09-2	0.750	U	0.266	0.750	1.50	1	10/02/2025 04:09	WG2612402

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

Analyte	CAS #	Result ug/l	Qualifier	DL ug/l	LOD ug/l	LOQ ug/l	Dilution	Analysis date / time	Batch
Naphthalene	91-20-3	1.04	J J3	1.00	1.25	5.00	1	10/07/2025 01:04	WG2614994
n-Butylbenzene	104-51-8	0.500	U	0.154	0.500	1.00	1	10/02/2025 04:09	WG2612402
n-Propylbenzene	103-65-1	0.100	U	0.0472	0.100	0.200	1	10/02/2025 04:09	WG2612402
o-Xylene	95-47-6	0.100	U	0.0400	0.100	0.200	1	10/02/2025 04:09	WG2612402
m&p-Xylenes		0.200	U	0.0600	0.200	0.400	1	10/02/2025 04:09	WG2612402
sec-Butylbenzene	135-98-8	2.56		0.101	0.250	0.500	1	10/02/2025 04:09	WG2612402
Styrene	100-42-5	0.250	U	0.109	0.250	0.500	1	10/02/2025 04:09	WG2612402
tert-Butylbenzene	98-06-6	0.0860	J	0.0620	0.500	1.00	1	10/02/2025 04:09	WG2612402
Tetrachloroethene	127-18-4	0.0750	U	0.0280	0.0750	0.150	1	10/02/2025 04:09	WG2612402
Toluene	108-88-3	0.0630	J	0.0500	0.100	0.200	1	10/02/2025 04:09	WG2612402
trans-1,2-Dichloroethene	156-60-5	0.300	U	0.0572	0.300	0.600	1	10/02/2025 04:09	WG2612402
trans-1,3-Dichloropropene	10061-02-6	0.150	U	0.0612	0.150	0.300	1	10/02/2025 04:09	WG2612402
Trichloroethene	79-01-6	0.0400	U	0.0160	0.0400	0.0800	1	10/02/2025 04:09	WG2612402
Trichlorofluoromethane	75-69-4	0.0500	U	0.0200	0.0500	0.100	1	10/02/2025 04:09	WG2612402
Vinyl acetate	108-05-4	2.50	U	0.692	2.50	10.0	1	10/02/2025 04:09	WG2612402
Vinyl chloride	75-01-4	0.0750	U	0.0273	0.0750	0.150	1	10/02/2025 04:09	WG2612402
Xylenes, Total	1330-20-7	0.400	U	0.191	0.400	0.800	1	10/02/2025 04:09	WG2612402
(S) Toluene-d8	*2037-26-5*	*102*				*89.0-112*		*10/02/2025 04:09*	WG2612402
(S) Toluene-d8	*2037-26-5*	*97.8*				*89.0-112*		*10/07/2025 01:04*	WG2614994
(S) 4-Bromofluorobenzene	*460-00-4*	*96.1*				*85.0-114*		*10/02/2025 04:09*	WG2612402
(S) 4-Bromofluorobenzene	*460-00-4*	*102*				*85.0-114*		*10/07/2025 01:04*	WG2614994
(S) 1,2-Dichloroethane-d4	*17060-07-0*	*92.9*				*81.0-118*		*10/02/2025 04:09*	WG2612402
(S) 1,2-Dichloroethane-d4	*17060-07-0*	*105*				*81.0-118*		*10/07/2025 01:04*	WG2614994

Semi-Volatile Organic Compounds (GC) by Method AK102/103

Analyte	CAS #	Result ug/l	Qualifier	DL ug/l	LOD ug/l	LOQ ug/l	Dilution	Analysis date / time	Batch
AK102 DRO C10-C25	C10-C25	720	U	571	720	800	1	10/08/2025 20:04	WG2611590
AK103 RRO C25-C36	C25-C36	720	U	460	720	800	1	10/08/2025 20:04	WG2611590
(S) o-Terphenyl	*84-15-1*	*85.7*				*50.0-150*		*10/08/2025 20:04*	WG2611590
(S) n-Triacontane d62	*93952-07-9*	*93.3*				*10.0-163*		*10/08/2025 20:04*	WG2611590

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

Analyte	CAS #	Result ug/l	Qualifier	DL ug/l	LOD ug/l	LOQ ug/l	Dilution	Analysis date / time	Batch
Anthracene	120-12-7	0.0450	U	0.0292	0.0450	0.0500	1	10/01/2025 17:03	WG2609699
Acenaphthene	83-32-9	0.0603		0.0396	0.0450	0.0500	1	10/01/2025 17:03	WG2609699
Acenaphthylene	208-96-8	0.0450	U	0.0296	0.0450	0.0500	1	10/01/2025 17:03	WG2609699
Benzo(a)anthracene	56-55-3	0.0450	U	0.0333	0.0450	0.0500	1	10/01/2025 17:03	WG2609699
Benzo(a)pyrene	50-32-8	0.0450	U	0.0320	0.0450	0.0500	1	10/01/2025 17:03	WG2609699
Benzo(b)fluoranthene	205-99-2	0.0450	U	0.0343	0.0450	0.0500	1	10/01/2025 17:03	WG2609699
Benzo(g,h,i)perylene	191-24-2	0.0450	U	0.0309	0.0450	0.0500	1	10/01/2025 17:03	WG2609699
Benzo(k)fluoranthene	207-08-9	0.125	U	0.0909	0.125	0.250	1	10/01/2025 17:03	WG2609699
Chrysene	218-01-9	0.0450	U	0.0347	0.0450	0.0500	1	10/01/2025 17:03	WG2609699
Dibenz(a,h)anthracene	53-70-3	0.0450	U	0.0314	0.0450	0.0500	1	10/01/2025 17:03	WG2609699
Fluoranthene	206-44-0	0.0450	U	0.0431	0.0450	0.0500	1	10/01/2025 17:03	WG2609699
Fluorene	86-73-7	0.0755		0.0437	0.0450	0.0500	1	10/01/2025 17:03	WG2609699
Indeno(1,2,3-cd)pyrene	193-39-5	0.0450	U	0.0348	0.0450	0.0500	1	10/01/2025 17:03	WG2609699
Naphthalene	91-20-3	0.250	U	0.188	0.250	0.500	1	10/01/2025 17:03	WG2609699
Phenanthrene	85-01-8	0.0450	U	0.0394	0.0450	0.0500	1	10/01/2025 17:03	WG2609699
Pyrene	129-00-0	0.0450	U	0.0430	0.0450	0.0500	1	10/01/2025 17:03	WG2609699
1-Methylnaphthalene	90-12-0	0.250	U	0.0764	0.250	0.500	1	10/01/2025 17:03	WG2609699
2-Methylnaphthalene	91-57-6	0.250	U	0.146	0.250	0.500	1	10/01/2025 17:03	WG2609699
2-Chloronaphthalene	91-58-7	0.250	U	0.0646	0.250	0.500	1	10/01/2025 17:03	WG2609699
(S) 2-Fluorobiphenyl	*321-60-8*	*70.8*				*53.0-106*		*10/01/2025 17:03*	WG2609699

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

Analyte	CAS #	Result	Qualifier	DL	LOD	LOQ	Dilution	Analysis	Batch
		ug/l		ug/l	ug/l	ug/l		date / time	
(S) p-Terphenyl-d14	*1718-51-0*	*59.5*				*58.0-132*		*10/01/2025 17:03*	WG2609699
(S) 2-Methylnaphthalene-D10	*7297-45-2*	*70.8*				*50.0-150*		*10/01/2025 17:03*	WG2609699
(S) Fluoranthene-D10	*93951-69-0*	*78.4*				*50.0-150*		*10/01/2025 17:03*	WG2609699

Method Blank (MB)

(MB) R4280200-3 09/29/25 22:32

Analyte	MB Result ug/l	MB Qualifier	MB DL ug/l	MB LOD ug/l	MB LOQ ug/l
1,1,1,2-Tetrachloroethane	0.0500	U	0.0200	0.0500	0.100
1,1,1-Trichloroethane	0.0500	U	0.0110	0.0500	0.100
1,1,2,2-Tetrachloroethane	0.0500	U	0.0156	0.0500	0.100
1,1,2-Trichloroethane	0.100	U	0.0353	0.100	0.200
1,1-Dichloroethane	0.0500	U	0.0230	0.0500	0.100
1,1-Dichloroethene	0.0500	U	0.0200	0.0500	0.100
1,1-Dichloropropene	0.100	U	0.0280	0.100	0.200
1,2,3-Trichlorobenzene	0.250	U	0.0250	0.250	0.500
1,2,3-Trichloropropane	0.500	U	0.204	0.500	1.00
1,2,4-Trichlorobenzene	0.500	U	0.193	0.500	1.00
1,2,4-Trimethylbenzene	0.100	U	0.0464	0.100	0.200
1,2-Dibromo-3-Chloropropane	0.500	U	0.204	0.500	1.00
1,2-Dibromoethane	0.0500	U	0.0210	0.0500	0.100
1,2-Dichlorobenzene	0.200	U	0.0580	0.200	0.400
1,2-Dichloroethane	0.0500	U	0.0190	0.0500	0.100
1,2-Dichloropropane	0.200	U	0.0508	0.200	0.400
1,3,5-Trimethylbenzene	0.100	U	0.0432	0.100	0.200
1,3-Dichlorobenzene	0.200	U	0.0680	0.200	0.400
1,3-Dichloropropane	0.150	U	0.0700	0.150	0.300
1,4-Dichlorobenzene	0.250	U	0.0788	0.250	0.500
2,2-Dichloropropane	0.100	U	0.0317	0.100	0.200
2-Butanone (MEK)	1.00	U	0.500	1.00	2.00
2-Hexanone	1.00	U	0.400	1.00	2.00
2-Chlorotoluene	0.100	U	0.0368	0.100	0.200
4-Chlorotoluene	0.100	U	0.0452	0.100	0.200
p-Isopropyltoluene	0.300	U	0.0932	0.300	0.600
4-Methyl-2-pentanone (MIBK)	1.00	U	0.400	1.00	2.00
Benzene	0.0500	U	0.0160	0.0500	0.100
Bromobenzene	0.250	U	0.0420	0.250	0.500
Bromochloromethane	0.100	U	0.0452	0.100	0.200
Bromodichloromethane	0.100	U	0.0315	0.100	0.200
Bromoform	0.500	U	0.239	0.500	1.00
Bromomethane	0.500	U	0.148	0.500	1.00
Carbon tetrachloride	0.100	U	0.0432	0.100	0.200
Chlorobenzene	0.0500	U	0.0229	0.0500	0.100
Chloroethane	0.100	U	0.0432	0.100	0.200
Chloroform	0.0600	J	0.0166	0.0500	0.100
Chloromethane	0.250	U	0.0556	0.250	0.500
cis-1,2-Dichloroethene	0.0750	U	0.0276	0.0750	0.150
cis-1,3-Dichloropropene	0.100	U	0.0271	0.100	0.200

Method Blank (MB)

(MB) R4280200-3 09/29/25 22:32

Analyte	MB Result ug/l	MB Qualifier	MB DL ug/l	MB LOD ug/l	MB LOQ ug/l
Chlorodibromomethane	0.0500	U	0.0180	0.0500	0.100
Dibromomethane	0.100	U	0.0400	0.100	0.200
Dichlorodifluoromethane	0.100	U	0.0327	0.100	0.200
Ethylbenzene	0.0500	U	0.0212	0.0500	0.100
Isopropylbenzene	1.00	U	0.0345	1.00	2.00
Methyl tert-butyl ether	0.0300	U	0.0118	0.0300	0.0600
Methylene Chloride	0.750	U	0.266	0.750	1.50
Naphthalene	1.25	U	1.00	1.25	5.00
n-Butylbenzene	0.500	U	0.154	0.500	1.00
n-Propylbenzene	0.100	U	0.0472	0.100	0.200
o-Xylene	0.100	U	0.0400	0.100	0.200
m&p-Xylenes	0.200	U	0.0600	0.200	0.400
sec-Butylbenzene	0.250	U	0.101	0.250	0.500
Styrene	0.250	U	0.109	0.250	0.500
tert-Butylbenzene	0.500	U	0.0620	0.500	1.00
Tetrachloroethene	0.0750	U	0.0280	0.0750	0.150
Toluene	0.100	U	0.0500	0.100	0.200
trans-1,2-Dichloroethene	0.300	U	0.0572	0.300	0.600
trans-1,3-Dichloropropene	0.150	U	0.0612	0.150	0.300
Trichloroethene	0.0400	U	0.0160	0.0400	0.0800
Trichlorofluoromethane	0.0500	U	0.0200	0.0500	0.100
Vinyl acetate	2.50	U	0.692	2.50	10.0
Vinyl chloride	0.0750	U	0.0273	0.0750	0.150
Xylenes, Total	0.400	U	0.191	0.400	0.800
(S) Toluene-d8	*94.3*				*89.0-112*
(S) 4-Bromofluorobenzene	*102*				*85.0-114*
(S) 1,2-Dichloroethane-d4	*101*				*81.0-118*

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

(LCS) R4280200-1 09/29/25 20:36 • (LCSD) R4280200-2 09/29/25 20:56

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,1,1,2-Tetrachloroethane	10.0	9.82	9.96	98.2	99.6	78.0-124			1.42	20
1,1,1-Trichloroethane	10.0	11.4	11.5	114	115	74.0-131			0.873	20
1,1,2,2-Tetrachloroethane	10.0	8.45	8.47	84.5	84.7	71.0-121			0.236	20
1,1,2-Trichloroethane	10.0	10.1	10.0	101	100	80.0-119			0.995	20
1,1-Dichloroethane	10.0	9.89	10.1	98.9	101	77.0-125			2.10	20
1,1-Dichloroethene	10.0	9.63	9.40	96.3	94.0	71.0-131			2.42	20

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

(LCS) R4280200-1 09/29/25 20:36 • (LCSD) R4280200-2 09/29/25 20:56

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,1-Dichloropropene	10.0	10.1	10.4	101	104	79.0-125			2.93	20
1,2,3-Trichlorobenzene	10.0	11.7	11.8	117	118	69.0-129			0.851	20
1,2,3-Trichloropropane	10.0	8.73	8.32	87.3	83.2	73.0-122			4.81	20
1,2,4-Trichlorobenzene	10.0	13.0	13.8	130	138	69.0-130		J4	5.97	20
1,2,4-Trimethylbenzene	10.0	9.65	9.47	96.5	94.7	76.0-124			1.88	20
1,2-Dibromo-3-Chloropropane	10.0	9.43	9.68	94.3	96.8	62.0-128			2.62	20
1,2-Dibromoethane	10.0	9.03	9.20	90.3	92.0	77.0-121			1.87	20
1,2-Dichlorobenzene	10.0	10.4	10.3	104	103	80.0-119			0.966	20
1,2-Dichloroethane	10.0	10.7	11.3	107	113	73.0-128			5.45	20
1,2-Dichloropropane	10.0	9.97	10.4	99.7	104	78.0-122			4.22	20
1,3,5-Trimethylbenzene	10.0	9.49	9.32	94.9	93.2	75.0-124			1.81	20
1,3-Dichlorobenzene	10.0	10.0	10.1	100	101	80.0-119			0.995	20
1,3-Dichloropropane	10.0	9.20	9.22	92.0	92.2	80.0-119			0.217	20
1,4-Dichlorobenzene	10.0	9.83	9.95	98.3	99.5	79.0-118			1.21	20
2,2-Dichloropropane	10.0	9.90	10.5	99.0	105	60.0-139			5.88	20
2-Butanone (MEK)	50.0	42.0	44.3	84.0	88.6	56.0-143			5.33	20
2-Hexanone	50.0	54.8	55.8	110	112	57.0-139			1.81	20
2-Chlorotoluene	10.0	9.00	8.98	90.0	89.8	79.0-122			0.222	20
4-Chlorotoluene	10.0	10.0	10.1	100	101	78.0-122			0.995	20
p-Isopropyltoluene	10.0	10.4	10.3	104	103	77.0-127			0.966	20
4-Methyl-2-pentanone (MIBK)	50.0	48.0	48.8	96.0	97.6	67.0-130			1.65	20
Benzene	10.0	9.62	9.84	96.2	98.4	79.0-120			2.26	20
Bromobenzene	10.0	9.09	9.20	90.9	92.0	80.0-120			1.20	20
Bromochloromethane	10.0	9.98	10.1	99.8	101	78.0-123			1.20	20
Bromodichloromethane	10.0	11.1	11.4	111	114	79.0-125			2.67	20
Bromoform	10.0	9.69	9.94	96.9	99.4	66.0-130			2.55	20
Bromomethane	10.0	8.93	9.35	89.3	93.5	53.0-141			4.60	20
Carbon tetrachloride	10.0	12.0	12.0	120	120	72.0-136			0.000	20
Chlorobenzene	10.0	9.20	9.34	92.0	93.4	82.0-118			1.51	20
Chloroethane	10.0	9.66	9.82	96.6	98.2	60.0-138			1.64	20
Chloroform	10.0	9.76	9.97	97.6	99.7	79.0-124			2.13	20
Chloromethane	10.0	9.52	9.75	95.2	97.5	50.0-139			2.39	20
cis-1,2-Dichloroethene	10.0	11.0	11.5	110	115	78.0-123			4.44	20
cis-1,3-Dichloropropene	10.0	9.97	10.5	99.7	105	75.0-124			5.18	20
Chlorodibromomethane	10.0	9.28	9.48	92.8	94.8	74.0-126			2.13	20
Dibromomethane	10.0	10.0	10.1	100	101	79.0-123			0.995	20
Dichlorodifluoromethane	10.0	10.7	10.7	107	107	32.0-152			0.000	20
Ethylbenzene	10.0	9.39	9.29	93.9	92.9	79.0-121			1.07	20
Isopropylbenzene	10.0	10.0	10.1	100	101	72.0-131			0.995	20
Methyl tert-butyl ether	10.0	10.1	10.5	101	105	71.0-124			3.88	20

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

(LCS) R4280200-1 09/29/25 20:36 • (LCSD) R4280200-2 09/29/25 20:56

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Methylene Chloride	10.0	10.3	10.5	103	105	74.0-124			1.92	20
Naphthalene	10.0	10.6	11.0	106	110	61.0-128			3.70	20
n-Butylbenzene	10.0	11.3	11.5	113	115	75.0-128			1.75	20
n-Propylbenzene	10.0	10.1	9.87	101	98.7	76.0-126			2.30	20
o-Xylene	10.0	9.74	9.74	97.4	97.4	78.0-122			0.000	20
m&p-Xylenes	20.0	19.8	19.9	99.0	99.5	80.0-121			0.504	20
sec-Butylbenzene	10.0	10.4	10.5	104	105	77.0-126			0.957	20
Styrene	10.0	10.0	10.2	100	102	78.0-123			1.98	20
tert-Butylbenzene	10.0	10.2	10.3	102	103	78.0-124			0.976	20
Tetrachloroethene	10.0	10.2	10.3	102	103	74.0-129			0.976	20
Toluene	10.0	9.18	9.23	91.8	92.3	80.0-121			0.543	20
trans-1,2-Dichloroethene	10.0	11.1	11.5	111	115	75.0-124			3.54	20
trans-1,3-Dichloropropene	10.0	9.32	9.54	93.2	95.4	73.0-127			2.33	20
Trichloroethene	10.0	10.2	10.3	102	103	79.0-123			0.976	20
Trichlorofluoromethane	10.0	11.7	12.3	117	123	65.0-141			5.00	20
Vinyl acetate	50.0	45.6	47.6	91.2	95.2	54.0-146			4.29	20
Vinyl chloride	10.0	10.1	10.2	101	102	58.0-137			0.985	20
Xylenes, Total	30.0	29.5	29.6	98.3	98.7	79.0-121			0.338	20
(S) Toluene-d8				*91.6*	*92.1*	*89.0-112*				
(S) 4-Bromofluorobenzene				*100*	*101*	*85.0-114*				
(S) 1,2-Dichloroethane-d4				*104*	*106*	*81.0-118*				

Method Blank (MB)

(MB) R4281435-3 10/01/25 20:50

Analyte	MB Result ug/l	MB Qualifier	MB DL ug/l	MB LOD ug/l	MB LOQ ug/l
Carbon Disulfide	0.500	U	0.162	0.500	1.00
Hexachloro-1,3-butadiene	2.00	U	0.508	2.00	4.00
(S) Toluene-d8	*104*				*89.0-112*
(S) 4-Bromofluorobenzene	*103*				*85.0-114*
(S) 1,2-Dichloroethane-d4	*92.4*				*81.0-118*

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

(LCS) R4281435-1 10/01/25 19:15 • (LCSD) R4281435-2 10/01/25 19:34

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Carbon Disulfide	10.0	9.81	9.50	98.1	95.0	64.0-133			3.21	20
Hexachloro-1,3-butadiene	10.0	13.7	13.5	137	135	66.0-134	J4	J4	1.47	20
(S) Toluene-d8				*98.8*	*100*	*89.0-112*				
(S) 4-Bromofluorobenzene				*108*	*105*	*85.0-114*				
(S) 1,2-Dichloroethane-d4				*101*	*98.6*	*81.0-118*				

Method Blank (MB)

(MB) R4283121-3 10/02/25 00:13

Analyte	MB Result ug/l	MB Qualifier	MB DL ug/l	MB LOD ug/l	MB LOQ ug/l
1,1,1,2-Tetrachloroethane	0.0500	U	0.0200	0.0500	0.100
1,1,1-Trichloroethane	0.0500	U	0.0110	0.0500	0.100
1,1,2,2-Tetrachloroethane	0.0500	U	0.0156	0.0500	0.100
1,1,2-Trichloroethane	0.100	U	0.0353	0.100	0.200
1,1-Dichloroethane	0.0500	U	0.0230	0.0500	0.100
1,1-Dichloroethene	0.0500	U	0.0200	0.0500	0.100
1,1-Dichloropropene	0.100	U	0.0280	0.100	0.200
1,2,3-Trichlorobenzene	0.250	U	0.0250	0.250	0.500
1,2,3-Trichloropropane	0.500	U	0.204	0.500	1.00
1,2,4-Trichlorobenzene	0.500	U	0.193	0.500	1.00
1,2,4-Trimethylbenzene	0.100	U	0.0464	0.100	0.200
1,2-Dibromo-3-Chloropropane	0.500	U	0.204	0.500	1.00
1,2-Dibromoethane	0.0500	U	0.0210	0.0500	0.100
1,2-Dichlorobenzene	0.200	U	0.0580	0.200	0.400
1,2-Dichloroethane	0.0500	U	0.0190	0.0500	0.100
1,2-Dichloropropane	0.200	U	0.0508	0.200	0.400
1,3,5-Trimethylbenzene	0.100	U	0.0432	0.100	0.200
1,3-Dichlorobenzene	0.200	U	0.0680	0.200	0.400
1,3-Dichloropropane	0.150	U	0.0700	0.150	0.300
1,4-Dichlorobenzene	0.250	U	0.0788	0.250	0.500
2,2-Dichloropropane	0.100	U	0.0317	0.100	0.200
2-Butanone (MEK)	1.00	U	0.500	1.00	2.00
2-Hexanone	1.00	U	0.400	1.00	2.00
2-Chlorotoluene	0.100	U	0.0368	0.100	0.200
4-Chlorotoluene	0.100	U	0.0452	0.100	0.200
p-Isopropyltoluene	0.300	U	0.0932	0.300	0.600
4-Methyl-2-pentanone (MIBK)	1.00	U	0.400	1.00	2.00
Benzene	0.0500	U	0.0160	0.0500	0.100
Bromobenzene	0.250	U	0.0420	0.250	0.500
Bromochloromethane	0.100	U	0.0452	0.100	0.200
Bromodichloromethane	0.100	U	0.0315	0.100	0.200
Bromoform	0.500	U	0.239	0.500	1.00
Bromomethane	0.500	U	0.148	0.500	1.00
Carbon Disulfide	0.500	U	0.162	0.500	1.00
Carbon tetrachloride	0.100	U	0.0432	0.100	0.200
Chlorobenzene	0.0500	U	0.0229	0.0500	0.100
Chloroethane	0.100	U	0.0432	0.100	0.200
Chloroform	0.0500	U	0.0166	0.0500	0.100
Chloromethane	0.250	U	0.0556	0.250	0.500
cis-1,2-Dichloroethene	0.0750	U	0.0276	0.0750	0.150

Method Blank (MB)

(MB) R4283121-3 10/02/25 00:13

Analyte	MB Result ug/l	MB Qualifier	MB DL ug/l	MB LOD ug/l	MB LOQ ug/l
cis-1,3-Dichloropropene	0.100	U	0.0271	0.100	0.200
Chlorodibromomethane	0.0500	U	0.0180	0.0500	0.100
Dibromomethane	0.100	U	0.0400	0.100	0.200
Dichlorodifluoromethane	0.100	U	0.0327	0.100	0.200
Ethylbenzene	0.0500	U	0.0212	0.0500	0.100
Hexachloro-1,3-butadiene	2.00	U	0.508	2.00	4.00
Isopropylbenzene	1.00	U	0.0345	1.00	2.00
Methyl tert-butyl ether	0.0300	U	0.0118	0.0300	0.0600
Methylene Chloride	0.750	U	0.266	0.750	1.50
Naphthalene	1.25	U	1.00	1.25	5.00
n-Butylbenzene	0.500	U	0.154	0.500	1.00
n-Propylbenzene	0.100	U	0.0472	0.100	0.200
o-Xylene	0.100	U	0.0400	0.100	0.200
m&p-Xylenes	0.200	U	0.0600	0.200	0.400
sec-Butylbenzene	0.250	U	0.101	0.250	0.500
Styrene	0.250	U	0.109	0.250	0.500
tert-Butylbenzene	0.500	U	0.0620	0.500	1.00
Tetrachloroethene	0.0750	U	0.0280	0.0750	0.150
Toluene	0.100	U	0.0500	0.100	0.200
trans-1,2-Dichloroethene	0.300	U	0.0572	0.300	0.600
trans-1,3-Dichloropropene	0.150	U	0.0612	0.150	0.300
Trichloroethene	0.0400	U	0.0160	0.0400	0.0800
Trichlorofluoromethane	0.0500	U	0.0200	0.0500	0.100
Vinyl acetate	2.50	U	0.692	2.50	10.0
Vinyl chloride	0.0750	U	0.0273	0.0750	0.150
Xylenes, Total	0.400	U	0.191	0.400	0.800
(S) Toluene-d8	*103*				*89.0-112*
(S) 4-Bromofluorobenzene	*95.5*				*85.0-114*
(S) 1,2-Dichloroethane-d4	*94.9*				*81.0-118*

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

(LCS) R4283121-1 10/01/25 22:56 • (LCSD) R4283121-2 10/01/25 23:15

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,1,1,2-Tetrachloroethane	10.0	10.1	10.2	101	102	78.0-124			0.985	20
1,1,1-Trichloroethane	10.0	11.0	11.1	110	111	74.0-131			0.905	20
1,1,2,2-Tetrachloroethane	10.0	9.11	9.20	91.1	92.0	71.0-121			0.983	20
1,1,2-Trichloroethane	10.0	9.85	9.75	98.5	97.5	80.0-119			1.02	20

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

(LCS) R4283121-1 10/01/25 22:56 • (LCSD) R4283121-2 10/01/25 23:15

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,1-Dichloroethane	10.0	10.9	10.9	109	109	77.0-125			0.000	20
1,1-Dichloroethene	10.0	11.0	10.9	110	109	71.0-131			0.913	20
1,1-Dichloropropene	10.0	11.1	10.5	111	105	79.0-125			5.56	20
1,2,3-Trichlorobenzene	10.0	8.80	9.18	88.0	91.8	69.0-129			4.23	20
1,2,3-Trichloropropane	10.0	9.97	10.3	99.7	103	73.0-122			3.26	20
1,2,4-Trichlorobenzene	10.0	8.80	9.21	88.0	92.1	69.0-130			4.55	20
1,2,4-Trimethylbenzene	10.0	10.3	10.5	103	105	76.0-124			1.92	20
1,2-Dibromo-3-Chloropropane	10.0	9.33	9.61	93.3	96.1	62.0-128			2.96	20
1,2-Dibromoethane	10.0	9.65	9.82	96.5	98.2	77.0-121			1.75	20
1,2-Dichlorobenzene	10.0	9.60	9.61	96.0	96.1	80.0-119			0.104	20
1,2-Dichloroethane	10.0	9.73	9.68	97.3	96.8	73.0-128			0.515	20
1,2-Dichloropropane	10.0	10.7	10.7	107	107	78.0-122			0.000	20
1,3,5-Trimethylbenzene	10.0	10.0	9.97	100	99.7	75.0-124			0.300	20
1,3-Dichlorobenzene	10.0	9.35	9.38	93.5	93.8	80.0-119			0.320	20
1,3-Dichloropropane	10.0	10.2	10.4	102	104	80.0-119			1.94	20
1,4-Dichlorobenzene	10.0	9.19	9.42	91.9	94.2	79.0-118			2.47	20
2,2-Dichloropropane	10.0	9.32	9.48	93.2	94.8	60.0-139			1.70	20
2-Butanone (MEK)	50.0	42.5	45.2	85.0	90.4	56.0-143			6.16	20
2-Hexanone	50.0	50.5	52.1	101	104	57.0-139			3.12	20
2-Chlorotoluene	10.0	10.3	10.4	103	104	79.0-122			0.966	20
4-Chlorotoluene	10.0	9.49	9.48	94.9	94.8	78.0-122			0.105	20
p-Isopropyltoluene	10.0	9.69	9.56	96.9	95.6	77.0-127			1.35	20
4-Methyl-2-pentanone (MIBK)	50.0	53.3	54.3	107	109	67.0-130			1.86	20
Benzene	10.0	10.5	10.4	105	104	79.0-120			0.957	20
Bromobenzene	10.0	9.67	9.81	96.7	98.1	80.0-120			1.44	20
Bromochloromethane	10.0	10.4	10.5	104	105	78.0-123			0.957	20
Bromodichloromethane	10.0	10.6	10.5	106	105	79.0-125			0.948	20
Bromoform	10.0	9.54	9.79	95.4	97.9	66.0-130			2.59	20
Bromomethane	10.0	10.3	9.96	103	99.6	53.0-141			3.36	20
Carbon Disulfide	10.0	10.7	10.8	107	108	64.0-133			0.930	20
Carbon tetrachloride	10.0	11.4	11.2	114	112	72.0-136			1.77	20
Chlorobenzene	10.0	9.34	9.50	93.4	95.0	82.0-118			1.70	20
Chloroethane	10.0	10.6	10.2	106	102	60.0-138			3.85	20
Chloroform	10.0	10.0	9.78	100	97.8	79.0-124			2.22	20
Chloromethane	10.0	11.4	10.4	114	104	50.0-139			9.17	20
cis-1,2-Dichloroethene	10.0	10.3	10.3	103	103	78.0-123			0.000	20
cis-1,3-Dichloropropene	10.0	10.5	10.7	105	107	75.0-124			1.89	20
Chlorodibromomethane	10.0	10.5	10.7	105	107	74.0-126			1.89	20
Dibromomethane	10.0	10.0	9.88	100	98.8	79.0-123			1.21	20
Dichlorodifluoromethane	10.0	12.6	13.0	126	130	32.0-152			3.13	20

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

(LCS) R4283121-1 10/01/25 22:56 • (LCSD) R4283121-2 10/01/25 23:15

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	10.0	10.1	10.2	101	102	79.0-121			0.985	20
Hexachloro-1,3-butadiene	10.0	9.67	9.53	96.7	95.3	66.0-134			1.46	20
Isopropylbenzene	10.0	11.1	11.0	111	110	72.0-131			0.905	20
Methyl tert-butyl ether	10.0	10.4	10.6	104	106	71.0-124			1.90	20
Methylene Chloride	10.0	10.1	10.4	101	104	74.0-124			2.93	20
Naphthalene	10.0	9.51	9.93	95.1	99.3	61.0-128			4.32	20
n-Butylbenzene	10.0	9.85	9.74	98.5	97.4	75.0-128			1.12	20
n-Propylbenzene	10.0	10.1	9.98	101	99.8	76.0-126			1.20	20
o-Xylene	10.0	10.6	10.7	106	107	78.0-122			0.939	20
m&p-Xylenes	20.0	21.2	21.2	106	106	80.0-121			0.000	20
sec-Butylbenzene	10.0	10.7	10.6	107	106	77.0-126			0.939	20
Styrene	10.0	10.4	10.4	104	104	78.0-123			0.000	20
tert-Butylbenzene	10.0	10.2	10.1	102	101	78.0-124			0.985	20
Tetrachloroethene	10.0	10.3	10.3	103	103	74.0-129			0.000	20
Toluene	10.0	10.0	10.1	100	101	80.0-121			0.995	20
trans-1,2-Dichloroethene	10.0	11.2	11.1	112	111	75.0-124			0.897	20
trans-1,3-Dichloropropene	10.0	9.69	9.81	96.9	98.1	73.0-127			1.23	20
Trichloroethene	10.0	10.9	10.8	109	108	79.0-123			0.922	20
Trichlorofluoromethane	10.0	11.2	11.1	112	111	65.0-141			0.897	20
Vinyl acetate	50.0	44.9	47.4	89.8	94.8	54.0-146			5.42	20
Vinyl chloride	10.0	11.1	11.0	111	110	58.0-137			0.905	20
Xylenes, Total	30.0	31.8	31.9	106	106	79.0-121			0.314	20
(S) Toluene-d8				*95.9*	*96.9*	*89.0-112*				
(S) 4-Bromofluorobenzene				*99.1*	*101*	*85.0-114*				
(S) 1,2-Dichloroethane-d4				*97.3*	*94.1*	*81.0-118*				

Method Blank (MB)

(MB) R4283555-2 10/06/25 21:05

Analyte	MB Result ug/l	MB Qualifier	MB DL ug/l	MB LOD ug/l	MB LOQ ug/l
1,1,1,2-Tetrachloroethane	0.0500	U	0.0200	0.0500	0.100
1,1,1-Trichloroethane	0.0500	U	0.0110	0.0500	0.100
1,1,2,2-Tetrachloroethane	0.0500	U	0.0156	0.0500	0.100
1,1,2-Trichloroethane	0.100	U	0.0353	0.100	0.200
1,1-Dichloroethane	0.0500	U	0.0230	0.0500	0.100
1,1-Dichloroethene	0.0500	U	0.0200	0.0500	0.100
1,1-Dichloropropene	0.100	U	0.0280	0.100	0.200
1,2,3-Trichlorobenzene	0.250	U	0.0250	0.250	0.500
1,2,3-Trichloropropane	0.500	U	0.204	0.500	1.00
1,2,4-Trichlorobenzene	0.500	U	0.193	0.500	1.00
1,2,4-Trimethylbenzene	0.100	U	0.0464	0.100	0.200
1,2-Dibromo-3-Chloropropane	0.500	U	0.204	0.500	1.00
1,2-Dibromoethane	0.0500	U	0.0210	0.0500	0.100
1,2-Dichlorobenzene	0.200	U	0.0580	0.200	0.400
1,2-Dichloroethane	0.0500	U	0.0190	0.0500	0.100
1,2-Dichloropropane	0.200	U	0.0508	0.200	0.400
1,3,5-Trimethylbenzene	0.100	U	0.0432	0.100	0.200
1,3-Dichlorobenzene	0.200	U	0.0680	0.200	0.400
1,3-Dichloropropane	0.150	U	0.0700	0.150	0.300
1,4-Dichlorobenzene	0.250	U	0.0788	0.250	0.500
2,2-Dichloropropane	0.100	U	0.0317	0.100	0.200
2-Butanone (MEK)	1.00	U	0.500	1.00	2.00
2-Chlorotoluene	0.100	U	0.0368	0.100	0.200
4-Chlorotoluene	0.100	U	0.0452	0.100	0.200
p-Isopropyltoluene	0.300	U	0.0932	0.300	0.600
4-Methyl-2-pentanone (MIBK)	1.00	U	0.400	1.00	2.00
Benzene	0.0500	U	0.0160	0.0500	0.100
Bromobenzene	0.250	U	0.0420	0.250	0.500
Bromochloromethane	0.100	U	0.0452	0.100	0.200
Bromodichloromethane	0.100	U	0.0315	0.100	0.200
Bromoform	0.500	U	0.239	0.500	1.00
Bromomethane	0.500	U	0.148	0.500	1.00
Carbon Disulfide	0.500	U	0.162	0.500	1.00
Carbon tetrachloride	0.100	U	0.0432	0.100	0.200
Chlorobenzene	0.0500	U	0.0229	0.0500	0.100
Chloroethane	0.100	U	0.0432	0.100	0.200
Chloroform	0.0500	U	0.0166	0.0500	0.100
Chloromethane	0.250	U	0.0556	0.250	0.500
cis-1,2-Dichloroethene	0.0750	U	0.0276	0.0750	0.150
cis-1,3-Dichloropropene	0.100	U	0.0271	0.100	0.200

Method Blank (MB)

(MB) R4283555-2 10/06/25 21:05

Analyte	MB Result ug/l	MB Qualifier	MB DL ug/l	MB LOD ug/l	MB LOQ ug/l
Chlorodibromomethane	0.0500	U	0.0180	0.0500	0.100
Dibromomethane	0.100	U	0.0400	0.100	0.200
Ethylbenzene	0.0500	U	0.0212	0.0500	0.100
Hexachloro-1,3-butadiene	2.00	U	0.508	2.00	4.00
Isopropylbenzene	1.00	U	0.0345	1.00	2.00
Methyl tert-butyl ether	0.0300	U	0.0118	0.0300	0.0600
Methylene Chloride	0.750	U	0.266	0.750	1.50
Naphthalene	1.25	U	1.00	1.25	5.00
n-Butylbenzene	0.500	U	0.154	0.500	1.00
n-Propylbenzene	0.100	U	0.0472	0.100	0.200
o-Xylene	0.100	U	0.0400	0.100	0.200
m&p-Xylenes	0.200	U	0.0600	0.200	0.400
sec-Butylbenzene	0.250	U	0.101	0.250	0.500
Styrene	0.250	U	0.109	0.250	0.500
tert-Butylbenzene	0.500	U	0.0620	0.500	1.00
Tetrachloroethene	0.0750	J	0.0280	0.0750	0.150
Toluene	0.100	U	0.0500	0.100	0.200
trans-1,2-Dichloroethene	0.300	U	0.0572	0.300	0.600
trans-1,3-Dichloropropene	0.150	U	0.0612	0.150	0.300
Trichloroethene	0.0400	U	0.0160	0.0400	0.0800
Trichlorofluoromethane	0.0500	U	0.0200	0.0500	0.100
Vinyl acetate	2.50	U	0.692	2.50	10.0
Vinyl chloride	0.0750	U	0.0273	0.0750	0.150
Xylenes, Total	0.400	U	0.191	0.400	0.800
(S) Toluene-d8	*99.7*				*89.0-112*
(S) 4-Bromofluorobenzene	*105*				*85.0-114*
(S) 1,2-Dichloroethane-d4	*105*				*81.0-118*

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

(LCS) R4283555-1 10/06/25 19:49 • (LCSD) R4283555-3 10/06/25 21:25

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,1,1,2-Tetrachloroethane	10.0	9.50	9.43	95.0	94.3	78.0-124			0.740	20
1,1,1-Trichloroethane	10.0	10.4	10.5	104	105	74.0-131			0.957	20
1,1,2,2-Tetrachloroethane	10.0	8.48	8.35	84.8	83.5	71.0-121			1.54	20
1,1,2-Trichloroethane	10.0	8.72	8.80	87.2	88.0	80.0-119			0.913	20
1,1-Dichloroethane	10.0	9.38	9.31	93.8	93.1	77.0-125			0.749	20
1,1-Dichloroethene	10.0	10.1	9.82	101	98.2	71.0-131			2.81	20

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

(LCS) R4283555-1 10/06/25 19:49 • (LCSD) R4283555-3 10/06/25 21:25

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,1-Dichloropropene	10.0	9.93	9.79	99.3	97.9	79.0-125			1.42	20
1,2,3-Trichlorobenzene	10.0	10.5	9.24	105	92.4	69.0-129			12.8	20
1,2,3-Trichloropropane	10.0	8.76	8.60	87.6	86.0	73.0-122			1.84	20
1,2,4-Trichlorobenzene	10.0	11.9	11.1	119	111	69.0-130			6.96	20
1,2,4-Trimethylbenzene	10.0	9.48	9.50	94.8	95.0	76.0-124			0.211	20
1,2-Dibromo-3-Chloropropane	10.0	9.51	8.10	95.1	81.0	62.0-128			16.0	20
1,2-Dibromoethane	10.0	8.97	8.97	89.7	89.7	77.0-121			0.000	20
1,2-Dichlorobenzene	10.0	9.94	9.73	99.4	97.3	80.0-119			2.14	20
1,2-Dichloroethane	10.0	9.60	9.81	96.0	98.1	73.0-128			2.16	20
1,2-Dichloropropane	10.0	8.88	9.02	88.8	90.2	78.0-122			1.56	20
1,3,5-Trimethylbenzene	10.0	9.18	9.25	91.8	92.5	75.0-124			0.760	20
1,3-Dichlorobenzene	10.0	9.49	9.49	94.9	94.9	80.0-119			0.000	20
1,3-Dichloropropane	10.0	8.79	9.06	87.9	90.6	80.0-119			3.03	20
1,4-Dichlorobenzene	10.0	9.41	9.60	94.1	96.0	79.0-118			2.00	20
2,2-Dichloropropane	10.0	11.1	10.6	111	106	60.0-139			4.61	20
2-Butanone (MEK)	50.0	49.9	47.4	99.8	94.8	56.0-143			5.14	20
2-Chlorotoluene	10.0	8.56	8.62	85.6	86.2	79.0-122			0.698	20
4-Chlorotoluene	10.0	9.00	8.97	90.0	89.7	78.0-122			0.334	20
p-Isopropyltoluene	10.0	9.25	9.12	92.5	91.2	77.0-127			1.42	20
4-Methyl-2-pentanone (MIBK)	50.0	44.1	44.2	88.2	88.4	67.0-130			0.226	20
Benzene	10.0	9.07	9.15	90.7	91.5	79.0-120			0.878	20
Bromobenzene	10.0	8.85	9.10	88.5	91.0	80.0-120			2.79	20
Bromochloromethane	10.0	9.73	9.94	97.3	99.4	78.0-123			2.14	20
Bromodichloromethane	10.0	10.0	10.2	100	102	79.0-125			1.98	20
Bromoform	10.0	8.88	9.14	88.8	91.4	66.0-130			2.89	20
Bromomethane	10.0	9.50	9.65	95.0	96.5	53.0-141			1.57	20
Carbon Disulfide	10.0	8.91	8.71	89.1	87.1	64.0-133			2.27	20
Carbon tetrachloride	10.0	10.3	10.3	103	103	72.0-136			0.000	20
Chlorobenzene	10.0	9.06	9.20	90.6	92.0	82.0-118			1.53	20
Chloroethane	10.0	9.24	8.72	92.4	87.2	60.0-138			5.79	20
Chloroform	10.0	10.3	10.4	103	104	79.0-124			0.966	20
Chloromethane	10.0	9.56	9.46	95.6	94.6	50.0-139			1.05	20
cis-1,2-Dichloroethene	10.0	9.57	9.46	95.7	94.6	78.0-123			1.16	20
cis-1,3-Dichloropropene	10.0	9.59	9.94	95.9	99.4	75.0-124			3.58	20
Chlorodibromomethane	10.0	8.88	8.75	88.8	87.5	74.0-126			1.47	20
Dibromomethane	10.0	9.44	9.52	94.4	95.2	79.0-123			0.844	20
Ethylbenzene	10.0	9.00	8.94	90.0	89.4	79.0-121			0.669	20
Hexachloro-1,3-butadiene	10.0	10.7	10.1	107	101	66.0-134			5.77	20
Isopropylbenzene	10.0	9.84	9.81	98.4	98.1	72.0-131			0.305	20
Methyl tert-butyl ether	10.0	10.3	10.1	103	101	71.0-124			1.96	20

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

(LCS) R4283555-1 10/06/25 19:49 • (LCSD) R4283555-3 10/06/25 21:25

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Methylene Chloride	10.0	9.20	9.60	92.0	96.0	74.0-124			4.26	20
Naphthalene	10.0	10.3	8.17	103	81.7	61.0-128		J3	23.1	20
n-Butylbenzene	10.0	9.68	9.32	96.8	93.2	75.0-128			3.79	20
n-Propylbenzene	10.0	8.80	8.90	88.0	89.0	76.0-126			1.13	20
o-Xylene	10.0	9.26	9.26	92.6	92.6	78.0-122			0.000	20
m&p-Xylenes	20.0	18.5	18.4	92.5	92.0	80.0-121			0.542	20
sec-Butylbenzene	10.0	9.21	8.98	92.1	89.8	77.0-126			2.53	20
Styrene	10.0	9.42	9.33	94.2	93.3	78.0-123			0.960	20
tert-Butylbenzene	10.0	8.81	8.97	88.1	89.7	78.0-124			1.80	20
Tetrachloroethene	10.0	9.25	9.07	92.5	90.7	74.0-129			1.97	20
Toluene	10.0	8.80	8.61	88.0	86.1	80.0-121			2.18	20
trans-1,2-Dichloroethene	10.0	9.40	9.29	94.0	92.9	75.0-124			1.18	20
trans-1,3-Dichloropropene	10.0	8.79	8.90	87.9	89.0	73.0-127			1.24	20
Trichloroethene	10.0	9.90	10.0	99.0	100	79.0-123			1.01	20
Trichlorofluoromethane	10.0	10.4	10.4	104	104	65.0-141			0.000	20
Vinyl acetate	50.0	48.3	48.3	96.6	96.6	54.0-146			0.000	20
Vinyl chloride	10.0	9.89	9.75	98.9	97.5	58.0-137			1.43	20
Xylenes, Total	30.0	27.8	27.7	92.7	92.3	79.0-121			0.360	20
(S) Toluene-d8				*92.6*	*94.1*	*89.0-112*				
(S) 4-Bromofluorobenzene				*104*	*104*	*85.0-114*				
(S) 1,2-Dichloroethane-d4				*113*	*112*	*81.0-118*				

L1902397-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1902397-02 10/07/25 00:26 • (MS) R4283555-4 10/07/25 07:15 • (MSD) R4283555-5 10/07/25 07:34

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
1,1,1,2-Tetrachloroethane	10.0	0.0500	9.01	9.50	90.1	95.0	1	71.0-121			5.29	20
1,1,1-Trichloroethane	10.0	0.0500	8.80	8.92	88.0	89.2	1	10.0-144			1.35	20
1,1,2,2-Tetrachloroethane	10.0	0.0500	8.31	8.90	83.1	89.0	1	10.0-160			6.86	20
1,1,2-Trichloroethane	10.0	0.100	9.17	9.36	91.7	93.6	1	80.0-119			2.05	20
1,1-Dichloroethane	10.0	0.0500	9.18	8.90	91.8	89.0	1	77.0-125			3.10	20
1,1-Dichloroethene	10.0	0.0500	7.58	8.15	75.8	81.5	1	71.0-131			7.25	20
1,1-Dichloropropene	10.0	0.100	8.56	8.27	85.6	82.7	1	79.0-125			3.45	20
1,2,3-Trichlorobenzene	10.0	0.250	10.2	11.2	102	112	1	69.0-129			9.35	20
1,2,3-Trichloropropane	10.0	0.500	8.73	8.89	87.3	88.9	1	73.0-122			1.82	20
1,2,4-Trichlorobenzene	10.0	0.500	11.8	12.4	118	124	1	69.0-130			4.96	20
1,2,4-Trimethylbenzene	10.0	0.0520	8.18	8.31	81.3	82.6	1	76.0-124			1.58	20
1,2-Dibromo-3-Chloropropane	10.0	0.500	8.01	9.40	80.1	94.0	1	62.0-128			16.0	20

L1902397-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1902397-02 10/07/25 00:26 • (MS) R4283555-4 10/07/25 07:15 • (MSD) R4283555-5 10/07/25 07:34

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
1,2-Dibromoethane	10.0	0.0500	9.19	9.18	91.9	91.8	1	77.0-121			0.109	20
1,2-Dichlorobenzene	10.0	0.200	8.94	9.36	89.4	93.6	1	80.0-119			4.59	20
1,2-Dichloroethane	10.0	0.0500	9.72	9.42	97.2	94.2	1	73.0-128			3.13	20
1,2-Dichloropropane	10.0	0.200	9.06	8.92	90.6	89.2	1	78.0-122			1.56	20
1,3,5-Trimethylbenzene	10.0	0.100	7.54	7.99	75.4	79.9	1	75.0-124			5.80	20
1,3-Dichlorobenzene	10.0	0.200	8.68	8.77	86.8	87.7	1	80.0-119			1.03	20
1,3-Dichloropropane	10.0	0.150	9.28	9.25	92.8	92.5	1	80.0-119			0.324	20
1,4-Dichlorobenzene	10.0	0.250	8.70	8.76	87.0	87.6	1	79.0-118			0.687	20
2,2-Dichloropropane	10.0	0.100	8.55	8.95	85.5	89.5	1	60.0-139			4.57	20
2-Butanone (MEK)	50.0	0.880	36.5	42.1	71.2	82.4	1	56.0-143			14.2	20
2-Chlorotoluene	10.0	0.100	7.62	7.91	76.2	79.1	1	79.0-122	J6		3.73	20
4-Chlorotoluene	10.0	0.100	8.29	8.33	82.9	83.3	1	78.0-122			0.481	20
p-Isopropyltoluene	10.0	0.300	7.42	7.80	74.2	78.0	1	77.0-127	J6		4.99	20
4-Methyl-2-pentanone (MIBK)	50.0	1.00	43.3	46.2	86.6	92.4	1	67.0-130			6.48	20
Benzene	10.0	0.0420	9.11	8.63	90.7	85.9	1	79.0-120			5.41	20
Bromobenzene	10.0	0.250	8.75	8.55	87.5	85.5	1	80.0-120			2.31	20
Bromochloromethane	10.0	0.100	10.2	10.1	102	101	1	78.0-123			0.985	20
Bromodichloromethane	10.0	0.100	10.3	10.2	103	102	1	79.0-125			0.976	20
Bromoform	10.0	0.500	9.14	9.33	91.4	93.3	1	66.0-130			2.06	20
Bromomethane	10.0	0.500	9.16	8.91	91.6	89.1	1	53.0-141			2.77	20
Carbon Disulfide	10.0	0.500	7.28	7.12	72.8	71.2	1	64.0-133			2.22	20
Carbon tetrachloride	10.0	0.100	8.13	8.24	81.3	82.4	1	72.0-136			1.34	20
Chlorobenzene	10.0	0.0500	8.90	8.91	89.0	89.1	1	82.0-118			0.112	20
Chloroethane	10.0	0.100	8.72	8.17	87.2	81.7	1	60.0-138			6.51	20
Chloroform	10.0	0.0500	10.1	10.2	101	102	1	79.0-124			0.985	20
Chloromethane	10.0	0.250	8.92	8.36	89.2	83.6	1	50.0-139			6.48	20
cis-1,2-Dichloroethene	10.0	0.0750	9.64	9.27	96.4	92.7	1	78.0-123			3.91	20
cis-1,3-Dichloropropene	10.0	0.100	9.71	9.48	97.1	94.8	1	75.0-124			2.40	20
Chlorodibromomethane	10.0	0.0500	9.09	9.20	90.9	92.0	1	74.0-126			1.20	20
Dibromomethane	10.0	0.100	9.49	9.51	94.9	95.1	1	79.0-123			0.211	20
Ethylbenzene	10.0	0.0500	8.25	8.24	82.5	82.4	1	79.0-121			0.121	20
Hexachloro-1,3-butadiene	10.0	2.00	9.95	10.4	99.5	104	1	66.0-134			4.42	20
Isopropylbenzene	10.0	1.00	7.90	8.05	79.0	80.5	1	72.0-131			1.88	20
Methyl tert-butyl ether	10.0	0.0300	9.72	10.6	97.2	106	1	71.0-124			8.66	20
Methylene Chloride	10.0	0.750	9.73	9.54	97.3	95.4	1	74.0-124			1.97	20
Naphthalene	10.0	1.25	8.91	10.0	89.1	100	1	61.0-128			11.5	20
n-Butylbenzene	10.0	0.500	7.48	8.10	74.8	81.0	1	75.0-128	J6		7.96	20
n-Propylbenzene	10.0	0.100	7.16	7.30	71.6	73.0	1	76.0-126	J6	J6	1.94	20
o-Xylene	10.0	0.0420	8.26	8.43	82.2	83.9	1	78.0-122			2.04	20
m&p-Xylenes	20.0	0.0910	16.3	16.5	81.0	82.0	1	80.0-121			1.22	20

L1902397-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1902397-02 10/07/25 00:26 • (MS) R4283555-4 10/07/25 07:15 • (MSD) R4283555-5 10/07/25 07:34

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
sec-Butylbenzene	10.0	0.250	7.10	7.45	71.0	74.5	1	77.0-126	J6	J6	4.81	20
Styrene	10.0	0.250	8.83	8.74	88.3	87.4	1	78.0-123			1.02	20
tert-Butylbenzene	10.0	0.500	7.35	7.29	73.5	72.9	1	78.0-124	J6	J6	0.820	20
Tetrachloroethene	10.0	0.0750	7.75	7.59	77.5	75.9	1	74.0-129			2.09	20
Toluene	10.0	0.369	8.77	8.54	84.0	81.7	1	80.0-121			2.66	20
trans-1,2-Dichloroethene	10.0	0.300	8.03	8.54	80.3	85.4	1	75.0-124			6.16	20
trans-1,3-Dichloropropene	10.0	0.150	9.21	9.10	92.1	91.0	1	73.0-127			1.20	20
Trichloroethene	10.0	0.0400	9.40	8.99	94.0	89.9	1	79.0-123			4.46	20
Trichlorofluoromethane	10.0	0.0500	7.67	7.80	76.7	78.0	1	65.0-141			1.68	20
Vinyl acetate	50.0	2.50	52.4	52.4	105	105	1	54.0-146			0.000	20
Vinyl chloride	10.0	0.0750	7.94	7.81	79.4	78.1	1	58.0-137			1.65	20
Xylenes, Total	30.0	0.400	24.6	24.9	82.0	83.0	1	79.0-121			1.21	20
(S) Toluene-d8					*94.8*	*94.1*		*89.0-112*				
(S) 4-Bromofluorobenzene					*99.9*	*103*		*85.0-114*				
(S) 1,2-Dichloroethane-d4					*111*	*112*		*81.0-118*				

Method Blank (MB)

(MB) R4284636-3 10/08/25 19:32

Analyte	MB Result ug/l	MB Qualifier	MB DL ug/l	MB LOD ug/l	MB LOQ ug/l
2-Hexanone	0.433	J	0.400	1.00	2.00
Dichlorodifluoromethane	0.100	U	0.0327	0.100	0.200
(S) Toluene-d8	*105*				*89.0-112*
(S) 4-Bromofluorobenzene	*101*				*85.0-114*
(S) 1,2-Dichloroethane-d4	*115*				*81.0-118*

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

(LCS) R4284636-1 10/08/25 18:30 • (LCSD) R4284636-2 10/08/25 18:51

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
2-Hexanone	50.0	55.0	61.2	110	122	57.0-139			10.7	20
Dichlorodifluoromethane	10.0	8.75	8.41	87.5	84.1	32.0-152			3.96	20
(S) Toluene-d8				*102*	*105*	*89.0-112*				
(S) 4-Bromofluorobenzene				*99.2*	*101*	*85.0-114*				
(S) 1,2-Dichloroethane-d4				*117*	*117*	*81.0-118*				

1 Cp
2 Tc
3 Ss
4 Cn
5 Ds
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Method Blank (MB)

(MB) R4284543-1 10/08/25 15:56

Analyte	MB Result ug/l	MB Qualifier	MB DL ug/l	MB LOD ug/l	MB LOQ ug/l
AK102 DRO C10-C25	720	U	571	720	800
AK103 RRO C25-C36	720	U	460	720	800
(S) o-Terphenyl	*91.6*				*60.0-120*
(S) n-Triacontane d62	*100*				*10.0-163*

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

(LCS) R4284543-2 10/08/25 16:16 • (LCSD) R4284543-3 10/08/25 16:37

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
AK102 DRO C10-C25	6000	5310	5280	88.5	88.0	75.0-125			0.567	20
(S) o-Terphenyl				*112*	*111*	*60.0-120*				
(S) n-Triacontane d62				*105*	*104*	*10.0-163*				

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

(LCS) R4284543-4 10/08/25 16:58 • (LCSD) R4284543-5 10/08/25 17:18

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
AK103 RRO C25-C36	6000	5910	5700	98.5	95.0	21.0-158			3.62	24
(S) o-Terphenyl				*96.9*	*93.8*	*60.0-120*				
(S) n-Triacontane d62				*109*	*103*	*10.0-163*				

L1902397-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1902397-02 10/08/25 17:39 • (MS) R4284543-6 10/08/25 18:00 • (MSD) R4284543-7 10/08/25 18:21

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
AK103 RRO C25-C36	5820	720	5440	5640	93.5	94.9	1	10.0-159			3.61	49
(S) o-Terphenyl					*94.1*	*94.8*		*50.0-150*				
(S) n-Triacontane d62					*103*	*101*		*10.0-163*				

L1902397-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1902397-02 10/08/25 17:39 • (MS) R4284543-8 10/08/25 18:42 • (MSD) R4284543-9 10/08/25 19:02

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
AK102 DRO C10-C25	5880	720	4120	4070	70.1	70.7	1	75.0-125	J6	J6	1.22	20
(S) o-Terphenyl					*97.1*	*102*		*50.0-150*				
(S) n-Triacontane d62					*88.3*	*93.2*		*10.0-163*				

Method Blank (MB)

(MB) R4281586-2 10/01/25 11:40

Analyte	MB Result ug/l	MB Qualifier	MB DL ug/l	MB LOD ug/l	MB LOQ ug/l
Anthracene	0.0450	U	0.0292	0.0450	0.0500
Acenaphthene	0.0450	U	0.0396	0.0450	0.0500
Acenaphthylene	0.0450	U	0.0296	0.0450	0.0500
Benzo(a)anthracene	0.0450	U	0.0333	0.0450	0.0500
Benzo(a)pyrene	0.0450	U	0.0320	0.0450	0.0500
Benzo(b)fluoranthene	0.0450	U	0.0343	0.0450	0.0500
Benzo(g,h,i)perylene	0.0450	U	0.0309	0.0450	0.0500
Benzo(k)fluoranthene	0.125	U	0.0909	0.125	0.250
Chrysene	0.0450	U	0.0347	0.0450	0.0500
Dibenz(a,h)anthracene	0.0450	U	0.0314	0.0450	0.0500
Fluoranthene	0.0450	U	0.0431	0.0450	0.0500
Fluorene	0.0450	U	0.0437	0.0450	0.0500
Indeno(1,2,3-cd)pyrene	0.0450	U	0.0348	0.0450	0.0500
Naphthalene	0.250	U	0.188	0.250	0.500
Phenanthrene	0.0450	U	0.0394	0.0450	0.0500
Pyrene	0.0450	U	0.0430	0.0450	0.0500
1-Methylnaphthalene	0.250	U	0.0764	0.250	0.500
2-Methylnaphthalene	0.250	U	0.146	0.250	0.500
2-Chloronaphthalene	0.250	U	0.0646	0.250	0.500
(S) 2-Fluorobiphenyl	*73.5*				*53.0-106*
(S) p-Terphenyl-d14	*72.0*				*58.0-132*
(S) 2-Methylnaphthalene-d10	*71.5*				*50.0-150*
(S) Fluoranthene-d10	*82.0*				*50.0-150*

Laboratory Control Sample (LCS)

(LCS) R4281586-1 10/01/25 11:22

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Anthracene	2.00	1.53	76.5	53.0-119	
Acenaphthene	2.00	1.42	71.0	48.0-114	
Acenaphthylene	2.00	1.42	71.0	35.0-121	
Benzo(a)anthracene	2.00	1.80	90.0	59.0-120	
Benzo(a)pyrene	2.00	1.48	74.0	53.0-120	
Benzo(b)fluoranthene	2.00	1.59	79.5	53.0-126	
Benzo(g,h,i)perylene	2.00	1.50	75.0	44.0-128	
Benzo(k)fluoranthene	2.00	1.59	79.5	54.0-125	
Chrysene	2.00	1.77	88.5	57.0-120	
Dibenz(a,h)anthracene	2.00	1.59	79.5	44.0-131	

Laboratory Control Sample (LCS)

(LCS) R4281586-1 10/01/25 11:22

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Fluoranthene	2.00	1.76	88.0	58.0-120	
Fluorene	2.00	1.60	80.0	50.0-118	
Indeno(1,2,3-cd)pyrene	2.00	1.53	76.5	48.0-130	
Naphthalene	2.00	1.26	63.0	43.0-114	
Phenanthrene	2.00	1.57	78.5	53.0-115	
Pyrene	2.00	1.72	86.0	53.0-121	
1-Methylnaphthalene	2.00	1.42	71.0	41.0-115	
2-Methylnaphthalene	2.00	1.38	69.0	39.0-114	
2-Chloronaphthalene	2.00	1.38	69.0	34.0-111	
(S) 2-Fluorobiphenyl			*70.5*	*53.0-106*	
(S) p-Terphenyl-d14			*71.0*	*58.0-132*	
(S) 2-Methylnaphthalene-d10			*67.5*	*50.0-150*	
(S) Fluoranthene-d10			*82.5*	*50.0-150*	

L1902397-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1902397-02 10/01/25 14:39 • (MS) R4281586-3 10/01/25 14:57 • (MSD) R4281586-4 10/01/25 15:15

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Anthracene	1.89	0.0450	1.50	1.49	79.4	78.8	1	53.0-119			0.669	20
Acenaphthene	1.89	0.0450	1.37	1.34	72.5	70.9	1	48.0-114			2.21	20
Acenaphthylene	1.89	0.0450	1.40	1.42	74.1	75.1	1	35.0-121			1.42	20
Benzo(a)anthracene	1.89	0.0450	1.83	1.77	96.8	93.7	1	59.0-120			3.33	20
Benzo(a)pyrene	1.89	0.0450	1.10	0.965	58.2	51.1	1	53.0-120		J6	13.1	20
Benzo(b)fluoranthene	1.89	0.0450	1.04	0.947	55.0	50.1	1	53.0-126		J6	9.36	20
Benzo(g,h,i)perylene	1.89	0.0450	0.280	0.247	14.8	13.1	1	44.0-128	J6	J6	12.5	20
Benzo(k)fluoranthene	1.89	0.125	1.08	0.962	57.1	50.9	1	54.0-125		J6	11.6	20
Chrysene	1.89	0.0450	1.63	1.63	86.2	86.2	1	57.0-120			0.000	20
Dibenz(a,h)anthracene	1.89	0.0450	0.286	0.232	15.1	12.3	1	44.0-131	J6	J3 J6	20.8	20
Fluoranthene	1.89	0.0450	1.73	1.70	91.5	89.9	1	58.0-120			1.75	20
Fluorene	1.89	0.0450	1.52	1.50	80.4	79.4	1	50.0-118			1.32	20
Indeno(1,2,3-cd)pyrene	1.89	0.0450	0.344	0.288	18.2	15.2	1	48.0-130	J6	J6	17.7	20
Naphthalene	1.89	0.250	1.22	1.20	64.6	63.5	1	43.0-114			1.65	20
Phenanthrene	1.89	0.0450	1.50	1.48	79.4	78.3	1	53.0-115			1.34	20
Pyrene	1.89	0.0450	1.58	1.58	83.6	83.6	1	53.0-121			0.000	20
1-Methylnaphthalene	1.89	0.250	1.44	1.40	76.2	74.1	1	41.0-115			2.82	20
2-Methylnaphthalene	1.89	0.250	1.37	1.34	72.5	70.9	1	39.0-114			2.21	20
2-Chloronaphthalene	1.89	0.250	1.30	1.28	68.8	67.7	1	34.0-111			1.55	20
(S) 2-Fluorobiphenyl					*68.3*	*67.7*		*53.0-106*				

L1902397-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1902397-02 10/01/25 14:39 • (MS) R4281586-3 10/01/25 14:57 • (MSD) R4281586-4 10/01/25 15:15

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
(S) p-Terphenyl-d14					*65.1*	*63.5*		*58.0-132*				
(S) 2-Methylnaphthalene-d10					*70.4*	*70.4*		*50.0-150*				
(S) Fluoranthene-d10					*85.2*	*84.7*		*50.0-150*				

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.
U (Radiochemistry)	Result + Error < MDA.
J (Radiochemistry)	Result < MDA; Result + Error > MDA.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
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.
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.

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	LA000356
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.

COOLER RECEIPT FORM
(ONE PER COOLER)

Please email this form and the completed CoC records to the Brice Project Chemist within 24 hours of sample receipt.

COC Number 251KALET-01
Cooler Number/Name on COC Lone Wolf
Temperature (temp blank, °C)
Temperature (cooler, °C) 0.3-0.1=0.2
Thermometer Type/ID TH9
Laboratory/Location
Laboratory SDG L1902397
Shipment Method **Tracking Number**

			Circle:	
1.	Were custody seals present? **Yes** **No** If no, were samples hand del?		Yes	No
	If yes, how many and where? Front | Back | Intact?		Yes	No
	Signature/date present on custody seals?		Yes	No
2.	Were custody papers taped to lid inside cooler?		Yes	No
3.	Were custody papers properly filled out (ink, signed, etc.)?		Yes	No
4.	Custody forms signed/dated and properly accepted/relinquished?		Yes	No
5.	Has the shipper/tracking number been documented on the paperwork?		Yes	No
6.	Was sufficient ice used (if appropriate)?	N/A	Yes	No
	Type used: ☐ Wet ☒ Gel Still frozen?		Yes	No
7.	Were all samples/bottles sealed in separate plastic bags?	N/A	Yes	No
8.	Did all bottles arrive in good condition? (intact, not leaking, etc.)		Yes	No
9.	Were all bottle labels complete (sample ID, date, analysis, preservative, etc.) ?		Yes	No
10.	Did all bottle labels agree with the custody papers?		Yes	No
11.	Were the appropriate containers used for the analyses?		Yes	No
12.	Are all VOA vials free of headspace > 6mm in diameter?	N/A	Yes	No
	If no, note samples and number of vials affected below.			
	If no, are there vials without headspace to perform the analysis?	N/A	Yes	No
13.	Was sufficient volume sent in each bottle to perform analysis?	N/A	Yes	No
14.	If there are volatiles present, is there a trip blank present in this cooler?	N/A	Yes	No
15.	Is the temperature within 0-6°C?	N/A	Yes	No
16.	Were labels correctly associated with pre-tared containers (not placed directly on jars for methanol-preserved volatiles)?	N/A	Yes	No
17.	Were non-volatile sample checked for appropriate preservation?	N/A	Yes	No
18.	Were methanol-preserved soil containers accompanied by an unpreserved aliquot for percent moisture content?	N/A	Yes	No
	(If checked at the bench, include prep logs or narrative with final report.)			

Explain any discrepancies/deficiencies (attach additional sheets if required):
Shipping number is: 027384561060000D1 (GoldStreak)

If discrepancies/deficiencies are noted, was the Brice chemist contacted*?
Chemist: _____ Date/Time: _____ Contact Method: phone email

Email or phone notes should be included with final report, if applicable, or at a minimum documented in the case narrative.

BRICE ENGINEERING, LLC.

CHAIN OF CUSTODY RECORD

C057

Section 1

CLIENT: **Brice Engineering, LLC**
3700 Centerpoint Drive, Suite 8223, Anchorage, AK 99503

CONTACT: Victoria Pennick PHONE #: 907-205-9892

PROJECT: North ORC/Kalakaket Creek RRS/LF002/OT001 Project numbers: NPDL WO#: 25-051 Contract #: W911KB-20-D-0002 Task Order #: 0135

REPORTS TO: Victoria Pennick E-MAIL: vpennick@briceenvironmental.com

INVOICE TO: accountspayable@calistacorp.com QUOTE #: W.O. #: 700200-006

COC number: 25KALET-01

Page1 OF 1

4902397

Section 3

Preservative: 40 ML HCL; 100 ML AG HCL; 100 ML AG; NONE

Section 2

RESERVED for lab use	SAMPLE IDENTIFICATION	DATE mm/dd/yyyy	TIME HHMM	MATRIX CODE	# CONTAINERS	TYPE	Analysis: DODAK101 (GRO)	DOD8260DLL (VOCs)	DODAK102/103 (DRO/RRO)	DOD8270PAHSIMD (PAH)	MS/MSD	BRIENGAAK-KALAKAKET Prelogin# - T274306 JARED STARKEY Location	
	~~25LF002-TB01~~		0800	WQ		TB	X					FIELDQC	
	25OT001-TB01	09/24/2025	0800	WQ	4			X				Field QC	01
	25OT001-PT1SB01	09/24/2025	1200	WG	21	Grab		X	X	X	X	PT1SB01	02
	25OT001-PT1SB04	09/24/2025	1330	WG	7	Grab		X	X	X		PT1SB04	03
	~~25OT001-PT1SB05~~			WG		Grab		X	X	X		~~PT1SB05~~	
	25OT001-PT1SB09	09/24/2025	1420	WG	7	Grab		X	X	X		PT1SB09	04
	~~25OT001-PT1SB15~~			WG		Grab		X	X	X		~~PT1SB15~~	
	25OT001-PT1SB049	9/24/2025	1230	WG	7	Grab		X	X	X		PT1SB049	05

Data Deliverables: Level II/IV, AK_SEDD 5.2a (POA instructional set), ERPIMS EDD, and Brice EQEDD

Section 3

Relinquished By: (1)	Date	Time	Received By:
	9/25/25	1300	
Relinquished By: (2)	Date	Time	Received By:
Relinquished By: (3)	Date	Time	Received By:
Relinquished By: (4)	Date	Time	Received For Laboratory By: 09/26/2025 1730

Section 4

DOD Project? Yes

Cooler ID: Lone Wolf

☐ check if multi-cooler shipment
If multi-cooler shipment is checked, please log all coolers as one SDG.

Requested Turnaround Time and/or Special Instructions:
Standard TAT
Send confirmation of receipt to Victoria Pennick and receipt.cooler@usace.army.mil, within 24 hours of sample receipt. Please communicate any issues immediately.

APPENDIX E
MANN-KENDALL TREND ANALYSIS

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Table E-1 Mann-Kendall Trend Analysis Summary

Monitoring Well	Analyte	# Sample Events Evaluated (n)	# of Non-Detects	Date Most Recently Sampled	Most Recent Concentration (mg/L)	Mann-Kendall Statistic (S)	Mann-Kendall Tau (τ)	Mann-Kendall p-value	Coefficient of Variation (CV)	Trend Indicated	Trend Type	Criteria Met (>=4 points)	Cleanup Level (mg/L)	Cleanup Level Exeedance
PT1SB01	DRO	7	1	24-Sep-25	0.01	-9	-0.429	0.115	1.19	No	No Trend	Yes	1.5	No
PT1SB04	DRO	6	1	24-Sep-25	0.0	-5	-0.333	0.226	0.55	No	No Trend	Yes	1.5	No
PT1SB09	DRO	7	0	24-Sep-25	2.09	-3	-0.143	0.382	0.45	No	No Trend	Yes	1.5	Yes

PT1SB01

Mann-Kendall Test

Monitoring Well	Analyte	# Sample Events Evaluated (n)	# of Non-Detects	Date Most Recently Sampled	Most Recent Conc. (mg/L)	M-K (S)	M-K τ	MK-p	CV	Trend	Trend Type
PT1SB01	**DRO (mg/L)**	7	1	24-Sep-25	0.01	-9	-0.429	0.115	1.19	No	No Trend

Event	Date	Result	Data Flag	M-K Conc
1	10/6/2011	1.96		1.96
2	10/11/2012	2.3		2.30
3	7/10/2013	0.108		0.11
4	7/12/2014	0.123	J	0.12
5	7/14/2015	0.629		0.63
6	9/16/2020	0.309	B,J,QN	0.31
7	9/24/2025	0.01	U	0.10

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-1	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-1	-1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-1	-1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-1	-1	1	1	-1	-	-	-	-	-	-	-	-	-	-	-	-	-
-1	-1	-1	-1	-1	-1	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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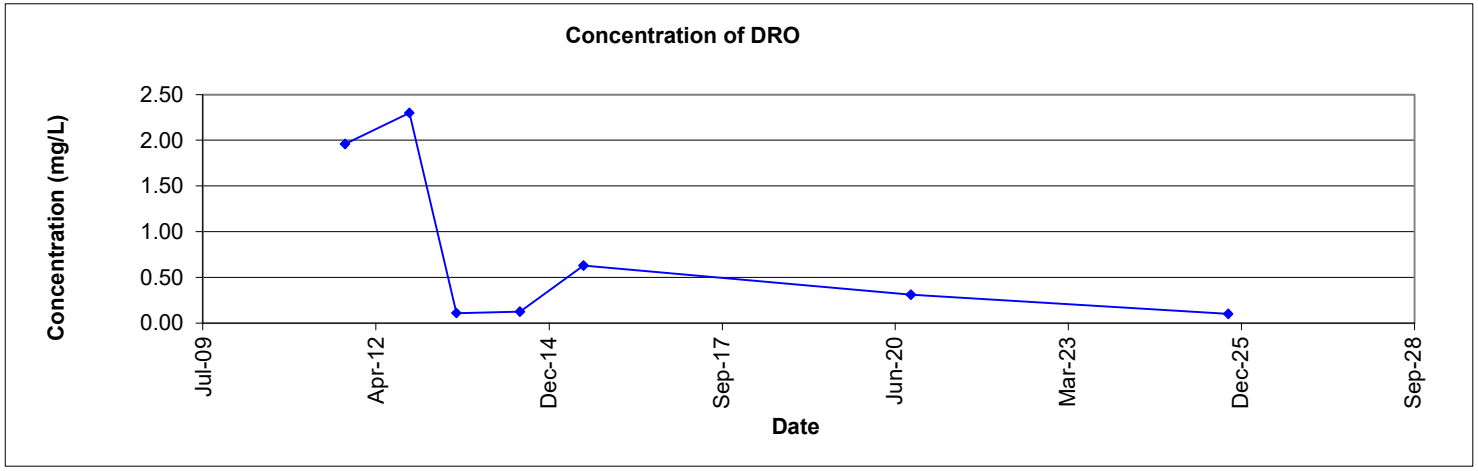
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-4	-5	2	1	-2	-1	0	0	0	0	0	0	0	0	0	0	0	0

Mann-Kendall Statistic (S) = Total	**-9.0000**	**N**	**7.0000**
Mann-Kendall Tau (τ)	**-0.4286**	**alpha (significance v**	**0.0500**
Mann-Kendall p-value	**0.114778**	**Variance of S**	**44.3333**
Coefficient of Variance (CV)	**1.1891**	**Z-stat**	**-1.2015**

Trend	**No**



PT1SB04

Mann-Kendall Test

Monitoring Well	Analyte	# Sample Events Evaluated (n)	# of Non-Detects	Date Most Recently Sampled	Most Recent Conc. (mg/L)	M-K (S)	M-K τ	MK-p	CV	Trend	Trend Type
PT1SB04	**DRO (mg/L)**	6	1	24-Sep-25	0	-5	-0.333	0.226	0.55	No	No Trend

Event	Date	Result	Data Flag	M-K Conc
1	10/11/2012	0.36		0.36
2	7/10/2013	0.264		0.26
3	7/12/2014	0.115	J	0.12
4	7/14/2015	0.175		0.18
5	9/16/2020	0.414	J	0.41
6	9/24/2025	0.01	U	0.10
7				

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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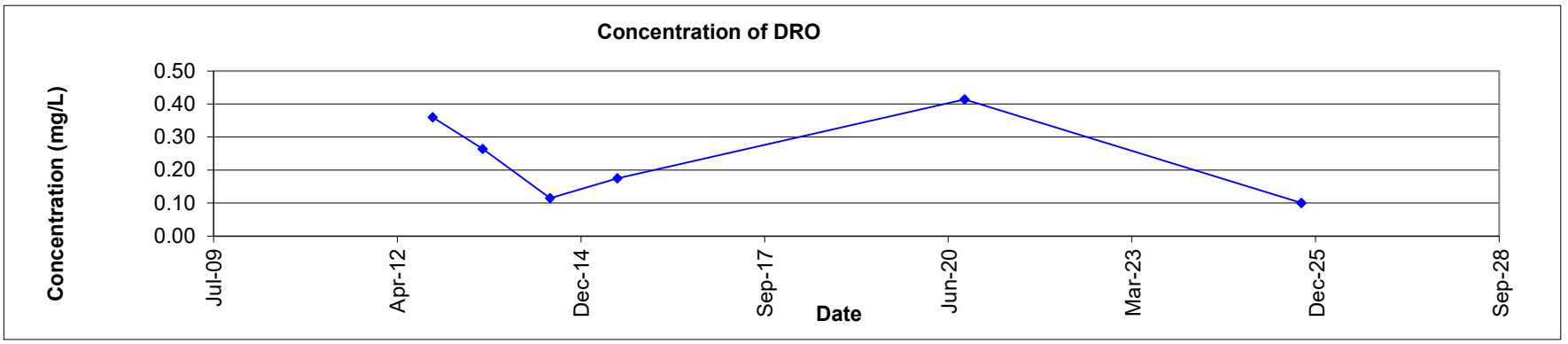
-3	-2	1	0	-1	0	0	0	0	0	0	0	0	0	0	0	0	0

Mann-Kendall Statistic (S) = Total	**-5.0000**	**N**	**7.0000**
Mann-Kendall Tau (τ)	**-0.3333**	**alpha (significance v**	**0.0500**
Mann-Kendall p-value	**0.226185**	**Variance of S**	**28.3333**
Coefficient of Variance (CV)	**0.5468**	**Z-stat**	**-0.7515**

Trend	**No**



PT1SB09

Mann-Kendall Test

Monitoring Well	Analyte	# Sample Events Evaluated (n)	# of Non-Detects	Date Most Recently Sampled	Most Recent Conc. (mg/L)	M-K (S)	M-K τ	MK-p	CV	Trend	Trend Type
PT1SB09	**DRO (mg/L)**	7	0	24-Sep-25	2.09	-3	-0.143	0.382	0.45	No	No Trend

Event	Date	Result	Data Flag	M-K Conc
1	10/6/2011	3.69		3.69
2	10/11/2012	3.3		3.30
3	7/10/2013	1.36		1.36
4	7/12/2014	1.1	J	1.10
5	7/14/2015	1.72		1.72
6	9/16/2020	3.46		3.46
7	9/24/2025	2.09		2.09

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
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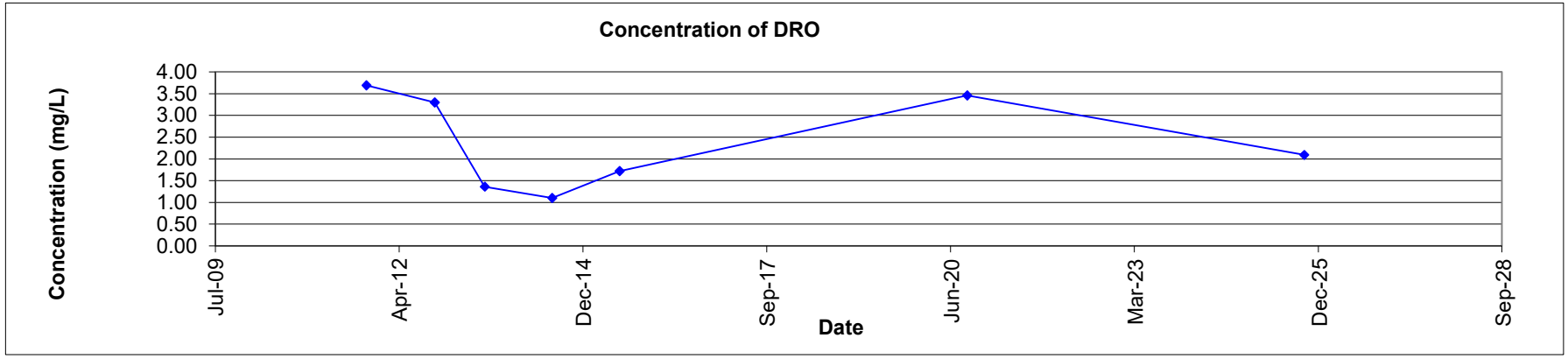
-6	-3	2	3	2	-1	0	0	0	0	0	0	0	0	0	0	0	0

Mann-Kendall Statistic (S) = Total	**-3.0000**	**N**	**7.0000**
Mann-Kendall Tau (τ)	**-0.1429**	**alpha (significance v**	**0.0500**
Mann-Kendall p-value	**0.381945**	**Variance of S**	**44.3333**
Coefficient of Variance (CV)	**0.4498**	**Z-stat**	**-0.3004**

Trend	**No**



APPENDIX F
RESPONSE TO COMMENTS

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Document: Report Long-Term Management Kalakaket Creek Radio Relay Station Sites LF002 and OT001 (Brice 2026)
File No.: 860.38.008

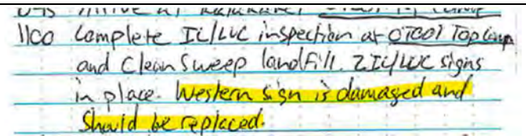
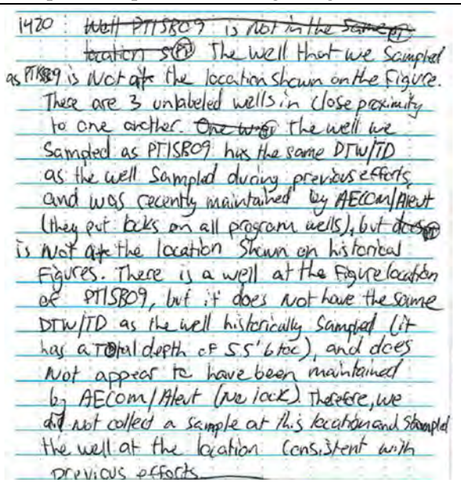
Comment No.	Page/ Section	ADEC Comment/Recommendation: 3/23/2026	USAF Response: 3/27/2026 ADEC Response: 5/13/2026
1.	General Comment	DEC notes that this document should be identified as a draft instead of a draft final, as it is the first version that was submitted for regulatory review. The FY24-26 Joint Execution Plan (JEP) that was agreed upon by DEC and USAF identifies that a draft, draft final, and final will be submitted for Kalakaket's Long-Term Monitoring Report. Please revise the title of this document for consistency with the JEP.	Comment noted. The current ORC is scoped for draft-final and final versions only. However, the FY25 ORC includes draft, draft-final, and final versions, consistent with the JEP. In the future, ORC documents will be provided to DEC as draft versions. **5/13/2026: ADEC accepts.**
2.	ES	*[…] however, they were erroneously included in the Work Plan (USAF 2025) and inspected during the field event.* *It is recommended that future IC/LUC inspections at OT001 are limited to subarea PT1, and the subareas recommended for site closure (AWH, DS2, DS3, RDC, WPH, and the Upper Camp Area) are not inspected.* Clarification: The AWH, DS3, RDC, and WPH subareas have received cleanup complete determinations, whereas DS2 and the Clean Sweep Landfill at the Upper Camp Area remain active in DEC's database. DEC concurs that the subareas that have been closed as cleanup complete do not require further inspections; however, the active subareas may require additional actions or inspections. Moreover, LUC signs are installed at the Clean Sweep Landfill and DEC requests that this landfill be included in future inspections.	Clarification. The 2009 Kalakaket Clean Sweep Report titled *Building Demolition, Debris Removal, Landfill Construction and Environmental Remediation* states "The recommendation for the Drum Storage Area 2 is Site Closure" (p.118). ADEC approved the report in a letter on May 13, 2010 (AR #63916). The same report states (p. 99) that the closure of the landfill conforms to the requirements identified in 18 AAC 60.390. The landfill permit required the USAF to perform annual inspections of the landfill for five years. Inspections of the landfill were performed annually from 2011-2015; therefore, the permit requirement has been met. **5/13/2026, ADEC:** Clarification – ADEC's approval of the above-referenced report does not supersede regulatory requirements for site closure. DS2 and the Clean Sweep landfill remain active on DEC's contaminated sites database and additional action is required before the sites can be considered for closure. Notably, ADEC's Solid Waste Program has not received all requested closure documents as required by the permit, and site closure cannot be considered until all requirements have been met. Per ADEC's phone call with the USAF project manager on 5/13/2026, USAF internally transferred responsibility for the Clean Sweep Landfill from AFCEC to the 611th. The USAF project manager intends to facilitate communication between the appropriate ADEC and USAF parties for further clarification in an effort to move the landfill towards closure. **Comment Closed.**
3.	1.3 5.1 5.2	• *The Five-Year Review also concluded that the protectiveness of the remedy for LF002 could not be determined until after the completion of the landfill cap inspection.* *In 2025, fieldwork was conducted under separate contract. The scope of the project included landfill assessments, […]* Clarification: At the time of this review, DEC has not yet reviewed or approved the *Technical Memorandum, Landfill Assessments at LF002 and Limited Sampling at OT001, Kalakaket Creek Radio Relay Station, Kalakaket Creek, Alaska.* DEC will evaluate the findings and resulting recommendations for LF2 and OT001 under separate cover.	Comment noted. **5/13/2026: ADEC accepts.**

Comment No.	Page/ Section	ADEC Comment/Recommendation: 3/23/2026	USAF Response: 3/27/2026 ADEC Response: 5/13/2026
4.	1.4	ADEC approved the onsite disposal of PCB-contaminated soil with concentrations greater than 1 mg/kg and less than 10 mg/kg and **OT001 was closed with ICs** (USAF 2010b). Clarification needed: It is unclear which site this is referring to. As DEC has noted in its comments on both Five-Year Reviews, multiple OT001 sites remain active in DEC's database, and none of the Kalakaket Creek RRS sites are identified as cleanup complete with ICs. The following three OT001 sites are listed as active in DEC's database, including the landfill where the above-referenced PCB-contaminated soil was disposed of: • Hazard ID 4674: Kalakaket Creek RRS - Drum Storage Area 2 [OT001] • Hazard ID 4669: Kalakaket Creek RRS - POL Tank 1 [OT001] • Hazard ID 25560: Kalakaket Creek RRS Class III Municipal Solid Waste Landfill [OT001] Please revise the text for accuracy.	Concur. The text will be revised to read: *"ADEC approved the onsite disposal of PCB-contaminated soil with concentrations greater than 1 mg/kg and less than 10 mg/kg ~~and OT001 was closed with ICs~~. In 2010, Site OT001 achieved a Remedy in Place/Remediation Complete designation under CERCLA from ADEC (USAF 2010b). The AWH, DS3, RDC, WPH, Antenna Fuel System, Equipment Building, and Vehicle Maintenance Garage are listed as Cleanup Complete in the ADEC database."* **5/13/2026:** Per ADEC's phone call with the USAF project manager on 5/13/2026, the highlighted language will be revised for accuracy pending verification of the presented information. **Comment closed.**
5.	1.4	*Record the deed restriction for Site OT001: **proposed for implementation in 2025**. The USAF will file a Notice of Activity and Use Limitation in accordance with Alaska Statute 46.04.340.* Clarification needed: DEC has not received a draft of the Notice of Activity and Use Limitation (NAUL) for OT001 to date. Please provide a timeline for submission of the NAUL.	Clarification. USAF is waiting to submit the Kalakaket OT001 NAUL until the ESD for the site is finalized so that the NAUL reflects the most up-to-date information. The ESD has undergone an initial ADEC review and we are in the process of working with our contractor and legal to respond to ADEC comments. **5/13/2026: ADEC accepts.**
6.	2.3 6.0	*The field team used a Global Positioning System (GPS) unit and field map to navigate to the location of monitoring wells PT1SB05 and PT1SB15, as shown on recent report figures (USAF 2023; **2024**), but neither well could be located.* The above sentence cites a 2024 USAF report; however, this report is not included in the reference section. Please ensure that the correct year is listed above and a citation for the document is included in Section 6.0.	Concur. Section 6.0 will be updated to include the following reference: USAF. 2024. *Technical Memorandum, Final Work Plan, Landfill Assessments at LF002 (4676 & 4677) and Limited Sampling at OT001 (4674), Kalakaket Creek Radio Relay Station, Alaska.* July. **5/13/2026: ADEC accepts.**

Comment No.	Page/ Section	ADEC Comment/Recommendation: 3/23/2026	USAF Response: 3/27/2026 ADEC Response: 5/13/2026
7.	2.3 Figure 3	*Wells PT1SB05 and PT1SB15 were not found. The field team used a Global Positioning System (GPS) unit and field map to navigate to the location of monitoring wells PT1SB05 and PT1SB15, as shown on recent report figures (USAF 2023; 2024), but neither well could be located.* PT1SB05 is depicted in the wrong location in Figure 3 based on the updated survey information presented in Appendix E of the *2020 Remedial Action Operations, Institutional Control/Land Use Control Report*. The updated well location was not shown in the 2020 report figures or subsequent documents. Additionally, the locations for PT1SB01, -04, and -09 shown in Figure 3 correspond to the re-surveyed locations, whereas PT1SB05 and -15 are depicted in the old survey locations. PT1SB15 was not located or re-surveyed in 2020; however, based on the original layout of the monitoring well network at PT1 shown in older figures, PT1SB15 should be located north/northeast of PT1SB09. It is likely that the incorrect locations were being searched for PT1SB05 and -15. It also seems possible that the unknown well observed near PT1SB09 was PT1SB05. Furthermore, the *Draft Technical Memorandum Landfill Assessments at LF002 and Limited Sampling at OT001* indicates that PT1SB05 and -15 were located and repaired during the 2025 field efforts preceding the work documented in this report. DEC recommends using figures and coordinates from the finalized technical memorandum to inform future field work.	Concur. During the fieldwork and following data review a discrepancy was observed between survey data for the wells and the actual location of the wells. Monitoring well locations were based on georeferenced locations from the 2020 RA-O IC/LUC Report (USAF 2021), Second Five-Year Review (USAF 2023), and the 2024 Technical Memorandum Work Plan (USAF 2024) figures; however, these locations differ from the 2007 and 2013 locations. Therefore, a review of survey data from 2007, 2013, and 2020 was conducted to determine the location of wells onsite and identify the cause of the discrepancy. • In 2007, 10 monitoring wells were installed at PT1. Following installation, the well locations were surveyed by a professional land surveyor (USAF 2009a). Of the 10 wells installed only five wells, which are the wells included in the current LTM program, have historically produced enough water for sampling. During the evaluation of the 2007 survey data relative to the subsequent survey data, it appears that the 2007 well locations are incorrectly offset by about 100 feet southwest of the actual locations. • In 2013, the locations of monitoring wells PT1SB01, PT1SB04, PT1SB05, PT1SB09, and PT1SB15 were recorded using a handheld GPS unit (USAF 2014). • In 2020, the sampling event was performed to coincide with the Second Five-Year Review. During the event, the monitoring well locations were recorded using a Trimble Geo 7 (USAF 2023). Wells PT1SB01, PT1SB04, and PT1SB09 were located and included on the figure. Monitoring well PT1SB05 was located; however, the well was not presented on the figure. Monitoring well PT1SB15 was not located. Based on a review of the data and the 2025 field observations, the 2007 and 2013 locations for PT1SB01, PT1SB04, and PT1SB09 appear to be offset to the southwest of the actual well locations. The 2020 data for these three wells was consistent with the well locations observed by Brice in 2025. Therefore, the location of these wells were used as known fixed locations and the locations of monitoring wells PT1SB05 and PT1SB15 were translated based on this. Additionally, in 2025, three unlabeled wells were observed near PT1SB09, one of which was destroyed and found lying on the ground (Appendix C, Photograph 45). If the 2007 and 2013 well locations are offset to the northeast to align with the confirmed locations of PT1SB01, PT1SB04, and PT1SB09, monitoring wells PT1SB05 and PT1SB15 plot in the general area of the unknown wells observed in 2025 (see attached figure). While Brice was onsite in September 2025, Brice observed that PT1SB09 had been recently maintained and locked with the same locks used by the contractor that completed the well repairs under the *Draft Technical Memorandum Landfill Assessments at LF002 and Limited Sampling at OT001*. Due to offset survey data, monitoring wells PT1SB05 and PT1SB15 may not have actually received the repairs, but rather PTISB09. Section 5.2.2 of the report includes a recommendation to confirm well locations and resurvey and label the wells using a permanent method during the next sampling event. **5/13/2026: ADEC accepts.**
8.	Table 2	Loose outer casings were noted for several monitoring wells, and all casing lids could be removed with locks in place. Please provide a timeline for conducting maintenance and repairs on Kalakaket wells.	Clarification. Well repairs (trimming PVC casing, cap and lock replacement) were performed under separate contract and are discussed in the *Draft Technical Memorandum Landfill Assessments at LF002 and Limited Sampling at OT001*. Additional repairs may be made under the FY25 ORC. Timeline and scope will be addressed in the Work Plan under that contract. **5/13/2026: ADEC accepts.**

Comment No.	Page/ Section	ADEC Comment/Recommendation: 3/23/2026	USAF Response: 3/27/2026 ADEC Response: 5/13/2026
9.	3.0 Appendix D	*Affected results are qualified as estimated and flagged QL to indicate a possible low bias. Usability is not affected as the qualified results are either less than the cleanup level, or greater than the cleanup level.* Clarification: Section 3.0 and the Chemical Data Quality Report and Lab Data Review Checklists (LDRC) in Appendix D repeatedly state that usability of results with low or unknown bias is not impacted because concentrations are below the cleanup level. This is not valid reasoning; the usability of results with low or unknown bias near the cleanup level is affected, as there is reasonable concern that the true concentration may be at or above the cleanup level. Please review and reconsider the usability of data with low or unknown bias that are less than, but near the cleanup level, and review and revise all statements that assert that usability of results with low or unknown bias is not impacted because concentrations are below the cleanup level.	Concur with clarification. In Section 3.0 of the CDQR the text is simplified in the comments, as well as in the Checklist. The default evaluation for impacts to usability is detected results or LODs that fall within ±35% of the PSL (65-135%) (used in AK SEDD Checker). Outside that range, impacts to usability have been deemed minimal. Review of the qualified data for Kalakaket Creek found the following: • Non-detect LODs for 1,2-Dibromoethane (EDB) in samples LF1SB07, PT1SB01 and PT1SB09, and naphthalene in samples LF1SB07 and PT1SB01 by SW8260D were within the ±35% of the PSL and were qualified as estimated with a low bias due to the required sampling method. However, these analytes are historically non-detect in these wells; therefore, usability is not impacted. All detected results that were qualified were reported at concentrations less than 65% of the PSL; usability is also not impacted. Clarification to the checklists and CDQR section 3.0 subsections will be added to indicate this level of review and findings. Additionally, the following sections in the LDRC sections will be revised: • 6.b.v-vii • 6.c.vii • 6.d.iv • 6.e.iv **5/13/2026: ADEC accepts.**
10.	5.1.1	***IC/LUCs were functioning as intended****; however, exposed debris observed at the site indicates that erosion of the cap is occurring and* ***the remedy is not functioning as intended.*** The above sentence is contradictory and multiple sections throughout the report simply state that the landfill cap is eroding but the IC/LUCs are functioning as intended. The IC/LUCs are part of the remedy, and the purpose of the landfill cap is to limit exposure to landfill contents and subsurface soils. Erosion of the cap indicates that this is not functioning as intended. Please revise the statements throughout the report to align with observed site conditions.	Concur. The text in the executive summary and Section 5.1.1 will be revised to read: *"Buried vehicles and other metal debris was observed exposed at the eastern edge of the site,~~- IC/LUCs were functioning as intended; however, exposed debris observed at the site indicates~~ indicating that erosion of the cap is occurring and the remedy is not functioning as intended."* **5/13/2026: ADEC accepts.**

Comment No.	Page/ Section	ADEC Comment/Recommendation: 3/23/2026	USAF Response: 3/27/2026 ADEC Response: 5/13/2026
11.	5.1.1	*Past use does not appear to be impacting groundwater at the site. It is recommended that groundwater monitoring be discontinued at LF1.* In response to Comment No. 1 on the *2020 Remedial Action Operations, Institutional Control/Land Use Control Report*, USAF agreed to use a submersible pump for the final rounds of groundwater sampling. At least one more round of sampling should be completed using an appropriate method for sampling of volatiles.	Comment noted. The monitoring wells at PT1 and LF1 are 1-inch wells constructed with a thick-walled PVC, and the inner diameter is less than 1-inch .The 2020 comment response agreed to submersible pumps; however, in the Second Five Year Review the recommendation was made to use hydrasleeves due well construction and low recharge of the aquifer. A submersible pump will not fit in the wells and is not an appropriate sampling method at this site. The submersible pump designed to sample 1-inch wells is the Storm 50, which has a diameter of 0.9-inches, and is too large. Historically, multiple sampling methods appropriate for the collection of VOCs (e.g., hydrasleeve, bladder pump, dipping tubing and plugging end) have been attempted at the site and have been unsuccessful due to the well construction and low recharge. For the 2025 sampling event a custom hydrasleeve with a <1-inch diameter was designed to address the previous limitations (i.e., well construction and low recharge); however, the hydrasleeve was still unable to fit in the well and a smaller size could not be created. Since 2011, there have been seven rounds of groundwater monitoring and no analyte has exceeded ADEC cleanup levels, with the exception of one RRO exceedance in 2020 where the FD was less than the cleanup level. Based on the multiple methods used to collect both groundwater data and address the limited recharge at the site the results indicate that groundwater, when present, at the site is not being impacted by past use. **5/13/2026: ADEC accepts and approves discontinuation of groundwater monitoring at LF1.**
12.	5.1.1	*It is recommended that IC/LUC inspections continue every 5 years, and the landfill cap is recommended for repair by covering, grading, and reseeding areas where exposed debris has been observed.* DEC concurs with the recommendation to conduct inspections every five years. Please provide a timeline for conducting the recommended repairs.	Clarification. The condition of the landfill was assessed under separate contract and included a geophysical survey and assessment of exposed debris. Results and recommendations are to be presented in the *Technical Memorandum, Landfill Assessments at LF002 and Limited Sampling at OT001, Kalakaket Creek Radio Relay Station, Kalakaket Creek, Alaska*. **5/13/2026: ADEC accepts.**
13.	5.1.2	*It is recommended that IC/LUC inspections continue every 5 years, and the landfill cap is recommended for repair […]. It is also recommended that the field team inspecting the site bring equipment to perform vegetative clearing if an immediate area for landing/access is not available […]* DEC concurs with the recommendations presented in Section 5.1.2. See also Comment No. 3.	Comment noted. **5/13/2026: ADEC accepts.**
14.	5.2.2	*It is recommended that IC/LUC inspections and groundwater monitoring continue every 5 years. It is also recommended that wells currently in the monitoring program (PT1SB01, PT1SB04, PT1SB05, PT1SB09, PT1SB15) and historical wells, if located, be surveyed and labelled using a permanent method (e.g., affixed metal labels).* DEC concurs. See also Comment No. 7.	Comment noted. **5/13/2026: ADEC accepts.**
15.	6.0	*USAF. 2026. Technical Memorandum, Landfill Assessments at LF002 and Limited Sampling at OT001, Kalakaket **Creed** Radio Relay Station, Kalakaket Creek, Alaska.* At the time of this review, this document has not been reviewed or approved by DEC. Please indicate that it is a draft document and correct the spelling error in the document title.	Concur. The reference will be revised to indicate the document is a draft and to correct the typo. **5/13/2026: ADEC accepts.**

Comment No.	Page/ Section	ADEC Comment/Recommendation: 3/23/2026	USAF Response: 3/27/2026 ADEC Response: 5/13/2026
16.	Figures 2 & 3	The Landfill LUC subarea boundaries do not align with the landfill extents depicted in the figures. While DEC understands that the depicted landfill extents are based on updated survey information, it does not make sense that the LUC boundaries do not encompass the landfills. Instead, they should also be updated based on the new survey information. See also Comment No. 21.	Concur. The LUC subarea boundaries in Figures 2 and 3 are defined by the *Land Use Control Management Plan Pacific Air Forces Regional Support Center Remote Installations* (USAF 2023) and the landfill extents are based on data from the 2020 IC/LUC inspection report and Second Five Year Review. A discrepancy has been observed with the historical survey data. Survey data from the 2025 work under separate contract has not been finalized and is not available. Figures 2 and 3 will be revised to reflect what is in the LUCMP. **5/13/2026, ADEC:** ADEC accepts the use of the boundaries depicted in the LUCMP for this report. LUC and landfill boundaries may be addressed further as part of the *Technical Memorandum, Landfill Assessments at LF002 and Limited Sampling at OT001, Kalakaket Creek Radio Relay Station, Kalakaket Creek, Alaska* review. Additionally, the ADEC and USAF project managers discussed a plan to verify installation, landfill, and LUC boundaries and create an accurate site figure, which may extend beyond the cover of the Long-Term Monitoring and Landfill Assessment reports. **Comment closed.**
17.	Figure 3	Please indicate groundwater flow direction in Figure 3.	Concur. The groundwater flow direction will be added to Figure 3. **5/13/2026: ADEC accepts.**
18.	Field Notes PDF pg. 47	 1100 complete IC/LUC inspection at OT001 Topcamp and Clean Sweep landfill. 2 IC/LUC signs in place. Western sign is damaged and should be replaced. The field notes indicate that the western sign at the Clean Sweep Landfill was damaged and requires repair. This is a notable observation that should be documented in the body of the report, including a recommendation to repair or replace the damaged sign.	Concur. A description of the damaged sign and a recommendation to replace it will be added to Sections 2.1.2.1 and 5.2.1. **5/13/2026: ADEC accepts.**
19.	Field Notes PDF pg. 47 Photo Log Photos 43 & 44	 1420 ~~Well PT1SB09 is not in the same~~ location ~~as~~ The well that we sampled as PT1SB09 is not at the location shown on the Figure. There are 3 unlabeled wells in close proximity to one another. ~~One~~ two of the well we sampled as PT1SB09 has the same DTW/TD as the well sampled during previous efforts and was recently maintained by AECOM/Alert (they put locks on all program wells), but does is not at the location shown on historical Figures. There is a well at the Figure location of PT1SB09, but it does not have the same DTW/TD as the well historically sampled (it has a Total depth of 5.5' btoc), and does not appear to have been maintained by AECOM/Alert (no lock). Therefore, we did not collect a sample at this location and sampled the well at the location consistent with previous efforts. The field notes and photo log document that an unknown well was observed near PT1SB09. This is a notable observation that should be documented in the body of the report. Additionally, please indicate the approximate location of the unknown well in Figure 3. See also Comment No. 7.	Concur. The following text will be added to Section 2.4: *"Groundwater samples were planned for five monitoring wells at OT001, but wells PT1SB05 and PT1SB15 could not be located. In 2025, three unlabeled wells were observed near PT1SB09, one of which was destroyed and found lying on the ground (Appendix C, Photograph 45). Discrepancies have been observed between the 2007, 2013, and 2020 survey data for the monitoring wells at PT1 and the actual locations of the wells. Based on the historical survey data, the unknown wells may be PT1SB05 and PT1SB15.* Additionally, to best address the observed discrepancies the following recommendation has been made in Section 5.2.2: *"It is also recommended that wells currently in the monitoring program (PT1SB01, PT1SB04, PT1SB05, PT1SB09, PT1SB15) and historical wells, if located, be surveyed and labelled using a permanent method (e.g., affixed metal labels). Prior to mobilization current and historical data should be reviewed and cross-referenced to best determine existing locations."* Please see also response to comment 7. **5/13/2026: ADEC accepts.**

Comment No.	Page/ Section	ADEC Comment/Recommendation: 3/23/2026	USAF Response: 3/27/2026 ADEC Response: 5/13/2026
20.	Appendix B Inspection Checklist LF002 LF1	There appears to be an inconsistency between the inspection checklist for LF1 and the body of the report. The checklist indicates that there was no evidence of surface erosion on the disposal area or exterior berms but the associated comments and body of report indicate that parts of buried vehicles and possible drums were observed. Please review and revise for consistency to indicate that surface erosion was observed.	Concur. The inspection checklist will be revised to check "Yes" for "Evidence of surface erosion on disposal area walls or exterior berms". **5/13/2026: ADEC accepts.**
21.	Photolog Photo 23	Please provide a figure showing the map depicted on the LUC signs. Do the LUC boundaries depicted on the signs fully encompass LF1 and LF2? Photo 23 appears to show LUC boundaries that do not encompass the full extents of LF1 and LF2. See also Comment No. 16.	Comment noted. The IC/LUC signs were installed under separate contract. Discussion of replaced signage and installation is presented in the *Technical Memorandum, Landfill Assessments at LF002 and Limited Sampling at OT001, Kalakaket Creek Radio Relay Station, Kalakaket Creek, Alaska*. **5/13/2026: ADEC accepts.**
22.	Photo Log Photo 45	Photo 45 in the photo log shows a destroyed monitoring well that was observed in subarea PT1. This is a notable observation that should be documented in the body of the report. Additionally, please indicate the approximate location of the destroyed well in Figure 3.	Concur. The approximate location of the destroyed well will be added to Figure 3. Please see also response to comment 19. **5/13/2026: ADEC accepts.**
23.	Appendix D LDRC L1902397 6.b.iv-vi	**Lab Report No.: L1902397** the RPD reported from LCS/LCSD, and or sample/sample duplicate? (AK Petroleum methods 20%; all other analyses see the laboratory QC pages) Yes ☐ No ☒ N/A ☐ Comments: The LCS/LCSD RPD for naphthalene (23.1%) was greater than the 20% UCL. v. If %R or RPD is outside of acceptable limits, what samples are affected? Comments: None vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined? Yes ☐ No ☒ N/A ☐ Comments: All associated sample results are non-detect for 1,2,4-Trichlorobenzene and Hexachloro-1,3-butadiene. Naphthalene was detected in samples 25OT001-PT1SB09 and 25OT001-PT1SB049; results for naphthalene were flagged QN in these samples. Non-detect samples were not qualified. Please review and revise the responses to questions 6.b.iv-vi on LDRC L1902397 for consistency and correctness.	Concur. Clarifications will be added to those sections. Please see also response to comment 9. **5/13/2026: ADEC accepts.**
24.	Appendix D CoC L1892109	DEC noted the following while reviewing the chain of custody for sample data group L1892109: • The cooler ID was not listed in Section 4 of the chain of custody (CoC). • Lab receipt signature is either missing or completed in the wrong box. For future projects, please ensure that all CoCs are completed fully and correctly.	Comment noted. Cooler ID was missed. COC ID was used in lieu of cooler ID as there was only one cooler associated with this SDG. The signature was completed in the appropriate order, even if not in the box specifically reserved for the laboratory after multiple custody handoffs. For future projects, additional QC will be performed to ensure that CoCs are completed fully and correctly. **5/13/2026: ADEC accepts.**
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