

Mr. Pete Campbell
ADEC – Contaminated Sites
43335 Kalifornsky Beach, Suite 11
Soldotna, AK 99669

Date: March 11, 2024
Our Ref: ARC11033
Subject: ART Biennial Monitoring Report
Former TBE Machine Shop Property
49200 (Mile 22.5) Kenai Spur Highway
Nikiski, Alaska

Arcadis U.S., Inc.
175 Regency Woods
Place
Suite 400
Cary
North Carolina 27518
www.arcadis.com

Dear Mr. Campbell,

This letter report has been prepared on behalf of the General Electric Company (GE) to document the seventh monitoring event (and first biennial groundwater monitoring) conducted in August 2023 at the former TBE Machine Shop Property located at 49200 Kenai Spur Highway (milepost 22.5) in Nikiski, Alaska (Site; **Figure 1**). Groundwater monitoring had previously been conducted annually since 2016, when the accelerated remediation technologies (ART) in-well treatment system at the Site was shut down. Biennial sampling was approved following completion of the 2021 annual sampling event via a letter dated April 6, 2022 from the Alaska Department of Environmental Conservation (ADEC, Pete Campbell) to GE (Bob Witsell). The August 2023 monitoring was performed in accordance with the ADEC- approved ART Third Annual Monitoring Report, Revision No. 1 (Arcadis U.S., Inc. [Arcadis] 2019). Pursuant to 18 Alaska Administrative Code 75.335, the work described in this letter report was conducted under the supervision of a Qualified Person. The report is organized to provide a summary of activities in the following sections:

- Annual Groundwater Monitoring
- Investigation-Derived Waste (IDW) Management
- Data Quality Assurance (QA)/Quality Control (QC) Summary
- Recommendations
- Summary

Biennial Groundwater Monitoring

Biennial groundwater monitoring was conducted on August 1, 2023, and included measuring the static water level and collecting samples at all 11 monitoring wells (**Figure 1**). Static water level measurements were recorded at each monitoring well before sampling. Water levels are summarized in **Table 1**. Samples were collected from the wells following purging using low-flow techniques. Samples were submitted for laboratory analysis for volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) SW-846 Method 8260D, gasoline-range organics (GROs) by ADEC Method AK101, and diesel-range organics (DROs) by ADEC Methods AK102 and AK103. Water quality field parameters were also measured during sample collection (dissolved oxygen, oxidation-reduction potential, pH, specific conductivity, temperature, and turbidity). A summary of 2023 detected groundwater data is provided in **Table 2**. A summary of all detected groundwater data collected since baseline

sampling began in 2014, conducted shortly before ART system startup, is provided in **Table 3**. Laboratory analytical results are provided in **Attachment 1**. The Laboratory Data Review Checklist is provided in **Attachment 2**.

Since 2014, VOC concentrations in samples collected from monitoring wells MW-3, MW-6, and MW-8 through MW-11 have been below groundwater cleanup levels, including samples collected in 2023. Eight VOCs have historically been detected in one or more of the remaining monitoring wells (MW-1, MW-2, MW-4, MW-5, and MW-7) at concentrations above groundwater cleanup levels: 1,2,4-trimethylbenzene, cis-1,2-dichloroethene (cis-1,2-DCE), ethylbenzene, naphthalene, tetrachloroethene (PCE), trichloroethene (TCE), vinyl chloride, and total xylenes. Of these VOCs, only four were detected at concentrations above cleanup levels in samples collected in 2023:

- cis-1,2-DCE in monitoring well MW-1 and MW-2
- Ethylbenzene in monitoring well MW-2
- TCE in monitoring wells MW-1 and MW-4
- Total xylenes in monitoring well MW-2.

The current groundwater data are generally consistent with historical groundwater concentrations for VOCs in monitoring wells MW-1, MW-2, and MW-4. Monitoring wells MW-5 and MW-7 had no VOC detections in 2023. Constituent concentrations at most wells remain below or within one order of magnitude of the groundwater cleanup levels.

Monitoring well MW-1 exhibited concentrations above cleanup levels for cis-1,2-DCE and TCE. Concentrations of cis-1,2-DCE were approximately an order of magnitude below those observed in 2021. TCE concentrations observed in monitoring well MW-1 decreased between 2016 and 2023, which is consistent with anaerobic reductive dechlorination. TCE concentrations continue to decrease and remain slightly above the groundwater cleanup level.

Monitoring well MW-2 exhibited concentrations above cleanup levels for cis-1,2-DCE, Ethylbenzene, and xylenes. Cis-1,2-DCE was last detected in 2020 and last above the cleanup level in 2018. Prior to 2023, ethylbenzene was last above the cleanup criteria in MW-2 in 2019 while total xylenes were last above the cleanup level at MW-2 in 2016.

The TCE concentration level observed in monitoring well MW-4 is consistent with historical observations. GRO and DRO concentrations at all wells remained below the cleanup levels.

Concentrations of most constituents of concern (COCs) have generally decreased over time or remained at low concentrations. A combination of physical and biological/chemical mechanisms are likely responsible for the overall improvement in water quality. While conditions have generally improved, a limited number of constituents remain above standards, primarily in wells MW-1 and MW-2. Conditions in MW-1 and MW-2 vary over time but there is still an overall decreasing trend in COC concentrations since ART operation was stopped.

IDW Management

Groundwater from well purging was treated onsite by pumping through a carbon-filled drum. Treated groundwater was discharged to the ground per prior approval from ADEC.

Data QA/QC Summary

As required by ADEC (Technical Memorandum 06-002, dated August 20, 2009), Arcadis completed a laboratory data review checklist for the Eurofins laboratory report generated as part of the monitoring activities. The laboratory report is included as **Attachment 1** and the data review checklist is included as **Attachment 2**. The following QA summary describes parameters related to the quality and usability of the data presented in this letter report.

Sample Handling

Samples collected in 2023 were shipped overnight via FedEx to Eurofins in Seattle, Washington to perform the requested analyses using the methods specified in the chain-of-custody records.

Sample receipt forms for each work order were reviewed to verify that samples were received in good condition and within the acceptable temperature range. All samples were received within the acceptable temperature range upon arrival at the laboratory.

Sensitivity

Laboratory method blanks were analyzed in association with samples collected in 2023 to check for contributions to the analytical results possibly attributable to laboratory-based contamination. Two trip blanks were submitted with groundwater samples for VOC and/or GRO analysis to verify that cross-contamination did not occur during sample handling and transport. There were no method blank or trip blank detections affecting data quality for the reporting period. An equipment rinsate blank was submitted for DRO, GRO, and VOC analysis to verify that proper equipment decontamination procedures were performed.

Precision

Field duplicate samples were collected at a frequency of approximately 10 percent of the overall number of samples collected during the August sampling event. The data meet precision objectives for field duplicate and matrix spike (MS)/matrix spike duplicate (MSD) relative percent differences.

Accuracy

Accuracy is evaluated using percent recoveries for laboratory control samples (LCSs), including LCS duplicate, MS, and MSD samples. The LCS and/or LCS duplicate percent recoveries were outside the laboratory upper control limit for at least one analyte for the August 2023 groundwater sampling event. In addition, the MS and/or MSD percent recoveries were outside laboratory control limits for at least one analyte for the August 2023 groundwater sampling event at well MW-3-W-2023801). These results required data qualifiers as noted in Attachment 2. Data were qualified as outlined in Attachment 2 due to these deviations; however, the data qualifications did not impact data usability. The original analysis on August 1, 2023, is reported on **Table 2**.

Completeness

The sampling results appear to be valid and usable and meet the ADEC completeness goal.

A review of the laboratory data package indicates that the collected samples are considered to be representative of site conditions at the locations and times they were obtained. No samples were rejected as unusable due to quality control failures.

Recommendations

No clear evidence of significant rebound was observed during the 2023 post-ART system shutdown monitoring period. Based on the limited changes in groundwater quality observed over the last eight years post-ART shutdown, GE proposes to continue with a biennial (every other year) sampling schedule to monitor long-term groundwater quality trends at the Site.

Samples will be collected from monitoring wells MW-1 through MW-11 during each biennial event. Sampling will be performed in late summer/early fall, which is historically the time of year in which higher constituent concentrations are observed in groundwater. Wells will be sampled for VOCs, DROs, and GROs. Field parameters to be collected include dissolved oxygen, oxidation-reduction potential, pH, specific conductivity, temperature, and turbidity. No collection of ferrous iron or heterotrophic plate count data is proposed.

Mr. Pete Campbell
ADEC – Contaminated Sites
March 11, 2024

The ART system wells did not reduce concentrations of constituents to below cleanup levels over the course of their operation. While the ART system operation may have provided some benefit, it is unclear what the contribution of the ART system was to the overall improvement in groundwater concentrations of PCE and TCE. The formation of cis-1,2-DCE is indicative of anaerobic degradation of PCE and TCE, something that would not be expected to be enhanced but rather hindered by the ART system. Conditions appear to vary from aerobic to anaerobic across the Site based on field parameters collected during monitoring. The ongoing attenuation of contaminants is likely a combination of abiotic mechanisms, aerobic biodegradation and anaerobic degradation with the importance of these attenuation mechanisms varying over time and by location on the Site.

Summary

Routine groundwater monitoring has been conducted onsite since the shutdown of the ART system in June 2016. Results have generally remained consistent with historical data. While some erratic trends are observed in monitoring well MW-1, this well is located in the center of the Site and surrounded by other wells with stable or decreasing data trends. Based on the limited changes that have been observed over the 8-year post-system shut down period, GE recommends continuing with a biennial sampling schedule every other year, with the next sampling event proposed for summer/fall 2025. If you have any questions or concerns, please feel free to call me at 919-415-2308 or Mr. Bob Witsell of GE at 706-291-3319.

Sincerely,
Arcadis G&M of North Carolina, Inc.

Matthew Pelton

Matthew Pelton
Project Manager

Email: Matthew.Pelton@arcadis.com
Direct Line: 919-415-2308

CC. Bob Witsell (GE)
 Rebecca Andresen (Arcadis)

Enclosures:

Tables

- 1 Monitoring Well Construction Information and Groundwater Elevations
- 2 2023 Groundwater Analytical Results – Detected Analytes
- 3 Historical Groundwater Analytical Results – Detected Analytes

Figure

- 1 Site Plan

Mr. Pete Campbell
ADEC – Contaminated Sites
March 11, 2024

Attachments

- Attachment 1 Laboratory Report
- Attachment 2 Laboratory Data Review Checklist

Tables

Table 1
Monitoring Well Construction Information and Groundwater Elevations
ART First Biennial Monitoring Report
Former TBE Machine Shop Property
Nikiski, Alaska



Location ID	Ground Surface Elevation (ft amsl)	Top of Casing Elevation (ft amsl)	August 1, 2023	
			Depth to Water (ft btoc)	GW Elevation (ft amsl)
MW-1	127.46	130.16	42.45	87.71
MW-2	127.72	130.61	41.10	89.51
MW-3	128.44	131.42	41.88	89.54
MW-4	128.45	131.33	41.75	89.58
MW-5	127.93	131.07	41.50	89.57
MW-6	127.68	130.82	41.28	89.54
MW-7	128.44	131.75	42.19	89.56
MW-8	128.65	131.33	41.75	89.58
MW-9	129.07	131.89	42.29	89.60
MW-10	126.67	129.3	39.10	90.20
MW-11	125.3	128.3	38.70	89.60

Notes:

1. Top of casing elevations are from the 2011 land survey reported by URS Corporation in the 2011 Groundwater Characterization Report.
2. Survey coordinates provided in Alaska State Plane Zone 4, North American Datum of 1927.

Acronyms and Abbreviations:

ART = accelerated remediation technologies

ft amsl - feet above mean sea level

ft btoc - feet below top of casing

GW = groundwater

ID = identification

Reference:

URS Corporation.2011. Groundwater Characterization Report.

Table 2
Summary of 2023 Detected Groundwater Sample Analytical Results
ART First Biennial Monitoring Report
Former TBE Machine Shop Property
Nikiski, Alaska

Location ID: Date Collected: Sample Name:	GW Human Health Cleanup Level 2023	Units	MW-1 8/1/2023 MW-1-W-20230801	MW-2 8/1/2023 MW-2-W-20230801	MW-3 8/1/2023 MW-3-W-20230801	MW-4 8/1/2023 MW-4-W-20230801	MW-5 8/1/2023 MW-5-W-20230801	MW-6 8/1/2023 MW-6-W-20230801	MW-7 8/1/2023 MW-7-W-20230801	MW-8 8/1/2023 MW-8-W-20230801	MW-9 8/1/2023 MW-9-W-20230801	MW-10 8/1/2023 MW-10-W-20230801	MW-11 8/1/2023 MW-11-W-20230801
Detected Volatile Organics													
1,1,1-Trichloroethane	8000	µg/L	1	1 U	1	1.4	1 U [1 U]	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	28	µg/L	2.7	3.8	2.8 J	1 U	1 U [1 U]	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-Trimethylbenzene	56	µg/L	3 U	38	3 U	3 U	6.4 [6.3]	3 U	3 U	3 U	3 U	3 U	3 U
1,2-Dichlorobenzene	300	µg/L	1 U	1.7	1 U	1 U	1 U [1 U]	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethene (cis) (DCE)	36	µg/L	50	46	2.7 J	1 U	10 [10]	1 U	1 U	1 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene	60	µg/L	1 U	14	1 U	1 U	3.1 [3]	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	4.8	µg/L	1 U	1 U	1 U	1 U	2 [1.9]	1 U	1 U	1 U	1 U	1 U	1 U
2-Phenylbutane	2000	µg/L	1 U	2.3	1 U	1 U	1 U [1 U]	1 U	1 U	1 U	1 U	1 U	1 U
Cymene	--	µg/L	1 U	1.8	1 U	1 U	1.1 [1]	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	15	µg/L	1 U	240	1 U	1 U	14 [13]	1 U	1 U	1 U	1 U	1 U	1 U
Isopropylbenzene (Cumene)	450	µg/L	1 U	3.1	1 U	1 U	1 U [1 U]	1 U	1 U	1 U	1 U	1 U	1 U
m-Xylene & p-Xylene	190	µg/L	2 U	280	2 U	2 U	22 [22]	2 U	2 U	2 U	2 U	2 U	2 U
N-Propylbenzene	660	µg/L	1 U	3.3	1 U	1 U	1 U [1 U]	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene (PCE)	41	µg/L	19	1 U	1.7	10	1 U [1 U]	1 U	6.2	1 U	1 U	1 U	1 U
Toluene	1100	µg/L	1 U	2.1	1 UJ	1 U	1 U [1 U]	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene (TCE)	2.8	µg/L	8.4	1 U	1 U	3.2	1 U [1 U]	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes (o)	190	µg/L	1 U	80	1 U	1 U	1.1 [1.1]	1 U	1 U	1 U	1 U	1 U	1 U
Detected GROs													
GRO-C6-C10	2.2	mg/L	0.1	1.6	0.08 U	0.08 U	0.34 [0.34]	0.08 U	0.08 U				
Detected Field Parameters													
Dissolved oxygen	--	mg/L	1.06	0	0	3.66	0.88	0.25	1.71	4.94	2.22	2.41	0.79
Oxidation-reduction potential	--	mV	112	-31	144	221	13	2.08	229	238	244	236	233
pH	--	SU	6.02	6.34	5.52	5.69	6.12	5.58	6.08	6	5.95	5.85	5.6
Specific conductivity	--	mS/cm	0.241	0.626	0.233	0.103	0.302	0.183	0.181	0.136	0.144	0.109	0.182
Temperature	--	°C	8.85	8.35	7.97	9.8	7.99	7.68	9.17	8.59	10.06	8.33	8.91
Turbidity	--	NTU	0	1.9	4.6	14.5	57.4	20.9	13.3	16.5	47.7	1000	11

Notes:

1. Groundwater cleanup levels are the Alaska Department of Environmental Conservation's Groundwater Cleanup Levels (Article 3 - 18 AAC 75.345), revised April 2023.

2. Duplicate sample concentrations are presented in brackets.

3. Exceedances are bolded and shaded.

Acronyms and Abbreviations:

µg/L = microgram per liter

-- = no cleanup level available

ID = identification

mg/L = milligram per liter

GRO = Gasoline Range Organics

mg/L = milligram per liter

mS/cm = millisiemen per centimeter

mV = millivolt

NTU = nephelometric turbidity unit

SU = standard unit

Data Qualifications:

U = Not detected.

Table 3
Summary of Historical Groundwater Sample Analytical Results
ART Seventh Annual Monitoring Report
Former TBE Machine Shop Property
Nikiski, Alaska

Location ID: Date Collected: Sample Name:	GW Human Health Cleanup Level 2023	Units	MW-1 6/10/2014	MW-1 9/9/2014	MW-1 12/5/2014	MW-1 3/2/2015	MW-1 5/27/2015	MW-1 9/9/2015	MW-1 12/2/2015	MW-1 3/15/2016	MW-1 6/7/2016	MW-1 9/13/2016	MW-1 3/2/2017	MW-1 9/5/2017	MW-1 3/21/2018	MW-1 8/1/2019	MW-1 9/16/2020	MW-1 8/24/2021	MW-1 8/1/2023
			Baseline	ART System Operating										Post-ART Shutdown					
Detected Volatile Organics																			
1,1,1-Trichloroethane	8000	µg/L	7.5 [7.5]	5.2 [5.4]	4.1 [4.5]	4.5 [4.2]	3.8	4.2	3 U	5	3 U [3 U]	3.5	3.1	300 U	3.9	3 U	R	2	1
1,1-Dichloroethane	28	µg/L	3.3 [3.5]	6.2 [6.3]	5 [4.3]	4.6 [4.4]	8.1	7.3	2 U	4.8	2.7 [2]	7.8	7.4	13	6.9	4.8	4.7 J	5.2	2.7
1,1-Dichloroethene	280	µg/L	1 U [1 U]	1 U * [1 U]	1 U * [1 U]	2 U [2 U]	2 U ^	2 U	2 U	1 U	2 U [2 U]	2 U	2 U	4 U	4 U	R	1.2	1 U	
1,2,4-Trimethylbenzene	56	µg/L	1 U [1 U]	1 U * [1 U]	1 U [1 U]	3 U [3 U]	9.2	29	3 U	2.6	3 U [3 U]	57	38	90	3.7	3 U	R	120	3 U
1,2-Dichlorobenzene	300	µg/L	1 U [1 U]	1 U * [1 U]	1 U [1 U]	2 U [2 U]	2 U	2 U	2 U	1 U	2 U [2 U]	2.1	2 U	2.7	2 U	R	3.3	1 U	
1,2-Dichloroethene (cis)	36	µg/L	5.3 [5.6]	17 [17]	22 [18]	27 [25]	56	57	1 U	56	35 [30]	130	140	420	180	100	110 J	330 J	50
1,2-Dichloroethene (trans)	360	µg/L	1 U [1 U]	1 U [1 U]	1 U [1 U]	1 U [1 U]	1 U	1 U	1 U	1 U	3 U [3 U]	3 U *	3 U	3 U	3 U	R	1	1 U	
1,3,5-Trimethylbenzene	60	µg/L	1 U [1 U]	1 U * [1 U]	1 U * [1 U]	3 U [3 U]	3 U	9.5	3 U	1 U	3 U [3 U]	21	11	31	3 U	R	42	1 U	
1,4-Dichlorobenzene	4.8	µg/L	1 U [1 U]	1 U * [1 U]	1 U [1 U]	2 U [2 U]	2 U	2 U	2 U	1 U	4 U [4 U]	4 U	4 U	4 U	4 U	R	1 U	1 U	
Cymene	--	µg/L	1 U [1 U]	1 U * [1 U]	1 U [1 U]	3 U [3 U]	3 U	3 U	3 U	1 U	3 U [3 U]	3.4	3 U	4.9	3 U	R	5.2	1 U	
Ethylbenzene	15	µg/L	1 U [1 U]	1 U * [1 U]	1 U [1 U]	3 U [3 U]	26	140 H	3 U	14	8.6 [7.1]	360	230	540	15	3 U	R	860 J	1 U
Isopropylbenzene	450	µg/L	1 U [1 U]	1 U * [1 U]	1 U [1 U]	2 U [2 U]	4.3	3.9	2 U	1.2	2 U [2 U]	6.4	3.7	7.5	2 U	R	7.7	1 U	
Naphthalene	1.7	µg/L	3 U [3 U]	3 U * [3 U]	3 U [3 U]	2 U [2 U]	2 U *	2 U	2 U	1 U	2 U [2 U]	3.8	2 U	4.8	4 U	R	150 U	3 U	
n-Butylbenzene	1000	µg/L	2 U [2 U]	2 U * [2 U]	2 U [2 U]	3 U [3 U]	3 U	3 U	3 U	1 U	3 U [3 U]	8	3 U	11	3 U	R	1 U	1 U	
n-Propylbenzene	660	µg/L	1 U [1 U]	1 U * [1 U]	1 U [1 U]	3 U [3 U]	3 U	3 U	3 U	1 U	3 U [3 U]	6.4	3.4	8.7	3 U	R	9.7	1 U	
sec-Butylbenzene	2000	µg/L	1 U [1 U]	1 U * [1 U]	1 U [1 U]	3 U [3 U]	3 U	3 U	3 U	1 U	3 U [3 U]	3.3	3 U	3 U	3 U	R	4.2	1 U	
Styrene	1200	µg/L	5 U [5 U]	5 U * [5 U]	5 U [5 U]	5 U [5 U]	5 U	5 U	5 U	1 U	5 U [5 U]	5 U	5 U	5 U	5 U	R	1 U	1 U	
tert-Butylbenzene	690	µg/L	1 U [1 U]	1 U * [1 U]	1 U [1 U]	3 U [3 U]	3 U	3 U	3 U	1 U	3 U [3 U]	3 U	3 U	3 U	3 U	R	2 U	2 U	
Tetrachloroethene (PCE)	41	µg/L	34 [31]	38 * [41]	58 [57]	59 [51]	71	59	3 U	56	22 [21]	58	50	51	40	30	24 J	36	19
Toluene	1100	µg/L	1 U [1 U]	1 U * [1 U]	1 U [1 U]	2 U [2 U]	2 U	8.1	2 U	1 U	2 U [2 U]	25	9.7	34	2 U	R	36	1 U	
Trichloroethene (TCE)	2.8	µg/L	18 [18]	19 [21]	20 [19]	21 [21]	26	27	3 U *	21	9.8 [9.2]	32	22	33	19	14	12 J	13	8.4
Vinyl chloride	0.19	µg/L	1 U [1 U]	1 U [1 U]	1 U [1 U]	1 U [1 U]	1 U	1 U	1 U	1 U	1 U [1 U]	1 U	1 U	1 U	1 U	R	50 U	1 U	
Xylene, (m- & p-)	190	µg/L	2 U [2 U]	2 U * [2 U]	2 U [2 U]	3 U [3 U]	12	160 H	3 U	13	10 [8.9]	530	270	810	20	3 U	R	1300 J	2 U
Xylene, (o-)	190	µg/L	1 U [1 U]	1 U * [1 U]	1 U * [1 U]	2 U [2 U]	19	72	2 U	6.6	3.5 [2.9]	170	120	260	9.8	2 U	R	400 J	1 U
Xylenes (total)	190	µg/L	2 U [2 U]	2 U [2 U]	2 U [2 U]	3 U [3 U]	31	232	3 U	19.6	13.5 [11.8]	700	390	1070	29.8	3 U	R	1700 J	2 U
Detected Miscellaneous																			
Ferrous Iron	--	mg/L	2.8	0.1	0.4	0.6	3.6	3.3	3.1	3	2.4	--	--	--	--	--	--	--	
Heterotrophic Plate Count	--	CFU/mL	210 H cn	--	--	--	3100 H	--	--	760 H	--	--	--	--	--	--	--	--	
Detected GROs																			
(GRO)-C6-C10	2.2	mg/L	0.05 U [0.05 U]	0.05 U [0.05 U]	--	--	0.18	--	--	--	0.066 [0.05 U]	--	1.2	3.6	1 U	0.25 U	R	5	0.1
Detected DROs																			
(DRO) (C10-C25)	1.5	mg/L	0.38 U [0.39 U]	0.66 Y [0.78 Y]	--	--	0.94 Y	--	--	--	0.48 [0.36]	--	1.2	3.5	0.92 *	0.99	0.72 J	2.1	0.48 *
Detected Field Parameters																			
Dissolved oxygen	--	mg/L	0.65	1.09	1.13	0.91	0.96	0.85	0.68	0.38	0.62	3.37	2.03	0.38	1.87	0.21	0	0	1.06
DTW	--	ft-btoc	--	--	--	--	--	--	--	--	--	--	--	43.4	--	--	--	--	42.56
Oxidation-reduction potential	--	mV	247.9	143.7	161.7	173.9	113.9	51	-194.7	100.4	9.15	23.2	54.6	-29.2	80.6	130	105	5	112
pH	--	SU	3.77	5.63	5.78	5.66	5.9	6	6.11	6	6.42	6.29	--	6.25	5.99	5.98	5.67	5.94	6.02
Specific conductivity	--	mS/cm	0.205	0.231	0.172	0.177	0.229	0.248	0.378	0.311	0.283	0.386	0.463	0.5	0.223	0.431	0.285	0.534	0.241

Table 3
Summary of Historical Groundwater Sample Analytical Results
ART Seventh Annual Monitoring Report
Former TBE Machine Shop Property
Nikiski, Alaska

Location ID: Date Collected: Sample Name:	GW Human Health Cleanup Level 2023	Units	MW-2 6/10/2014	MW-2 9/9/2014	MW-2 12/5/2014	MW-2 3/2/2015	MW-2 5/27/2015	MW-2 9/9/2015	MW-2 12/2/2015	MW-2 3/15/2016	MW-2 6/8/2016 MW-2-W-060816	MW-2 9/13/2016 MW-2-W-091316	MW-2 3/1/2017 MW-2	MW-2 9/6/2017 MW-2-W-090617	MW-2 3/21/2018 MW-2	MW-2 8/1/2019 MW-2-W-190801	MW-2 9/16/2020 MW-2-W-200916	MW-2 8/23/2021 MW-2-W-20210823	MW-2 8/1/2023 MW-2-W-20230801	
			Baseline	ART System Operating												Post-ART Shutdown				
Detected Volatile Organics																				
1,1,1-Trichloroethane	8000	µg/L	1.5	1.6	2	3 U	3 U	3 U [3 U]	20 U	3 U	3 U [3 U]	3 U	3 U F1 *	3 U	3 U	R	1 U	1 U		
1,1-Dichloroethane	28	µg/L	7.1	6.5	6.1	4.9	4.7	4.4	5.1 [4.9]	20 U	6.2	4.8 [4.8]	5.5	3.9	7	4.6	3.9 J	1 U	3.8	
1,1-Dichloroethene	280	µg/L	1 U	1 U	1 U *	2 U	2 U ^	2 U [2 U]	20 U	2 U	2 U [2 U]	2 U	4 U	4 U	4 U	R	1 U	1 U		
1,2,4-Trimethylbenzene	56	µg/L	9.3	39 *	96	84	14	7.1	3 U [3 U]	88	19	3 [3]	22	3 U	17	4.1	R	3 U	38	
1,2-Dichlorobenzene	300	µg/L	1.3	2.8 *	5.6	5.8	2.2	2 U	2 U [2 U]	20 U	2 U	2 U [2 U]	2 U	2 U	2 U	R	1 U	1.7		
1,2-Dichloroethene (cis)	36	µg/L	84	110	150	170	78	52	25 [25]	430	160	61 [62]	110	30	72	34	27 J	1 U	46	
1,2-Dichloroethene (trans)	360	µg/L	1 U	1 U	1 U	1 U	1 U	1 U [1 U]	20 U	3 U	3 U * [3 U *]	3 U	3 U F1	3 U	3 U	R	1 U	1 U		
1,3,5-Trimethylbenzene	60	µg/L	1 U	7 *	20	24	3 U	3 U	3 U [3 U]	25	4.7	3 U [3 U]	6.7	3 U	5.6	3 U	R	1 U	14	
1,4-Dichlorobenzene	4.8	µg/L	1 U	1 U *	1 U	2	2 U	2 U	2 U [2 U]	20 U	4 U	4 U [4 U]	4 U	4 U	4 U	R	1 U	1 U		
Cymene	--	µg/L	1 U	1 U *	2.4	3.1	3 U	3 U	3 U [3 U]	20 U	3 U	3 U [3 U]	3 U	3 U	3 U	R	1 U	1.8		
Ethylbenzene	15	µg/L	10	92 *	350	420	18	6.2	3 U [3 U]	590	95	8.6 [9.1]	91	3 U	83	23	6.8 J	1 U	240	
Isopropylbenzene	450	µg/L	2.8	5.9 *	9.9	9.3	4.9	3.8	2 U [2 U]	20 U	2.4	2 U [2 U]	2.3	2 U	2 U	R	1 U	3.1		
Naphthalene	1.7	µg/L	3 U	3 *	6.6	6	2 U *	2 U	2 U [2 U]	20 U	2 U	2 U [2 U]	2 U	4 U	4 U	R	3 U	3 U		
n-Butylbenzene	1000	µg/L	2 U	3.7 *	2 U	3 U	3 U	3 U	3 U [3 U]	20 U	3 U	3 U [3 U]	3 U	3 U	3 U	R	1 U	1 U		
n-Propylbenzene	660	µg/L	1 U	2.1 *	7	6.7	3 U	3 U	3 U [3 U]	20 U	3 U	3 U [3 U]	3 U	3 U	3 U	R	1 U	3.3		
sec-Butylbenzene	2000	µg/L	1.1	1 U *	1 U	4.7	3 U	3 U	3 U [3 U]	20 U	3 U	3 U [3 U]	3 U	3 U	3 U	R	1 U	2.3		
Styrene	1200	µg/L	5 U	5 U *	5 U	5 U	5 U	5 U	5 U [5 U]	20 U	5 U	5 U [5 U]	5 U	5 U	5 U	30	R	1 U	1 U	
tert-Butylbenzene	690	µg/L	1 U	1 U *	1.1	3 U	3 U	3 U	3 U [3 U]	20 U	3 U	3 U [3 U]	3 U	3 U	3 U	R	2 U	2 U		
Tetrachloroethene (PCE)	41	µg/L	6.6	5.7 *	15	3 U	3 U	3 U	3 U [3 U]	20 U	3 U	3 U [3 U]	3 U	3 U	3 U	R	1 U	1 U		
Toluene	1100	µg/L	1 U	1 U *	11	9.3	2 U	2 U	2 U [2 U]	20 U	2	2 U [2 U]	2.3	2 U	2 U	R	1 U	2.1		
Trichloroethene (TCE)	2.8	µg/L	12	8.4	14	3 U	3 U	3 U	3 U [3 U]	20 U	3 U	3 U [3 U]	3 U	3 U	3 U	R	1 U	1 U		
Vinyl chloride	0.19	µg/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U [1 U]	20 U	1 U	1 U [1 U]	1 U	1 U	1 U	R	1 U	1 U		
Xylene, (m- & p-)	190	µg/L	3.6	36 *	230	310	3 U	4.2	3 U [3 U]	760	96	7.2 [7.6]	110	3 U	96	31	7.1 J	2 U	280	
Xylene, (o-)	190	µg/L	90	150 *	380	370	31	9.3	2 U [2 U]	410	70	5.6 [5.8]	65	2 U	30	14	2.2 J	1 U	80	
Xylenes (total)	190	µg/L	93.6	186	610	680	31	13.5	3 U [3 U]	1170	166	12.8 [13.4]	175	3 U	126	45	9.3 J	2 U	360	
Detected Miscellaneous																				
Ferrous Iron	--	mg/L	3.2	1.8	2.8	2	5.8	5.5	5.5	4.5	4.6	--	--	--	--	--	--	--		
Heterotrophic Plate Count	--	CFU/mL	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
Detected GROs																				
(GRO)-C6-C10	2.2	mg/L	0.3	0.56	--	--	0.18	--	--	--	0.58	--	0.65	1 U	1 U	0.25 U	R	0.25 U	1.6	
Detected DROs																				
(DRO) (C10-C25)	1.5	mg/L	1.3	0.8 Y	--	--	0.58 Y	--	--	--	0.53	--	0.47	0.89 F1	0.33 *	0.36	0.26 J	0.21	0.73 *-	
Detected Field Parameters																				
Dissolved oxygen	--	mg/L	3.31	0.63	0.99	0.58	1.69	0.74	0.54	0.54	0.88	4.82	1.15	0.73	0.95	0.1	0	8.7	0	
DTW	--	ft-btoc	--	--	--	--	--	--	--	--	--	43.84	--	--	--	--	--	41.2		
Oxidation-reduction potential	--	mV	30.3	4.4	73.8	74.3	87.2	-18.5	-125.6	15.2	29.6	52.6	61.9	-14.9	-58.2	-25	-50	40	-31	
pH	--	SU	6.43	6.25	6.31	6.19	6.13	6.14	6.02	6.23	7.13	6.07	--	6.04	6.02	6.16	6.16	5.87	6.34	
Specific conductivity	--	mS/cm	0.549	0.449	0.391	0.373	0.381	0.361	0.52	0.61	0.529	0.475	0.628	0.484	0.293	0.601	0.507	0.384	0.626	
Temperature	--	°C	5.88	8.81	4.58	4.65	6.27	6.2												

Table 3
Summary of Historical Groundwater Sample Analytical Results
ART Seventh Annual Monitoring Report
Former TBE Machine Shop Property
Nikiski, Alaska

Location ID: Date Collected: Sample Name:	GW Human Health Cleanup Level 2023	Units	MW-3 6/10/2014	MW-3 5/27/2015	MW-3 6/8/2016	MW-3 3/2/2017	MW-3 3/21/2018	MW-3 8/1/2019	MW-3 9/16/2020	MW-3 8/24/2021	MW-3 8/1/2023	MW-4 6/10/2014	MW-4 9/9/2014	MW-4 12/5/2014	MW-4 3/2/2015	MW-4 5/27/2015	MW-4 9/8/2015	MW-4 12/2/2015	MW-4 3/15/2016	MW-4 6/7/2016	
			MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4		
Detected Volatile Organics																					
1,1,1-Trichloroethane	8000	µg/L	2.6	3 U	3 U	3 U [3 U]	3 U	3 U	R	1.2 [1.3]	1	2.9	5.7	3.4	3.2	3.9 [4]	3.8	4.1 H	4.8	3.6	3
1,1-Dichloroethane	28	µg/L	3.2	3.9	6.1	5.4 [5.6]	5.2	3.9	4.1 J	8.8 [8.6]	2.8 J	1 U	1 U	1 U	2 U	2 U [2 U]	2 U	2 U H	11	1 U	2 U
1,1-Dichloroethene	280	µg/L	1 U	2 U ^	2 U * F1	2 U [2 U]	4 U	4 U	R	1 U [1 U]	1 U	1 U	1 U *	2 U	2 U ^ [2 U ^]	2 U	2 U H	2 U	1 U	2 U	
1,2,4-Trimethylbenzene	56	µg/L	1 U	3 U	3 U	3 U [3 U]	3 U	3 U	R	3 U [3 U]	3 U	1 U	1 U *	1 U	3 U [3 U]	3 U	3 U H	24	1 U	3 U	
1,2-Dichlorobenzene	300	µg/L	1 U	2 U	2 U	2 U [2 U]	2 U	2 U	R	1 U [1 U]	1 U	1 U	1 U *	1 U	2 U	2 U [2 U]	2 U	2 U H	2 U	1 U	2 U
1,2-Dichloroethene (cis)	36	µg/L	2	3	4.6 F1	4.9 [4.5]	5.3	5.2	5.1 J	20 [19]	2.7 J	1 U	1 U	1 U	1 U	1 U [1 U]	1 U	1 U H	88	1 U	1 U
1,2-Dichloroethene (trans)	360	µg/L	1 U	1 U	3 U F1	3 U [3 U]	3 U	3 U	R	1 U [1 U]	1 U J	1 U	1 U	1 U	1 U	1 U [1 U]	1 U	1 U H	1 U	1 U	3 U
1,3,5-Trimethylbenzene	60	µg/L	1 U	3 U	3 U	3 U [3 U]	3 U	3 U	R	1 U [1 U]	1 U	1 U	1 U *	1 U	3 U [3 U]	3 U	3 U H	6.7	1 U	3 U	
1,4-Dichlorobenzene	4.8	µg/L	1 U	2 U	4 U	4 U [4 U]	4 U	4 U	R	1 U [1 U]	1 U	1 U	1 U *	1 U	2 U	2 U [2 U]	2 U	2 U H	2 U	1 U	4 U
Cymene	--	µg/L	1 U	3 U	3 U *	3 U [3 U]	3 U	3 U	R	1 U [1 U]	1 U	1 U	1 U *	1 U	3 U	3 U [3 U]	3 U	3 U H	3 U	1 U	3 U
Ethylbenzene	15	µg/L	1 U	3 U	3 U	3 U [3 U]	3 U	3 U	R	1 U [1 U]	1 U	1 U	1 U	1 U	3 U	3 U [3 U]	3 U	3 U H	130	1 U	3 U
Isopropylbenzene	450	µg/L	1 U	2 U	2 U	2 U [2 U]	2 U	2 U	R	1 U [1 U]	1 U	1 U	1 U	1 U	2 U	2 U [2 U]	2 U	2 U H	3.6	1 U	2 U
Naphthalene	1.7	µg/L	3 U	2 U *	2 U	2 U [2 U]	4 U	4 U	R	3 U [3 U]	3 U	3 U	3 U *	3 U	2 U	2 U * [2 U *]	2 U	2 U H	2 U	1 U	2 U
n-Butylbenzene	1000	µg/L	2 U	3 U	3 U	3 U [3 U]	3 U	3 U	R	1 U [1 U]	1 U	2 U	2 U *	2 U	3 U	3 U [3 U]	3 U	3 U H	3 U	1 U	3 U
n-Propylbenzene	660	µg/L	1 U	3 U	3 U	3 U [3 U]	3 U	3 U	R	1 U [1 U]	1 U	1 U	1 U *	1 U	3 U	3 U [3 U]	3 U	3 U H	3 U	1 U	3 U
sec-Butylbenzene	2000	µg/L	1 U	3 U	3 U	3 U [3 U]	3 U	3 U	R	1 U [1 U]	1 U	1 U	1 U *	1 U	3 U	3 U [3 U]	3 U	3 U H	3 U	1 U	3 U
Styrene	1200	µg/L	5 U	5 U	5 U	5 U [5 U]	5 U	5 U	R	1 U [1 U]	1 U	5 U	5 U	5 U	5 U	5 U [5 U]	5 U	5 U H	5 U	1 U	5 U
tert-Butylbenzene	690	µg/L	1 U	3 U	3 U	3 U [3 U]	3 U	3 U	R	2 U [2 U]	2 U	1 U	1 U *	1 U	3 U	3 U [3 U]	3 U	3 U H	3 U	1 U	3 U
Tetrachloroethene (PCE)	41	µg/L	2.4	3 U	3 U	3 U [3 U]	3 U	3 U	R	2 [1.9]	1.7	11	14	14	13	16 [16]	14	15 H	52	14	14
Toluene	1100	µg/L	1 U	2 U	2 U	2 U [2 U]	2 U	2 U	R	1 U [1 U]	1 U J	1 U	1 U	1 U	2 U	2 U [2 U]	2 U	2 U H	8.2	1 U	2 U
Trichloroethene (TCE)	2.8	µg/L	1.2	3 U	3 U	3 U [3 U]	3 U	3 U	R	1.8 [1.8]	1 U	3.2	4.9	3.4	3.3	4.5 [4.3]	3.7	--	4.6 H	3.5	3.9
Vinyl chloride	0.19	µg/L	1 U	1 U	1 U F1	1 U [1 U]	1 U	1 U	R	1 U [1 U]	1 U	1 U	1 U	1 U	1 U	1 U [1 U]	1 U	--	1 U	1 U	1 U
Xylene, (m- & p-)	190	µg/L	2 U	3 U	3 U	3 U [3 U]	3 U	3 U	R	2 U [2 U]	2 U	2 U	2 U	2 U	3 U	3 U [3 U]	3 U	3 U H	130	1 U	3 U
Xylene, (o-)	190	µg/L	1 U	2 U	2 U	2 U [2 U]	2 U	2 U	R	1 U [1 U]	1 U	1 U	1 U *	2 U	2 U	2 U [2 U]	2 U	2 U H	76	1 U	2 U
Xylenes (total)	190	µg/L	2 U	3 U	3 U	3 U [3 U]	3 U	3 U	R	2 U [2 U]	2 U	2 U	2 U	2 U	3 U	3 U [3 U]	3 U	3 U H	206	1 U	3 U
Detected Miscellaneous																					
Ferrous Iron	--	mg/L	0.6	0.2	0.2	--	--	--	--	--	--	0.6	0	0	0	0.2	0.2	--	0	0	0
Heterotrophic Plate Count	--	CFU/mL	--	--	--	--	--	--	--	--	--	110 H cn	--	--	--	130 H	--	--	--	--	3700 H
Detected GROs																					
(GRO)-C6-C10	2.2	mg/L	0.05 U	0.05 U	0.05 U	0.05 U [0.05 U]	1 U	0.25 U	R	0.25 U [0.25 U]	0.08 U	0.05 U	0.05 U	--	--	0.05 U [0.05 U]	--	--	--	--	0.05 U
Detected DROs																					
(DRO) (C10-C25)	1.5	mg/L	0.39 U	0.37 Y	0.29	0.3 [0.28]	0.19 *	0.39	0.26 J	0.49 [0.61]	0.94 *- F1	0.38 U	0.23 Y	--	--	0.33 Y [0.37 Y]	--	--	--	--	0.57
Detected Field Parameters																					
Dissolved oxygen	--	mg/L	1.09	0.52	0.68	--	0.91	0	0	6.18	0	2.54	1.42	3.52	2.83	1.39	2.89	--	3.02	3.9	3
DTW	--	ft-btoc	--	--	--	--	--	--	--	42	--	--	--	--	--	--	--	--	--	--	
Oxidation-reduction potential	--	mV	184.9	150.9	-																

Table 3
Summary of Historical Groundwater Sample Analytical Results
ART Seventh Annual Monitoring Report
Former TBE Machine Shop Property
Nikiski, Alaska

Location ID: Date Collected: Sample Name:	GW Human Health Cleanup Level 2023	Units	MW-4 9/13/2016 MW-4-W-091316	MW-4 3/1/2017 MW-4	MW-4 9/5/2017 MW-4-W-090517	MW-4 3/20/2018 MW-4	MW-4 8/1/2019 MW-4-W-190801	MW-4 9/16/2020 MW-4-W-200916	MW-4 8/24/2021 MW-4-W-20210824	MW-4 8/1/2023 MW-4-W-20230801	MW-5 6/10/2014 MW-5	MW-5 9/9/2014 MW-5	MW-5 12/5/2014 MW-5	MW-5 3/2/2015 MW-5	MW-5 5/27/2015 MW-5	MW-5 9/9/2015 MW-5	MW-5 12/1/2015 MW-5	MW-5 3/15/2016 MW-5	MW-5 6/8/2016 MW-5-W-060816
Post-ART Shutdown																			
Baseline																			
ART System Operating																			
Detected Volatile Organics																			
1,1,1-Trichloroethane	8000	µg/L	3	3 U [3 U]	3.3 [3.4]	3.3	3 U [3 U]	R [R]	2.3	1.4	1.7	1 U	1 U *	3 U	3 U [3 U]	3 U [3 U]	5 U [5 U]	3 U [3 U]	
1,1-Dichloroethane	28	µg/L	2 U	2 U [2 U]	2 U [2 U]	2 U	2 U [2 U]	R [R]	1 U	1 U	1 U	1 U	1 U *	2 U	2 U [2 U]	2 U [2 U]	5 U [5 U]	2 U [2 U]	
1,1-Dichloroethene	280	µg/L	2 U	2 U [2 U]	4 U [4 U]	4 U	4 U [4 U]	R [R]	1 U	1 U	1.8	1 U	1 U *	2 U	2 U [2 U]	2 U [2 U]	5 U [5 U]	2 U [2 U]	
1,2,4-Trimethylbenzene	56	µg/L	3 U	3 U [3 U]	3 U [3 U]	3 U	3 U [3 U]	R [R]	3 U	3 U	6.7	28	35	32 F1	55	24 [22]	21 [24]	16 [16]	11 [12]
1,2-Dichlorobenzene	300	µg/L	2 U	2 U [2 U]	2 U [2 U]	2 U	2 U [2 U]	R [R]	1 U	1 U	2.7	2.3	2.3	2 U	3.4	2 [2 U]	2 U [2 U]	5 U [5 U]	2 U [2 U]
1,2-Dichloroethene (cis)	36	µg/L	1 U *	1 U [1 U]	1 U [1 U]	3 U	3 U [3 U]	R [R]	1 U	1 U	370	88	140	520 F1	520 H	430 H [440 H]	120 [120]	120 [120]	230 [240]
1,2-Dichloroethene (trans)	360	µg/L	3 U *	3 U [3 U]	3 U [3 U]	3 U	3 U [3 U]	R [R]	1 U	1 U	1 U	1 U	1 U	1 U	1 U [1 U]	1 U [1 U]	5 U [5 U]	3 U [3 U]	
1,3,5-Trimethylbenzene	60	µg/L	3 U	3 U [3 U]	3 U [3 U]	3 U	3 U [3 U]	R [R]	1 U	1 U	15	17	23	22 F1	29	18 [17]	15 [17]	13 [13]	9.4 [9.8]
1,4-Dichlorobenzene	4.8	µg/L	4 U	4 U [4 U]	4 U [4 U]	4 U	4 U [4 U]	R [R]	1 U	1 U	10	1 U	1 U	5 F1	6.6	7.5 [7]	5.2 [2 U]	5 U [5 U]	4 U [4 U]
Cymene	--	µg/L	3 U	3 U [3 U]	3 U [3 U]	3 U	3 U [3 U]	R [R]	1 U	1 U	1.5	1.7	3 U	3 U [3 U]	3 U [3 U]	5 U [5 U]	3 U [3 U]	3 U [3 U]	
Ethylbenzene	15	µg/L	3 U	3 U [3 U]	3 U [3 U]	3 U	3 U [3 U]	R [R]	1 U	1 U	200	230	280	180 F1	310 H	220 H [220 H]	250 [220]	150 [160]	170 [170]
Isopropylbenzene	450	µg/L	2 U	2 U [2 U]	2 U [2 U]	2 U	2 U [2 U]	R [R]	1 U	1 U	1.3	1.5	2 U	2 U	2 U [2 U]	2 U [2 U]	5 U [5 U]	2 U [2 U]	
Naphthalene	1.7	µg/L	2 U	2 U [2 U]	4 U [4 U]	4 U	4 U [4 U]	R [R]	3 U	3 U	3.1	4.2	3.4	2 U	5.8 H	2.4 [2.3]	2 [2.4]	5 U [5 U]	2 U [2 U]
n-Butylbenzene	1000	µg/L	3 U	3 U [3 U]	3 U [3 U]	3 U	3 U [3 U]	R [R]	1 U	1 U	2	10	2 U	3 U	3 U [3 U]	12 [11]	9.1 [9.8]	5 U [5 U]	8.3 [8.2]
n-Propylbenzene	660	µg/L	3 U	3 U [3 U]	3 U [3 U]	3 U	3 U [3 U]	R [R]	1 U	1 U	1.5	1.8	3 U	3 U	3 U [3 U]	3 U [3 U]	5 U [5 U]	3 U [3 U]	
sec-Butylbenzene	2000	µg/L	3 U	3 U [3 U]	3 U [3 U]	3 U	3 U [3 U]	R [R]	1 U	1 U	1 U	1 U	1 U	3 U	3 U [3 U]	3 U [3 U]	5 U [5 U]	3 U [3 U]	
Styrene	1200	µg/L	5 U	5 U [5 U]	5 U [5 U]	5 U	5 U [5 U]	R [R]	1 U	1 U	5 U	5 U	5 U	5 U	5 U [5 U]	5 U [5 U]	5 U [5 U]	5 U [5 U]	
tert-Butylbenzene	690	µg/L	3 U	3 U [3 U]	3 U [3 U]	3 U	3 U [3 U]	R [R]	2 U	2 U	1.2	1 U	1.1	3 U	3 U [3 U]	3 U [3 U]	5 U [5 U]	3 U [3 U]	
Tetrachloroethene (PCE)	41	µg/L	13	12 [12]	14 [12]	14	14 [14]	14 J [14 J]	15	10	98	59	50	3	3 U	3 U [3 U]	6.7 [6.4]	5 U [5 U]	3 U [3 U]
Toluene	1100	µg/L	2 U	2 U [2 U]	2 U [2 U]	2 U	2 U [2 U]	R [R]	1 U	1 U	4.2	5.6	1.5	2 U	7	3.5 [3.4]	2 U [2 U]	5 U [5 U]	2 U [2 U]
Trichloroethene (TCE)	2.8	µg/L	4.2	3.5 [3.6]	4.9 [4.5]	4.6	4.2 [4.4]	4.6 J [4.1 J]	5.1	3.2	20	23	16	3 U F1	3 U	3 U [3 U]	3.1 [3.2]	5 U [5 U]	3 U [3 U]
Vinyl chloride	0.19	µg/L	1 U	1 U [1 U]	1 U [1 U]	1 U	1 U [1 U]	R [R]	1 U	1 U	1 U	1 U	1 U	1 U	1 U [1 U]	1.7 [1.5]	5 U [5 U]	1 U [1 U]	
Xylene, (m- & p-)	190	µg/L	3 U	3 U [3 U]	3 U [3 U]	3 U	3 U [3 U]	R [R]	2 U	2 U	250	320	390	250 F1	330 H	310 H [310 H]	340 [310]	230 [240]	230 [230]
Xylene, (o-)	190	µg/L	2 U	2 U [2 U]	2 U [2 U]	2 U	2 U [2 U]	R [R]	1 U	1 U	160	120	99 F1	290 H	140 H [140 H]	120 [130]	82 [85]	86 [89]	
Xylenes (total)	190	µg/L	3 U	3 U [3 U]	3 U [3 U]	3 U	3 U [3 U]	R [R]	2 U	2 U	410	440	510	349	620	450 [450]	460 [440]	312 [325]	316 [319]
Detected Miscellaneous																			
Ferrous Iron	--	mg/L	--	--	--	--	--	--	--	--	2.2	4.2	2.4	2.2	4	4.2	5	3.8	3
Heterotrophic Plate Count	--	CFU/mL	--	--	--	--	--	--	--	790 H cn	--	--	--	130 H	--	--	--	--	620 H
Detected GROs																			
(GRO)-C6-C10	2.2	mg/L	--	0.05 U [0.05 U]	1 U [1 U]	1 U	0.25 U [0.25 U]	R [R]	0.25 U	0.08 U	1.7	1.8 B	1.4	1.3	2.9	2.1 [2]	1.6 [1.7]	1.2 [1.2]	1.2 [1.2]
Detected DROs																			
(DRO) (C10-C25)	1.5	mg/L	--	0.44 [0.5]	0.33 [0.34]	0.27 *	0.31 [0.37]	0.35 J [0.42 J]	0.45	0.44 *-	1.6	1.2 Y	1.1 Y	0.69 Y	1.2 Y	1.1 Y [1.2 Y]	0.87 [0.89]	1 [1.2]	0.92 [0.85]
Detected Field Parameters																			
Dissolved oxygen	--	mg/L	4.25	4.3	1.42	5.12	3.28	0.051	1.5	3.66	0.51	0.54	1.61	0.62	0.67	0.44	0.89	0.49	0.46
DTW	--	ft-btoc	--	--	44.56	--	--	--	41.84	--	--	--	--	--	--	--	--	--	--
Oxidation-reduction potential	--	mV	91.6	101.9	194.8	220.7	205	257	248	221	-95								

Table 3
Summary of Historical Groundwater Sample Analytical Results
ART Seventh Annual Monitoring Report
Former TBE Machine Shop Property
Nikiski, Alaska

Location ID: Date Collected: Sample Name:	GW Human Health Cleanup Level 2023	Units	MW-5 9/13/2016 MW-5-W-091316	MW-5 3/1/2017 MW-5	MW-5 9/6/2017 MW-5-W-090617	MW-5 3/21/2018 MW-5	MW-5 8/1/2019 MW-5-W-190801	MW-5 9/16/2020 MW-5-W-200916	MW-5 8/23/2021 MW-5-W-20210823	MW-5 8/1/2023 MW-5-W-20230801	MW-6 6/10/2014 MW-6	MW-6 5/27/2015 MW-6	MW-6 6/8/2016 MW-6-W-060816	MW-6 3/1/2017 MW-6	MW-6 3/21/2018 MW-6	MW-6 8/1/2019 MW-6-W-190801	MW-6 9/16/2020 MW-6-W-200916	MW-6 8/23/2021 MW-6-W-20210823	MW-6 8/1/2023 MW-6-W-20230801		
			Post-ART Shutdown								Baseline				ART System Operating				Post-ART Shutdown		
Detected Volatile Organics																					
1,1,1-Trichloroethane	8000	µg/L	3 U	3 U	3 U * [3 U *]	3 U [3 U]	3 U	R [R]	1 U	1 U [1 U]	1 U	3 U	3 U	3 U	3 U	3 U	3 U	R	1 U	1 U	
1,1-Dichloroethane	28	µg/L	2 U	2 U	200 U [200 U]	2 U [2 U]	2 U	R [R]	1 U	1 U [1 U]	1 U	2 U	2 U	2 U	2 U	2 U	2 U	R	1	1 U	
1,1-Dichloroethene	280	µg/L	2 U F1	2 U	4 U [4 U]	4 U [4 U]	4 U	R [R]	1 U	1 U [1 U]	1 U	2 U ^	2 U	2 U	4 U	4 U	4 U	R	1 U	1 U	
1,2,4-Trimethylbenzene	56	µg/L	20 F1	15	300 U [300 U]	32 [29]	19	20 J [18 J]	12	6.4 [6.3]	1 U	3 U	3 U	3 U	3 U	3 U	3 U	R	3 U	3 U	
1,2-Dichlorobenzene	300	µg/L	2 U	2 U	2 U [2 U]	2 U [2 U *]	2 U	R [R]	1 U	1 U [1 U]	1 U	2 U	2 U	2 U	2 U	2 U	2 U	R	1 U	1 U	
1,2-Dichloroethene (cis)	36	µg/L	500	290	220 [210]	150 [170]	46	50 J [37 J]	20	10 [10]	1 U	1 U [1 U]	1 U	1 U	1 U	3 U	3 U	R	1 U	1 U	
1,2-Dichloroethene (trans)	360	µg/L	3 U * F1	3 U	3 U [3 U]	3 U [3 U]	3 U	R [R]	1 U	1 U [1 U]	1 U	3 U	3 U	3 U	3 U	3 U	3 U	R	1 U	1 U	
1,3,5-Trimethylbenzene	60	µg/L	14 F1	12	300 U [300 U]	17 [17 *]	13	15 J [14 J]	8.7	3.1 [3]	1 U	3 U	3 U	3 U	3 U	3 U	3 U	R	1 U	1 U	
1,4-Dichlorobenzene	4.8	µg/L	4.2	4 U	400 U [400 U]	4.4 [4.5]	4 U	R [R]	1 U	2 [1.9]	1 U	2 U	4 U	4 U	4 U	4 U	4 U	R	1 U	1 U	
Cymene	--	µg/L	3 U	3 U	3 U [3 U]	3.4 [3.2 *]	3 U	3 J [R]	1.7	1.1 [1]	1 U	3 U	3 U	3 U	3 U	3 U	3 U	R	1 U	1 U	
Ethylbenzene	15	µg/L	240	180	300 U [300 U]	240 [270]	220	89 J [78 J]	1 U	14 [13]	1 U	3 U	3 U	3 U	3 U	3 U	3 U	R	1 U	1 U	
Isopropylbenzene	450	µg/L	2 U	2 U	2 U [2 U]	2 U [2 U]	2 U	R [R]	1 U	1 U [1 U]	1 U	2 U	2 U	2 U	2 U	2 U	2 U	R	1 U	1 U	
Naphthalene	1.7	µg/L	3.2	2 U	4 U [4 U]	4 U [4 U *]	4 U	R [R]	3 U	3 U [3 U]	3 U	2 U *	2 U	2 U	4 U	4 U	4 U	R	3 U	3 U	
n-Butylbenzene	1000	µg/L	10	3 U	300 U [300 U]	3 U [3 U]	3 U	R [R]	1 U	1 U [1 U]	2 U	3 U	3 U	3 U	3 U	3 U	3 U	R	1 U	1 U	
n-Propylbenzene	660	µg/L	3 U	3 U	3 U [3 U]	3 U [3 U *]	3 U	R [R]	1 U	1 U [1 U]	1 U	3 U	3 U	3 U	3 U	3 U	3 U	R	1 U	1 U	
sec-Butylbenzene	2000	µg/L	3 U	3 U	3 U [3 U]	3 U [3 U]	3 U	R [R]	1 U	1 U [1 U]	1 U	3 U	3 U	3 U	3 U	3 U	3 U	R	1 U	1 U	
Styrene	1200	µg/L	5 U	5 U	5 U [5 U]	5 U [5 U]	340	R [R]	1 U	1 U [1 U]	5 U	5 U	5 U	5 U	5 U	5 U	5 U	R	1 U	1 U	
tert-Butylbenzene	690	µg/L	3 U	3 U	3 U [3 U]	3 U [3 U *]	3 U	R [R]	2 U	2 U [2 U]	1 U	3 U	3 U	3 U	3 U	3 U	3 U	R	2 U	2 U	
Tetrachloroethene (PCE)	41	µg/L	3 U	3 U	3 U [3 U]	3 U [3 U]	3 U	R [R]	1 U	1 U [1 U]	1 U	3 U	3 U	3 U	3 U	3 U	3 U	R	1 U	1 U	
Toluene	1100	µg/L	3.1	2 U	200 U [200 U]	2 U [2 U *]	2 U	R [R]	1 U	1 U [1 U]	1 U	2 U	2 U	2 U	2 U	2 U	2 U	R	1 U	1 U	
Trichloroethene (TCE)	2.8	µg/L	3 U	3 U	3 U [3 U]	3 U [3 U]	3 U	R [R]	1 U	1 U [1 U]	1 U	3 U	3 U	3 U	3 U	3 U	3 U	R	1 U	1 U	
Vinyl chloride	0.19	µg/L	1 U	1 U	1 U [1 U]	1 U [1 U]	1 U	R [R]	1 U	1 U [1 U]	1 U	1 U	1 U	1 U	1 U	1 U	1 U	R	1 U	1 U	
Xylene, (m- & p-)	190	µg/L	330	240	310 [310]	350 [390]	340	130 J [110 J]	2 U	22 [22]	2 U	3 U	3 U	3 U	3 U	3 U	3 U	R	2 U	2 U	
Xylene, (o-)	190	µg/L	160	100	200 U [200 U]	84 [88]	12	4.5 J [3.6 J]	1 U	1.1 [1.1]	1 U	2 U	2 U	2 U	2 U	2 U	2 U	R	1 U	1 U	
Xylenes (total)	190	µg/L	490	340	310 [310]	434 [478]	352	134.5 J [113.6 J]	2 U	23.1 [23.1]	2 U	3 U	3 U	3 U	3 U	3 U	3 U	R	2 U	2 U	
Detected Miscellaneous																					
Ferrous Iron	--	mg/L	--	--	--	--	--	--	--	0.2	0.6	3.2	--	--	--	--	--	--	--	--	
Heterotrophic Plate Count	--	CFU/mL	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Detected GROs																					
(GRO)-C6-C10	2.2	mg/L	1.7	1.4	1.7 [1.7]	1.7 [1.7]	1.5	0.61 J [0.61 J]	0.61	0.34 [0.34]	0.05 U	0.05 U	0.05 U	0.05 U	1 U	0.25 U	R	0.25 U	0.08 U		
Detected DROs																					
(DRO) (C10-C25)	1.5	mg/L	1.3	0.96	1.4 [1.4]	0.65 * [0.35 *]	1.6	1.6 J [1.4 J]	1.5	0.33 *- [1 *-]	0.38 U	0.21 Y	0.15	0.2	0.13 U *	0.12	0.12 J	0.12	0.14 *-		
Detected Field Parameters																					
Dissolved oxygen	--	mg/L	5.81	1.31	0.71	2.19	0	0	0	0.86	1.75	3.31	0.81	1.95	1.91	0	0	0	0.25		
DTW	--	ft-btoc	--	--</td																	

Table 3
Summary of Historical Groundwater Sample Analytical Results
ART Seventh Annual Monitoring Report
Former TBE Machine Shop Property
Nikiski, Alaska

Location ID: Date Collected: Sample Name:	GW Human Health Cleanup Level 2023	Units	MW-7 6/11/2014 MW-7	MW-7 9/10/2014 MW-7	MW-7 12/5/2014 MW-7	MW-7 3/2/2015 MW-7	MW-7 5/27/2015 MW-7	MW-7 9/9/2015 MW-7	MW-7 12/1/2015 MW-7	MW-7 3/15/2016 MW-7	MW-7 6/8/2016 MW-7-W-060816	MW-7 9/13/2016 MW-7-W-091316	MW-7 3/1/2017 MW-7	MW-7 9/5/2017 MW-7-W-090517	MW-7 3/20/2018 MW-7	MW-7 8/1/2019 MW-7-W-190801	MW-7 9/16/2020 MW-7-W-200916	MW-7 8/23/2021 MW-7-W-20210823	MW-7 8/1/2023 MW-7-W-20230801
Detected Volatile Organics																			
ART System Operating																			
1,1,1-Trichloroethane	8000	µg/L	2.4	1 U	1 U *	3 U	3 U	3 U	1 U	3 U	3 U	3 U *	3 U	3 U	3 U	3 U	R	1 U	1 U
1,1-Dichloroethane	28	µg/L	1 U	1 U	1 U	2 U	2 U	2 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	R	1 U	1 U
1,1-Dichloroethene	280	µg/L	1 U	1 U	1 U *	2 U	2 U ^	2 U	1 U	2 U	2 U	2 U	2 U	2 U	4 U	4 U	R	1 U	1 U
1,2,4-Trimethylbenzene	56	µg/L	1 U	1 U	1 U	3 U	3 U	3 U	1 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	R	3 U	3 U
1,2-Dichlorobenzene	300	µg/L	1 U	1 U	1 U	2 U	2 U	2 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	R	1 U	1 U
1,2-Dichloroethene (cis)	36	µg/L	1 U	3.6	2.7	1.5	1	1 U	1.2	1.5	1 U	1 U *	1 U	1 U	3 U	3 U	R	1 U	1 U
1,2-Dichloroethene (trans)	360	µg/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	3 U *	3 U	3 U	3 U	3 U	R	1 U	1 U
1,3,5-Trimethylbenzene	60	µg/L	1 U	1 U	1 U	3 U	3 U	3 U	1 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	R	1 U	1 U
1,4-Dichlorobenzene	4.8	µg/L	1 U	1 U	1 U	2 U	2 U	2 U	1 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	R	1 U	1 U
Cymene	--	µg/L	1 U	1 U	1 U	3 U	3 U	3 U	1 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	R	1 U	1 U
Ethylbenzene	15	µg/L	1 U	1 U	1 U	3 U	3 U	3 U	1 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	R	1 U	1 U
Isopropylbenzene	450	µg/L	1 U	1 U	1 U	2 U	2 U	2 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	R	1 U	1 U
Naphthalene	1.7	µg/L	3 U	3 U	3 U	2 U	2 U *	2 U	2 U	1 U	2 U	2 U	2 U	4 U	4 U	4 U	R	3 U	3 U
n-Butylbenzene	1000	µg/L	2 U	2 U	2 U	3 U	3 U	3 U	1 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	R	1 U	1 U
n-Propylbenzene	660	µg/L	1 U	1 U	1 U	3 U	3 U	3 U	1 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	R	1 UJ	1 U
sec-Butylbenzene	2000	µg/L	1 U	1 U	1 U	3 U	3 U	3 U	1 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	R	1 U	1 U
Styrene	1200	µg/L	5 U	5 U	5 U	5 U	5 U	5 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	R	1 U	1 U
tert-Butylbenzene	690	µg/L	1 U	1 U	1 U	3 U	3 U	3 U	1 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	R	2 U	2 U
Tetrachloroethene (PCE)	41	µg/L	24	17	21	18	25	24	23	24	18	13	14	14	17	12	12	10 J	8.2 J
Toluene	1100	µg/L	1 U	1 U	1 U	2 U	2 U	2 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	R	1 U	1 U
Trichloroethene (TCE)	2.8	µg/L	1.7	2.8	2.1	3 U	3 U	3 U	3.1	2.3	3 U	3 U	3 U	3 U	3 U	3 U	R	1 U	1 U
Vinyl chloride	0.19	µg/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	R	1 U	1 U
Xylene, (m- & p-)	190	µg/L	2 U	2 U	2 U	3 U	3 U	3 U	1 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	R	2 U	2 U
Xylene, (o-)	190	µg/L	1 U	1 U	1 U *	2 U	2 U	2 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	R	1 U	1 U
Xylenes (total)	190	µg/L	2 U	2 U	2 U	3 U	3 U	3 U	1 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	R	2 U	2 U
Detected Miscellaneous																			
Ferrous Iron	--	mg/L	0.4	1.2	0	0.2	0.2	0.2	0	0	0	--	--	--	--	--	--	--	
Heterotrophic Plate Count	--	CFU/mL	18 H cn	--	--	--	7.5 H	--	--	--	93 H	--	--	--	--	--	--	--	
Detected GROs																			
(GRO)-C6-C10	2.2	mg/L	0.05 U	0.05 U	--	--	0.05 U	--	--	--	0.05 U	--	0.05 U	1 U	1 U	0.25 U	R	0.25 U	0.08 U
Detected DROs																			
(DRO) (C10-C25)	1.5	mg/L	0.39 U	0.15 Y	--	--	0.2 U	--	--	--	0.1 U	--	0.1 U F1	0.11 U	0.12 U *	0.11 U	R	0.12 U	0.14 U *-
Detected Field Parameters																			
Dissolved oxygen	--	mg/L	3.67	7.16	3.69	3.59	1.82	1.02	2.3	1.9	2.5	8.38	4.13	1.01	0.98	0.5	0	0.68	1.71
DTW	--	ft-btoc	--	--	--	--	--	--	--	--	--	--	--	44.99	--	--	--	--	42.28
Oxidation-reduction potential	--	mV	212.1	82.9	184.7	119.2	102.4	150.1	-165.3	-150.1	-86.2	161.6	105.9	155	194	153	51	213	229
pH	--	SU	4.8	5.97	5.93	5.92	5.5	6.02	6.02	6.1	6.95	4.76	--	5.7	5.87	6	5.55	5.77	6.08
Specific conductivity	--	mS/cm	0.124	0.099	0.084	0.078	0.12	0.137	0.207	0.161	0.138	0.211	0.242	0.212	0.096	0.233	0.194	0.192	0.181
Temperature	--	°C	5.69	9.24	5.87	8.13	1.1	9.29	7.43	5.91	13.42	8.45	2.99	7.19	2.53	8.07	3.83	7	9.17
Turbidity	--	NTU	36	23	26.7	13.6	0</td												

Table 3

Summary of Historical Groundwater Sample Analytical Results

ART Seventh Annual Monitoring Report

Former TBE Machine Shop Property

Nikiski, Alaska

Location ID: Date Collected: Sample Name:	GW Human Health Cleanup Level 2023	Units	MW-8 6/11/2014 MW-8	MW-8 5/27/2015 MW-8	MW-8 6/7/2016 MW-8-W-060716	MW-8 3/1/2017 MW-8	MW-8 3/20/2018 MW-8	MW-8 8/1/2019 MW-8-W-190801	MW-8 9/16/2020 MW-8-W-200916	MW-8 8/23/2021 MW-8-W-20210823	MW-8 8/1/2023 MW-8-W-20230801	MW-9 6/11/2014 MW-9	MW-9 5/27/2015 MW-9	MW-9 6/8/2016 MW-9-W-060816		
			Baseline	ART System Operating			Post-ART Shutdown						Baseline	ART System Operating		
Detected Volatile Organics																
1,1,1-Trichloroethane	8000	µg/L	1 U	3 U [3 U]	3 U	3 U	3 U [3 U]	3 U	R	1 U	1 U	1 U	3 U	3 U	3 U	
1,1-Dichloroethane	28	µg/L	1 U	2 U [2 U]	2 U	2 U	2 U [2 U]	2 U	R	1 U	1 U	1 U	2 U	2 U	2 U	
1,1-Dichloroethene	280	µg/L	1 U	2 U ^[2 U ^]	2 U	2 U	4 U [4 U]	4 U	R	1 U	1 U	1 U	2 U ^	2 U ^	2 U *	
1,2,4-Trimethylbenzene	56	µg/L	1 U	3 U [3 U]	3 U	3 U	3 U [3 U *]	3 U	R	3 U	3 U	1 U	3 U	3 U	3 U	
1,2-Dichlorobenzene	300	µg/L	1 U	2 U [2 U]	2 U	2 U	2 U [2 U *]	2 U	R	1 U	1 U	1 U	2 U	2 U	2 U	
1,2-Dichloroethene (cis)	36	µg/L	1 U	1 U [1 U]	1 U	1 U	3 U [3 U *]	3 U	R	1 U	1 U	1 U	1 U	1 U	1 U	
1,2-Dichloroethene (trans)	360	µg/L	1 U	1 U [1 U]	3 U	3 U	3 U [3 U]	3 U	R	1 U	1 U	1 U	1 U	1 U	3 U	
1,3,5-Trimethylbenzene	60	µg/L	1 U	3 U [3 U]	3 U	3 U	3 U [3 U *]	3 U	R	1 U	1 U	1 U	3 U	3 U	3 U	
1,4-Dichlorobenzene	4.8	µg/L	1 U	2 U [2 U]	4 U	4 U	4 U [4 U *]	4 U	R	1 U	1 U	1 U	2 U	4 U		
Cymene	--	µg/L	1 U	3 U [3 U]	3 U	3 U	3 U [3 U *]	3 U	R	1 U	1 U	1 U	3 U	3 U *		
Ethylbenzene	15	µg/L	1 U	3 U [3 U]	3 U	3 U	3 U [3 U *]	3 U	R	1 U	1 U	1 U	3 U	3 U		
Isopropylbenzene	450	µg/L	1 U	2 U [2 U]	2 U	2 U	2 U [2 U *]	2 U	R	1 U	1 U	1 U	2 U	2 U		
Naphthalene	1.7	µg/L	3 U	2 U * [2 U *]	2 U	2 U	4 U [4 U]	4 U	R	3 U	3 U	3 U	2 U *	2 U		
n-Butylbenzene	1000	µg/L	2 U	3 U [3 U]	3 U	3 U	3 U [3 U *]	3 U	R	1 U	1 U	2 U	3 U	3 U		
n-Propylbenzene	660	µg/L	1 U	3 U [3 U]	3 U	3 U	3 U [3 U *]	3 U	R	1 U	1 U	1 U	3 U	3 U		
sec-Butylbenzene	2000	µg/L	1 U	3 U [3 U]	3 U	3 U	3 U [3 U *]	3 U	R	1 U	1 U	1 U	3 U	3 U		
Styrene	1200	µg/L	5 U	5 U [5 U]	5 U	5 U	5 U [5 U *]	5 U	R	1 U	1 U	5 U	5 U	5 U		
tert-Butylbenzene	690	µg/L	1 U	3 U [3 U]	3 U	3 U	3 U [3 U]	3 U	R	2 U	2 U	1 U	3 U	3 U		
Tetrachloroethene (PCE)	41	µg/L	1 U	3 U [3 U]	3 U	3 U	3 U [3 U]	3 U	R	1 U	1 U	1 U	3 U	3 U		
Toluene	1100	µg/L	1 U	2 U [2 U]	2 U	2 U	2 U [2 U *]	2 U	R	1 U	1 U	1 U	2 U	2 U		
Trichloroethene (TCE)	2.8	µg/L	1 U	3 U [3 U]	3 U	3 U	3 U [3 U *]	3 U	R	1 U	1 U	1 U	3 U	3 U		
Vinyl chloride	0.19	µg/L	1 U	1 U [1 U]	1 U	1 U	1 U [1 U]	1 U	R	1 U	1 U	1 U	1 U	1 U		
Xylene, (m- & p-)	190	µg/L	2 U	3 U [3 U]	3 U	3 U	3 U [3 U *]	3 U	R	2 U	2 U	2 U	3 U	3 U		
Xylene, (o-)	190	µg/L	1 U	2 U [2 U]	2 U	2 U	2 U [2 U *]	2 U	R	1 U	1 U	1 U	2 U	2 U		
Xylenes (total)	190	µg/L	2 U	3 U [3 U]	3 U	3 U	3 U [3 U]	3 U	R	2 U	2 U	2 U	3 U	3 U		
Detected Miscellaneous																
Ferrous Iron	--	mg/L	0.4	0.2	0.2	--	--	--	--	--	--	0.4	0	0		
Heterotrophic Plate Count	--	CFU/mL	--	--	--	--	--	--	--	--	--	--	--	--		
Detected GROs																
(GRO)-C6-C10	2.2	mg/L	0.05 U	0.05 U [0.05 U]	0.05 U	0.05 U	1 U [1 U]	0.25 U	R	0.25 U	0.08 U	0.05 U	0.05 U	0.05 U		
Detected DROs																
(DRO) (C10-C25)	1.5	mg/L	0.38 U	0.2 U [0.2 U]	0.11 U	0.1 U	0.11 U * [0.12 U *]	0.11 U	R	0.11 U	0.14 *-	0.39 U	0.21 U	0.11 U		
Detected Field Parameters																
Dissolved oxygen	--	mg/L	6.55	6.91	5.03	5.21	6.29	4.36	2.86	4.3	4.94	4.27	4.23	2.08		
DTW	--	ft-btoc	--	--	--	--	--	--	--	41.84	--	--	--	--		
Oxidation-reduction potential	--	mV	212.1	110.4	67.1	77.8	202	178	234	220	238	290	138.7	-69.7		
pH	--	SU	5.44	5.62	5.69	--	5.88	6	5.27	5.8	6	3.22	5.46	7.52		
Specific conductivity	--	mS/cm	0.062	0.067	0.071	0.121	0.061	0.142	0.086	0.11	0.136	0.108	0.093	0.079		
Temperature	--	°C	6.29	5.2	9.9	3.41	2.12	7.42	8.46	6.92	8.59	4.84	4.48	7.67		
Turbidity	--	NTU	22.2	49	39.5	0.11	10.89	0.1	8.6	18.8	16.5	4.21	0	9.8		

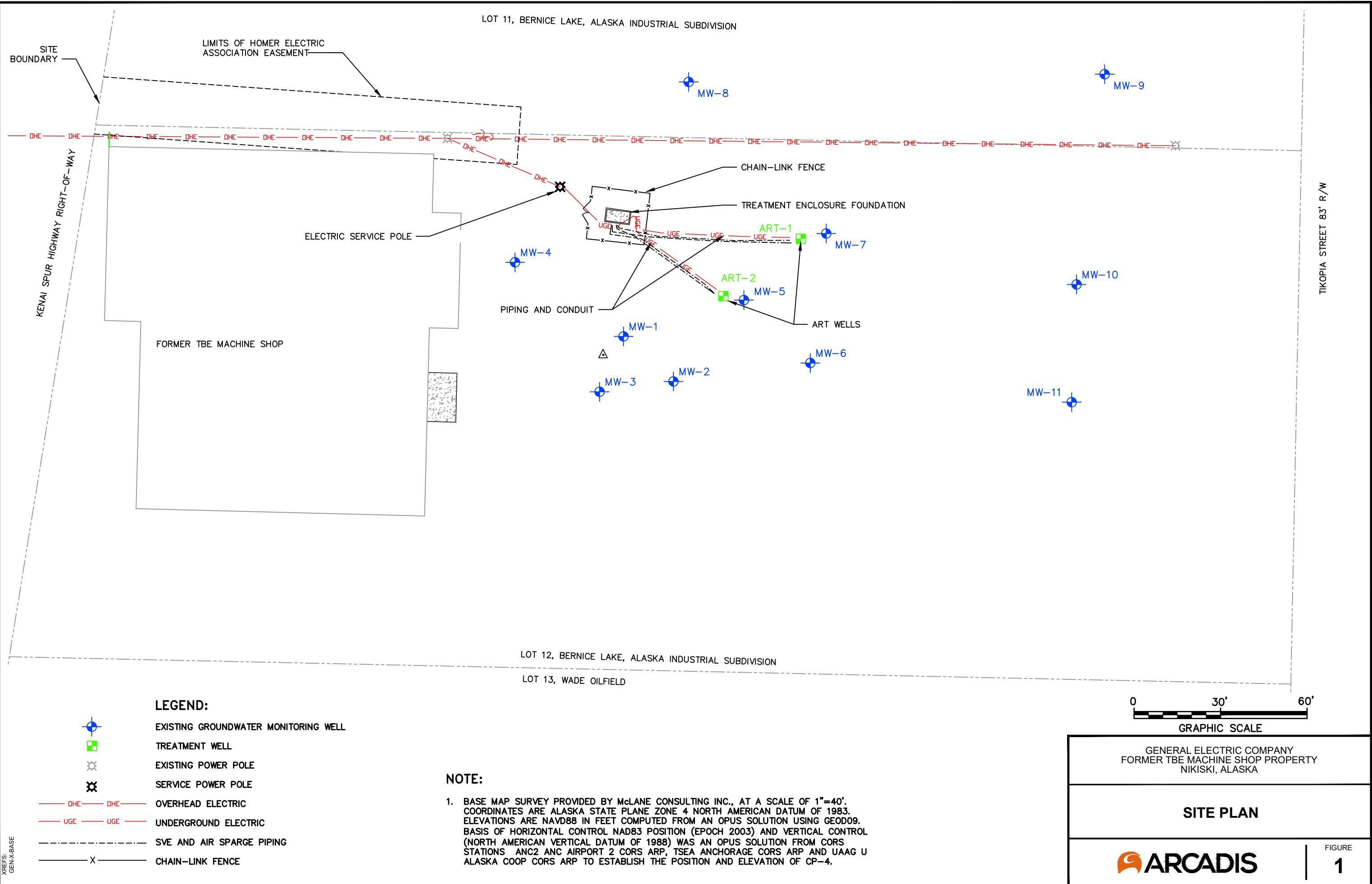
Table 3
Summary of Historical Groundwater Sample Analytical Results
ART Seventh Annual Monitoring Report
Former TBE Machine Shop Property
Nikiski, Alaska

Location ID: Date Collected: Sample Name:	GW Human Health Cleanup Level 2023	Units	MW-9 3/2/2017 MW-9	MW-9 3/20/2018 MW-9	MW-9 8/1/2019 MW-9-W-190801	MW-9 9/16/2020 MW-9-W-200916	MW-9 8/23/2021 MW-9-W-20210823	MW-9 8/1/2023 MW-9-W-20230801	MW-10 6/11/2014 MW-10	MW-10 5/27/2015 MW-10	MW-10 6/8/2016 MW-10-W-060816	MW-10 3/2/2017 MW-10	MW-10 3/20/2018 MW-10	MW-10 8/1/2019 MW-10-W-190801	MW-10 9/16/2020 MW-10-W-200916	MW-10 8/23/2021 MW-10-W-20210823	MW-10 8/1/2023 MW-10-W-20230801	
Detected Volatile Organics																		
1,1,1-Trichloroethane	8000	µg/L	3 U	3 U	3 U	R	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U	3 U [3 U]	R	1 U [1 U]	1 U
1,1-Dichloroethane	28	µg/L	2 U	2 U	2 U	R	1 U	1 U	1 U	1 U	2 U	2 U	2 U	2 U	2 U [2 U]	R	1 U [1 U]	1 U
1,1-Dichloroethene	280	µg/L	2 U	4 U	4 U	R	1 U	1 U	1 U	1 U	2 U ^	2 U *	2 U	4 U	4 U [4 U]	R	1 U [1 U]	1 U
1,2,4-Trimethylbenzene	56	µg/L	3 U	3 U	3 U F1	R	3 U	3 U	3 U	1 U	3 U	3 U	3 U	3 U	3 U [3 U]	R	3 U [3 U]	3 U
1,2-Dichlorobenzene	300	µg/L	2 U	2 U	2 U F1	R	1 U	1 U	1 U	1 U	2 U	2 U	2 U	2 U	2 U [2 U]	R	1 U [1 U]	1 U
1,2-Dichloroethene (cis)	36	µg/L	1 U	3 U	3 U	R	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U [3 U]	R	1 U [1 U]	1 U
1,2-Dichloroethene (trans)	360	µg/L	3 U	3 U	3 U	R	1 U	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U [3 U]	R	1 U [1 U]	1 U
1,3,5-Trimethylbenzene	60	µg/L	3 U	3 U	3 U F1	R	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U	3 U [3 U]	R	1 U [1 U]	1 U
1,4-Dichlorobenzene	4.8	µg/L	4 U	4 U	4 U F1	R	1 U	1 U	1 U	1 U	2 U	4 U	4 U	4 U	4 U [4 U]	R	1 U [1 U]	1 U
Cymene	--	µg/L	3 U	3 U	3 U F1	R	1 U	1 U	1 U	1 U	3 U	3 U *	3 U	3 U	3 U [3 U]	R	1 U [1 U]	1 U
Ethylbenzene	15	µg/L	3 U	3 U	3 U F1	R	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U	3 U [3 U]	R	1 U [1 U]	1 U
Isopropylbenzene	450	µg/L	2 U	2 U	2 U F1	R	1 U	1 U	1 U	1 U	2 U	2 U	2 U	2 U	2 U [2 U]	R	1 U [1 U]	1 U
Naphthalene	1.7	µg/L	2 U	4 U	4 U	R	3 U	3 U	3 U	3 U	2 U *	2 U	2 U	4 U	4 U [4 U]	R	3 U [3 U]	3 U
n-Butylbenzene	1000	µg/L	3 U	3 U	3 U F1	R	1 U	1 U	1 U	1 U	2 U	3 U	3 U	3 U	3 U [3 U]	R	1 U [1 U]	1 U
n-Propylbenzene	660	µg/L	3 U	3 U	3 U F1	R	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U	3 U [3 U]	R	1 U [1 U]	1 U
sec-Butylbenzene	2000	µg/L	3 U	3 U	3 U F1	R	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U	3 U [3 U]	R	1 U [1 U]	1 U
Styrene	1200	µg/L	5 U	5 U	5 U	R	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U [5 U]	R	1 U [1 U]	1 U
tert-Butylbenzene	690	µg/L	3 U	3 U	3 U F1	R	2 U	2 U	2 U	1 U	3 U	3 U	3 U	3 U	3 U [3 U]	R	2 U [2 U]	2 U
Tetrachloroethene (PCE)	41	µg/L	3 U	3 U	3 U	R	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U	3 U [3 U]	R	1 U [1 U]	1 U
Toluene	1100	µg/L	2 U	2 U	2 U F1	R	1 U	1 U	1 U	1 U	2 U	2 U	2 U	2 U	2 U [2 U]	R	1 U [1 U]	1 U
Trichloroethene (TCE)	2.8	µg/L	3 U	3 U	3 U	R	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U	3 U [3 U]	R	1 U [1 U]	1 U
Vinyl chloride	0.19	µg/L	1 U	1 U	1 U	R	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U [1 U]	R	1 U [1 U]	1 U
Xylene, (m- & p-)	190	µg/L	3 U	3 U	3 U F1	R	2 U	2 U	2 U	2 U	3 U	3 U	3 U	3 U	3 U [3 U]	R	2 U [2 U]	2 U
Xylene, (o-)	190	µg/L	2 U	2 U	2 U	R	1 U	1 U	1 U	1 U	2 U	2 U	2 U	2 U	2 U [2 U]	R	1 U [1 U]	1 U
Xylenes (total)	190	µg/L	3 U	3 U	3 U	R	2 U	2 U	2 U	2 U	3 U	3 U	3 U	3 U	3 U [3 U]	R	2 U [2 U]	2 U
Detected Miscellaneous																		
Ferrous Iron	--	mg/L	--	--	--	--	--	--	--	0.4	0.2	0	--	--	--	--	--	--
Heterotrophic Plate Count	--	CFU/mL	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Detected GROs																		
(GRO)-C6-C10	2.2	mg/L	0.05 U	1 U	0.25 U	R	0.25 U	0.08 U	0.08 U	0.05 U	0.05 U	0.05 U	0.05 U	1 U	0.25 U [0.25 U]	R	0.25 U [0.25 U]	0.08 U
Detected DROs																		
(DRO) (C10-C25)	1.5	mg/L	0.11 U	0.12 U *	0.11 U	R	0.11 U	0.14 U*-	0.14 U*-	0.4 U	0.21 U	0.11 U	0.12 U	0.11 U *	0.11 U [0.11 U]	R	0.12 U [0.12 U]	0.13 *-
Detected Field Parameters																		
Dissolved oxygen	--	mg/L	4.1	3.02	2.48	0	9.69	2.22	2.22	4.35	3.92	3.19	5.44	3.14	3.12	0	5.4	2.41
DTW	--	ft-btoc	--	--	--	--	--	42.4	42.4	--	--	--	--	--	--	--	--	39.76
Oxidation-reduction potential	--	mV	87.5	195.9	268.9	59	206	244	244	236.1	149.7	-9.8	101.6	201.2	253.5	69	204	236
pH	--	SU	--	5.78	5.59	5.38	5.79	5.95	5.95	4.79	5.34	7.12	--	5.65	5.71	5.19	5.61	5.85
Specific conductivity	--	mS/cm	0.128	0.056	90.4	0.149	0.125	0.144	0.144	0.107	0.071	0.078	0.127	0.048	82.6	0.125	0.109	0.109
Temperature	--	°C	3.31	0.88	6.5	4.8	7.58	10.06	10.06	5.05	4.42	7.12	3.13	1.71	10.3	3.38	7.05	8.33
Turbidity	--	NTU	0	14.16	0	0.7	2	47.7	47.7	60.1	39.2	33.8	0	71.22	0	18	50	1000

Table 3
Summary of Historical Groundwater Sample Analytical Results
ART Seventh Annual Monitoring Report
Former TBE Machine Shop Property
Nikiski, Alaska

Location ID: Date Collected: Sample Name:	GW Human Health Cleanup Level 2023	Units	MW-11 6/11/2014 MW-11	MW-11 5/27/2015 MW-11	MW-11 6/8/2016 MW-11-W-060816	MW-11 3/2/2017 MW-11	MW-11 3/20/2018 MW-11	MW-11 8/1/2019 MW-11-W-190801	MW-11 9/16/2020 MW-11-W-200916	MW-11 8/23/2021 MW-11-W-20210823	MW-11 8/1/2023 MW-11-W-20230801
Detected Volatile Organics											
1,1,1-Trichloroethane	8000	µg/L	1 U	3 U	3 U	3 U	3 U	3 U	R	1 U	1 U
1,1-Dichloroethane	28	µg/L	1 U	2 U	2 U	2 U	2 U	2 U	R	1 U	1 U
1,1-Dichloroethene	280	µg/L	1 U	2 U [^]	2 U*	2 U	4 U	4 U	R	1 U	1 U
1,2,4-Trimethylbenzene	56	µg/L	1 U	3 U	3 U	3 U	3 U	3 U	R	3 U	3 U
1,2-Dichlorobenzene	300	µg/L	1 U	2 U	2 U	2 U	2 U	2 U	R	1 U	1 U
1,2-Dichloroethene (cis)	36	µg/L	1 U	1 U	1 U	1 U	3 U	3 U	R	1 U	1 U
1,2-Dichloroethene (trans)	360	µg/L	1 U	1 U	3 U	3 U	3 U	3 U	R	1 U	1 U
1,3,5-Trimethylbenzene	60	µg/L	1 U	3 U	3 U	3 U	3 U	3 U	R	1 U	1 U
1,4-Dichlorobenzene	4.8	µg/L	1 U	2 U	4 U	4 U	4 U	4 U	R	1 U	1 U
Cymene	--	µg/L	1 U	3 U	3 U*	3 U	3 U	3 U	R	1 U	1 U
Ethylbenzene	15	µg/L	1 U	3 U	3 U	3 U	3 U	3 U	R	1 U	1 U
Isopropylbenzene	450	µg/L	1 U	2 U	2 U	2 U	2 U	2 U	R	1 U	1 U
Naphthalene	1.7	µg/L	3 U	2 U*	2 U	2 U	4 U	4 U	R	3 U	3 U
n-Butylbenzene	1000	µg/L	2 U	3 U	3 U	3 U	3 U	3 U	R	1 U	1 U
n-Propylbenzene	660	µg/L	1 U	3 U	3 U	3 U	3 U	3 U	R	1 U	1 U
sec-Butylbenzene	2000	µg/L	1 U	3 U	3 U	3 U	3 U	3 U	R	1 U	1 U
Styrene	1200	µg/L	5 U	5 U	5 U	5 U	5 U	5 U	R	1 U	1 U
tert-Butylbenzene	690	µg/L	1 U	3 U	3 U	3 U	3 U	3 U	R	2 U	2 U
Tetrachloroethene (PCE)	41	µg/L	1 U	3 U	3 U	3 U	3 U	3 U	R	1 U	1 U
Toluene	1100	µg/L	1 U	2 U	2 U	2 U	2 U	2 U	R	1 U	1 U
Trichloroethene (TCE)	2.8	µg/L	1 U	3 U	3 U	3 U	3 U	3 U	R	1 U	1 U
Vinyl chloride	0.19	µg/L	1 U	1 U	1 U	1 U	1 U	1 U	R	1 U	1 U
Xylene, (m- & p-)	190	µg/L	2 U	3 U	3 U	3 U	3 U	3 U	R	2 U	2 U
Xylene, (o-)	190	µg/L	1 U	2 U	2 U	2 U	2 U	2 U	R	1 U	1 U
Xylenes (total)	190	µg/L	2 U	3 U	3 U	3 U	3 U	3 U	R	2 U	2 U
Detected Miscellaneous											
Ferrous Iron	--	mg/L	0.4	0.1	0	--	--	--	--	--	--
Heterotrophic Plate Count	--	CFU/mL	--	--	--	--	--	--	--	--	--
Detected GROs											
(GRO)-C6-C10	2.2	mg/L	0.05 U	0.05 U	0.05 U	0.05 U	1 U	0.25 U	R	0.25 U	0.08 U
Detected DROs											
(DRO) (C10-C25)	1.5	mg/L	0.38 U	0.2 U	0.11 U	0.13	0.12 U*	0.12	0.12 J	0.11	0.14 *-
Detected Field Parameters											
Dissolved oxygen	--	mg/L	1.39	4.31	1.19	3.1	1.52	1.74	0	2.12	0.79
DTW	--	ft-btoc	--	--	--	--	--	--	--	--	38.78
Oxidation-reduction potential	--	mV	272.1	155.9	-57.2	93.2	195.8	186.8	73	184	233
pH	--	SU	4.59	5.35	5.88	--	5.48	5.57	5.12	5.55	5.6
Specific conductivity	--	mS/cm	0.162	0.113	0.149	0.192	0.092	141	0.198	0.167	0.182
Temperature	--	°C	4.81	4.48	7.94	0.28	0.4	8.6	4.75	8.04	8.91
Turbidity	--	NTU	74.9	208.3	34.3	0	176.9	0	15.3	5.8	11

Figure



Attachment 1

Laboratory Report

ANALYTICAL REPORT

PREPARED FOR

Attn: Anna Hagemeister
ARCADIS US Inc
630 Plaza Drive
Suite 100
Highlands Ranch, Colorado 80129-2377

Generated 8/24/2023 1:59:17 PM

JOB DESCRIPTION

GE Nikiski/CHEVARCAK GE-Nikiski

JOB NUMBER

580-130190-1

Eurofins Seattle

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northwest, LLC Project Manager.

Authorization



Generated
8/24/2023 1:59:17 PM

Authorized for release by
Katie Grant, Project Manager I
Katie.Grant@et.eurofinsus.com
(253)922-2310

Table of Contents

Cover Page	1
Table of Contents	3
Case Narrative	4
Definitions	6
Client Sample Results	7
QC Sample Results	37
Chronicle	57
Certification Summary	60
Sample Summary	61
Chain of Custody	62
Receipt Checklists	66

Case Narrative

Client: ARCADIS US Inc
Project/Site: GE Nikiski/CHEVARCAK GE-Nikiski

Job ID: 580-130190-1

Job ID: 580-130190-1

Laboratory: Eurofins Seattle

Narrative

Job Narrative 580-130190-1

Receipt

The samples were received on 8/3/2023 9:20 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 2.1° C and 4.6° C.

Receipt Exceptions

The container label for the following samples do not match the information listed on the Chain-of-Custody (COC): MW-11-W-20230801 (580-130190-1) and MW-1-W-20230801 (580-130190-11). The container labels for sample -11 list sample ID of MW-1-W-20230801 and a sample time of 1406, while the COC lists a sample ID of MW-11-W-20230801 and a sample time of 1406. Because the sample ID for sample -1 is MW-11-W-20230801 and sample time is 0630, which matches the information on the chain of custody, Sample -11 was logged per the information on the container label.

No containers received were also provided by a Eurofins Environment Testing laboratory; the preservation cannot be verified.

The Trip Blank containers had no labels. The client packed a set of 4 with the same colored lids (blue) in one bag, and another set of 3 with the same colored lids (yellow) in another bag, which was associated to the COC and labeled as such.

GC/MS VOA

Method 8260D: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-2-W-20230801 (580-130190-8). Elevated reporting limits (RLs) are provided.

Method 8260D: The continuing calibration verification (CCV) associated with batch 580-433662 recovered above the upper control limit for Dichlorodifluoromethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: MW-11-W-20230801 (580-130190-1), MW-10-W-20230801 (580-130190-2), MW-9-W-20230801 (580-130190-3), MW-7-W-20230801 (580-130190-4), BD-1-W-20230801 (580-130190-13), Trip Blank 1 (580-130190-14), Trip Blank 2 (580-130190-15) and (CCVIS 580-433662/4).

Method 8260D: The CCV for analytical batch 580-433662 recovered outside control limits for the following analyte: Bromoform has been identified as a poor performing analyte when analyzed using this method; therefore, re-analysis was not performed. These results have been reported and qualified.

Method 8260D: The continuing calibration verification (CCV) associated with batch 580-433673 recovered outside acceptance criteria, low biased, for Bromoform and Hexachlorobutadiene. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8260D: The continuing calibration verification (CCV) associated with batch 580-433887 recovered above the upper control limit for Dichlorodifluoromethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: MW-3-W-20230801 (580-130190-9) and (CCVIS 580-433887/4).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA

Method AK102 & 103: The laboratory control sample / laboratory control sample duplicate / matrix spike / matrix spike duplicate (LCS/LCSD/MS/MSD) for preparation batch 580-433897 and analytical batch 580-433966 recovered outside acceptance limits for DRO (nC10-<nC25). There was insufficient sample to perform a re-extraction; therefore, the data have been reported.

Method AK102 & 103: Surrogate recovery for the following samples was outside of acceptance limits: MW-1-W-20230801 (580-130190-11), (LCS 580-433897/2-A), (LCSD 580-433897/3-A) and (MB 580-433897/1-A). There was insufficient sample to perform a re-extraction; therefore, the data have been reported.

Method AK102 & 103: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 580-433897 and analytical batch 580-433966.

Case Narrative

Client: ARCADIS US Inc

Project/Site: GE Nikiski/CHEVARCAK GE-Nikiski

Job ID: 580-130190-1

Job ID: 580-130190-1 (Continued)

Laboratory: Eurofins Seattle (Continued)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: ARCADIS US Inc

Project/Site: GE Nikiski/CHEVARCAK GE-Nikiski

Job ID: 580-130190-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

GC Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
F1	MS and/or MSD recovery exceeds control limits.
S1-	Surrogate recovery exceeds control limits, low biased.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: ARCADIS US Inc

Project/Site: GE Nikiski/CHEVARCAK GE-Nikiski

Job ID: 580-130190-1

Client Sample ID: MW-11-W-20230801

Lab Sample ID: 580-130190-1

Matrix: Water

Date Collected: 08/01/23 06:30

Date Received: 08/03/23 09:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0		ug/L			08/03/23 23:20	1
Chloromethane	ND		1.0		ug/L			08/03/23 23:20	1
Vinyl chloride	ND		1.0		ug/L			08/03/23 23:20	1
Bromomethane	ND		1.0		ug/L			08/03/23 23:20	1
Chloroethane	ND		1.0		ug/L			08/03/23 23:20	1
Trichlorofluoromethane	ND		1.0		ug/L			08/03/23 23:20	1
1,1-Dichloroethene	ND		1.0		ug/L			08/03/23 23:20	1
Methylene Chloride	ND		5.0		ug/L			08/03/23 23:20	1
Methyl tert-butyl ether	ND		1.0		ug/L			08/03/23 23:20	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/03/23 23:20	1
1,1-Dichloroethane	ND		1.0		ug/L			08/03/23 23:20	1
2,2-Dichloropropane	ND		1.0		ug/L			08/03/23 23:20	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			08/03/23 23:20	1
Chlorobromomethane	ND		1.0		ug/L			08/03/23 23:20	1
Chloroform	ND		1.0		ug/L			08/03/23 23:20	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/03/23 23:20	1
Carbon tetrachloride	ND		1.0		ug/L			08/03/23 23:20	1
1,1-Dichloropropene	ND		1.0		ug/L			08/03/23 23:20	1
Benzene	ND		1.0		ug/L			08/03/23 23:20	1
1,2-Dichloroethane	ND		1.0		ug/L			08/03/23 23:20	1
Trichloroethene	ND		1.0		ug/L			08/03/23 23:20	1
1,2-Dichloropropane	ND		1.0		ug/L			08/03/23 23:20	1
Dibromomethane	ND		1.0		ug/L			08/03/23 23:20	1
Dichlorobromomethane	ND		1.0		ug/L			08/03/23 23:20	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			08/03/23 23:20	1
Toluene	ND		1.0		ug/L			08/03/23 23:20	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			08/03/23 23:20	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/03/23 23:20	1
Tetrachloroethene	ND		1.0		ug/L			08/03/23 23:20	1
1,3-Dichloropropane	ND		1.0		ug/L			08/03/23 23:20	1
Chlorodibromomethane	ND		1.0		ug/L			08/03/23 23:20	1
Ethylene Dibromide	ND		1.0		ug/L			08/03/23 23:20	1
Chlorobenzene	ND		1.0		ug/L			08/03/23 23:20	1
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/03/23 23:20	1
Ethylbenzene	ND		1.0		ug/L			08/03/23 23:20	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/03/23 23:20	1
o-Xylene	ND		1.0		ug/L			08/03/23 23:20	1
Styrene	ND		1.0		ug/L			08/03/23 23:20	1
Bromoform	ND		1.0		ug/L			08/03/23 23:20	1
Isopropylbenzene	ND		1.0		ug/L			08/03/23 23:20	1
Bromobenzene	ND		1.0		ug/L			08/03/23 23:20	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			08/03/23 23:20	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/03/23 23:20	1
N-Propylbenzene	ND		1.0		ug/L			08/03/23 23:20	1
2-Chlorotoluene	ND		1.0		ug/L			08/03/23 23:20	1
4-Chlorotoluene	ND		1.0		ug/L			08/03/23 23:20	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/03/23 23:20	1
tert-Butylbenzene	ND		2.0		ug/L			08/03/23 23:20	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			08/03/23 23:20	1

Eurofins Seattle

Client Sample Results

Client: ARCADIS US Inc

Project/Site: GE Nikiski/CHEVARCAK GE-Nikiski

Job ID: 580-130190-1

Client Sample ID: MW-11-W-20230801

Lab Sample ID: 580-130190-1

Matrix: Water

Date Collected: 08/01/23 06:30

Date Received: 08/03/23 09:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0		ug/L			08/03/23 23:20	1
4-Isopropyltoluene	ND		1.0		ug/L			08/03/23 23:20	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/03/23 23:20	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/03/23 23:20	1
n-Butylbenzene	ND		1.0		ug/L			08/03/23 23:20	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/03/23 23:20	1
1,2-Dibromo-3-Chloropropane	ND		3.0		ug/L			08/03/23 23:20	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/03/23 23:20	1
Hexachlorobutadiene	ND		3.0		ug/L			08/03/23 23:20	1
Naphthalene	ND		3.0		ug/L			08/03/23 23:20	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			08/03/23 23:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		80 - 120					08/03/23 23:20	1
1,2-Dichloroethane-d4 (Surr)	108		80 - 120					08/03/23 23:20	1
4-Bromofluorobenzene (Surr)	92		80 - 120					08/03/23 23:20	1
Dibromofluoromethane (Surr)	105		80 - 120					08/03/23 23:20	1

Method: ADEC AK101 - Alaska - Gasoline Range Organics (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		0.080		mg/L			08/03/23 23:20	1
Surrogate									
4-Bromofluorobenzene (Surr)									

Method: ADEC AK102 & 103 - Alaska - Diesel Range Organics & Residual Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (nC10-<nC25)	0.14	*-	0.14		mg/L		08/07/23 09:20	08/08/23 04:11	1
Surrogate									
o-Terphenyl									

Eurofins Seattle

Client Sample Results

Client: ARCADIS US Inc

Project/Site: GE Nikiski/CHEVARCAK GE-Nikiski

Job ID: 580-130190-1

Client Sample ID: MW-10-W-20230801

Lab Sample ID: 580-130190-2

Matrix: Water

Date Collected: 08/01/23 07:15

Date Received: 08/03/23 09:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0		ug/L		08/03/23 23:44		1
Chloromethane	ND		1.0		ug/L		08/03/23 23:44		1
Vinyl chloride	ND		1.0		ug/L		08/03/23 23:44		1
Bromomethane	ND		1.0		ug/L		08/03/23 23:44		1
Chloroethane	ND		1.0		ug/L		08/03/23 23:44		1
Trichlorofluoromethane	ND		1.0		ug/L		08/03/23 23:44		1
1,1-Dichloroethene	ND		1.0		ug/L		08/03/23 23:44		1
Methylene Chloride	ND		5.0		ug/L		08/03/23 23:44		1
Methyl tert-butyl ether	ND		1.0		ug/L		08/03/23 23:44		1
trans-1,2-Dichloroethene	ND		1.0		ug/L		08/03/23 23:44		1
1,1-Dichloroethane	ND		1.0		ug/L		08/03/23 23:44		1
2,2-Dichloropropane	ND		1.0		ug/L		08/03/23 23:44		1
cis-1,2-Dichloroethene	ND		1.0		ug/L		08/03/23 23:44		1
Chlorobromomethane	ND		1.0		ug/L		08/03/23 23:44		1
Chloroform	ND		1.0		ug/L		08/03/23 23:44		1
1,1,1-Trichloroethane	ND		1.0		ug/L		08/03/23 23:44		1
Carbon tetrachloride	ND		1.0		ug/L		08/03/23 23:44		1
1,1-Dichloropropene	ND		1.0		ug/L		08/03/23 23:44		1
Benzene	ND		1.0		ug/L		08/03/23 23:44		1
1,2-Dichloroethane	ND		1.0		ug/L		08/03/23 23:44		1
Trichloroethene	ND		1.0		ug/L		08/03/23 23:44		1
1,2-Dichloropropane	ND		1.0		ug/L		08/03/23 23:44		1
Dibromomethane	ND		1.0		ug/L		08/03/23 23:44		1
Dichlorobromomethane	ND		1.0		ug/L		08/03/23 23:44		1
cis-1,3-Dichloropropene	ND		1.0		ug/L		08/03/23 23:44		1
Toluene	ND		1.0		ug/L		08/03/23 23:44		1
trans-1,3-Dichloropropene	ND		1.0		ug/L		08/03/23 23:44		1
1,1,2-Trichloroethane	ND		1.0		ug/L		08/03/23 23:44		1
Tetrachloroethene	ND		1.0		ug/L		08/03/23 23:44		1
1,3-Dichloropropane	ND		1.0		ug/L		08/03/23 23:44		1
Chlorodibromomethane	ND		1.0		ug/L		08/03/23 23:44		1
Ethylene Dibromide	ND		1.0		ug/L		08/03/23 23:44		1
Chlorobenzene	ND		1.0		ug/L		08/03/23 23:44		1
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L		08/03/23 23:44		1
Ethylbenzene	ND		1.0		ug/L		08/03/23 23:44		1
m-Xylene & p-Xylene	ND		2.0		ug/L		08/03/23 23:44		1
o-Xylene	ND		1.0		ug/L		08/03/23 23:44		1
Styrene	ND		1.0		ug/L		08/03/23 23:44		1
Bromoform	ND		1.0		ug/L		08/03/23 23:44		1
Isopropylbenzene	ND		1.0		ug/L		08/03/23 23:44		1
Bromobenzene	ND		1.0		ug/L		08/03/23 23:44		1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L		08/03/23 23:44		1
1,2,3-Trichloropropane	ND		1.0		ug/L		08/03/23 23:44		1
N-Propylbenzene	ND		1.0		ug/L		08/03/23 23:44		1
2-Chlorotoluene	ND		1.0		ug/L		08/03/23 23:44		1
4-Chlorotoluene	ND		1.0		ug/L		08/03/23 23:44		1
1,3,5-Trimethylbenzene	ND		1.0		ug/L		08/03/23 23:44		1
tert-Butylbenzene	ND		2.0		ug/L		08/03/23 23:44		1
1,2,4-Trimethylbenzene	ND		3.0		ug/L		08/03/23 23:44		1

Eurofins Seattle

Client Sample Results

Client: ARCADIS US Inc

Project/Site: GE Nikiski/CHEVARCAK GE-Nikiski

Job ID: 580-130190-1

Client Sample ID: MW-10-W-20230801

Lab Sample ID: 580-130190-2

Matrix: Water

Date Collected: 08/01/23 07:15

Date Received: 08/03/23 09:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0		ug/L			08/03/23 23:44	1
4-Isopropyltoluene	ND		1.0		ug/L			08/03/23 23:44	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/03/23 23:44	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/03/23 23:44	1
n-Butylbenzene	ND		1.0		ug/L			08/03/23 23:44	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/03/23 23:44	1
1,2-Dibromo-3-Chloropropane	ND		3.0		ug/L			08/03/23 23:44	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/03/23 23:44	1
Hexachlorobutadiene	ND		3.0		ug/L			08/03/23 23:44	1
Naphthalene	ND		3.0		ug/L			08/03/23 23:44	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			08/03/23 23:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		80 - 120		08/03/23 23:44	1
1,2-Dichloroethane-d4 (Surr)	107		80 - 120		08/03/23 23:44	1
4-Bromofluorobenzene (Surr)	90		80 - 120		08/03/23 23:44	1
Dibromofluoromethane (Surr)	103		80 - 120		08/03/23 23:44	1

Method: ADEC AK101 - Alaska - Gasoline Range Organics (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		0.080		mg/L			08/03/23 23:44	1
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
4-Bromofluorobenzene (Surr)	92		50 - 150		08/03/23 23:44	1			

Method: ADEC AK102 & 103 - Alaska - Diesel Range Organics & Residual Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (nC10-<nC25)	0.13	*-	0.13		mg/L		08/07/23 09:20	08/08/23 04:30	1
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
o-Terphenyl	63		50 - 150		08/07/23 09:20	08/08/23 04:30	1		

Eurofins Seattle

Client Sample Results

Client: ARCADIS US Inc

Project/Site: GE Nikiski/CHEVARCAK GE-Nikiski

Job ID: 580-130190-1

Client Sample ID: MW-9-W-20230801

Lab Sample ID: 580-130190-3

Date Collected: 08/01/23 08:00

Matrix: Water

Date Received: 08/03/23 09:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0		ug/L			08/04/23 00:08	1
Chloromethane	ND		1.0		ug/L			08/04/23 00:08	1
Vinyl chloride	ND		1.0		ug/L			08/04/23 00:08	1
Bromomethane	ND		1.0		ug/L			08/04/23 00:08	1
Chloroethane	ND		1.0		ug/L			08/04/23 00:08	1
Trichlorofluoromethane	ND		1.0		ug/L			08/04/23 00:08	1
1,1-Dichloroethene	ND		1.0		ug/L			08/04/23 00:08	1
Methylene Chloride	ND		5.0		ug/L			08/04/23 00:08	1
Methyl tert-butyl ether	ND		1.0		ug/L			08/04/23 00:08	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/04/23 00:08	1
1,1-Dichloroethane	ND		1.0		ug/L			08/04/23 00:08	1
2,2-Dichloropropane	ND		1.0		ug/L			08/04/23 00:08	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			08/04/23 00:08	1
Chlorobromomethane	ND		1.0		ug/L			08/04/23 00:08	1
Chloroform	ND		1.0		ug/L			08/04/23 00:08	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/04/23 00:08	1
Carbon tetrachloride	ND		1.0		ug/L			08/04/23 00:08	1
1,1-Dichloropropene	ND		1.0		ug/L			08/04/23 00:08	1
Benzene	ND		1.0		ug/L			08/04/23 00:08	1
1,2-Dichloroethane	ND		1.0		ug/L			08/04/23 00:08	1
Trichloroethene	ND		1.0		ug/L			08/04/23 00:08	1
1,2-Dichloropropane	ND		1.0		ug/L			08/04/23 00:08	1
Dibromomethane	ND		1.0		ug/L			08/04/23 00:08	1
Dichlorobromomethane	ND		1.0		ug/L			08/04/23 00:08	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			08/04/23 00:08	1
Toluene	ND		1.0		ug/L			08/04/23 00:08	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			08/04/23 00:08	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/04/23 00:08	1
Tetrachloroethene	ND		1.0		ug/L			08/04/23 00:08	1
1,3-Dichloropropane	ND		1.0		ug/L			08/04/23 00:08	1
Chlorodibromomethane	ND		1.0		ug/L			08/04/23 00:08	1
Ethylene Dibromide	ND		1.0		ug/L			08/04/23 00:08	1
Chlorobenzene	ND		1.0		ug/L			08/04/23 00:08	1
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/04/23 00:08	1
Ethylbenzene	ND		1.0		ug/L			08/04/23 00:08	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/04/23 00:08	1
o-Xylene	ND		1.0		ug/L			08/04/23 00:08	1
Styrene	ND		1.0		ug/L			08/04/23 00:08	1
Bromoform	ND		1.0		ug/L			08/04/23 00:08	1
Isopropylbenzene	ND		1.0		ug/L			08/04/23 00:08	1
Bromobenzene	ND		1.0		ug/L			08/04/23 00:08	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			08/04/23 00:08	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/04/23 00:08	1
N-Propylbenzene	ND		1.0		ug/L			08/04/23 00:08	1
2-Chlorotoluene	ND		1.0		ug/L			08/04/23 00:08	1
4-Chlorotoluene	ND		1.0		ug/L			08/04/23 00:08	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/04/23 00:08	1
tert-Butylbenzene	ND		2.0		ug/L			08/04/23 00:08	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			08/04/23 00:08	1

Eurofins Seattle

Client Sample Results

Client: ARCADIS US Inc

Project/Site: GE Nikiski/CHEVARCAK GE-Nikiski

Job ID: 580-130190-1

Client Sample ID: MW-9-W-20230801

Lab Sample ID: 580-130190-3

Matrix: Water

Date Collected: 08/01/23 08:00

Date Received: 08/03/23 09:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0		ug/L			08/04/23 00:08	1
4-Isopropyltoluene	ND		1.0		ug/L			08/04/23 00:08	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/04/23 00:08	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/04/23 00:08	1
n-Butylbenzene	ND		1.0		ug/L			08/04/23 00:08	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/04/23 00:08	1
1,2-Dibromo-3-Chloropropane	ND		3.0		ug/L			08/04/23 00:08	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/04/23 00:08	1
Hexachlorobutadiene	ND		3.0		ug/L			08/04/23 00:08	1
Naphthalene	ND		3.0		ug/L			08/04/23 00:08	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			08/04/23 00:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120					08/04/23 00:08	1
1,2-Dichloroethane-d4 (Surr)	113		80 - 120					08/04/23 00:08	1
4-Bromofluorobenzene (Surr)	90		80 - 120					08/04/23 00:08	1
Dibromofluoromethane (Surr)	104		80 - 120					08/04/23 00:08	1

Method: ADEC AK101 - Alaska - Gasoline Range Organics (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		0.080		mg/L			08/04/23 00:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		50 - 150					08/04/23 00:08	1

Method: ADEC AK102 & 103 - Alaska - Diesel Range Organics & Residual Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (nC10-<nC25)	ND	*-	0.14		mg/L		08/07/23 09:20	08/08/23 04:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	63		50 - 150				08/07/23 09:20	08/08/23 04:49	1

Eurofins Seattle

Client Sample Results

Client: ARCADIS US Inc

Project/Site: GE Nikiski/CHEVARCAK GE-Nikiski

Job ID: 580-130190-1

Client Sample ID: MW-7-W-20230801

Lab Sample ID: 580-130190-4

Matrix: Water

Date Collected: 08/01/23 08:45

Date Received: 08/03/23 09:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0		ug/L			08/04/23 00:32	1
Chloromethane	ND		1.0		ug/L			08/04/23 00:32	1
Vinyl chloride	ND		1.0		ug/L			08/04/23 00:32	1
Bromomethane	ND		1.0		ug/L			08/04/23 00:32	1
Chloroethane	ND		1.0		ug/L			08/04/23 00:32	1
Trichlorofluoromethane	ND		1.0		ug/L			08/04/23 00:32	1
1,1-Dichloroethene	ND		1.0		ug/L			08/04/23 00:32	1
Methylene Chloride	ND		5.0		ug/L			08/04/23 00:32	1
Methyl tert-butyl ether	ND		1.0		ug/L			08/04/23 00:32	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/04/23 00:32	1
1,1-Dichloroethane	ND		1.0		ug/L			08/04/23 00:32	1
2,2-Dichloropropane	ND		1.0		ug/L			08/04/23 00:32	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			08/04/23 00:32	1
Chlorobromomethane	ND		1.0		ug/L			08/04/23 00:32	1
Chloroform	ND		1.0		ug/L			08/04/23 00:32	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/04/23 00:32	1
Carbon tetrachloride	ND		1.0		ug/L			08/04/23 00:32	1
1,1-Dichloropropene	ND		1.0		ug/L			08/04/23 00:32	1
Benzene	ND		1.0		ug/L			08/04/23 00:32	1
1,2-Dichloroethane	ND		1.0		ug/L			08/04/23 00:32	1
Trichloroethene	ND		1.0		ug/L			08/04/23 00:32	1
1,2-Dichloropropane	ND		1.0		ug/L			08/04/23 00:32	1
Dibromomethane	ND		1.0		ug/L			08/04/23 00:32	1
Dichlorobromomethane	ND		1.0		ug/L			08/04/23 00:32	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			08/04/23 00:32	1
Toluene	ND		1.0		ug/L			08/04/23 00:32	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			08/04/23 00:32	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/04/23 00:32	1
Tetrachloroethene	6.2		1.0		ug/L			08/04/23 00:32	1
1,3-Dichloropropane	ND		1.0		ug/L			08/04/23 00:32	1
Chlorodibromomethane	ND		1.0		ug/L			08/04/23 00:32	1
Ethylene Dibromide	ND		1.0		ug/L			08/04/23 00:32	1
Chlorobenzene	ND		1.0		ug/L			08/04/23 00:32	1
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/04/23 00:32	1
Ethylbenzene	ND		1.0		ug/L			08/04/23 00:32	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/04/23 00:32	1
o-Xylene	ND		1.0		ug/L			08/04/23 00:32	1
Styrene	ND		1.0		ug/L			08/04/23 00:32	1
Bromoform	ND		1.0		ug/L			08/04/23 00:32	1
Isopropylbenzene	ND		1.0		ug/L			08/04/23 00:32	1
Bromobenzene	ND		1.0		ug/L			08/04/23 00:32	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			08/04/23 00:32	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/04/23 00:32	1
N-Propylbenzene	ND		1.0		ug/L			08/04/23 00:32	1
2-Chlorotoluene	ND		1.0		ug/L			08/04/23 00:32	1
4-Chlorotoluene	ND		1.0		ug/L			08/04/23 00:32	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/04/23 00:32	1
tert-Butylbenzene	ND		2.0		ug/L			08/04/23 00:32	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			08/04/23 00:32	1

Eurofins Seattle

Client Sample Results

Client: ARCADIS US Inc

Project/Site: GE Nikiski/CHEVARCAK GE-Nikiski

Job ID: 580-130190-1

Client Sample ID: MW-7-W-20230801

Lab Sample ID: 580-130190-4

Matrix: Water

Date Collected: 08/01/23 08:45

Date Received: 08/03/23 09:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0		ug/L			08/04/23 00:32	1
4-Isopropyltoluene	ND		1.0		ug/L			08/04/23 00:32	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/04/23 00:32	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/04/23 00:32	1
n-Butylbenzene	ND		1.0		ug/L			08/04/23 00:32	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/04/23 00:32	1
1,2-Dibromo-3-Chloropropane	ND		3.0		ug/L			08/04/23 00:32	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/04/23 00:32	1
Hexachlorobutadiene	ND		3.0		ug/L			08/04/23 00:32	1
Naphthalene	ND		3.0		ug/L			08/04/23 00:32	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			08/04/23 00:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120					08/04/23 00:32	1
1,2-Dichloroethane-d4 (Surr)	114		80 - 120					08/04/23 00:32	1
4-Bromofluorobenzene (Surr)	90		80 - 120					08/04/23 00:32	1
Dibromofluoromethane (Surr)	105		80 - 120					08/04/23 00:32	1

Method: ADEC AK101 - Alaska - Gasoline Range Organics (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		0.080		mg/L			08/04/23 00:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		50 - 150					08/04/23 00:32	1

Method: ADEC AK102 & 103 - Alaska - Diesel Range Organics & Residual Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (nC10-<nC25)	ND	*-	0.14		mg/L		08/07/23 09:20	08/08/23 05:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	62		50 - 150				08/07/23 09:20	08/08/23 05:08	1

Client Sample Results

Client: ARCADIS US Inc

Project/Site: GE Nikiski/CHEVARCAK GE-Nikiski

Job ID: 580-130190-1

Client Sample ID: MW-8-W-20230801

Lab Sample ID: 580-130190-5

Matrix: Water

Date Collected: 08/01/23 09:30

Date Received: 08/03/23 09:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0		ug/L			08/04/23 06:59	1
Chloromethane	ND		1.0		ug/L			08/04/23 06:59	1
Vinyl chloride	ND		1.0		ug/L			08/04/23 06:59	1
Bromomethane	ND		1.0		ug/L			08/04/23 06:59	1
Chloroethane	ND		1.0		ug/L			08/04/23 06:59	1
Trichlorofluoromethane	ND		1.0		ug/L			08/04/23 06:59	1
1,1-Dichloroethene	ND		1.0		ug/L			08/04/23 06:59	1
Methylene Chloride	ND		5.0		ug/L			08/04/23 06:59	1
Methyl tert-butyl ether	ND		1.0		ug/L			08/04/23 06:59	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/04/23 06:59	1
1,1-Dichloroethane	ND		1.0		ug/L			08/04/23 06:59	1
2,2-Dichloropropane	ND		1.0		ug/L			08/04/23 06:59	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			08/04/23 06:59	1
Chlorobromomethane	ND		1.0		ug/L			08/04/23 06:59	1
Chloroform	ND		1.0		ug/L			08/04/23 06:59	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/04/23 06:59	1
Carbon tetrachloride	ND		1.0		ug/L			08/04/23 06:59	1
1,1-Dichloropropene	ND		1.0		ug/L			08/04/23 06:59	1
Benzene	ND		1.0		ug/L			08/04/23 06:59	1
1,2-Dichloroethane	ND		1.0		ug/L			08/04/23 06:59	1
Trichloroethene	ND		1.0		ug/L			08/04/23 06:59	1
1,2-Dichloropropane	ND		1.0		ug/L			08/04/23 06:59	1
Dibromomethane	ND		1.0		ug/L			08/04/23 06:59	1
Dichlorobromomethane	ND		1.0		ug/L			08/04/23 06:59	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			08/04/23 06:59	1
Toluene	ND		1.0		ug/L			08/04/23 06:59	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			08/04/23 06:59	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/04/23 06:59	1
Tetrachloroethene	ND		1.0		ug/L			08/04/23 06:59	1
1,3-Dichloropropane	ND		1.0		ug/L			08/04/23 06:59	1
Chlorodibromomethane	ND		1.0		ug/L			08/04/23 06:59	1
Ethylene Dibromide	ND		1.0		ug/L			08/04/23 06:59	1
Chlorobenzene	ND		1.0		ug/L			08/04/23 06:59	1
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/04/23 06:59	1
Ethylbenzene	ND		1.0		ug/L			08/04/23 06:59	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/04/23 06:59	1
o-Xylene	ND		1.0		ug/L			08/04/23 06:59	1
Styrene	ND		1.0		ug/L			08/04/23 06:59	1
Bromoform	ND		1.0		ug/L			08/04/23 06:59	1
Isopropylbenzene	ND		1.0		ug/L			08/04/23 06:59	1
Bromobenzene	ND		1.0		ug/L			08/04/23 06:59	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			08/04/23 06:59	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/04/23 06:59	1
N-Propylbenzene	ND		1.0		ug/L			08/04/23 06:59	1
2-Chlorotoluene	ND		1.0		ug/L			08/04/23 06:59	1
4-Chlorotoluene	ND		1.0		ug/L			08/04/23 06:59	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/04/23 06:59	1
tert-Butylbenzene	ND		2.0		ug/L			08/04/23 06:59	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			08/04/23 06:59	1

Eurofins Seattle

Client Sample Results

Client: ARCADIS US Inc

Project/Site: GE Nikiski/CHEVARCAK GE-Nikiski

Job ID: 580-130190-1

Client Sample ID: MW-8-W-20230801

Lab Sample ID: 580-130190-5

Matrix: Water

Date Collected: 08/01/23 09:30

Date Received: 08/03/23 09:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0		ug/L			08/04/23 06:59	1
4-Isopropyltoluene	ND		1.0		ug/L			08/04/23 06:59	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/04/23 06:59	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/04/23 06:59	1
n-Butylbenzene	ND		1.0		ug/L			08/04/23 06:59	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/04/23 06:59	1
1,2-Dibromo-3-Chloropropane	ND		3.0		ug/L			08/04/23 06:59	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/04/23 06:59	1
Hexachlorobutadiene	ND		3.0		ug/L			08/04/23 06:59	1
Naphthalene	ND		3.0		ug/L			08/04/23 06:59	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			08/04/23 06:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	101		80 - 120		08/04/23 06:59	1
1,2-Dichloroethane-d4 (Surr)	106		80 - 120		08/04/23 06:59	1
4-Bromofluorobenzene (Surr)	94		80 - 120		08/04/23 06:59	1
Dibromofluoromethane (Surr)	108		80 - 120		08/04/23 06:59	1

Method: ADEC AK101 - Alaska - Gasoline Range Organics (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		0.080		mg/L			08/04/23 06:59	1
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
4-Bromofluorobenzene (Surr)	96		50 - 150		08/04/23 06:59	1			

Method: ADEC AK102 & 103 - Alaska - Diesel Range Organics & Residual Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (nC10-<nC25)	0.14	*-	0.14		mg/L		08/07/23 09:20	08/08/23 05:27	1
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
o-Terphenyl	64		50 - 150		08/07/23 09:20	08/08/23 05:27	1		

Eurofins Seattle

Client Sample Results

Client: ARCADIS US Inc

Project/Site: GE Nikiski/CHEVARCAK GE-Nikiski

Job ID: 580-130190-1

Client Sample ID: MW-6-W-20230801

Lab Sample ID: 580-130190-6

Matrix: Water

Date Collected: 08/01/23 10:15

Date Received: 08/03/23 09:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0		ug/L			08/04/23 07:23	1
Chloromethane	ND		1.0		ug/L			08/04/23 07:23	1
Vinyl chloride	ND		1.0		ug/L			08/04/23 07:23	1
Bromomethane	ND		1.0		ug/L			08/04/23 07:23	1
Chloroethane	ND		1.0		ug/L			08/04/23 07:23	1
Trichlorofluoromethane	ND		1.0		ug/L			08/04/23 07:23	1
1,1-Dichloroethene	ND		1.0		ug/L			08/04/23 07:23	1
Methylene Chloride	ND		5.0		ug/L			08/04/23 07:23	1
Methyl tert-butyl ether	ND		1.0		ug/L			08/04/23 07:23	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/04/23 07:23	1
1,1-Dichloroethane	ND		1.0		ug/L			08/04/23 07:23	1
2,2-Dichloropropane	ND		1.0		ug/L			08/04/23 07:23	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			08/04/23 07:23	1
Chlorobromomethane	ND		1.0		ug/L			08/04/23 07:23	1
Chloroform	ND		1.0		ug/L			08/04/23 07:23	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/04/23 07:23	1
Carbon tetrachloride	ND		1.0		ug/L			08/04/23 07:23	1
1,1-Dichloropropene	ND		1.0		ug/L			08/04/23 07:23	1
Benzene	ND		1.0		ug/L			08/04/23 07:23	1
1,2-Dichloroethane	ND		1.0		ug/L			08/04/23 07:23	1
Trichloroethene	ND		1.0		ug/L			08/04/23 07:23	1
1,2-Dichloropropane	ND		1.0		ug/L			08/04/23 07:23	1
Dibromomethane	ND		1.0		ug/L			08/04/23 07:23	1
Dichlorobromomethane	ND		1.0		ug/L			08/04/23 07:23	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			08/04/23 07:23	1
Toluene	ND		1.0		ug/L			08/04/23 07:23	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			08/04/23 07:23	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/04/23 07:23	1
Tetrachloroethene	ND		1.0		ug/L			08/04/23 07:23	1
1,3-Dichloropropane	ND		1.0		ug/L			08/04/23 07:23	1
Chlorodibromomethane	ND		1.0		ug/L			08/04/23 07:23	1
Ethylene Dibromide	ND		1.0		ug/L			08/04/23 07:23	1
Chlorobenzene	ND		1.0		ug/L			08/04/23 07:23	1
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/04/23 07:23	1
Ethylbenzene	ND		1.0		ug/L			08/04/23 07:23	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/04/23 07:23	1
o-Xylene	ND		1.0		ug/L			08/04/23 07:23	1
Styrene	ND		1.0		ug/L			08/04/23 07:23	1
Bromoform	ND		1.0		ug/L			08/04/23 07:23	1
Isopropylbenzene	ND		1.0		ug/L			08/04/23 07:23	1
Bromobenzene	ND		1.0		ug/L			08/04/23 07:23	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			08/04/23 07:23	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/04/23 07:23	1
N-Propylbenzene	ND		1.0		ug/L			08/04/23 07:23	1
2-Chlorotoluene	ND		1.0		ug/L			08/04/23 07:23	1
4-Chlorotoluene	ND		1.0		ug/L			08/04/23 07:23	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/04/23 07:23	1
tert-Butylbenzene	ND		2.0		ug/L			08/04/23 07:23	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			08/04/23 07:23	1

Eurofins Seattle

Client Sample Results

Client: ARCADIS US Inc

Project/Site: GE Nikiski/CHEVARCAK GE-Nikiski

Job ID: 580-130190-1

Client Sample ID: MW-6-W-20230801

Lab Sample ID: 580-130190-6

Matrix: Water

Date Collected: 08/01/23 10:15

Date Received: 08/03/23 09:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0		ug/L			08/04/23 07:23	1
4-Isopropyltoluene	ND		1.0		ug/L			08/04/23 07:23	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/04/23 07:23	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/04/23 07:23	1
n-Butylbenzene	ND		1.0		ug/L			08/04/23 07:23	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/04/23 07:23	1
1,2-Dibromo-3-Chloropropane	ND		3.0		ug/L			08/04/23 07:23	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/04/23 07:23	1
Hexachlorobutadiene	ND		3.0		ug/L			08/04/23 07:23	1
Naphthalene	ND		3.0		ug/L			08/04/23 07:23	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			08/04/23 07:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		80 - 120					08/04/23 07:23	1
1,2-Dichloroethane-d4 (Surr)	114		80 - 120					08/04/23 07:23	1
4-Bromofluorobenzene (Surr)	89		80 - 120					08/04/23 07:23	1
Dibromofluoromethane (Surr)	106		80 - 120					08/04/23 07:23	1

Method: ADEC AK101 - Alaska - Gasoline Range Organics (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		0.080		mg/L			08/04/23 07:23	1
Surrogate									
4-Bromofluorobenzene (Surr)									

Method: ADEC AK102 & 103 - Alaska - Diesel Range Organics & Residual Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (nC10-<nC25)	0.14	*-	0.14		mg/L		08/07/23 09:20	08/08/23 05:46	1
Surrogate									
o-Terphenyl									

Eurofins Seattle

Client Sample Results

Client: ARCADIS US Inc

Project/Site: GE Nikiski/CHEVARCAK GE-Nikiski

Job ID: 580-130190-1

Client Sample ID: MW-5-W-20230801

Lab Sample ID: 580-130190-7

Matrix: Water

Date Collected: 08/01/23 11:00

Date Received: 08/03/23 09:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0		ug/L			08/04/23 08:11	1
Chloromethane	ND		1.0		ug/L			08/04/23 08:11	1
Vinyl chloride	ND		1.0		ug/L			08/04/23 08:11	1
Bromomethane	ND		1.0		ug/L			08/04/23 08:11	1
Chloroethane	ND		1.0		ug/L			08/04/23 08:11	1
Trichlorofluoromethane	ND		1.0		ug/L			08/04/23 08:11	1
1,1-Dichloroethene	ND		1.0		ug/L			08/04/23 08:11	1
Methylene Chloride	ND		5.0		ug/L			08/04/23 08:11	1
Methyl tert-butyl ether	ND		1.0		ug/L			08/04/23 08:11	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/04/23 08:11	1
1,1-Dichloroethane	ND		1.0		ug/L			08/04/23 08:11	1
2,2-Dichloropropane	ND		1.0		ug/L			08/04/23 08:11	1
cis-1,2-Dichloroethene	10		1.0		ug/L			08/04/23 08:11	1
Chlorobromomethane	ND		1.0		ug/L			08/04/23 08:11	1
Chloroform	ND		1.0		ug/L			08/04/23 08:11	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/04/23 08:11	1
Carbon tetrachloride	ND		1.0		ug/L			08/04/23 08:11	1
1,1-Dichloropropene	ND		1.0		ug/L			08/04/23 08:11	1
Benzene	ND		1.0		ug/L			08/04/23 08:11	1
1,2-Dichloroethane	ND		1.0		ug/L			08/04/23 08:11	1
Trichloroethene	ND		1.0		ug/L			08/04/23 08:11	1
1,2-Dichloropropane	ND		1.0		ug/L			08/04/23 08:11	1
Dibromomethane	ND		1.0		ug/L			08/04/23 08:11	1
Dichlorobromomethane	ND		1.0		ug/L			08/04/23 08:11	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			08/04/23 08:11	1
Toluene	ND		1.0		ug/L			08/04/23 08:11	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			08/04/23 08:11	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/04/23 08:11	1
Tetrachloroethene	ND		1.0		ug/L			08/04/23 08:11	1
1,3-Dichloropropane	ND		1.0		ug/L			08/04/23 08:11	1
Chlorodibromomethane	ND		1.0		ug/L			08/04/23 08:11	1
Ethylene Dibromide	ND		1.0		ug/L			08/04/23 08:11	1
Chlorobenzene	ND		1.0		ug/L			08/04/23 08:11	1
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/04/23 08:11	1
Ethylbenzene	14		1.0		ug/L			08/04/23 08:11	1
m-Xylene & p-Xylene	22		2.0		ug/L			08/04/23 08:11	1
o-Xylene	1.1		1.0		ug/L			08/04/23 08:11	1
Styrene	ND		1.0		ug/L			08/04/23 08:11	1
Bromoform	ND		1.0		ug/L			08/04/23 08:11	1
Isopropylbenzene	ND		1.0		ug/L			08/04/23 08:11	1
Bromobenzene	ND		1.0		ug/L			08/04/23 08:11	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			08/04/23 08:11	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/04/23 08:11	1
N-Propylbenzene	ND		1.0		ug/L			08/04/23 08:11	1
2-Chlorotoluene	ND		1.0		ug/L			08/04/23 08:11	1
4-Chlorotoluene	ND		1.0		ug/L			08/04/23 08:11	1
1,3,5-Trimethylbenzene	3.1		1.0		ug/L			08/04/23 08:11	1
tert-Butylbenzene	ND		2.0		ug/L			08/04/23 08:11	1
1,2,4-Trimethylbenzene	6.4		3.0		ug/L			08/04/23 08:11	1

Eurofins Seattle

Client Sample Results

Client: ARCADIS US Inc

Project/Site: GE Nikiski/CHEVARCAK GE-Nikiski

Job ID: 580-130190-1

Client Sample ID: MW-5-W-20230801

Lab Sample ID: 580-130190-7

Matrix: Water

Date Collected: 08/01/23 11:00

Date Received: 08/03/23 09:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0		ug/L			08/04/23 08:11	1
4-Isopropyltoluene	1.1		1.0		ug/L			08/04/23 08:11	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/04/23 08:11	1
1,4-Dichlorobenzene	2.0		1.0		ug/L			08/04/23 08:11	1
n-Butylbenzene	ND		1.0		ug/L			08/04/23 08:11	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/04/23 08:11	1
1,2-Dibromo-3-Chloropropane	ND		3.0		ug/L			08/04/23 08:11	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/04/23 08:11	1
Hexachlorobutadiene	ND		3.0		ug/L			08/04/23 08:11	1
Naphthalene	ND		3.0		ug/L			08/04/23 08:11	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			08/04/23 08:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	101		80 - 120					08/04/23 08:11	1
1,2-Dichloroethane-d4 (Surr)	106		80 - 120					08/04/23 08:11	1
4-Bromofluorobenzene (Surr)	104		80 - 120					08/04/23 08:11	1
Dibromofluoromethane (Surr)	102		80 - 120					08/04/23 08:11	1

Method: ADEC AK101 - Alaska - Gasoline Range Organics (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	0.34		0.080		mg/L			08/04/23 08:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		50 - 150					08/04/23 08:11	1

Method: ADEC AK102 & 103 - Alaska - Diesel Range Organics & Residual Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (nC10-<nC25)	0.33	*-	0.14		mg/L		08/07/23 09:20	08/08/23 06:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	66		50 - 150				08/07/23 09:20	08/08/23 06:24	1

Client Sample Results

Client: ARCADIS US Inc

Project/Site: GE Nikiski/CHEVARCAK GE-Nikiski

Job ID: 580-130190-1

Client Sample ID: MW-2-W-20230801

Date Collected: 08/01/23 11:45

Date Received: 08/03/23 09:20

Lab Sample ID: 580-130190-8

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0		ug/L			08/04/23 08:35	1
Chloromethane	ND		1.0		ug/L			08/04/23 08:35	1
Vinyl chloride	ND		1.0		ug/L			08/04/23 08:35	1
Bromomethane	ND		1.0		ug/L			08/04/23 08:35	1
Chloroethane	ND		1.0		ug/L			08/04/23 08:35	1
Trichlorofluoromethane	ND		1.0		ug/L			08/04/23 08:35	1
1,1-Dichloroethene	ND		1.0		ug/L			08/04/23 08:35	1
Methylene Chloride	ND		5.0		ug/L			08/04/23 08:35	1
Methyl tert-butyl ether	ND		1.0		ug/L			08/04/23 08:35	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/04/23 08:35	1
1,1-Dichloroethane	3.8		1.0		ug/L			08/04/23 08:35	1
2,2-Dichloropropane	ND		1.0		ug/L			08/04/23 08:35	1
cis-1,2-Dichloroethene	46		1.0		ug/L			08/04/23 08:35	1
Chlorobromomethane	ND		1.0		ug/L			08/04/23 08:35	1
Chloroform	ND		1.0		ug/L			08/04/23 08:35	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/04/23 08:35	1
Carbon tetrachloride	ND		1.0		ug/L			08/04/23 08:35	1
1,1-Dichloropropene	ND		1.0		ug/L			08/04/23 08:35	1
Benzene	ND		1.0		ug/L			08/04/23 08:35	1
1,2-Dichloroethane	ND		1.0		ug/L			08/04/23 08:35	1
Trichloroethene	ND		1.0		ug/L			08/04/23 08:35	1
1,2-Dichloropropane	ND		1.0		ug/L			08/04/23 08:35	1
Dibromomethane	ND		1.0		ug/L			08/04/23 08:35	1
Dichlorobromomethane	ND		1.0		ug/L			08/04/23 08:35	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			08/04/23 08:35	1
Toluene	2.1		1.0		ug/L			08/04/23 08:35	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			08/04/23 08:35	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/04/23 08:35	1
Tetrachloroethene	ND		1.0		ug/L			08/04/23 08:35	1
1,3-Dichloropropane	ND		1.0		ug/L			08/04/23 08:35	1
Chlorodibromomethane	ND		1.0		ug/L			08/04/23 08:35	1
Ethylene Dibromide	ND		1.0		ug/L			08/04/23 08:35	1
Chlorobenzene	ND		1.0		ug/L			08/04/23 08:35	1
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/04/23 08:35	1
o-Xylene	80		1.0		ug/L			08/04/23 08:35	1
Styrene	ND		1.0		ug/L			08/04/23 08:35	1
Bromoform	ND		1.0		ug/L			08/04/23 08:35	1
Isopropylbenzene	3.1		1.0		ug/L			08/04/23 08:35	1
Bromobenzene	ND		1.0		ug/L			08/04/23 08:35	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			08/04/23 08:35	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/04/23 08:35	1
N-Propylbenzene	3.3		1.0		ug/L			08/04/23 08:35	1
2-Chlorotoluene	ND		1.0		ug/L			08/04/23 08:35	1
4-Chlorotoluene	ND		1.0		ug/L			08/04/23 08:35	1
1,3,5-Trimethylbenzene	14		1.0		ug/L			08/04/23 08:35	1
tert-Butylbenzene	ND		2.0		ug/L			08/04/23 08:35	1
1,2,4-Trimethylbenzene	38		3.0		ug/L			08/04/23 08:35	1
sec-Butylbenzene	2.3		1.0		ug/L			08/04/23 08:35	1
4-Isopropyltoluene	1.8		1.0		ug/L			08/04/23 08:35	1

Eurofins Seattle

Client Sample Results

Client: ARCADIS US Inc

Project/Site: GE Nikiski/CHEVARCAK GE-Nikiski

Job ID: 580-130190-1

Client Sample ID: MW-2-W-20230801

Lab Sample ID: 580-130190-8

Matrix: Water

Date Collected: 08/01/23 11:45

Date Received: 08/03/23 09:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		1.0		ug/L			08/04/23 08:35	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/04/23 08:35	1
n-Butylbenzene	ND		1.0		ug/L			08/04/23 08:35	1
1,2-Dichlorobenzene	1.7		1.0		ug/L			08/04/23 08:35	1
1,2-Dibromo-3-Chloropropane	ND		3.0		ug/L			08/04/23 08:35	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/04/23 08:35	1
Hexachlorobutadiene	ND		3.0		ug/L			08/04/23 08:35	1
Naphthalene	ND		3.0		ug/L			08/04/23 08:35	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			08/04/23 08:35	1

Surrogate

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	101		80 - 120		08/04/23 08:35	1
1,2-Dichloroethane-d4 (Surr)	108		80 - 120		08/04/23 08:35	1
4-Bromofluorobenzene (Surr)	95		80 - 120		08/04/23 08:35	1
Dibromofluoromethane (Surr)	103		80 - 120		08/04/23 08:35	1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	240		10		ug/L			08/07/23 13:04	10
m-Xylene & p-Xylene	280		20		ug/L			08/07/23 13:04	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		80 - 120					08/07/23 13:04	10
1,2-Dichloroethane-d4 (Surr)	107		80 - 120					08/07/23 13:04	10
4-Bromofluorobenzene (Surr)	99		80 - 120					08/07/23 13:04	10
Dibromofluoromethane (Surr)	101		80 - 120					08/07/23 13:04	10

Method: ADEC AK101 - Alaska - Gasoline Range Organics (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	1.6		0.080		mg/L			08/04/23 08:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		50 - 150					08/04/23 08:35	1

Method: ADEC AK102 & 103 - Alaska - Diesel Range Organics & Residual Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (nC10-<nC25)	0.73	*-	0.14		mg/L		08/07/23 09:20	08/08/23 06:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	67		50 - 150				08/07/23 09:20	08/08/23 06:43	1

Eurofins Seattle

Client Sample Results

Client: ARCADIS US Inc

Project/Site: GE Nikiski/CHEVARCAK GE-Nikiski

Job ID: 580-130190-1

Client Sample ID: MW-3-W-20230801

Lab Sample ID: 580-130190-9

Matrix: Water

Date Collected: 08/01/23 12:30

Date Received: 08/03/23 09:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0		ug/L			08/07/23 07:53	1
Chloromethane	ND		1.0		ug/L			08/07/23 07:53	1
Vinyl chloride	ND		1.0		ug/L			08/07/23 07:53	1
Bromomethane	ND		1.0		ug/L			08/07/23 07:53	1
Chloroethane	ND		1.0		ug/L			08/07/23 07:53	1
Trichlorofluoromethane	ND		1.0		ug/L			08/07/23 07:53	1
1,1-Dichloroethene	ND		1.0		ug/L			08/07/23 07:53	1
Methylene Chloride	ND		5.0		ug/L			08/07/23 07:53	1
Methyl tert-butyl ether	ND		1.0		ug/L			08/07/23 07:53	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/07/23 07:53	1
1,1-Dichloroethane	2.8		1.0		ug/L			08/07/23 07:53	1
2,2-Dichloropropane	ND		1.0		ug/L			08/07/23 07:53	1
cis-1,2-Dichloroethene	2.7		1.0		ug/L			08/07/23 07:53	1
Chlorobromomethane	ND		1.0		ug/L			08/07/23 07:53	1
Chloroform	ND		1.0		ug/L			08/07/23 07:53	1
1,1,1-Trichloroethane	1.0		1.0		ug/L			08/07/23 07:53	1
Carbon tetrachloride	ND		1.0		ug/L			08/07/23 07:53	1
1,1-Dichloropropene	ND		1.0		ug/L			08/07/23 07:53	1
Benzene	ND		1.0		ug/L			08/07/23 07:53	1
1,2-Dichloroethane	ND		1.0		ug/L			08/07/23 07:53	1
Trichloroethene	ND		1.0		ug/L			08/07/23 07:53	1
1,2-Dichloropropane	ND		1.0		ug/L			08/07/23 07:53	1
Dibromomethane	ND		1.0		ug/L			08/07/23 07:53	1
Dichlorobromomethane	ND		1.0		ug/L			08/07/23 07:53	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			08/07/23 07:53	1
Toluene	ND		1.0		ug/L			08/07/23 07:53	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			08/07/23 07:53	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/07/23 07:53	1
Tetrachloroethene	1.7		1.0		ug/L			08/07/23 07:53	1
1,3-Dichloropropane	ND		1.0		ug/L			08/07/23 07:53	1
Chlorodibromomethane	ND		1.0		ug/L			08/07/23 07:53	1
Ethylene Dibromide	ND		1.0		ug/L			08/07/23 07:53	1
Chlorobenzene	ND		1.0		ug/L			08/07/23 07:53	1
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/07/23 07:53	1
Ethylbenzene	ND		1.0		ug/L			08/07/23 07:53	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/07/23 07:53	1
o-Xylene	ND		1.0		ug/L			08/07/23 07:53	1
Styrene	ND		1.0		ug/L			08/07/23 07:53	1
Bromoform	ND		1.0		ug/L			08/07/23 07:53	1
Isopropylbenzene	ND		1.0		ug/L			08/07/23 07:53	1
Bromobenzene	ND		1.0		ug/L			08/07/23 07:53	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			08/07/23 07:53	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/07/23 07:53	1
N-Propylbenzene	ND		1.0		ug/L			08/07/23 07:53	1
2-Chlorotoluene	ND		1.0		ug/L			08/07/23 07:53	1
4-Chlorotoluene	ND		1.0		ug/L			08/07/23 07:53	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/07/23 07:53	1
tert-Butylbenzene	ND		2.0		ug/L			08/07/23 07:53	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			08/07/23 07:53	1

Eurofins Seattle

Client Sample Results

Client: ARCADIS US Inc

Project/Site: GE Nikiski/CHEVARCAK GE-Nikiski

Job ID: 580-130190-1

Client Sample ID: MW-3-W-20230801

Lab Sample ID: 580-130190-9

Matrix: Water

Date Collected: 08/01/23 12:30

Date Received: 08/03/23 09:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0		ug/L			08/07/23 07:53	1
4-Isopropyltoluene	ND		1.0		ug/L			08/07/23 07:53	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/07/23 07:53	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/07/23 07:53	1
n-Butylbenzene	ND		1.0		ug/L			08/07/23 07:53	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/07/23 07:53	1
1,2-Dibromo-3-Chloropropane	ND		3.0		ug/L			08/07/23 07:53	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/07/23 07:53	1
Hexachlorobutadiene	ND		3.0		ug/L			08/07/23 07:53	1
Naphthalene	ND		3.0		ug/L			08/07/23 07:53	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			08/07/23 07:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	102		80 - 120					08/07/23 07:53	1
1,2-Dichloroethane-d4 (Surr)	107		80 - 120					08/07/23 07:53	1
4-Bromofluorobenzene (Surr)	90		80 - 120					08/07/23 07:53	1
Dibromofluoromethane (Surr)	102		80 - 120					08/07/23 07:53	1

Method: ADEC AK101 - Alaska - Gasoline Range Organics (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		0.080		mg/L			08/04/23 08:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		50 - 150					08/04/23 08:59	1

Method: ADEC AK102 & 103 - Alaska - Diesel Range Organics & Residual Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (nC10-<nC25)	0.94	*- F1	0.14		mg/L		08/07/23 09:20	08/08/23 07:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	72		50 - 150				08/07/23 09:20	08/08/23 07:02	1

Eurofins Seattle

Client Sample Results

Client: ARCADIS US Inc

Project/Site: GE Nikiski/CHEVARCAK GE-Nikiski

Job ID: 580-130190-1

Client Sample ID: MW-4-W-20230801

Lab Sample ID: 580-130190-10

Matrix: Water

Date Collected: 08/01/23 13:15

Date Received: 08/03/23 09:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0		ug/L			08/04/23 09:23	1
Chloromethane	ND		1.0		ug/L			08/04/23 09:23	1
Vinyl chloride	ND		1.0		ug/L			08/04/23 09:23	1
Bromomethane	ND		1.0		ug/L			08/04/23 09:23	1
Chloroethane	ND		1.0		ug/L			08/04/23 09:23	1
Trichlorofluoromethane	ND		1.0		ug/L			08/04/23 09:23	1
1,1-Dichloroethene	ND		1.0		ug/L			08/04/23 09:23	1
Methylene Chloride	ND		5.0		ug/L			08/04/23 09:23	1
Methyl tert-butyl ether	ND		1.0		ug/L			08/04/23 09:23	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/04/23 09:23	1
1,1-Dichloroethane	ND		1.0		ug/L			08/04/23 09:23	1
2,2-Dichloropropane	ND		1.0		ug/L			08/04/23 09:23	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			08/04/23 09:23	1
Chlorobromomethane	ND		1.0		ug/L			08/04/23 09:23	1
Chloroform	ND		1.0		ug/L			08/04/23 09:23	1
1,1,1-Trichloroethane	1.4		1.0		ug/L			08/04/23 09:23	1
Carbon tetrachloride	ND		1.0		ug/L			08/04/23 09:23	1
1,1-Dichloropropene	ND		1.0		ug/L			08/04/23 09:23	1
Benzene	ND		1.0		ug/L			08/04/23 09:23	1
1,2-Dichloroethane	ND		1.0		ug/L			08/04/23 09:23	1
Trichloroethene	3.2		1.0		ug/L			08/04/23 09:23	1
1,2-Dichloropropane	ND		1.0		ug/L			08/04/23 09:23	1
Dibromomethane	ND		1.0		ug/L			08/04/23 09:23	1
Dichlorobromomethane	ND		1.0		ug/L			08/04/23 09:23	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			08/04/23 09:23	1
Toluene	ND		1.0		ug/L			08/04/23 09:23	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			08/04/23 09:23	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/04/23 09:23	1
Tetrachloroethene	10		1.0		ug/L			08/04/23 09:23	1
1,3-Dichloropropane	ND		1.0		ug/L			08/04/23 09:23	1
Chlorodibromomethane	ND		1.0		ug/L			08/04/23 09:23	1
Ethylene Dibromide	ND		1.0		ug/L			08/04/23 09:23	1
Chlorobenzene	ND		1.0		ug/L			08/04/23 09:23	1
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/04/23 09:23	1
Ethylbenzene	ND		1.0		ug/L			08/04/23 09:23	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/04/23 09:23	1
o-Xylene	ND		1.0		ug/L			08/04/23 09:23	1
Styrene	ND		1.0		ug/L			08/04/23 09:23	1
Bromoform	ND		1.0		ug/L			08/04/23 09:23	1
Isopropylbenzene	ND		1.0		ug/L			08/04/23 09:23	1
Bromobenzene	ND		1.0		ug/L			08/04/23 09:23	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			08/04/23 09:23	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/04/23 09:23	1
N-Propylbenzene	ND		1.0		ug/L			08/04/23 09:23	1
2-Chlorotoluene	ND		1.0		ug/L			08/04/23 09:23	1
4-Chlorotoluene	ND		1.0		ug/L			08/04/23 09:23	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/04/23 09:23	1
tert-Butylbenzene	ND		2.0		ug/L			08/04/23 09:23	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			08/04/23 09:23	1

Eurofins Seattle

Client Sample Results

Client: ARCADIS US Inc

Project/Site: GE Nikiski/CHEVARCAK GE-Nikiski

Job ID: 580-130190-1

Client Sample ID: MW-4-W-20230801

Lab Sample ID: 580-130190-10

Matrix: Water

Date Collected: 08/01/23 13:15

Date Received: 08/03/23 09:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0		ug/L			08/04/23 09:23	1
4-Isopropyltoluene	ND		1.0		ug/L			08/04/23 09:23	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/04/23 09:23	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/04/23 09:23	1
n-Butylbenzene	ND		1.0		ug/L			08/04/23 09:23	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/04/23 09:23	1
1,2-Dibromo-3-Chloropropane	ND		3.0		ug/L			08/04/23 09:23	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/04/23 09:23	1
Hexachlorobutadiene	ND		3.0		ug/L			08/04/23 09:23	1
Naphthalene	ND		3.0		ug/L			08/04/23 09:23	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			08/04/23 09:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		80 - 120		08/04/23 09:23	1
1,2-Dichloroethane-d4 (Surr)	107		80 - 120		08/04/23 09:23	1
4-Bromofluorobenzene (Surr)	87		80 - 120		08/04/23 09:23	1
Dibromofluoromethane (Surr)	102		80 - 120		08/04/23 09:23	1

Method: ADEC AK101 - Alaska - Gasoline Range Organics (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		0.080		mg/L			08/04/23 09:23	1
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
4-Bromofluorobenzene (Surr)	90		50 - 150		08/04/23 09:23	1			

Method: ADEC AK102 & 103 - Alaska - Diesel Range Organics & Residual Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (nC10-<nC25)	0.44	*-	0.15		mg/L		08/07/23 09:20	08/08/23 07:59	1
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
o-Terphenyl	64		50 - 150		08/07/23 09:20	08/08/23 07:59	1		

Eurofins Seattle

Client Sample Results

Client: ARCADIS US Inc

Project/Site: GE Nikiski/CHEVARCAK GE-Nikiski

Job ID: 580-130190-1

Client Sample ID: MW-1-W-20230801

Lab Sample ID: 580-130190-11

Matrix: Water

Date Collected: 08/01/23 14:06

Date Received: 08/03/23 09:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0		ug/L			08/04/23 09:48	1
Chloromethane	ND		1.0		ug/L			08/04/23 09:48	1
Vinyl chloride	ND		1.0		ug/L			08/04/23 09:48	1
Bromomethane	ND		1.0		ug/L			08/04/23 09:48	1
Chloroethane	ND		1.0		ug/L			08/04/23 09:48	1
Trichlorofluoromethane	ND		1.0		ug/L			08/04/23 09:48	1
1,1-Dichloroethene	ND		1.0		ug/L			08/04/23 09:48	1
Methylene Chloride	ND		5.0		ug/L			08/04/23 09:48	1
Methyl tert-butyl ether	ND		1.0		ug/L			08/04/23 09:48	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/04/23 09:48	1
1,1-Dichloroethane	2.7		1.0		ug/L			08/04/23 09:48	1
2,2-Dichloropropane	ND		1.0		ug/L			08/04/23 09:48	1
cis-1,2-Dichloroethene	50		1.0		ug/L			08/04/23 09:48	1
Chlorobromomethane	ND		1.0		ug/L			08/04/23 09:48	1
Chloroform	ND		1.0		ug/L			08/04/23 09:48	1
1,1,1-Trichloroethane	1.0		1.0		ug/L			08/04/23 09:48	1
Carbon tetrachloride	ND		1.0		ug/L			08/04/23 09:48	1
1,1-Dichloropropene	ND		1.0		ug/L			08/04/23 09:48	1
Benzene	ND		1.0		ug/L			08/04/23 09:48	1
1,2-Dichloroethane	ND		1.0		ug/L			08/04/23 09:48	1
Trichloroethene	8.4		1.0		ug/L			08/04/23 09:48	1
1,2-Dichloropropane	ND		1.0		ug/L			08/04/23 09:48	1
Dibromomethane	ND		1.0		ug/L			08/04/23 09:48	1
Dichlorobromomethane	ND		1.0		ug/L			08/04/23 09:48	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			08/04/23 09:48	1
Toluene	ND		1.0		ug/L			08/04/23 09:48	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			08/04/23 09:48	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/04/23 09:48	1
Tetrachloroethene	19		1.0		ug/L			08/04/23 09:48	1
1,3-Dichloropropane	ND		1.0		ug/L			08/04/23 09:48	1
Chlorodibromomethane	ND		1.0		ug/L			08/04/23 09:48	1
Ethylene Dibromide	ND		1.0		ug/L			08/04/23 09:48	1
Chlorobenzene	ND		1.0		ug/L			08/04/23 09:48	1
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/04/23 09:48	1
Ethylbenzene	ND		1.0		ug/L			08/04/23 09:48	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/04/23 09:48	1
o-Xylene	ND		1.0		ug/L			08/04/23 09:48	1
Styrene	ND		1.0		ug/L			08/04/23 09:48	1
Bromoform	ND		1.0		ug/L			08/04/23 09:48	1
Isopropylbenzene	ND		1.0		ug/L			08/04/23 09:48	1
Bromobenzene	ND		1.0		ug/L			08/04/23 09:48	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			08/04/23 09:48	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/04/23 09:48	1
N-Propylbenzene	ND		1.0		ug/L			08/04/23 09:48	1
2-Chlorotoluene	ND		1.0		ug/L			08/04/23 09:48	1
4-Chlorotoluene	ND		1.0		ug/L			08/04/23 09:48	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/04/23 09:48	1
tert-Butylbenzene	ND		2.0		ug/L			08/04/23 09:48	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			08/04/23 09:48	1

Eurofins Seattle

Client Sample Results

Client: ARCADIS US Inc

Project/Site: GE Nikiski/CHEVARCAK GE-Nikiski

Job ID: 580-130190-1

Client Sample ID: MW-1-W-20230801

Lab Sample ID: 580-130190-11

Matrix: Water

Date Collected: 08/01/23 14:06

Date Received: 08/03/23 09:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0		ug/L			08/04/23 09:48	1
4-Isopropyltoluene	ND		1.0		ug/L			08/04/23 09:48	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/04/23 09:48	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/04/23 09:48	1
n-Butylbenzene	ND		1.0		ug/L			08/04/23 09:48	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/04/23 09:48	1
1,2-Dibromo-3-Chloropropane	ND		3.0		ug/L			08/04/23 09:48	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/04/23 09:48	1
Hexachlorobutadiene	ND		3.0		ug/L			08/04/23 09:48	1
Naphthalene	ND		3.0		ug/L			08/04/23 09:48	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			08/04/23 09:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	101		80 - 120					08/04/23 09:48	1
1,2-Dichloroethane-d4 (Surr)	109		80 - 120					08/04/23 09:48	1
4-Bromofluorobenzene (Surr)	91		80 - 120					08/04/23 09:48	1
Dibromofluoromethane (Surr)	105		80 - 120					08/04/23 09:48	1

Method: ADEC AK101 - Alaska - Gasoline Range Organics (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	0.10		0.080		mg/L			08/04/23 09:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		50 - 150					08/04/23 09:48	1

Method: ADEC AK102 & 103 - Alaska - Diesel Range Organics & Residual Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (nC10-<nC25)	0.48	*-	0.14		mg/L		08/07/23 09:20	08/08/23 08:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	44	S1-	50 - 150				08/07/23 09:20	08/08/23 08:18	1

Client Sample Results

Client: ARCADIS US Inc

Project/Site: GE Nikiski/CHEVARCAK GE-Nikiski

Job ID: 580-130190-1

Client Sample ID: EQB-1-W-20230801

Lab Sample ID: 580-130190-12

Matrix: Water

Date Collected: 08/01/23 14:20

Date Received: 08/03/23 09:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0		ug/L			08/04/23 06:11	1
Chloromethane	ND		1.0		ug/L			08/04/23 06:11	1
Vinyl chloride	ND		1.0		ug/L			08/04/23 06:11	1
Bromomethane	ND		1.0		ug/L			08/04/23 06:11	1
Chloroethane	ND		1.0		ug/L			08/04/23 06:11	1
Trichlorofluoromethane	ND		1.0		ug/L			08/04/23 06:11	1
1,1-Dichloroethene	ND		1.0		ug/L			08/04/23 06:11	1
Methylene Chloride	ND		5.0		ug/L			08/04/23 06:11	1
Methyl tert-butyl ether	ND		1.0		ug/L			08/04/23 06:11	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/04/23 06:11	1
1,1-Dichloroethane	ND		1.0		ug/L			08/04/23 06:11	1
2,2-Dichloropropane	ND		1.0		ug/L			08/04/23 06:11	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			08/04/23 06:11	1
Chlorobromomethane	ND		1.0		ug/L			08/04/23 06:11	1
Chloroform	1.8		1.0		ug/L			08/04/23 06:11	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/04/23 06:11	1
Carbon tetrachloride	ND		1.0		ug/L			08/04/23 06:11	1
1,1-Dichloropropene	ND		1.0		ug/L			08/04/23 06:11	1
Benzene	ND		1.0		ug/L			08/04/23 06:11	1
1,2-Dichloroethane	ND		1.0		ug/L			08/04/23 06:11	1
Trichloroethene	ND		1.0		ug/L			08/04/23 06:11	1
1,2-Dichloropropane	ND		1.0		ug/L			08/04/23 06:11	1
Dibromomethane	ND		1.0		ug/L			08/04/23 06:11	1
Dichlorobromomethane	ND		1.0		ug/L			08/04/23 06:11	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			08/04/23 06:11	1
Toluene	ND		1.0		ug/L			08/04/23 06:11	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			08/04/23 06:11	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/04/23 06:11	1
Tetrachloroethene	ND		1.0		ug/L			08/04/23 06:11	1
1,3-Dichloropropane	ND		1.0		ug/L			08/04/23 06:11	1
Chlorodibromomethane	ND		1.0		ug/L			08/04/23 06:11	1
Ethylene Dibromide	ND		1.0		ug/L			08/04/23 06:11	1
Chlorobenzene	ND		1.0		ug/L			08/04/23 06:11	1
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/04/23 06:11	1
Ethylbenzene	ND		1.0		ug/L			08/04/23 06:11	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/04/23 06:11	1
o-Xylene	ND		1.0		ug/L			08/04/23 06:11	1
Styrene	ND		1.0		ug/L			08/04/23 06:11	1
Bromoform	ND		1.0		ug/L			08/04/23 06:11	1
Isopropylbenzene	ND		1.0		ug/L			08/04/23 06:11	1
Bromobenzene	ND		1.0		ug/L			08/04/23 06:11	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			08/04/23 06:11	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/04/23 06:11	1
N-Propylbenzene	ND		1.0		ug/L			08/04/23 06:11	1
2-Chlorotoluene	ND		1.0		ug/L			08/04/23 06:11	1
4-Chlorotoluene	ND		1.0		ug/L			08/04/23 06:11	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/04/23 06:11	1
tert-Butylbenzene	ND		2.0		ug/L			08/04/23 06:11	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			08/04/23 06:11	1

Eurofins Seattle

Client Sample Results

Client: ARCADIS US Inc

Project/Site: GE Nikiski/CHEVARCAK GE-Nikiski

Job ID: 580-130190-1

Client Sample ID: EQB-1-W-20230801

Lab Sample ID: 580-130190-12

Matrix: Water

Date Collected: 08/01/23 14:20

Date Received: 08/03/23 09:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0		ug/L			08/04/23 06:11	1
4-Isopropyltoluene	ND		1.0		ug/L			08/04/23 06:11	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/04/23 06:11	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/04/23 06:11	1
n-Butylbenzene	ND		1.0		ug/L			08/04/23 06:11	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/04/23 06:11	1
1,2-Dibromo-3-Chloropropane	ND		3.0		ug/L			08/04/23 06:11	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/04/23 06:11	1
Hexachlorobutadiene	ND		3.0		ug/L			08/04/23 06:11	1
Naphthalene	ND		3.0		ug/L			08/04/23 06:11	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			08/04/23 06:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	102		80 - 120					08/04/23 06:11	1
1,2-Dichloroethane-d4 (Surr)	104		80 - 120					08/04/23 06:11	1
4-Bromofluorobenzene (Surr)	92		80 - 120					08/04/23 06:11	1
Dibromofluoromethane (Surr)	101		80 - 120					08/04/23 06:11	1

Method: ADEC AK101 - Alaska - Gasoline Range Organics (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		0.080		mg/L			08/04/23 06:11	1
Surrogate									
4-Bromofluorobenzene (Surr)									

Method: ADEC AK102 & 103 - Alaska - Diesel Range Organics & Residual Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (nC10-<nC25)	ND	*-	0.13		mg/L		08/07/23 09:20	08/08/23 08:37	1
Surrogate									
o-Terphenyl									

Eurofins Seattle

Client Sample Results

Client: ARCADIS US Inc

Project/Site: GE Nikiski/CHEVARCAK GE-Nikiski

Job ID: 580-130190-1

Client Sample ID: BD-1-W-20230801

Lab Sample ID: 580-130190-13

Matrix: Water

Date Collected: 08/01/23 00:01

Date Received: 08/03/23 09:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0		ug/L			08/03/23 22:56	1
Chloromethane	ND		1.0		ug/L			08/03/23 22:56	1
Vinyl chloride	ND		1.0		ug/L			08/03/23 22:56	1
Bromomethane	ND		1.0		ug/L			08/03/23 22:56	1
Chloroethane	ND		1.0		ug/L			08/03/23 22:56	1
Trichlorofluoromethane	ND		1.0		ug/L			08/03/23 22:56	1
1,1-Dichloroethene	ND		1.0		ug/L			08/03/23 22:56	1
Methylene Chloride	ND		5.0		ug/L			08/03/23 22:56	1
Methyl tert-butyl ether	ND		1.0		ug/L			08/03/23 22:56	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/03/23 22:56	1
1,1-Dichloroethane	ND		1.0		ug/L			08/03/23 22:56	1
2,2-Dichloropropane	ND		1.0		ug/L			08/03/23 22:56	1
cis-1,2-Dichloroethene	10		1.0		ug/L			08/03/23 22:56	1
Chlorobromomethane	ND		1.0		ug/L			08/03/23 22:56	1
Chloroform	ND		1.0		ug/L			08/03/23 22:56	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/03/23 22:56	1
Carbon tetrachloride	ND		1.0		ug/L			08/03/23 22:56	1
1,1-Dichloropropene	ND		1.0		ug/L			08/03/23 22:56	1
Benzene	ND		1.0		ug/L			08/03/23 22:56	1
1,2-Dichloroethane	ND		1.0		ug/L			08/03/23 22:56	1
Trichloroethene	ND		1.0		ug/L			08/03/23 22:56	1
1,2-Dichloropropane	ND		1.0		ug/L			08/03/23 22:56	1
Dibromomethane	ND		1.0		ug/L			08/03/23 22:56	1
Dichlorobromomethane	ND		1.0		ug/L			08/03/23 22:56	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			08/03/23 22:56	1
Toluene	ND		1.0		ug/L			08/03/23 22:56	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			08/03/23 22:56	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/03/23 22:56	1
Tetrachloroethene	ND		1.0		ug/L			08/03/23 22:56	1
1,3-Dichloropropane	ND		1.0		ug/L			08/03/23 22:56	1
Chlorodibromomethane	ND		1.0		ug/L			08/03/23 22:56	1
Ethylene Dibromide	ND		1.0		ug/L			08/03/23 22:56	1
Chlorobenzene	ND		1.0		ug/L			08/03/23 22:56	1
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/03/23 22:56	1
Ethylbenzene	13		1.0		ug/L			08/03/23 22:56	1
m-Xylene & p-Xylene	22		2.0		ug/L			08/03/23 22:56	1
o-Xylene	1.1		1.0		ug/L			08/03/23 22:56	1
Styrene	ND		1.0		ug/L			08/03/23 22:56	1
Bromoform	ND		1.0		ug/L			08/03/23 22:56	1
Isopropylbenzene	ND		1.0		ug/L			08/03/23 22:56	1
Bromobenzene	ND		1.0		ug/L			08/03/23 22:56	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			08/03/23 22:56	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/03/23 22:56	1
N-Propylbenzene	ND		1.0		ug/L			08/03/23 22:56	1
2-Chlorotoluene	ND		1.0		ug/L			08/03/23 22:56	1
4-Chlorotoluene	ND		1.0		ug/L			08/03/23 22:56	1
1,3,5-Trimethylbenzene	3.0		1.0		ug/L			08/03/23 22:56	1
tert-Butylbenzene	ND		2.0		ug/L			08/03/23 22:56	1
1,2,4-Trimethylbenzene	6.3		3.0		ug/L			08/03/23 22:56	1

Eurofins Seattle

Client Sample Results

Client: ARCADIS US Inc

Project/Site: GE Nikiski/CHEVARCAK GE-Nikiski

Job ID: 580-130190-1

Client Sample ID: BD-1-W-20230801

Lab Sample ID: 580-130190-13

Matrix: Water

Date Collected: 08/01/23 00:01

Date Received: 08/03/23 09:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0		ug/L			08/03/23 22:56	1
4-Isopropyltoluene	1.0		1.0		ug/L			08/03/23 22:56	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/03/23 22:56	1
1,4-Dichlorobenzene	1.9		1.0		ug/L			08/03/23 22:56	1
n-Butylbenzene	ND		1.0		ug/L			08/03/23 22:56	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/03/23 22:56	1
1,2-Dibromo-3-Chloropropane	ND		3.0		ug/L			08/03/23 22:56	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/03/23 22:56	1
Hexachlorobutadiene	ND		3.0		ug/L			08/03/23 22:56	1
Naphthalene	ND		3.0		ug/L			08/03/23 22:56	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			08/03/23 22:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		80 - 120					08/03/23 22:56	1
1,2-Dichloroethane-d4 (Surr)	107		80 - 120					08/03/23 22:56	1
4-Bromofluorobenzene (Surr)	105		80 - 120					08/03/23 22:56	1
Dibromofluoromethane (Surr)	102		80 - 120					08/03/23 22:56	1

Method: ADEC AK101 - Alaska - Gasoline Range Organics (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	0.34		0.080		mg/L			08/03/23 22:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		50 - 150					08/03/23 22:56	1

Method: ADEC AK102 & 103 - Alaska - Diesel Range Organics & Residual Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (nC10-<nC25)	1.0	*-	0.14		mg/L		08/07/23 09:20	08/08/23 08:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	70		50 - 150				08/07/23 09:20	08/08/23 08:57	1

Client Sample Results

Client: ARCADIS US Inc

Project/Site: GE Nikiski/CHEVARCAK GE-Nikiski

Job ID: 580-130190-1

Client Sample ID: Trip Blank 1

Date Collected: 08/01/23 00:01

Date Received: 08/03/23 09:20

Lab Sample ID: 580-130190-14

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0		ug/L		08/03/23 18:07		1
Chloromethane	ND		1.0		ug/L		08/03/23 18:07		1
Vinyl chloride	ND		1.0		ug/L		08/03/23 18:07		1
Bromomethane	ND		1.0		ug/L		08/03/23 18:07		1
Chloroethane	ND		1.0		ug/L		08/03/23 18:07		1
Trichlorofluoromethane	ND		1.0		ug/L		08/03/23 18:07		1
1,1-Dichloroethene	ND		1.0		ug/L		08/03/23 18:07		1
Methylene Chloride	ND		5.0		ug/L		08/03/23 18:07		1
Methyl tert-butyl ether	ND		1.0		ug/L		08/03/23 18:07		1
trans-1,2-Dichloroethene	ND		1.0		ug/L		08/03/23 18:07		1
1,1-Dichloroethane	ND		1.0		ug/L		08/03/23 18:07		1
2,2-Dichloropropane	ND		1.0		ug/L		08/03/23 18:07		1
cis-1,2-Dichloroethene	ND		1.0		ug/L		08/03/23 18:07		1
Chlorobromomethane	ND		1.0		ug/L		08/03/23 18:07		1
Chloroform	ND		1.0		ug/L		08/03/23 18:07		1
1,1,1-Trichloroethane	ND		1.0		ug/L		08/03/23 18:07		1
Carbon tetrachloride	ND		1.0		ug/L		08/03/23 18:07		1
1,1-Dichloropropene	ND		1.0		ug/L		08/03/23 18:07		1
Benzene	ND		1.0		ug/L		08/03/23 18:07		1
1,2-Dichloroethane	ND		1.0		ug/L		08/03/23 18:07		1
Trichloroethene	ND		1.0		ug/L		08/03/23 18:07		1
1,2-Dichloropropane	ND		1.0		ug/L		08/03/23 18:07		1
Dibromomethane	ND		1.0		ug/L		08/03/23 18:07		1
Dichlorobromomethane	ND		1.0		ug/L		08/03/23 18:07		1
cis-1,3-Dichloropropene	ND		1.0		ug/L		08/03/23 18:07		1
Toluene	ND		1.0		ug/L		08/03/23 18:07		1
trans-1,3-Dichloropropene	ND		1.0		ug/L		08/03/23 18:07		1
1,1,2-Trichloroethane	ND		1.0		ug/L		08/03/23 18:07		1
Tetrachloroethene	ND		1.0		ug/L		08/03/23 18:07		1
1,3-Dichloropropane	ND		1.0		ug/L		08/03/23 18:07		1
Chlorodibromomethane	ND		1.0		ug/L		08/03/23 18:07		1
Ethylene Dibromide	ND		1.0		ug/L		08/03/23 18:07		1
Chlorobenzene	ND		1.0		ug/L		08/03/23 18:07		1
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L		08/03/23 18:07		1
Ethylbenzene	ND		1.0		ug/L		08/03/23 18:07		1
m-Xylene & p-Xylene	ND		2.0		ug/L		08/03/23 18:07		1
o-Xylene	ND		1.0		ug/L		08/03/23 18:07		1
Styrene	ND		1.0		ug/L		08/03/23 18:07		1
Bromoform	ND		1.0		ug/L		08/03/23 18:07		1
Isopropylbenzene	ND		1.0		ug/L		08/03/23 18:07		1
Bromobenzene	ND		1.0		ug/L		08/03/23 18:07		1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L		08/03/23 18:07		1
1,2,3-Trichloropropane	ND		1.0		ug/L		08/03/23 18:07		1
N-Propylbenzene	ND		1.0		ug/L		08/03/23 18:07		1
2-Chlorotoluene	ND		1.0		ug/L		08/03/23 18:07		1
4-Chlorotoluene	ND		1.0		ug/L		08/03/23 18:07		1
1,3,5-Trimethylbenzene	ND		1.0		ug/L		08/03/23 18:07		1
tert-Butylbenzene	ND		2.0		ug/L		08/03/23 18:07		1
1,2,4-Trimethylbenzene	ND		3.0		ug/L		08/03/23 18:07		1

Eurofins Seattle

Client Sample Results

Client: ARCADIS US Inc

Project/Site: GE Nikiski/CHEVARCAK GE-Nikiski

Job ID: 580-130190-1

Client Sample ID: Trip Blank 1

Lab Sample ID: 580-130190-14

Matrix: Water

Date Collected: 08/01/23 00:01

Date Received: 08/03/23 09:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0		ug/L			08/03/23 18:07	1
4-Isopropyltoluene	ND		1.0		ug/L			08/03/23 18:07	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/03/23 18:07	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/03/23 18:07	1
n-Butylbenzene	ND		1.0		ug/L			08/03/23 18:07	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/03/23 18:07	1
1,2-Dibromo-3-Chloropropane	ND		3.0		ug/L			08/03/23 18:07	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/03/23 18:07	1
Hexachlorobutadiene	ND		3.0		ug/L			08/03/23 18:07	1
Naphthalene	ND		3.0		ug/L			08/03/23 18:07	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			08/03/23 18:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	102		80 - 120					08/03/23 18:07	1
1,2-Dichloroethane-d4 (Surr)	105		80 - 120					08/03/23 18:07	1
4-Bromofluorobenzene (Surr)	91		80 - 120					08/03/23 18:07	1
Dibromofluoromethane (Surr)	97		80 - 120					08/03/23 18:07	1

Method: ADEC AK101 - Alaska - Gasoline Range Organics (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		0.080		mg/L			08/03/23 18:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		50 - 150					08/03/23 18:07	1

Eurofins Seattle

Client Sample Results

Client: ARCADIS US Inc

Project/Site: GE Nikiski/CHEVARCAK GE-Nikiski

Job ID: 580-130190-1

Client Sample ID: Trip Blank 2

Date Collected: 08/01/23 00:01

Date Received: 08/03/23 09:20

Lab Sample ID: 580-130190-15

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0		ug/L			08/03/23 18:31	1
Chloromethane	ND		1.0		ug/L			08/03/23 18:31	1
Vinyl chloride	ND		1.0		ug/L			08/03/23 18:31	1
Bromomethane	ND		1.0		ug/L			08/03/23 18:31	1
Chloroethane	ND		1.0		ug/L			08/03/23 18:31	1
Trichlorofluoromethane	ND		1.0		ug/L			08/03/23 18:31	1
1,1-Dichloroethene	ND		1.0		ug/L			08/03/23 18:31	1
Methylene Chloride	ND		5.0		ug/L			08/03/23 18:31	1
Methyl tert-butyl ether	ND		1.0		ug/L			08/03/23 18:31	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/03/23 18:31	1
1,1-Dichloroethane	ND		1.0		ug/L			08/03/23 18:31	1
2,2-Dichloropropane	ND		1.0		ug/L			08/03/23 18:31	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			08/03/23 18:31	1
Chlorobromomethane	ND		1.0		ug/L			08/03/23 18:31	1
Chloroform	ND		1.0		ug/L			08/03/23 18:31	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/03/23 18:31	1
Carbon tetrachloride	ND		1.0		ug/L			08/03/23 18:31	1
1,1-Dichloropropene	ND		1.0		ug/L			08/03/23 18:31	1
Benzene	ND		1.0		ug/L			08/03/23 18:31	1
1,2-Dichloroethane	ND		1.0		ug/L			08/03/23 18:31	1
Trichloroethene	ND		1.0		ug/L			08/03/23 18:31	1
1,2-Dichloropropane	ND		1.0		ug/L			08/03/23 18:31	1
Dibromomethane	ND		1.0		ug/L			08/03/23 18:31	1
Dichlorobromomethane	ND		1.0		ug/L			08/03/23 18:31	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			08/03/23 18:31	1
Toluene	ND		1.0		ug/L			08/03/23 18:31	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			08/03/23 18:31	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/03/23 18:31	1
Tetrachloroethene	ND		1.0		ug/L			08/03/23 18:31	1
1,3-Dichloropropane	ND		1.0		ug/L			08/03/23 18:31	1
Chlorodibromomethane	ND		1.0		ug/L			08/03/23 18:31	1
Ethylene Dibromide	ND		1.0		ug/L			08/03/23 18:31	1
Chlorobenzene	ND		1.0		ug/L			08/03/23 18:31	1
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/03/23 18:31	1
Ethylbenzene	ND		1.0		ug/L			08/03/23 18:31	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/03/23 18:31	1
o-Xylene	ND		1.0		ug/L			08/03/23 18:31	1
Styrene	ND		1.0		ug/L			08/03/23 18:31	1
Bromoform	ND		1.0		ug/L			08/03/23 18:31	1
Isopropylbenzene	ND		1.0		ug/L			08/03/23 18:31	1
Bromobenzene	ND		1.0		ug/L			08/03/23 18:31	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			08/03/23 18:31	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/03/23 18:31	1
N-Propylbenzene	ND		1.0		ug/L			08/03/23 18:31	1
2-Chlorotoluene	ND		1.0		ug/L			08/03/23 18:31	1
4-Chlorotoluene	ND		1.0		ug/L			08/03/23 18:31	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/03/23 18:31	1
tert-Butylbenzene	ND		2.0		ug/L			08/03/23 18:31	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			08/03/23 18:31	1

Eurofins Seattle

Client Sample Results

Client: ARCADIS US Inc

Project/Site: GE Nikiski/CHEVARCAK GE-Nikiski

Job ID: 580-130190-1

Client Sample ID: Trip Blank 2

Lab Sample ID: 580-130190-15

Matrix: Water

Date Collected: 08/01/23 00:01

Date Received: 08/03/23 09:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0		ug/L			08/03/23 18:31	1
4-Isopropyltoluene	ND		1.0		ug/L			08/03/23 18:31	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/03/23 18:31	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/03/23 18:31	1
n-Butylbenzene	ND		1.0		ug/L			08/03/23 18:31	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/03/23 18:31	1
1,2-Dibromo-3-Chloropropane	ND		3.0		ug/L			08/03/23 18:31	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/03/23 18:31	1
Hexachlorobutadiene	ND		3.0		ug/L			08/03/23 18:31	1
Naphthalene	ND		3.0		ug/L			08/03/23 18:31	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			08/03/23 18:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		80 - 120					08/03/23 18:31	1
1,2-Dichloroethane-d4 (Surr)	113		80 - 120					08/03/23 18:31	1
4-Bromofluorobenzene (Surr)	88		80 - 120					08/03/23 18:31	1
Dibromofluoromethane (Surr)	100		80 - 120					08/03/23 18:31	1

Method: ADEC AK101 - Alaska - Gasoline Range Organics (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		0.080		mg/L			08/03/23 18:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		50 - 150					08/03/23 18:31	1

Eurofins Seattle

QC Sample Results

Client: ARCADIS US Inc

Project/Site: GE Nikiski/CHEVARCAK GE-Nikiski

Job ID: 580-130190-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 580-433662/11

Matrix: Water

Analysis Batch: 433662

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0		ug/L			08/03/23 17:19	1
Chloromethane	ND		1.0		ug/L			08/03/23 17:19	1
Vinyl chloride	ND		1.0		ug/L			08/03/23 17:19	1
Bromomethane	ND		1.0		ug/L			08/03/23 17:19	1
Chloroethane	ND		1.0		ug/L			08/03/23 17:19	1
Trichlorodifluoromethane	ND		1.0		ug/L			08/03/23 17:19	1
1,1-Dichloroethene	ND		1.0		ug/L			08/03/23 17:19	1
Methylene Chloride	ND		5.0		ug/L			08/03/23 17:19	1
Methyl tert-butyl ether	ND		1.0		ug/L			08/03/23 17:19	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/03/23 17:19	1
1,1-Dichloroethane	ND		1.0		ug/L			08/03/23 17:19	1
2,2-Dichloropropane	ND		1.0		ug/L			08/03/23 17:19	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			08/03/23 17:19	1
Chlorobromomethane	ND		1.0		ug/L			08/03/23 17:19	1
Chloroform	ND		1.0		ug/L			08/03/23 17:19	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/03/23 17:19	1
Carbon tetrachloride	ND		1.0		ug/L			08/03/23 17:19	1
1,1-Dichloropropene	ND		1.0		ug/L			08/03/23 17:19	1
Benzene	ND		1.0		ug/L			08/03/23 17:19	1
1,2-Dichloroethane	ND		1.0		ug/L			08/03/23 17:19	1
Trichloroethene	ND		1.0		ug/L			08/03/23 17:19	1
1,2-Dichloropropane	ND		1.0		ug/L			08/03/23 17:19	1
Dibromomethane	ND		1.0		ug/L			08/03/23 17:19	1
Dichlorobromomethane	ND		1.0		ug/L			08/03/23 17:19	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			08/03/23 17:19	1
Toluene	ND		1.0		ug/L			08/03/23 17:19	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			08/03/23 17:19	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/03/23 17:19	1
Tetrachloroethene	ND		1.0		ug/L			08/03/23 17:19	1
1,3-Dichloropropane	ND		1.0		ug/L			08/03/23 17:19	1
Chlorodibromomethane	ND		1.0		ug/L			08/03/23 17:19	1
Ethylene Dibromide	ND		1.0		ug/L			08/03/23 17:19	1
Chlorobenzene	ND		1.0		ug/L			08/03/23 17:19	1
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/03/23 17:19	1
Ethylbenzene	ND		1.0		ug/L			08/03/23 17:19	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/03/23 17:19	1
o-Xylene	ND		1.0		ug/L			08/03/23 17:19	1
Styrene	ND		1.0		ug/L			08/03/23 17:19	1
Bromoform	ND		1.0		ug/L			08/03/23 17:19	1
Isopropylbenzene	ND		1.0		ug/L			08/03/23 17:19	1
Bromobenzene	ND		1.0		ug/L			08/03/23 17:19	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			08/03/23 17:19	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/03/23 17:19	1
N-Propylbenzene	ND		1.0		ug/L			08/03/23 17:19	1
2-Chlorotoluene	ND		1.0		ug/L			08/03/23 17:19	1
4-Chlorotoluene	ND		1.0		ug/L			08/03/23 17:19	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/03/23 17:19	1
tert-Butylbenzene	ND		2.0		ug/L			08/03/23 17:19	1

Eurofins Seattle

QC Sample Results

Client: ARCADIS US Inc

Project/Site: GE Nikiski/CHEVARCAK GE-Nikiski

Job ID: 580-130190-1

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

Lab Sample ID: MB 580-433662/11

Matrix: Water

Analysis Batch: 433662

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifer									
1,2,4-Trimethylbenzene	ND				3.0		ug/L			08/03/23 17:19	1
sec-Butylbenzene	ND				1.0		ug/L			08/03/23 17:19	1
4-Isopropyltoluene	ND				1.0		ug/L			08/03/23 17:19	1
1,3-Dichlorobenzene	ND				1.0		ug/L			08/03/23 17:19	1
1,4-Dichlorobenzene	ND				1.0		ug/L			08/03/23 17:19	1
n-Butylbenzene	ND				1.0		ug/L			08/03/23 17:19	1
1,2-Dichlorobenzene	ND				1.0		ug/L			08/03/23 17:19	1
1,2-Dibromo-3-Chloropropane	ND				3.0		ug/L			08/03/23 17:19	1
1,2,4-Trichlorobenzene	ND				1.0		ug/L			08/03/23 17:19	1
Hexachlorobutadiene	ND				3.0		ug/L			08/03/23 17:19	1
Naphthalene	ND				3.0		ug/L			08/03/23 17:19	1
1,2,3-Trichlorobenzene	ND				2.0		ug/L			08/03/23 17:19	1
Surrogate	MB	MB	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
	Result	Qualifer									
Toluene-d8 (Surr)	102		80 - 120						08/03/23 17:19	1	
1,2-Dichloroethane-d4 (Surr)	105		80 - 120						08/03/23 17:19	1	
4-Bromofluorobenzene (Surr)	92		80 - 120						08/03/23 17:19	1	
Dibromofluoromethane (Surr)	99		80 - 120						08/03/23 17:19	1	

Lab Sample ID: LCS 580-433662/6

Matrix: Water

Analysis Batch: 433662

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	Limits
		Result	Qualifier				
Dichlorodifluoromethane	10.0	12.0		ug/L		120	20 - 150
Chloromethane	10.0	10.1		ug/L		101	25 - 150
Vinyl chloride	10.0	10.1		ug/L		101	31 - 150
Bromomethane	10.0	10.2		ug/L		102	36 - 150
Chloroethane	10.0	9.87		ug/L		99	38 - 150
Trichlorofluoromethane	10.0	10.7		ug/L		107	45 - 148
1,1-Dichloroethene	10.0	10.2		ug/L		102	70 - 129
Methylene Chloride	10.0	10.1		ug/L		101	77 - 125
Methyl tert-butyl ether	10.0	9.69		ug/L		97	72 - 120
trans-1,2-Dichloroethene	10.0	10.2		ug/L		102	75 - 120
1,1-Dichloroethane	10.0	9.74		ug/L		97	80 - 120
2,2-Dichloropropane	10.0	9.77		ug/L		98	66 - 126
cis-1,2-Dichloroethene	10.0	10.0		ug/L		100	76 - 120
Chlorobromomethane	10.0	10.3		ug/L		103	78 - 120
Chloroform	10.0	10.3		ug/L		103	78 - 127
1,1,1-Trichloroethane	10.0	9.91		ug/L		99	74 - 130
Carbon tetrachloride	10.0	9.76		ug/L		98	72 - 129
1,1-Dichloropropene	10.0	9.78		ug/L		98	74 - 120
Benzene	10.0	10.3		ug/L		103	80 - 122
1,2-Dichloroethane	10.0	10.3		ug/L		103	69 - 126
Trichloroethene	10.0	10.3		ug/L		103	80 - 125
1,2-Dichloropropane	10.0	10.3		ug/L		103	80 - 120
Dibromomethane	10.0	10.0		ug/L		100	80 - 120
Dichlorobromomethane	10.0	9.34		ug/L		93	75 - 124

Eurofins Seattle

QC Sample Results

Client: ARCADIS US Inc

Project/Site: GE Nikiski/CHEVARCAK GE-Nikiski

Job ID: 580-130190-1

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

Lab Sample ID: LCS 580-433662/6

Matrix: Water

Analysis Batch: 433662

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
cis-1,3-Dichloropropene	10.0	8.92		ug/L	89	77 - 120	
Toluene	10.0	10.5		ug/L	105	80 - 120	
trans-1,3-Dichloropropene	10.0	8.30		ug/L	83	76 - 122	
1,1,2-Trichloroethane	10.0	10.7		ug/L	107	80 - 121	
Tetrachloroethene	10.0	10.2		ug/L	102	76 - 125	
1,3-Dichloropropane	10.0	10.4		ug/L	104	79 - 120	
Chlorodibromomethane	10.0	8.18		ug/L	82	73 - 125	
Ethylene Dibromide	10.0	10.5		ug/L	105	79 - 126	
Chlorobenzene	10.0	10.2		ug/L	102	80 - 120	
1,1,1,2-Tetrachloroethane	10.0	9.85		ug/L	98	79 - 120	
Ethylbenzene	10.0	10.4		ug/L	104	80 - 120	
m-Xylene & p-Xylene	10.0	10.5		ug/L	105	80 - 120	
o-Xylene	10.0	10.2		ug/L	102	80 - 120	
Styrene	10.0	9.80		ug/L	98	76 - 122	
Bromoform	10.0	6.06		ug/L	61	56 - 139	
Isopropylbenzene	10.0	10.1		ug/L	101	80 - 123	
Bromobenzene	10.0	10.5		ug/L	105	80 - 120	
1,1,2,2-Tetrachloroethane	10.0	10.4		ug/L	104	74 - 124	
1,2,3-Trichloropropane	10.0	10.7		ug/L	107	76 - 124	
N-Propylbenzene	10.0	10.4		ug/L	104	80 - 122	
2-Chlorotoluene	10.0	10.5		ug/L	105	80 - 120	
4-Chlorotoluene	10.0	10.4		ug/L	104	73 - 129	
1,3,5-Trimethylbenzene	10.0	10.7		ug/L	107	80 - 122	
tert-Butylbenzene	10.0	10.2		ug/L	102	75 - 123	
1,2,4-Trimethylbenzene	10.0	10.7		ug/L	107	80 - 120	
sec-Butylbenzene	10.0	10.3		ug/L	103	78 - 122	
4-Isopropyltoluene	10.0	10.3		ug/L	103	77 - 126	
1,3-Dichlorobenzene	10.0	9.58		ug/L	96	77 - 127	
1,4-Dichlorobenzene	10.0	10.4		ug/L	104	80 - 120	
n-Butylbenzene	10.0	10.1		ug/L	101	57 - 133	
1,2-Dichlorobenzene	10.0	10.3		ug/L	103	80 - 120	
1,2-Dibromo-3-Chloropropane	10.0	8.16		ug/L	82	65 - 133	
1,2,4-Trichlorobenzene	10.0	9.36		ug/L	94	61 - 148	
Hexachlorobutadiene	10.0	9.60		ug/L	96	74 - 131	
Naphthalene	10.0	10.1		ug/L	101	63 - 150	
1,2,3-Trichlorobenzene	10.0	10.0		ug/L	100	65 - 150	

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	103		80 - 120
1,2-Dichloroethane-d4 (Surr)	102		80 - 120
4-Bromofluorobenzene (Surr)	95		80 - 120
Dibromofluoromethane (Surr)	99		80 - 120

Eurofins Seattle

QC Sample Results

Client: ARCADIS US Inc

Project/Site: GE Nikiski/CHEVARCAK GE-Nikiski

Job ID: 580-130190-1

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

Lab Sample ID: LCSD 580-433662/7

Matrix: Water

Analysis Batch: 433662

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
Dichlorodifluoromethane	10.0	12.2		ug/L		122	20 - 150	1	33
Chloromethane	10.0	10.1		ug/L		101	25 - 150	0	26
Vinyl chloride	10.0	10.3		ug/L		103	31 - 150	2	26
Bromomethane	10.0	10.4		ug/L		104	36 - 150	2	33
Chloroethane	10.0	10.0		ug/L		100	38 - 150	1	28
Trichlorofluoromethane	10.0	10.8		ug/L		108	45 - 148	1	35
1,1-Dichloroethene	10.0	10.4		ug/L		104	70 - 129	2	23
Methylene Chloride	10.0	10.2		ug/L		102	77 - 125	2	18
Methyl tert-butyl ether	10.0	9.83		ug/L		98	72 - 120	1	18
trans-1,2-Dichloroethene	10.0	10.1		ug/L		101	75 - 120	1	21
1,1-Dichloroethane	10.0	9.67		ug/L		97	80 - 120	1	15
2,2-Dichloropropane	10.0	9.69		ug/L		97	66 - 126	1	22
cis-1,2-Dichloroethene	10.0	9.85		ug/L		99	76 - 120	1	20
Chlorobromomethane	10.0	10.4		ug/L		104	78 - 120	1	13
Chloroform	10.0	10.4		ug/L		104	78 - 127	1	14
1,1,1-Trichloroethane	10.0	9.89		ug/L		99	74 - 130	0	19
Carbon tetrachloride	10.0	10.0		ug/L		100	72 - 129	3	19
1,1-Dichloropropene	10.0	9.77		ug/L		98	74 - 120	0	14
Benzene	10.0	10.2		ug/L		102	80 - 122	1	14
1,2-Dichloroethane	10.0	10.1		ug/L		101	69 - 126	3	11
Trichloroethene	10.0	10.5		ug/L		105	80 - 125	2	13
1,2-Dichloropropane	10.0	10.0		ug/L		100	80 - 120	3	14
Dibromomethane	10.0	10.0		ug/L		100	80 - 120	0	11
Dichlorobromomethane	10.0	9.18		ug/L		92	75 - 124	2	13
cis-1,3-Dichloropropene	10.0	8.11		ug/L		81	77 - 120	9	35
Toluene	10.0	10.4		ug/L		104	80 - 120	2	13
trans-1,3-Dichloropropene	10.0	8.08		ug/L		81	76 - 122	3	20
1,1,2-Trichloroethane	10.0	10.6		ug/L		106	80 - 121	2	14
Tetrachloroethene	10.0	10.1		ug/L		101	76 - 125	1	13
1,3-Dichloropropane	10.0	10.3		ug/L		103	79 - 120	2	19
Chlorodibromomethane	10.0	7.99		ug/L		80	73 - 125	2	13
Ethylene Dibromide	10.0	10.4		ug/L		104	79 - 126	1	12
Chlorobenzene	10.0	10.4		ug/L		104	80 - 120	2	10
1,1,1,2-Tetrachloroethane	10.0	9.91		ug/L		99	79 - 120	1	16
Ethylbenzene	10.0	10.3		ug/L		103	80 - 120	1	14
m-Xylene & p-Xylene	10.0	10.2		ug/L		102	80 - 120	2	14
o-Xylene	10.0	10.3		ug/L		103	80 - 120	1	16
Styrene	10.0	9.98		ug/L		100	76 - 122	2	16
Bromoform	10.0	6.17		ug/L		62	56 - 139	2	21
Isopropylbenzene	10.0	10.3		ug/L		103	80 - 123	2	19
Bromobenzene	10.0	10.3		ug/L		103	80 - 120	1	24
1,1,2,2-Tetrachloroethane	10.0	10.2		ug/L		102	74 - 124	2	25
1,2,3-Trichloropropane	10.0	10.6		ug/L		106	76 - 124	1	26
N-Propylbenzene	10.0	10.1		ug/L		101	80 - 122	3	22
2-Chlorotoluene	10.0	10.4		ug/L		104	80 - 120	0	20
4-Chlorotoluene	10.0	10.1		ug/L		101	73 - 129	2	29
1,3,5-Trimethylbenzene	10.0	10.2		ug/L		102	80 - 122	6	21
tert-Butylbenzene	10.0	10.2		ug/L		102	75 - 123	1	21

Eurofins Seattle

QC Sample Results

Client: ARCADIS US Inc

Project/Site: GE Nikiski/CHEVARCAK GE-Nikiski

Job ID: 580-130190-1

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

Lab Sample ID: LCSD 580-433662/7

Matrix: Water

Analysis Batch: 433662

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
1,2,4-Trimethylbenzene	10.0	10.1		ug/L		101	80 - 120	6	16
sec-Butylbenzene	10.0	10.2		ug/L		102	78 - 122	0	15
4-Isopropyltoluene	10.0	10.4		ug/L		104	77 - 126	1	20
1,3-Dichlorobenzene	10.0	10.1		ug/L		101	77 - 127	5	35
1,4-Dichlorobenzene	10.0	10.5		ug/L		105	80 - 120	1	17
n-Butylbenzene	10.0	10.2		ug/L		102	57 - 133	2	14
1,2-Dichlorobenzene	10.0	10.9		ug/L		109	80 - 120	6	15
1,2-Dibromo-3-Chloropropane	10.0	9.18		ug/L		92	65 - 133	12	25
1,2,4-Trichlorobenzene	10.0	11.4		ug/L		114	61 - 148	20	27
Hexachlorobutadiene	10.0	10.9		ug/L		109	74 - 131	13	22
Naphthalene	10.0	11.1		ug/L		111	63 - 150	9	33
1,2,3-Trichlorobenzene	10.0	11.7		ug/L		117	65 - 150	15	33

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
Toluene-d8 (Surr)	104		80 - 120
1,2-Dichloroethane-d4 (Surr)	101		80 - 120
4-Bromofluorobenzene (Surr)	96		80 - 120
Dibromofluoromethane (Surr)	99		80 - 120

Lab Sample ID: MB 580-433673/11

Matrix: Water

Analysis Batch: 433673

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0		ug/L			08/04/23 05:46	1
Chloromethane	ND		1.0		ug/L			08/04/23 05:46	1
Vinyl chloride	ND		1.0		ug/L			08/04/23 05:46	1
Bromomethane	ND		1.0		ug/L			08/04/23 05:46	1
Chloroethane	ND		1.0		ug/L			08/04/23 05:46	1
Trichlorofluoromethane	ND		1.0		ug/L			08/04/23 05:46	1
1,1-Dichloroethene	ND		1.0		ug/L			08/04/23 05:46	1
Methylene Chloride	ND		5.0		ug/L			08/04/23 05:46	1
Methyl tert-butyl ether	ND		1.0		ug/L			08/04/23 05:46	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/04/23 05:46	1
1,1-Dichloroethane	ND		1.0		ug/L			08/04/23 05:46	1
2,2-Dichloropropane	ND		1.0		ug/L			08/04/23 05:46	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			08/04/23 05:46	1
Chlorobromomethane	ND		1.0		ug/L			08/04/23 05:46	1
Chloroform	ND		1.0		ug/L			08/04/23 05:46	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/04/23 05:46	1
Carbon tetrachloride	ND		1.0		ug/L			08/04/23 05:46	1
1,1-Dichloropropene	ND		1.0		ug/L			08/04/23 05:46	1
Benzene	ND		1.0		ug/L			08/04/23 05:46	1
1,2-Dichloroethane	ND		1.0		ug/L			08/04/23 05:46	1
Trichloroethene	ND		1.0		ug/L			08/04/23 05:46	1
1,2-Dichloropropane	ND		1.0		ug/L			08/04/23 05:46	1
Dibromomethane	ND		1.0		ug/L			08/04/23 05:46	1
Dichlorobromomethane	ND		1.0		ug/L			08/04/23 05:46	1

Eurofins Seattle

QC Sample Results

Client: ARCADIS US Inc

Project/Site: GE Nikiski/CHEVARCAK GE-Nikiski

Job ID: 580-130190-1

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

Lab Sample ID: MB 580-433673/11

Matrix: Water

Analysis Batch: 433673

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND				1.0		ug/L			08/04/23 05:46	1
Toluene	ND				1.0		ug/L			08/04/23 05:46	1
trans-1,3-Dichloropropene	ND				1.0		ug/L			08/04/23 05:46	1
1,1,2-Trichloroethane	ND				1.0		ug/L			08/04/23 05:46	1
Tetrachloroethene	ND				1.0		ug/L			08/04/23 05:46	1
1,3-Dichloropropane	ND				1.0		ug/L			08/04/23 05:46	1
Chlorodibromomethane	ND				1.0		ug/L			08/04/23 05:46	1
Ethylene Dibromide	ND				1.0		ug/L			08/04/23 05:46	1
Chlorobenzene	ND				1.0		ug/L			08/04/23 05:46	1
1,1,1,2-Tetrachloroethane	ND				1.0		ug/L			08/04/23 05:46	1
Ethylbenzene	ND				1.0		ug/L			08/04/23 05:46	1
m-Xylene & p-Xylene	ND				2.0		ug/L			08/04/23 05:46	1
o-Xylene	ND				1.0		ug/L			08/04/23 05:46	1
Styrene	ND				1.0		ug/L			08/04/23 05:46	1
Bromoform	ND				1.0		ug/L			08/04/23 05:46	1
Isopropylbenzene	ND				1.0		ug/L			08/04/23 05:46	1
Bromobenzene	ND				1.0		ug/L			08/04/23 05:46	1
1,1,2,2-Tetrachloroethane	ND				1.0		ug/L			08/04/23 05:46	1
1,2,3-Trichloropropane	ND				1.0		ug/L			08/04/23 05:46	1
N-Propylbenzene	ND				1.0		ug/L			08/04/23 05:46	1
2-Chlorotoluene	ND				1.0		ug/L			08/04/23 05:46	1
4-Chlorotoluene	ND				1.0		ug/L			08/04/23 05:46	1
1,3,5-Trimethylbenzene	ND				1.0		ug/L			08/04/23 05:46	1
tert-Butylbenzene	ND				2.0		ug/L			08/04/23 05:46	1
1,2,4-Trimethylbenzene	ND				3.0		ug/L			08/04/23 05:46	1
sec-Butylbenzene	ND				1.0		ug/L			08/04/23 05:46	1
4-Isopropyltoluene	ND				1.0		ug/L			08/04/23 05:46	1
1,3-Dichlorobenzene	ND				1.0		ug/L			08/04/23 05:46	1
1,4-Dichlorobenzene	ND				1.0		ug/L			08/04/23 05:46	1
n-Butylbenzene	ND				1.0		ug/L			08/04/23 05:46	1
1,2-Dichlorobenzene	ND				1.0		ug/L			08/04/23 05:46	1
1,2-Dibromo-3-Chloropropane	ND				3.0		ug/L			08/04/23 05:46	1
1,2,4-Trichlorobenzene	ND				1.0		ug/L			08/04/23 05:46	1
Hexachlorobutadiene	ND				3.0		ug/L			08/04/23 05:46	1
Naphthalene	ND				3.0		ug/L			08/04/23 05:46	1
1,2,3-Trichlorobenzene	ND				2.0		ug/L			08/04/23 05:46	1

Surrogate	MB	MB	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		100		80 - 120			08/04/23 05:46	1
1,2-Dichloroethane-d4 (Surr)	106		106		80 - 120			08/04/23 05:46	1
4-Bromofluorobenzene (Surr)	93		93		80 - 120			08/04/23 05:46	1
Dibromofluoromethane (Surr)	101		101		80 - 120			08/04/23 05:46	1

Eurofins Seattle

QC Sample Results

Client: ARCADIS US Inc

Project/Site: GE Nikiski/CHEVARCAK GE-Nikiski

Job ID: 580-130190-1

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

Lab Sample ID: LCS 580-433673/6

Matrix: Water

Analysis Batch: 433673

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Dichlorodifluoromethane	10.0	12.2		ug/L		122	20 - 150
Chloromethane	10.0	10.8		ug/L		108	25 - 150
Vinyl chloride	10.0	10.6		ug/L		106	31 - 150
Bromomethane	10.0	10.4		ug/L		104	36 - 150
Chloroethane	10.0	10.6		ug/L		106	38 - 150
Trichlorofluoromethane	10.0	10.7		ug/L		107	45 - 148
1,1-Dichloroethene	10.0	10.2		ug/L		102	70 - 129
Methylene Chloride	10.0	10.2		ug/L		102	77 - 125
Methyl tert-butyl ether	10.0	9.41		ug/L		94	72 - 120
trans-1,2-Dichloroethene	10.0	9.98		ug/L		100	75 - 120
1,1-Dichloroethane	10.0	10.0		ug/L		100	80 - 120
2,2-Dichloropropane	10.0	8.53		ug/L		85	66 - 126
cis-1,2-Dichloroethene	10.0	9.76		ug/L		98	76 - 120
Chlorobromomethane	10.0	10.2		ug/L		102	78 - 120
Chloroform	10.0	10.5		ug/L		105	78 - 127
1,1,1-Trichloroethane	10.0	10.1		ug/L		101	74 - 130
Carbon tetrachloride	10.0	9.94		ug/L		99	72 - 129
1,1-Dichloropropene	10.0	10.1		ug/L		101	74 - 120
Benzene	10.0	10.5		ug/L		105	80 - 122
1,2-Dichloroethane	10.0	10.5		ug/L		105	69 - 126
Trichloroethene	10.0	10.4		ug/L		104	80 - 125
1,2-Dichloropropane	10.0	10.6		ug/L		106	80 - 120
Dibromomethane	10.0	10.3		ug/L		103	80 - 120
Dichlorobromomethane	10.0	9.57		ug/L		96	75 - 124
cis-1,3-Dichloropropene	10.0	9.00		ug/L		90	77 - 120
Toluene	10.0	10.6		ug/L		106	80 - 120
trans-1,3-Dichloropropene	10.0	8.02		ug/L		80	76 - 122
1,1,2-Trichloroethane	10.0	10.8		ug/L		108	80 - 121
Tetrachloroethene	10.0	9.88		ug/L		99	76 - 125
1,3-Dichloropropane	10.0	10.6		ug/L		106	79 - 120
Chlorodibromomethane	10.0	8.12		ug/L		81	73 - 125
Ethylene Dibromide	10.0	10.3		ug/L		103	79 - 126
Chlorobenzene	10.0	10.3		ug/L		103	80 - 120
1,1,1,2-Tetrachloroethane	10.0	9.63		ug/L		96	79 - 120
Ethylbenzene	10.0	10.0		ug/L		100	80 - 120
m-Xylene & p-Xylene	10.0	10.6		ug/L		106	80 - 120
o-Xylene	10.0	9.88		ug/L		99	80 - 120
Styrene	10.0	9.64		ug/L		96	76 - 122
Bromoform	10.0	5.95		ug/L		60	56 - 139
Isopropylbenzene	10.0	9.88		ug/L		99	80 - 123
Bromobenzene	10.0	10.1		ug/L		101	80 - 120
1,1,2,2-Tetrachloroethane	10.0	10.7		ug/L		107	74 - 124
1,2,3-Trichloropropane	10.0	10.7		ug/L		107	76 - 124
N-Propylbenzene	10.0	10.2		ug/L		102	80 - 122
2-Chlorotoluene	10.0	10.3		ug/L		103	80 - 120
4-Chlorotoluene	10.0	10.5		ug/L		105	73 - 129
1,3,5-Trimethylbenzene	10.0	10.6		ug/L		106	80 - 122
tert-Butylbenzene	10.0	10.2		ug/L		102	75 - 123

Eurofins Seattle

QC Sample Results

Client: ARCADIS US Inc

Project/Site: GE Nikiski/CHEVARCAK GE-Nikiski

Job ID: 580-130190-1

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

Lab Sample ID: LCS 580-433673/6

Matrix: Water

Analysis Batch: 433673

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,4-Trimethylbenzene	10.0	10.7		ug/L		107	80 - 120
sec-Butylbenzene	10.0	10.3		ug/L		103	78 - 122
4-Isopropyltoluene	10.0	9.99		ug/L		100	77 - 126
1,3-Dichlorobenzene	10.0	9.20		ug/L		92	77 - 127
1,4-Dichlorobenzene	10.0	9.95		ug/L		100	80 - 120
n-Butylbenzene	10.0	9.86		ug/L		99	57 - 133
1,2-Dichlorobenzene	10.0	10.0		ug/L		100	80 - 120
1,2-Dibromo-3-Chloropropane	10.0	8.17		ug/L		82	65 - 133
1,2,4-Trichlorobenzene	10.0	8.75		ug/L		87	61 - 148
Hexachlorobutadiene	10.0	8.98		ug/L		90	74 - 131
Naphthalene	10.0	10.2		ug/L		102	63 - 150
1,2,3-Trichlorobenzene	10.0	9.92		ug/L		99	65 - 150

Surrogate	LCS	LCS	
	%Recovery	Qualifier	Limits
Toluene-d8 (Surr)	105		80 - 120
1,2-Dichloroethane-d4 (Surr)	101		80 - 120
4-Bromofluorobenzene (Surr)	95		80 - 120
Dibromofluoromethane (Surr)	97		80 - 120

Lab Sample ID: LCSD 580-433673/7

Matrix: Water

Analysis Batch: 433673

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Dichlorodifluoromethane	10.0	11.4		ug/L		114	20 - 150	7	33
Chloromethane	10.0	10.0		ug/L		100	25 - 150	7	26
Vinyl chloride	10.0	9.95		ug/L		100	31 - 150	7	26
Bromomethane	10.0	9.78		ug/L		98	36 - 150	6	33
Chloroethane	10.0	10.1		ug/L		101	38 - 150	5	28
Trichlorofluoromethane	10.0	10.1		ug/L		101	45 - 148	6	35
1,1-Dichloroethene	10.0	9.78		ug/L		98	70 - 129	4	23
Methylene Chloride	10.0	9.99		ug/L		100	77 - 125	2	18
Methyl tert-butyl ether	10.0	9.58		ug/L		96	72 - 120	2	18
trans-1,2-Dichloroethene	10.0	9.33		ug/L		93	75 - 120	7	21
1,1-Dichloroethane	10.0	9.47		ug/L		95	80 - 120	6	15
2,2-Dichloropropane	10.0	8.26		ug/L		83	66 - 126	3	22
cis-1,2-Dichloroethene	10.0	9.54		ug/L		95	76 - 120	2	20
Chlorobromomethane	10.0	9.95		ug/L		100	78 - 120	3	13
Chloroform	10.0	10.4		ug/L		104	78 - 127	2	14
1,1,1-Trichloroethane	10.0	9.50		ug/L		95	74 - 130	7	19
Carbon tetrachloride	10.0	9.41		ug/L		94	72 - 129	5	19
1,1-Dichloropropene	10.0	9.29		ug/L		93	74 - 120	8	14
Benzene	10.0	10.2		ug/L		102	80 - 122	3	14
1,2-Dichloroethane	10.0	10.2		ug/L		102	69 - 126	3	11
Trichloroethene	10.0	10.1		ug/L		101	80 - 125	3	13
1,2-Dichloropropane	10.0	10.3		ug/L		103	80 - 120	3	14
Dibromomethane	10.0	10.0		ug/L		100	80 - 120	3	11
Dichlorobromomethane	10.0	9.57		ug/L		96	75 - 124	0	13

Eurofins Seattle

QC Sample Results

Client: ARCADIS US Inc

Project/Site: GE Nikiski/CHEVARCAK GE-Nikiski

Job ID: 580-130190-1

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

Lab Sample ID: LCSD 580-433673/7

Matrix: Water

Analysis Batch: 433673

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
cis-1,3-Dichloropropene	10.0	8.66		ug/L	87	77 - 120		4	35
Toluene	10.0	10.0		ug/L	100	80 - 120		6	13
trans-1,3-Dichloropropene	10.0	8.04		ug/L	80	76 - 122		0	20
1,1,2-Trichloroethane	10.0	10.7		ug/L	107	80 - 121		1	14
Tetrachloroethene	10.0	9.39		ug/L	94	76 - 125		5	13
1,3-Dichloropropane	10.0	10.4		ug/L	104	79 - 120		2	19
Chlorodibromomethane	10.0	8.46		ug/L	85	73 - 125		4	13
Ethylene Dibromide	10.0	10.3		ug/L	103	79 - 126		0	12
Chlorobenzene	10.0	10.1		ug/L	101	80 - 120		1	10
1,1,1,2-Tetrachloroethane	10.0	9.78		ug/L	98	79 - 120		1	16
Ethylbenzene	10.0	9.98		ug/L	100	80 - 120		0	14
m-Xylene & p-Xylene	10.0	9.96		ug/L	100	80 - 120		6	14
o-Xylene	10.0	9.88		ug/L	99	80 - 120		0	16
Styrene	10.0	9.59		ug/L	96	76 - 122		1	16
Bromoform	10.0	6.69		ug/L	67	56 - 139		12	21
Isopropylbenzene	10.0	9.72		ug/L	97	80 - 123		2	19
Bromobenzene	10.0	10.2		ug/L	102	80 - 120		1	24
1,1,2,2-Tetrachloroethane	10.0	10.8		ug/L	108	74 - 124		1	25
1,2,3-Trichloropropane	10.0	11.0		ug/L	110	76 - 124		3	26
N-Propylbenzene	10.0	9.94		ug/L	99	80 - 122		2	22
2-Chlorotoluene	10.0	10.2		ug/L	102	80 - 120		1	20
4-Chlorotoluene	10.0	10.4		ug/L	104	73 - 129		1	29
1,3,5-Trimethylbenzene	10.0	10.1		ug/L	101	80 - 122		5	21
tert-Butylbenzene	10.0	10.0		ug/L	100	75 - 123		2	21
1,2,4-Trimethylbenzene	10.0	10.1		ug/L	101	80 - 120		7	16
sec-Butylbenzene	10.0	10.2		ug/L	102	78 - 122		1	15
4-Isopropyltoluene	10.0	9.93		ug/L	99	77 - 126		1	20
1,3-Dichlorobenzene	10.0	9.29		ug/L	93	77 - 127		1	35
1,4-Dichlorobenzene	10.0	10.3		ug/L	103	80 - 120		3	17
n-Butylbenzene	10.0	9.70		ug/L	97	57 - 133		2	14
1,2-Dichlorobenzene	10.0	10.4		ug/L	104	80 - 120		3	15
1,2-Dibromo-3-Chloropropane	10.0	9.20		ug/L	92	65 - 133		12	25
1,2,4-Trichlorobenzene	10.0	9.25		ug/L	92	61 - 148		6	27
Hexachlorobutadiene	10.0	9.32		ug/L	93	74 - 131		4	22
Naphthalene	10.0	11.0		ug/L	110	63 - 150		7	33
1,2,3-Trichlorobenzene	10.0	10.7		ug/L	107	65 - 150		7	33

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	104		80 - 120
1,2-Dichloroethane-d4 (Surr)	100		80 - 120
4-Bromofluorobenzene (Surr)	95		80 - 120
Dibromofluoromethane (Surr)	97		80 - 120

Eurofins Seattle

QC Sample Results

Client: ARCADIS US Inc

Project/Site: GE Nikiski/CHEVARCAK GE-Nikiski

Job ID: 580-130190-1

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

Lab Sample ID: MB 580-433887/11

Matrix: Water

Analysis Batch: 433887

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0		ug/L			08/07/23 06:41	1
Chloromethane	ND		1.0		ug/L			08/07/23 06:41	1
Vinyl chloride	ND		1.0		ug/L			08/07/23 06:41	1
Bromomethane	ND		1.0		ug/L			08/07/23 06:41	1
Chloroethane	ND		1.0		ug/L			08/07/23 06:41	1
Trichlorodifluoromethane	ND		1.0		ug/L			08/07/23 06:41	1
1,1-Dichloroethene	ND		1.0		ug/L			08/07/23 06:41	1
Methylene Chloride	ND		5.0		ug/L			08/07/23 06:41	1
Methyl tert-butyl ether	ND		1.0		ug/L			08/07/23 06:41	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/07/23 06:41	1
1,1-Dichloroethane	ND		1.0		ug/L			08/07/23 06:41	1
2,2-Dichloropropane	ND		1.0		ug/L			08/07/23 06:41	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			08/07/23 06:41	1
Chlorobromomethane	ND		1.0		ug/L			08/07/23 06:41	1
Chloroform	ND		1.0		ug/L			08/07/23 06:41	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/07/23 06:41	1
Carbon tetrachloride	ND		1.0		ug/L			08/07/23 06:41	1
1,1-Dichloropropene	ND		1.0		ug/L			08/07/23 06:41	1
Benzene	ND		1.0		ug/L			08/07/23 06:41	1
1,2-Dichloroethane	ND		1.0		ug/L			08/07/23 06:41	1
Trichloroethene	ND		1.0		ug/L			08/07/23 06:41	1
1,2-Dichloropropane	ND		1.0		ug/L			08/07/23 06:41	1
Dibromomethane	ND		1.0		ug/L			08/07/23 06:41	1
Dichlorobromomethane	ND		1.0		ug/L			08/07/23 06:41	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			08/07/23 06:41	1
Toluene	ND		1.0		ug/L			08/07/23 06:41	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			08/07/23 06:41	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/07/23 06:41	1
Tetrachloroethene	ND		1.0		ug/L			08/07/23 06:41	1
1,3-Dichloropropane	ND		1.0		ug/L			08/07/23 06:41	1
Chlorodibromomethane	ND		1.0		ug/L			08/07/23 06:41	1
Ethylene Dibromide	ND		1.0		ug/L			08/07/23 06:41	1
Chlorobenzene	ND		1.0		ug/L			08/07/23 06:41	1
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/07/23 06:41	1
Ethylbenzene	ND		1.0		ug/L			08/07/23 06:41	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/07/23 06:41	1
o-Xylene	ND		1.0		ug/L			08/07/23 06:41	1
Styrene	ND		1.0		ug/L			08/07/23 06:41	1
Bromoform	ND		1.0		ug/L			08/07/23 06:41	1
Isopropylbenzene	ND		1.0		ug/L			08/07/23 06:41	1
Bromobenzene	ND		1.0		ug/L			08/07/23 06:41	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			08/07/23 06:41	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/07/23 06:41	1
N-Propylbenzene	ND		1.0		ug/L			08/07/23 06:41	1
2-Chlorotoluene	ND		1.0		ug/L			08/07/23 06:41	1
4-Chlorotoluene	ND		1.0		ug/L			08/07/23 06:41	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/07/23 06:41	1
tert-Butylbenzene	ND		2.0		ug/L			08/07/23 06:41	1

Eurofins Seattle

QC Sample Results

Client: ARCADIS US Inc

Project/Site: GE Nikiski/CHEVARCAK GE-Nikiski

Job ID: 580-130190-1

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

Lab Sample ID: MB 580-433887/11

Matrix: Water

Analysis Batch: 433887

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifer									
1,2,4-Trimethylbenzene	ND				3.0		ug/L			08/07/23 06:41	1
sec-Butylbenzene	ND				1.0		ug/L			08/07/23 06:41	1
4-Isopropyltoluene	ND				1.0		ug/L			08/07/23 06:41	1
1,3-Dichlorobenzene	ND				1.0		ug/L			08/07/23 06:41	1
1,4-Dichlorobenzene	ND				1.0		ug/L			08/07/23 06:41	1
n-Butylbenzene	ND				1.0		ug/L			08/07/23 06:41	1
1,2-Dichlorobenzene	ND				1.0		ug/L			08/07/23 06:41	1
1,2-Dibromo-3-Chloropropane	ND				3.0		ug/L			08/07/23 06:41	1
1,2,4-Trichlorobenzene	ND				1.0		ug/L			08/07/23 06:41	1
Hexachlorobutadiene	ND				3.0		ug/L			08/07/23 06:41	1
Naphthalene	ND				3.0		ug/L			08/07/23 06:41	1
1,2,3-Trichlorobenzene	ND				2.0		ug/L			08/07/23 06:41	1
Surrogate	MB	MB	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
	Result	Qualifer									
Toluene-d8 (Surr)	100				80 - 120					08/07/23 06:41	1
1,2-Dichloroethane-d4 (Surr)	107				80 - 120					08/07/23 06:41	1
4-Bromofluorobenzene (Surr)	93				80 - 120					08/07/23 06:41	1
Dibromofluoromethane (Surr)	104				80 - 120					08/07/23 06:41	1

Lab Sample ID: LCS 580-433887/6

Matrix: Water

Analysis Batch: 433887

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	Limits
		Result	Qualifier				
Dichlorodifluoromethane	10.0	12.3		ug/L	123	20 - 150	
Chloromethane	10.0	11.6		ug/L	116	25 - 150	
Vinyl chloride	10.0	11.3		ug/L	113	31 - 150	
Bromomethane	10.0	11.3		ug/L	113	36 - 150	
Chloroethane	10.0	11.0		ug/L	110	38 - 150	
Trichlorofluoromethane	10.0	11.4		ug/L	114	45 - 148	
1,1-Dichloroethene	10.0	11.3		ug/L	113	70 - 129	
Methylene Chloride	10.0	11.0		ug/L	110	77 - 125	
Methyl tert-butyl ether	10.0	9.99		ug/L	100	72 - 120	
trans-1,2-Dichloroethene	10.0	11.0		ug/L	110	75 - 120	
1,1-Dichloroethane	10.0	10.7		ug/L	107	80 - 120	
2,2-Dichloropropane	10.0	9.20		ug/L	92	66 - 126	
cis-1,2-Dichloroethene	10.0	10.8		ug/L	108	76 - 120	
Chlorobromomethane	10.0	10.9		ug/L	109	78 - 120	
Chloroform	10.0	11.5		ug/L	115	78 - 127	
1,1,1-Trichloroethane	10.0	10.6		ug/L	106	74 - 130	
Carbon tetrachloride	10.0	10.8		ug/L	108	72 - 129	
1,1-Dichloropropene	10.0	10.6		ug/L	106	74 - 120	
Benzene	10.0	11.3		ug/L	113	80 - 122	
1,2-Dichloroethane	10.0	10.8		ug/L	108	69 - 126	
Trichloroethene	10.0	11.2		ug/L	112	80 - 125	
1,2-Dichloropropane	10.0	11.0		ug/L	110	80 - 120	
Dibromomethane	10.0	10.5		ug/L	105	80 - 120	
Dichlorobromomethane	10.0	10.6		ug/L	106	75 - 124	

Eurofins Seattle

QC Sample Results

Client: ARCADIS US Inc

Project/Site: GE Nikiski/CHEVARCAK GE-Nikiski

Job ID: 580-130190-1

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

Lab Sample ID: LCS 580-433887/6

Matrix: Water

Analysis Batch: 433887

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
cis-1,3-Dichloropropene	10.0	9.16		ug/L	92	77 - 120	
Toluene	10.0	10.9		ug/L	109	80 - 120	
trans-1,3-Dichloropropene	10.0	9.07		ug/L	91	76 - 122	
1,1,2-Trichloroethane	10.0	11.3		ug/L	113	80 - 121	
Tetrachloroethene	10.0	9.95		ug/L	99	76 - 125	
1,3-Dichloropropane	10.0	11.1		ug/L	111	79 - 120	
Chlorodibromomethane	10.0	10.1		ug/L	101	73 - 125	
Ethylene Dibromide	10.0	11.1		ug/L	111	79 - 126	
Chlorobenzene	10.0	10.5		ug/L	105	80 - 120	
1,1,1,2-Tetrachloroethane	10.0	10.7		ug/L	107	79 - 120	
Ethylbenzene	10.0	10.7		ug/L	107	80 - 120	
m-Xylene & p-Xylene	10.0	11.0		ug/L	110	80 - 120	
o-Xylene	10.0	10.6		ug/L	106	80 - 120	
Styrene	10.0	10.1		ug/L	101	76 - 122	
Bromoform	10.0	9.09		ug/L	91	56 - 139	
Isopropylbenzene	10.0	10.6		ug/L	106	80 - 123	
Bromobenzene	10.0	10.5		ug/L	105	80 - 120	
1,1,2,2-Tetrachloroethane	10.0	10.9		ug/L	109	74 - 124	
1,2,3-Trichloropropane	10.0	11.2		ug/L	112	76 - 124	
N-Propylbenzene	10.0	10.3		ug/L	103	80 - 122	
2-Chlorotoluene	10.0	10.5		ug/L	105	80 - 120	
4-Chlorotoluene	10.0	10.2		ug/L	102	73 - 129	
1,3,5-Trimethylbenzene	10.0	10.6		ug/L	106	80 - 122	
tert-Butylbenzene	10.0	10.1		ug/L	101	75 - 123	
1,2,4-Trimethylbenzene	10.0	10.8		ug/L	108	80 - 120	
sec-Butylbenzene	10.0	10.4		ug/L	104	78 - 122	
4-Isopropyltoluene	10.0	10.2		ug/L	102	77 - 126	
1,3-Dichlorobenzene	10.0	9.75		ug/L	98	77 - 127	
1,4-Dichlorobenzene	10.0	10.3		ug/L	103	80 - 120	
n-Butylbenzene	10.0	10.0		ug/L	100	57 - 133	
1,2-Dichlorobenzene	10.0	10.5		ug/L	105	80 - 120	
1,2-Dibromo-3-Chloropropane	10.0	9.83		ug/L	98	65 - 133	
1,2,4-Trichlorobenzene	10.0	9.92		ug/L	99	61 - 148	
Hexachlorobutadiene	10.0	9.27		ug/L	93	74 - 131	
Naphthalene	10.0	10.4		ug/L	104	63 - 150	
1,2,3-Trichlorobenzene	10.0	10.7		ug/L	107	65 - 150	

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	103		80 - 120
1,2-Dichloroethane-d4 (Surr)	100		80 - 120
4-Bromofluorobenzene (Surr)	98		80 - 120
Dibromofluoromethane (Surr)	101		80 - 120

Eurofins Seattle

QC Sample Results

Client: ARCADIS US Inc

Project/Site: GE Nikiski/CHEVARCAK GE-Nikiski

Job ID: 580-130190-1

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

Lab Sample ID: LCSD 580-433887/7

Matrix: Water

Analysis Batch: 433887

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
Dichlorodifluoromethane	10.0	11.1		ug/L		111	20 - 150	10	33
Chloromethane	10.0	10.5		ug/L		105	25 - 150	10	26
Vinyl chloride	10.0	10.4		ug/L		104	31 - 150	8	26
Bromomethane	10.0	10.3		ug/L		103	36 - 150	10	33
Chloroethane	10.0	10.3		ug/L		103	38 - 150	7	28
Trichlorofluoromethane	10.0	10.6		ug/L		106	45 - 148	8	35
1,1-Dichloroethene	10.0	10.5		ug/L		105	70 - 129	7	23
Methylene Chloride	10.0	10.4		ug/L		104	77 - 125	6	18
Methyl tert-butyl ether	10.0	9.71		ug/L		97	72 - 120	3	18
trans-1,2-Dichloroethene	10.0	10.3		ug/L		103	75 - 120	7	21
1,1-Dichloroethane	10.0	10.0		ug/L		100	80 - 120	6	15
2,2-Dichloropropane	10.0	8.38		ug/L		84	66 - 126	9	22
cis-1,2-Dichloroethene	10.0	10.1		ug/L		101	76 - 120	6	20
Chlorobromomethane	10.0	10.8		ug/L		108	78 - 120	1	13
Chloroform	10.0	11.0		ug/L		110	78 - 127	5	14
1,1,1-Trichloroethane	10.0	10.1		ug/L		101	74 - 130	4	19
Carbon tetrachloride	10.0	10.3		ug/L		103	72 - 129	4	19
1,1-Dichloropropene	10.0	10.1		ug/L		101	74 - 120	6	14
Benzene	10.0	10.9		ug/L		109	80 - 122	4	14
1,2-Dichloroethane	10.0	10.4		ug/L		104	69 - 126	4	11
Trichloroethene	10.0	11.1		ug/L		111	80 - 125	1	13
1,2-Dichloropropane	10.0	10.8		ug/L		108	80 - 120	2	14
Dibromomethane	10.0	10.4		ug/L		104	80 - 120	1	11
Dichlorobromomethane	10.0	10.5		ug/L		105	75 - 124	1	13
cis-1,3-Dichloropropene	10.0	9.08		ug/L		91	77 - 120	1	35
Toluene	10.0	10.8		ug/L		108	80 - 120	1	13
trans-1,3-Dichloropropene	10.0	9.09		ug/L		91	76 - 122	0	20
1,1,2-Trichloroethane	10.0	11.3		ug/L		113	80 - 121	0	14
Tetrachloroethene	10.0	10.3		ug/L		103	76 - 125	3	13
1,3-Dichloropropane	10.0	11.0		ug/L		110	79 - 120	1	19
Chlorodibromomethane	10.0	10.2		ug/L		102	73 - 125	1	13
Ethylene Dibromide	10.0	11.2		ug/L		112	79 - 126	1	12
Chlorobenzene	10.0	10.7		ug/L		107	80 - 120	3	10
1,1,1,2-Tetrachloroethane	10.0	10.5		ug/L		105	79 - 120	2	16
Ethylbenzene	10.0	10.7		ug/L		107	80 - 120	0	14
m-Xylene & p-Xylene	10.0	10.8		ug/L		108	80 - 120	2	14
o-Xylene	10.0	10.5		ug/L		105	80 - 120	1	16
Styrene	10.0	10.3		ug/L		103	76 - 122	2	16
Bromoform	10.0	8.67		ug/L		87	56 - 139	5	21
Isopropylbenzene	10.0	10.4		ug/L		104	80 - 123	2	19
Bromobenzene	10.0	10.5		ug/L		105	80 - 120	0	24
1,1,2,2-Tetrachloroethane	10.0	10.4		ug/L		104	74 - 124	4	25
1,2,3-Trichloropropane	10.0	10.6		ug/L		106	76 - 124	5	26
N-Propylbenzene	10.0	10.1		ug/L		101	80 - 122	2	22
2-Chlorotoluene	10.0	10.4		ug/L		104	80 - 120	0	20
4-Chlorotoluene	10.0	10.3		ug/L		103	73 - 129	0	29
1,3,5-Trimethylbenzene	10.0	10.2		ug/L		102	80 - 122	4	21
tert-Butylbenzene	10.0	10.0		ug/L		100	75 - 123	1	21

Eurofins Seattle

QC Sample Results

Client: ARCADIS US Inc

Project/Site: GE Nikiski/CHEVARCAK GE-Nikiski

Job ID: 580-130190-1

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

Lab Sample ID: LCSD 580-433887/7

Matrix: Water

Analysis Batch: 433887

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
1,2,4-Trimethylbenzene	10.0	10.1		ug/L		101	80 - 120	7	16
sec-Butylbenzene	10.0	10.1		ug/L		101	78 - 122	3	15
4-Isopropyltoluene	10.0	10.0		ug/L		100	77 - 126	2	20
1,3-Dichlorobenzene	10.0	9.96		ug/L		100	77 - 127	2	35
1,4-Dichlorobenzene	10.0	10.5		ug/L		105	80 - 120	2	17
n-Butylbenzene	10.0	9.78		ug/L		98	57 - 133	3	14
1,2-Dichlorobenzene	10.0	10.8		ug/L		108	80 - 120	2	15
1,2-Dibromo-3-Chloropropane	10.0	10.2		ug/L		102	65 - 133	4	25
1,2,4-Trichlorobenzene	10.0	10.7		ug/L		107	61 - 148	7	27
Hexachlorobutadiene	10.0	10.2		ug/L		102	74 - 131	9	22
Naphthalene	10.0	10.8		ug/L		108	63 - 150	4	33
1,2,3-Trichlorobenzene	10.0	11.3		ug/L		113	65 - 150	6	33

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
Toluene-d8 (Surr)	106		80 - 120
1,2-Dichloroethane-d4 (Surr)	99		80 - 120
4-Bromofluorobenzene (Surr)	96		80 - 120
Dibromofluoromethane (Surr)	98		80 - 120

Lab Sample ID: 580-130190-9 MS

Matrix: Water

Analysis Batch: 433887

Client Sample ID: MW-3-W-20230801
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Dichlorodifluoromethane	ND		10.0	13.7		ug/L		137	20 - 150
Chloromethane	ND		10.0	13.0		ug/L		130	25 - 150
Vinyl chloride	ND		10.0	13.0		ug/L		130	31 - 150
Bromomethane	ND		10.0	12.1		ug/L		121	36 - 150
Chloroethane	ND		10.0	12.6		ug/L		126	38 - 150
Trichlorofluoromethane	ND		10.0	12.7		ug/L		127	45 - 148
1,1-Dichloroethene	ND		10.0	13.5	F1	ug/L		135	70 - 129
Methylene Chloride	ND		10.0	11.7		ug/L		117	77 - 125
Methyl tert-butyl ether	ND		10.0	10.8		ug/L		108	72 - 120
trans-1,2-Dichloroethene	ND		10.0	12.2	F1	ug/L		122	75 - 120
1,1-Dichloroethane	2.8		10.0	14.5		ug/L		117	80 - 120
2,2-Dichloropropane	ND		10.0	8.85		ug/L		88	66 - 126
cis-1,2-Dichloroethene	2.7		10.0	14.6		ug/L		118	76 - 120
Chlorobromomethane	ND		10.0	11.5		ug/L		115	78 - 120
Chloroform	ND		10.0	12.0		ug/L		120	78 - 127
1,1,1-Trichloroethane	1.0		10.0	13.0		ug/L		120	74 - 130
Carbon tetrachloride	ND		10.0	11.7		ug/L		117	72 - 129
1,1-Dichloropropene	ND		10.0	12.1	F1	ug/L		121	74 - 120
Benzene	ND		10.0	12.1		ug/L		121	80 - 122
1,2-Dichloroethane	ND		10.0	11.4		ug/L		114	69 - 126
Trichloroethene	ND		10.0	12.7		ug/L		118	80 - 125
1,2-Dichloropropane	ND		10.0	11.8		ug/L		118	80 - 120
Dibromomethane	ND		10.0	11.2		ug/L		112	80 - 120
Dichlorobromomethane	ND		10.0	8.70		ug/L		87	75 - 124

Eurofins Seattle

QC Sample Results

Client: ARCADIS US Inc

Project/Site: GE Nikiski/CHEVARCAK GE-Nikiski

Job ID: 580-130190-1

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

Lab Sample ID: 580-130190-9 MS

Client Sample ID: MW-3-W-20230801

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 433887

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec
	Result	Qualifier	Added	Result	Qualifier				Limits
cis-1,3-Dichloropropene	ND		10.0	5.04	F1	ug/L	50	77 - 120	
Toluene	ND		10.0	12.0		ug/L	120	80 - 120	
trans-1,3-Dichloropropene	ND		10.0	3.86	F1	ug/L	39	76 - 122	
1,1,2-Trichloroethane	ND		10.0	11.9		ug/L	119	80 - 121	
Tetrachloroethene	1.7		10.0	13.6		ug/L	119	76 - 125	
1,3-Dichloropropane	ND		10.0	11.7		ug/L	117	79 - 120	
Chlorodibromomethane	ND		10.0	5.90	F1	ug/L	59	73 - 125	
Ethylene Dibromide	ND		10.0	11.3		ug/L	113	79 - 126	
Chlorobenzene	ND		10.0	11.6		ug/L	116	80 - 120	
1,1,1,2-Tetrachloroethane	ND		10.0	10.1		ug/L	101	79 - 120	
Ethylbenzene	ND		10.0	11.8		ug/L	118	80 - 120	
m-Xylene & p-Xylene	ND		10.0	11.8		ug/L	118	80 - 120	
o-Xylene	ND		10.0	11.4		ug/L	114	80 - 120	
Styrene	ND		10.0	10.7		ug/L	107	76 - 122	
Bromoform	ND		10.0	2.76	F1	ug/L	28	56 - 139	
Isopropylbenzene	ND		10.0	11.5		ug/L	115	80 - 123	
Bromobenzene	ND		10.0	11.2		ug/L	112	80 - 120	
1,1,2,2-Tetrachloroethane	ND		10.0	11.3		ug/L	113	74 - 124	
1,2,3-Trichloropropane	ND		10.0	11.4		ug/L	114	76 - 124	
N-Propylbenzene	ND		10.0	11.4		ug/L	114	80 - 122	
2-Chlorotoluene	ND		10.0	11.4		ug/L	114	80 - 120	
4-Chlorotoluene	ND		10.0	11.2		ug/L	112	73 - 129	
1,3,5-Trimethylbenzene	ND		10.0	11.2		ug/L	112	80 - 122	
tert-Butylbenzene	ND		10.0	11.0		ug/L	110	75 - 123	
1,2,4-Trimethylbenzene	ND		10.0	11.0		ug/L	110	80 - 120	
sec-Butylbenzene	ND		10.0	11.0		ug/L	110	78 - 122	
4-Isopropyltoluene	ND		10.0	10.7		ug/L	107	77 - 126	
1,3-Dichlorobenzene	ND		10.0	10.1		ug/L	101	77 - 127	
1,4-Dichlorobenzene	ND		10.0	11.0		ug/L	110	80 - 120	
n-Butylbenzene	ND		10.0	10.6		ug/L	106	57 - 133	
1,2-Dichlorobenzene	ND		10.0	10.7		ug/L	107	80 - 120	
1,2-Dibromo-3-Chloropropane	ND		10.0	6.68		ug/L	67	65 - 133	
1,2,4-Trichlorobenzene	ND		10.0	8.98		ug/L	90	61 - 148	
Hexachlorobutadiene	ND		10.0	8.69		ug/L	87	74 - 131	
Naphthalene	ND		10.0	9.10		ug/L	91	63 - 150	
1,2,3-Trichlorobenzene	ND		10.0	9.41		ug/L	94	65 - 150	
<hr/>									
Surrogate	MS		MS		Limits				
	%Recovery	Qualifer							
Toluene-d8 (Surr)	105				80 - 120				
1,2-Dichloroethane-d4 (Surr)	99				80 - 120				
4-Bromofluorobenzene (Surr)	98				80 - 120				
Dibromofluoromethane (Surr)	101				80 - 120				

Eurofins Seattle

QC Sample Results

Client: ARCADIS US Inc

Project/Site: GE Nikiski/CHEVARCAK GE-Nikiski

Job ID: 580-130190-1

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

Lab Sample ID: 580-130190-9 MSD

Matrix: Water

Analysis Batch: 433887

Client Sample ID: MW-3-W-20230801

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
Dichlorodifluoromethane	ND		10.0	13.5		ug/L		135	20 - 150	2	33
Chloromethane	ND		10.0	12.2		ug/L		122	25 - 150	7	26
Vinyl chloride	ND		10.0	12.4		ug/L		124	31 - 150	5	26
Bromomethane	ND		10.0	11.5		ug/L		115	36 - 150	5	33
Chloroethane	ND		10.0	12.2		ug/L		122	38 - 150	3	28
Trichlorofluoromethane	ND		10.0	12.4		ug/L		124	45 - 148	2	35
1,1-Dichloroethene	ND		10.0	13.0	F1	ug/L		130	70 - 129	4	23
Methylene Chloride	ND		10.0	11.5		ug/L		115	77 - 125	2	18
Methyl tert-butyl ether	ND		10.0	10.5		ug/L		105	72 - 120	3	18
trans-1,2-Dichloroethene	ND		10.0	11.7		ug/L		117	75 - 120	4	21
1,1-Dichloroethane	2.8		10.0	14.1		ug/L		113	80 - 120	3	15
2,2-Dichloropropane	ND		10.0	8.58		ug/L		86	66 - 126	3	22
cis-1,2-Dichloroethene	2.7		10.0	14.1		ug/L		114	76 - 120	3	20
Chlorobromomethane	ND		10.0	11.2		ug/L		112	78 - 120	3	13
Chloroform	ND		10.0	12.0		ug/L		120	78 - 127	0	14
1,1,1-Trichloroethane	1.0		10.0	12.8		ug/L		117	74 - 130	2	19
Carbon tetrachloride	ND		10.0	11.2		ug/L		112	72 - 129	4	19
1,1-Dichloropropene	ND		10.0	11.9		ug/L		119	74 - 120	2	14
Benzene	ND		10.0	12.1		ug/L		121	80 - 122	0	14
1,2-Dichloroethane	ND		10.0	11.2		ug/L		112	69 - 126	2	11
Trichloroethene	ND		10.0	13.1		ug/L		123	80 - 125	3	13
1,2-Dichloropropane	ND		10.0	11.9		ug/L		119	80 - 120	1	14
Dibromomethane	ND		10.0	11.3		ug/L		113	80 - 120	1	11
Dichlorobromomethane	ND		10.0	8.94		ug/L		89	75 - 124	3	13
cis-1,3-Dichloropropene	ND		10.0	4.90	F1	ug/L		49	77 - 120	3	35
Toluene	ND		10.0	12.1	F1	ug/L		121	80 - 120	1	13
trans-1,3-Dichloropropene	ND		10.0	3.83	F1	ug/L		38	76 - 122	1	20
1,1,2-Trichloroethane	ND		10.0	12.0		ug/L		120	80 - 121	1	14
Tetrachloroethene	1.7		10.0	13.3		ug/L		117	76 - 125	2	13
1,3-Dichloropropane	ND		10.0	11.9		ug/L		119	79 - 120	2	19
Chlorodibromomethane	ND		10.0	5.93	F1	ug/L		59	73 - 125	1	13
Ethylene Dibromide	ND		10.0	11.9		ug/L		119	79 - 126	5	12
Chlorobenzene	ND		10.0	11.5		ug/L		115	80 - 120	1	10
1,1,1,2-Tetrachloroethane	ND		10.0	10.2		ug/L		102	79 - 120	0	16
Ethylbenzene	ND		10.0	11.8		ug/L		118	80 - 120	0	14
m-Xylene & p-Xylene	ND		10.0	11.7		ug/L		117	80 - 120	1	14
o-Xylene	ND		10.0	11.5		ug/L		115	80 - 120	1	16
Styrene	ND		10.0	11.1		ug/L		111	76 - 122	4	16
Bromoform	ND		10.0	2.71	F1	ug/L		27	56 - 139	2	21
Isopropylbenzene	ND		10.0	11.5		ug/L		115	80 - 123	0	19
Bromobenzene	ND		10.0	11.4		ug/L		114	80 - 120	2	24
1,1,2,2-Tetrachloroethane	ND		10.0	11.5		ug/L		115	74 - 124	1	25
1,2,3-Trichloropropane	ND		10.0	11.8		ug/L		118	76 - 124	3	26
N-Propylbenzene	ND		10.0	11.5		ug/L		115	80 - 122	1	22
2-Chlorotoluene	ND		10.0	11.3		ug/L		113	80 - 120	0	20
4-Chlorotoluene	ND		10.0	11.3		ug/L		113	73 - 129	1	29
1,3,5-Trimethylbenzene	ND		10.0	11.3		ug/L		113	80 - 122	0	21
tert-Butylbenzene	ND		10.0	11.2		ug/L		112	75 - 123	2	21

Eurofins Seattle

QC Sample Results

Client: ARCADIS US Inc

Project/Site: GE Nikiski/CHEVARCAK GE-Nikiski

Job ID: 580-130190-1

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

Lab Sample ID: 580-130190-9 MSD

Client Sample ID: MW-3-W-20230801

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 433887

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	RPD Limit
1,2,4-Trimethylbenzene	ND		10.0	11.0		ug/L	110	80 - 120	0 16
Surrogate				MSD	MSD			Limits	RPD Limit
Toluene-d8 (Surr)	106					80 - 120			
1,2-Dichloroethane-d4 (Surr)	98					80 - 120			
4-Bromofluorobenzene (Surr)	98					80 - 120			
Dibromofluoromethane (Surr)	97					80 - 120			
				%Recovery	Qualifier				

Method: AK101 - Alaska - Gasoline Range Organics (GC/MS)

Lab Sample ID: MB 580-433658/11

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 433658

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		0.080		mg/L			08/03/23 17:19	1
Surrogate									
4-Bromofluorobenzene (Surr)	95								

Lab Sample ID: LCS 580-433658/8

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 433658

Analyte		Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Gasoline Range Organics (GRO)-C6-C10		1.00	1.01		mg/L	101	101	60 - 120	
Surrogate									
4-Bromofluorobenzene (Surr)	102								

Eurofins Seattle

QC Sample Results

Client: ARCADIS US Inc

Project/Site: GE Nikiski/CHEVARCAK GE-Nikiski

Job ID: 580-130190-1

Method: AK101 - Alaska - Gasoline Range Organics (GC/MS) (Continued)

Lab Sample ID: LCSD 580-433658/9

**Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA**

Matrix: Water

Analysis Batch: 433658

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec 102	%Rec Limits	RPD 0	RPD Limit 20
Gasoline Range Organics (GRO)-C6-C10	1.00	1.02		mg/L			60 - 120	0	20
LCSD LCSD									
Surrogate	%Recovery	Qualifier	Limits						
4-Bromofluorobenzene (Surr)	101		50 - 150						

Lab Sample ID: MB 580-433669/11

**Client Sample ID: Method Blank
Prep Type: Total/NA**

Matrix: Water

Analysis Batch: 433669

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Gasoline Range Organics (GRO)-C6-C10	ND		0.080		mg/L			08/04/23 05:46	1
Surrogate									
Surrogate	MB		%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96				50 - 150			08/04/23 05:46	1

Lab Sample ID: LCS 580-433669/8

**Client Sample ID: Lab Control Sample
Prep Type: Total/NA**

Matrix: Water

Analysis Batch: 433669

Analyte		Spike	LCS	LCS		%Rec	
		Added	Result	Qualifier	Unit	D	Limits
Gasoline Range Organics (GRO)-C6-C10		1.00	0.934		mg/L	93	60 - 120
<i>LCS LCS</i>							
Surrogate	%Recovery	Qualifier	Limits				
4-Bromofluorobenzene (Surr)	99		50 - 150				

Lab Sample ID: LCSD 580-433669/9

**Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA**

Matrix: Water

Analysis Batch: 433669

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec 95	%Rec Limits	RPD 2	RPD Limit 20
Gasoline Range Organics (GRO)-C6-C10	1.00	0.948		mg/L			60 - 120		
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
4-Bromofluorobenzene (Surr)	100		50 - 150						

Lab Sample ID: 580-130190-9 MS

Client Sample ID: MW-3-W-20230801
Prep Type: Total/NA

Lab Sample II

Matrix: Water

Analysis Batch: 433669

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Gasoline Range Organics (GRO)-C6-C10	ND		1.00	1.01		mg/L	101	60 - 120	

QC Sample Results

Client: ARCADIS US Inc

Job ID: 580-130190-1

Project/Site: GE Nikiski/CHEVARCAK GE-Nikiski

Method: AK101 - Alaska - Gasoline Range Organics (GC/MS) (Continued)

Lab Sample ID: 580-130190-9 MS

Client Sample ID: MW-3-W-20230801

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 433669

Surrogate	MS	MS	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)			94		50 - 150

Lab Sample ID: 580-130190-9 MSD

Client Sample ID: MW-3-W-20230801

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 433669

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	ND		1.00	1.01		mg/L	101	60 - 120	0	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits							
4-Bromofluorobenzene (Surr)	98		50 - 150							

Method: AK102 & 103 - Alaska - Diesel Range Organics & Residual Range Organics (GC)

Lab Sample ID: MB 580-433897/1-A

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 433966

Prep Batch: 433897

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (nC10-<nC25)	ND		0.11		mg/L	0	08/07/23 09:20	08/08/23 03:13	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	55	S1-	60 - 120				08/07/23 09:20	08/08/23 03:13	1

Lab Sample ID: LCS 580-433897/2-A

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 433966

Prep Batch: 433897

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	RPD
DRO (nC10-<nC25)	4.00	2.27	*-	mg/L	57	75 - 125	
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits				
o-Terphenyl	55	S1-	60 - 120				

Lab Sample ID: LCSD 580-433897/3-A

Client Sample ID: Lab Control Sample Dup

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 433966

Prep Batch: 433897

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	RPD
DRO (nC10-<nC25)	4.00	2.51	*-	mg/L	63	75 - 125	10
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits				
o-Terphenyl	56	S1-	60 - 120				

Eurofins Seattle

QC Sample Results

Client: ARCADIS US Inc

Job ID: 580-130190-1

Project/Site: GE Nikiski/CHEVARCAK GE-Nikiski

Method: AK102 & 103 - Alaska - Diesel Range Organics & Residual Range Organics (GC) **(Continued)**

Lab Sample ID: 580-130190-9 MS

Matrix: Water

Analysis Batch: 433966

Client Sample ID: MW-3-W-20230801

Prep Type: Total/NA

Prep Batch: 433897

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
DRO (nC10-<nC25)	0.94	*- F1	5.21	3.81	F1	mg/L	55	75 - 125	
<i>MS MS</i>									
<i>Surrogate</i>									
<i>o-Terphenyl</i>	62			50 - 150					

Lab Sample ID: 580-130190-9 MSD

Matrix: Water

Analysis Batch: 433966

Client Sample ID: MW-3-W-20230801

Prep Type: Total/NA

Prep Batch: 433897

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	RPD
DRO (nC10-<nC25)	0.94	*- F1	5.22	3.35	F1	mg/L	46	75 - 125	13
<i>MSD MSD</i>									
<i>Surrogate</i>									
<i>o-Terphenyl</i>	53			50 - 150					20

Lab Chronicle

Client: ARCADIS US Inc
 Project/Site: GE Nikiski/CHEVARCAK GE-Nikiski

Job ID: 580-130190-1

Client Sample ID: MW-11-W-20230801

Lab Sample ID: 580-130190-1

Matrix: Water

Date Collected: 08/01/23 06:30
 Date Received: 08/03/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	433662	GBT	EET SEA	08/03/23 23:20
Total/NA	Analysis	AK101		1	433658	ITR	EET SEA	08/03/23 23:20
Total/NA	Prep	3510C			433897	SL	EET SEA	08/07/23 09:20
Total/NA	Analysis	AK102 & 103		1	433966	KLW	EET SEA	08/08/23 04:11

Client Sample ID: MW-10-W-20230801

Lab Sample ID: 580-130190-2

Matrix: Water

Date Collected: 08/01/23 07:15
 Date Received: 08/03/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	433662	GBT	EET SEA	08/03/23 23:44
Total/NA	Analysis	AK101		1	433658	ITR	EET SEA	08/03/23 23:44
Total/NA	Prep	3510C			433897	SL	EET SEA	08/07/23 09:20
Total/NA	Analysis	AK102 & 103		1	433966	KLW	EET SEA	08/08/23 04:30

Client Sample ID: MW-9-W-20230801

Lab Sample ID: 580-130190-3

Matrix: Water

Date Collected: 08/01/23 08:00
 Date Received: 08/03/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	433662	GBT	EET SEA	08/04/23 00:08
Total/NA	Analysis	AK101		1	433658	ITR	EET SEA	08/04/23 00:08
Total/NA	Prep	3510C			433897	SL	EET SEA	08/07/23 09:20
Total/NA	Analysis	AK102 & 103		1	433966	KLW	EET SEA	08/08/23 04:49

Client Sample ID: MW-7-W-20230801

Lab Sample ID: 580-130190-4

Matrix: Water

Date Collected: 08/01/23 08:45
 Date Received: 08/03/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	433662	GBT	EET SEA	08/04/23 00:32
Total/NA	Analysis	AK101		1	433658	ITR	EET SEA	08/04/23 00:32
Total/NA	Prep	3510C			433897	SL	EET SEA	08/07/23 09:20
Total/NA	Analysis	AK102 & 103		1	433966	KLW	EET SEA	08/08/23 05:08

Client Sample ID: MW-8-W-20230801

Lab Sample ID: 580-130190-5

Matrix: Water

Date Collected: 08/01/23 09:30
 Date Received: 08/03/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	433673	GBT	EET SEA	08/04/23 06:59
Total/NA	Analysis	AK101		1	433669	GBT	EET SEA	08/04/23 06:59
Total/NA	Prep	3510C			433897	SL	EET SEA	08/07/23 09:20
Total/NA	Analysis	AK102 & 103		1	433966	KLW	EET SEA	08/08/23 05:27

Eurofins Seattle

Lab Chronicle

Client: ARCADIS US Inc
Project/Site: GE Nikiski/CHEVARCAK GE-Nikiski

Job ID: 580-130190-1

Client Sample ID: MW-6-W-20230801

Lab Sample ID: 580-130190-6

Matrix: Water

Date Collected: 08/01/23 10:15
Date Received: 08/03/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	433673	GBT	EET SEA	08/04/23 07:23
Total/NA	Analysis	AK101		1	433669	GBT	EET SEA	08/04/23 07:23
Total/NA	Prep	3510C			433897	SL	EET SEA	08/07/23 09:20
Total/NA	Analysis	AK102 & 103		1	433966	KLW	EET SEA	08/08/23 05:46

Client Sample ID: MW-5-W-20230801

Lab Sample ID: 580-130190-7

Matrix: Water

Date Collected: 08/01/23 11:00
Date Received: 08/03/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	433673	GBT	EET SEA	08/04/23 08:11
Total/NA	Analysis	AK101		1	433669	GBT	EET SEA	08/04/23 08:11
Total/NA	Prep	3510C			433897	SL	EET SEA	08/07/23 09:20
Total/NA	Analysis	AK102 & 103		1	433966	KLW	EET SEA	08/08/23 06:24

Client Sample ID: MW-2-W-20230801

Lab Sample ID: 580-130190-8

Matrix: Water

Date Collected: 08/01/23 11:45
Date Received: 08/03/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	433673	GBT	EET SEA	08/04/23 08:35
Total/NA	Analysis	8260D	DL	10	433887	GBT	EET SEA	08/07/23 13:04
Total/NA	Analysis	AK101		1	433669	GBT	EET SEA	08/04/23 08:35
Total/NA	Prep	3510C			433897	SL	EET SEA	08/07/23 09:20
Total/NA	Analysis	AK102 & 103		1	433966	KLW	EET SEA	08/08/23 06:43

Client Sample ID: MW-3-W-20230801

Lab Sample ID: 580-130190-9

Matrix: Water

Date Collected: 08/01/23 12:30
Date Received: 08/03/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	433887	GBT	EET SEA	08/07/23 07:53
Total/NA	Analysis	AK101		1	433669	GBT	EET SEA	08/04/23 08:59
Total/NA	Prep	3510C			433897	SL	EET SEA	08/07/23 09:20
Total/NA	Analysis	AK102 & 103		1	433966	KLW	EET SEA	08/08/23 07:02

Client Sample ID: MW-4-W-20230801

Lab Sample ID: 580-130190-10

Matrix: Water

Date Collected: 08/01/23 13:15
Date Received: 08/03/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	433673	GBT	EET SEA	08/04/23 09:23
Total/NA	Analysis	AK101		1	433669	GBT	EET SEA	08/04/23 09:23
Total/NA	Prep	3510C			433897	SL	EET SEA	08/07/23 09:20
Total/NA	Analysis	AK102 & 103		1	433966	KLW	EET SEA	08/08/23 07:59

Eurofins Seattle

Lab Chronicle

Client: ARCADIS US Inc
Project/Site: GE Nikiski/CHEVARCAK GE-Nikiski

Job ID: 580-130190-1

Client Sample ID: MW-1-W-20230801

Lab Sample ID: 580-130190-11

Matrix: Water

Date Collected: 08/01/23 14:06
Date Received: 08/03/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	433673	GBT	EET SEA	08/04/23 09:48
Total/NA	Analysis	AK101		1	433669	GBT	EET SEA	08/04/23 09:48
Total/NA	Prep	3510C			433897	SL	EET SEA	08/07/23 09:20
Total/NA	Analysis	AK102 & 103		1	433966	KLW	EET SEA	08/08/23 08:18

Client Sample ID: EQB-1-W-20230801

Lab Sample ID: 580-130190-12

Matrix: Water

Date Collected: 08/01/23 14:20
Date Received: 08/03/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	433673	GBT	EET SEA	08/04/23 06:11
Total/NA	Analysis	AK101		1	433669	GBT	EET SEA	08/04/23 06:11
Total/NA	Prep	3510C			433897	SL	EET SEA	08/07/23 09:20
Total/NA	Analysis	AK102 & 103		1	433966	KLW	EET SEA	08/08/23 08:37

Client Sample ID: BD-1-W-20230801

Lab Sample ID: 580-130190-13

Matrix: Water

Date Collected: 08/01/23 00:01
Date Received: 08/03/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	433662	GBT	EET SEA	08/03/23 22:56
Total/NA	Analysis	AK101		1	433658	ITR	EET SEA	08/03/23 22:56
Total/NA	Prep	3510C			433897	SL	EET SEA	08/07/23 09:20
Total/NA	Analysis	AK102 & 103		1	433966	KLW	EET SEA	08/08/23 08:57

Client Sample ID: Trip Blank 1

Lab Sample ID: 580-130190-14

Matrix: Water

Date Collected: 08/01/23 00:01
Date Received: 08/03/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	433662	GBT	EET SEA	08/03/23 18:07
Total/NA	Analysis	AK101		1	433658	ITR	EET SEA	08/03/23 18:07

Client Sample ID: Trip Blank 2

Lab Sample ID: 580-130190-15

Matrix: Water

Date Collected: 08/01/23 00:01
Date Received: 08/03/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	433662	GBT	EET SEA	08/03/23 18:31
Total/NA	Analysis	AK101		1	433658	ITR	EET SEA	08/03/23 18:31

Laboratory References:

EET SEA = Eurofins Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Eurofins Seattle

Accreditation/Certification Summary

Client: ARCADIS US Inc

Project/Site: GE Nikiski/CHEVARCAK GE-Nikiski

Job ID: 580-130190-1

Laboratory: Eurofins Seattle

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-004	02-19-25
ANAB	Dept. of Defense ELAP	L2236	01-19-25
ANAB	Dept. of Energy	L2236	01-19-25
ANAB	ISO/IEC 17025	L2236	01-19-25
California	State	2954	07-07-23 *
Florida	NELAP	E87575	06-30-23 *
Louisiana (All)	NELAP	03073	07-01-24
Maine	State	WA01273	05-02-24
Montana (UST)	State	NA	04-14-27
New Jersey	NELAP	WA014	06-30-24
New York	NELAP	11662	03-31-24
Oregon	NELAP	4167	07-07-24
US Fish & Wildlife	US Federal Programs	A20571	06-30-23 *
USDA	US Federal Programs	525-23-4-22573	01-04-26
Washington	State	C788	07-13-23 *
Wisconsin	State	399133460	08-31-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Seattle

Sample Summary

Client: ARCADIS US Inc

Project/Site: GE Nikiski/CHEVARCAK GE-Nikiski

Job ID: 580-130190-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-130190-1	MW-11-W-20230801	Water	08/01/23 06:30	08/03/23 09:20
580-130190-2	MW-10-W-20230801	Water	08/01/23 07:15	08/03/23 09:20
580-130190-3	MW-9-W-20230801	Water	08/01/23 08:00	08/03/23 09:20
580-130190-4	MW-7-W-20230801	Water	08/01/23 08:45	08/03/23 09:20
580-130190-5	MW-8-W-20230801	Water	08/01/23 09:30	08/03/23 09:20
580-130190-6	MW-6-W-20230801	Water	08/01/23 10:15	08/03/23 09:20
580-130190-7	MW-5-W-20230801	Water	08/01/23 11:00	08/03/23 09:20
580-130190-8	MW-2-W-20230801	Water	08/01/23 11:45	08/03/23 09:20
580-130190-9	MW-3-W-20230801	Water	08/01/23 12:30	08/03/23 09:20
580-130190-10	MW-4-W-20230801	Water	08/01/23 13:15	08/03/23 09:20
580-130190-11	MW-1-W-20230801	Water	08/01/23 14:06	08/03/23 09:20
580-130190-12	EQB-1-W-20230801	Water	08/01/23 14:20	08/03/23 09:20
580-130190-13	BD-1-W-20230801	Water	08/01/23 00:01	08/03/23 09:20
580-130190-14	Trip Blank 1	Water	08/01/23 00:01	08/03/23 09:20
580-130190-15	Trip Blank 2	Water	08/01/23 00:01	08/03/23 09:20

Company Name/Address:

Arcadis - Chevron - AKGE
880 H St.
Anchorage, AK 99501

Billing information:

Attn: Accounts Payable
630 Plaza Dr Ste 600
Highlands Ranch, CO 80129Report to: Anna Haegmeister
Nick Wood/Sydney Clark/Erika MidkiffEmail To:
Sydney.Clark@arcadis.com; Nick.Wood@arcadis.com

Project Description:

91518 GE Nitkishi

City/State

Collected: Nitkishi, AK

Please Circle:
PT MT CT ET

Phone: 907-276-8095

Client Project #

30064209.19.21

30188444

Lab Project #

CHEVARCAK-91518

GE - Nitkishi

Collected by (print):

E. Wijik

Site/Facility ID #

2927 NEW SEWARD HWY

P.O. #

Collected by (signature):

E. Wijik

Rush? (Lab MUST Be Notified)

Same Day Five Day
 Next Day 5 Day (Rad Only)
 Two Day 10 Day (Rad Only)
 Three Day

Quote #

Date Results Needed

No. of

Sample ID

Comp/Grab

Matrix *

Depth

Date

Time

Cntrs

MW-11-w-20230801

Crab

GW

-

8.1.23

0630

11

X

X

MW-10-w-20230801

GW

-

0715

11

X

X

MW-9-w-20230801

GW

-

0800

11

X

X

MW-7-w-20230801

GW

-

0845

11

X

X

MW-8-w-20230801

GW

-

0930

11

X

X

MW-6-w-20230801

GW

-

1015

11

X

X

MW-5-w-20230801

GW

-

1100

11

X

X

MW-2-w-20230801

GW

-

1145

11

X

X

MW-3-w-20230801

GW

-

1230

33

X

X

MW-4-w-20230801

GW

-

1315

11

X

X

* Matrix:

SS - Soil AIR - Air

F - Filter

GW - Groundwater

B - Bioassay

WW - WasteWater

DW - Drinking Water

OT - Other

Remarks:

Samples returned via:

UPS FedEx Courier

Tracking #

pH _____ Temp _____

Flow _____ Other _____

Sample Receipt Checklist	
COC Seal Present/Intact:	NP <input type="checkbox"/> Y <input checked="" type="checkbox"/> N
COC Signed/Accurate:	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N
Bottles arrive intact:	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N
Correct bottles used:	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N
Sufficient volume sent:	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N
If Applicable	
VOA Zero Headspace:	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N
Preservation Correct/Checked:	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N
RAD Screen <0.5 mR/hr:	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N

Relinquished by : (Signature)

Date: 8.2.23 Time: 0800

Received by: (Signature)

Trip Blank Received: Yes / No
HCl / MeOH
TBR

Relinquished by : (Signature)

Date: Time:

Received by: (Signature)

Temp: °C Bottles Received:

If preservation required by Login: Date/Time

Relinquished by : (Signature)

Date: Time:

Received for lab by: (Signature)

Date: Time:

Hold:

Condition:
NCF / OK


PACE
PEOPLE ADVANCING SCIENCE

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

SDG #

Table #

Acctnum: CHEVARCAK

Template: T224959

Prelogin: P981343

PM: 110 - Brian Ford

PB: BW 2120

Shipped Via: FedEx 2nd Day

Remarks Sample # (lab only)



580-130190 Chain of Custody

Company Name/Address: Arcadis - Chevron - AK GE 880 H St. Anchorage, AK 99501			Billing Information: Attn: Accounts Payable 630 Plaza Dr Ste 600 Highlands Ranch, CO 80129			Pres Chk	Analysis / Container / Preservative						Chain of Custody	Page <u>2</u> of <u>2</u>					
Report to: Nick Wood Anna Haegmister			Email To: Sydney.Clark@arcadis.com , erika.midkiff@arcadis.com									Pace PEOPLE ADVANCING SCIENCE							
Project Description: 92609- GE Nitski			City/State Collected: Nitski, AK			Please Circle: PT MT CT ET						MT JULIET, TN 12065 Lebanon Rd Mount Juliet, TN 37122 Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf							
Phone: 907-276-8095		Client Project # 30064212.19.45		Lab Project # CHEVARCAK-92609								SDG #							
Collected by (print): E. Weisz		Site/Facility ID # MILE 79 Seward Hwy		P.O. #								Table #							
Collected by (signature): E. Weisz		Rush? (Lab MUST Be Notified) <input type="checkbox"/> Same Day <input type="checkbox"/> Five Day <input type="checkbox"/> Next Day <input type="checkbox"/> 5 Day (Rad Only) <input type="checkbox"/> Two Day <input checked="" type="checkbox"/> 10 Day (Rad Only) <input type="checkbox"/> Three Day		Quote #								Acctnum: CHEVARCAK							
Immediately Packed on Ice N <input type="checkbox"/> Y <input checked="" type="checkbox"/>				Date Results Needed		No. of Ctrns								Template: T228412					
Sample ID		Comp/Grab	Matrix *	Depth	Date	Time								Prelogin: P992979					
														PM: 110 - Brian Ford					
														PB 8-4-19-23					
														Shipped Via:					
														Remarks Sample # (lab only)					
MW-11-W-20230801		Grs	GW	-	8.1.23	1406	11	X	X										
EGB-1-W-20230801			GW	-		1420	11	X	X										
ISD-1-W-20230801		↓	GW	-	↓	-	11	X	X										
Trip Blank 1		—	GW	-	-	-	4	X											
Trip Blank 2		—	-	-	-	-	3	X											
* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater DW - Drinking Water OT - Other _____		Remarks:										pH _____	Temp _____	Flow _____	Other _____				
		Samples returned via: UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> Courier _____										Tracking # _____				Sample Receipt Checklist			
Relinquished by : (Signature) E. Weisz		Date: 8.2.23	Time: 0800	Received by: (Signature)				Trip Blank Received: Yes / No HCl / MeOH TBR				COC Seal Present/Intact: <input type="checkbox"/> NP <input type="checkbox"/> Y <input type="checkbox"/> N COC Signed/Accurate: <input type="checkbox"/> Y <input type="checkbox"/> N Bottles arrive intact: <input type="checkbox"/> Y <input type="checkbox"/> N Correct bottles used: <input type="checkbox"/> Y <input type="checkbox"/> N Sufficient volume sent: <input type="checkbox"/> Y <input type="checkbox"/> N If Applicable VOA Zero Headspace: <input type="checkbox"/> Y <input type="checkbox"/> N Preservation Correct/Checked: <input type="checkbox"/> Y <input type="checkbox"/> N RAD Screen <0.5 mR/hr: <input type="checkbox"/> Y <input type="checkbox"/> N							
Relinquished by : (Signature)		Date:	Time:	Received by: (Signature)				Temp: °C Bottles Received:				If preservation required by Login: Date/Time							
Relinquished by : (Signature)		Date:	Time:	Received for lab by: (Signature)				Date: 8/3/23		Time: 0920		Hold:		Condition: NCF / OK					

1
2
3
4
5
6
7
8
9
10
11

8/3/23

Therm. ID: 109 Cor: 2.1 ° Unc: 2.4 °
Cooler Dsc: A1
Packing: 3x3 FedEx:
Cust. Seal: Yes No UPS:
Blue Ice Wet, Dry, None Lab Cour: FDO
Other: _____

Therm. ID: 109 Cor: 4.6 ° Unc: 4.1 °
Cooler Dsc: A2
Packing: 3x3 FedEx:
Cust. Seal: Yes No UPS:
Blue Ice Wet, Dry, None Lab Cour: EDO
Other: _____

Login Sample Receipt Checklist

Client: ARCADIS US Inc

Job Number: 580-130190-1

Login Number: 130190

List Source: Eurofins Seattle

List Number: 1

Creator: Groves, Elizabeth

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	IDs on containers do not match the COC. Logged in per container.
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	False	Refer to Job Narrative for details.
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	False	Improper containers received.
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	False	Refer to Job Narrative for details.
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	False	Headspace larger than 1/4" in one or more vials, one vial with accpt. headspace
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Attachment 2

Laboratory Data Review Checklist

Laboratory Data Review Checklist

Completed By:

Kylie Arnold

Title:

Environmental Engineer

Date:

9/15/2023

CS Report Name:

GE Nikiski

Report Date:

8/24/2023

Consultant Firm:

Arcadis U.S., Inc.

Laboratory Name:

TestAmerica, Inc.

Laboratory Report Number:

580-130190-1

ADEC File Number:

N/A

Hazard Identification Number:

N/A

1. Laboratory

- a. Did an ADEC CS approved laboratory receive and perform all of the submitted sample analyses?

Yes No

Comments:

Identification #: 20-004, Exp Date: 02/19/2025

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

Yes No

Comments:

[Redacted]

2. Chain of Custody (CoC)

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

Yes No

Comments:

[Redacted]

- b. Correct Analyses requested?

Yes No

Comments:

VOCs by Method 8260D
GRO by Method AK101
DRO by Methods AK102

3. Laboratory Sample Receipt Documentation

- a. Sample/cooler temperature documented and within range at receipt (0° to 6° C)?

Yes No

Comments:

Temperatures = 2.1 and 4.6 °C

- b. Sample preservation acceptable – acidified waters, Methanol preserved VOC soil (GRO, BTEX, Volatile Chlorinated Solvents, etc.)?

Yes No

Comments:

Case Narrative: "The samples were received... properly preserved..." Samples were also received on ice.

- c. Sample condition documented – broken, leaking (Methanol), zero headspace (VOC vials)?

Yes No

Comments:

No broken containers, headspace larger than ¼" in one or more vials, one vial with acceptable headspace

- 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, etc.?

Yes No

Comments:

The container label for the following samples did not match the information on the COC: MW-11-W-20230801 (580-130190-1) and MW-1-W-20230801 (580-130190-11). The container labels for sample -11 list sample ID of MW-1-W-20230801 and a sample time of 1406, while the COC lists a sample ID of MW-11-W-20230801 and a sample time of 1406. Because the sample ID for sample -1 is MW-11-W-20230801 and a sample time is 0630, which matches the information on the COC, sample 011 was logged per the information on the container label.

- e. Data quality or usability affected?

Comments:

Data quality or usability not affected.

4. Case Narrative

- a. Present and understandable?

Yes No

Comments:

- b. Discrepancies, errors, or QC failures identified by the lab?

Yes No

Comments:

See Attachment 1

- c. Were all corrective actions documented?

Yes No

Comments:

See Attachment 1

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

Comments:

Some data qualifications will be required.

5. Samples Results

- a. Correct analyses performed/reported as requested on COC?

Yes No

Comments:

b. All applicable holding times met?

Yes No

Comments:

Hold times: Methods 8260D and AK101 - Analysis w/in 14 days; Methods AK102 & 103 - Extraction w/in 14 days, Analysis w/in 40 days of extraction

Collection Date: 8/1/23

Prepped: 8/7/23 (AK102 & 103 only)

Analyzed: 8/3 – 8/7/23 (8260D); 8/3 – 8/4/23 (AK101); Some 8260D samples re-analyzed on 8/7/23; 8/8/23 (AK102 & 103)

c. All soils reported on a dry weight basis?

Yes No

Comments:

N/A – samples are aqueous

d. Are the reported LOQs less than the Cleanup Level or the minimum required detection level for the project?

Yes No

Comments:

See Table 1.

e. Data quality or usability affected?

Yes No

Comments:

Data quality or usability is not affected

6. QC Samples

a. Method Blank

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

Yes No

Comments:

ii. All method blank results less than limit of quantitation (LOQ)?

Yes No

Comments:

iii. If above LOQ, what samples are affected?

Comments:

Not applicable

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

Yes No

Comments:

Not applicable

v. Data quality or usability affected?

Comments:

Data quality or usability not affected.

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

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

Yes No

Comments:

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

Yes No

Comments:

N/A – not analyzed for metals or inorganics

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

Yes No

Comments:

See Attachment 1

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

Yes No

Comments:

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

Comments:

All samples:

Qual J: MW-11-W-20230801, MW-10-W-20230801, MW-8-W-20230801, MW-6-W-20230801, MW-5-W-20230801, MW-2-W-20230801, MW-3-W-20230801, MW-4-W-20230801, MW-1-W-20230801

Qual UJ: MW-9-W-20230801, MW-7-W-20230801

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

Yes No

Comments:

For %R outside lower limit, flag = *-.

vii. Data quality or usability affected? (Use comment box to explain.)

Comments:

Data was qualified as estimated due to deviations mentioned above, but no impact to data usability.

c. Surrogates – Organics Only

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

Yes No

Comments:

ii. Accuracy – All percent recoveries (%R) reported and within method or laboratory limits?
And project specified DQOs, if applicable. (AK Petroleum methods 50-150 %R; all other analyses see the laboratory report pages)

Yes No

Comments:

See Attachment 1

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

Yes No

Comments:

Indicated by flag S1-

iv. Data quality or usability affected?

Comments:

Data was qualified as estimated due to deviations mentioned above, but no impact to data usability.

d. Trip blank – Volatile analyses only (GRO, BTEX, Volatile Chlorinated Solvents, etc.): Water and Soil

i. One trip blank reported per matrix, analysis and for each cooler containing volatile samples?
(If not, enter explanation below.)

Yes No

Comments:

ii. Is the cooler used to transport the trip blank and VOA samples clearly indicated on the COC? (If not, a comment explaining why must be entered below)

Yes No

Comments:

iii. All results less than LOQ?

Yes No

Comments:

iv. If above LOQ, what samples are affected?

Comments:

N/A

v. Data quality or usability affected?

Comments:

Data quality or usability not affected.

e. Field Duplicate

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

Yes No

Comments:

BD-1-W-20230801 (Parent sample: MW-5-W-20230801)

ii. Submitted blind to lab?

Yes No

Comments:

- iii. Precision – All relative percent differences (RPD) less than specified DQOs?
 (Recommended: 30% water, 50% soil)

$$\text{RPD (\%)} = \text{Absolute value of: } \frac{(R_1 - R_2)}{((R_1 + R_2)/2)} \times 100$$

Where R_1 = Sample Concentration
 R_2 = Field Duplicate Concentration

Yes No

Comments:

See Table 2

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instances when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water.

- iv. Data quality or usability affected? (Use the comment box to explain why or why not.)

Comments:

Data quality or usability not affected. All RPDs or control limits are acceptable except for one analyte (DRO [nC10-<nC25]). Qualify the detected value with a J

- f. Decontamination or Equipment Blank (If not applicable, a comment stating why must be entered below).

Yes No Not Applicable

EQB-1-W-20230801 collected on 8/1/2023

- i. All results less than LOQ?

Yes No

Comments:

Chloroform was detected at 1.8 µg/L.

- ii. If above LOQ, what samples are affected?

Comments:

No samples affected. All sample results are ND, no qualification required.

- iii. Data quality or usability affected?

Comments:

Data quality or usability not affected

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

a. Defined and appropriate?

Yes No

Comments:

See Attachment 1

Attachment 1**Additional Information for Job 580-130190-1****GE-Kenai**

4. Case Narrative

b. Discrepancies, errors or QC failures identified by the lab?

The trip blank containers had no labels. The client packed a set of 4 with the same colored lids (blue) in one bag, and another set of 3 with the same colored lids (yellow) in another bag, which was associated to the COC and labeled as such.

Method 8260D:

1. The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-2-W-20230801 (580-130190-8). Elevated reporting limits (RLs) are provided.
2. The continuing calibration verification (CCV) associated with batch 580-433662 recovered above the upper control limit for Dichlorodifluoromethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: MW-11-W-20230801 (580-130190-1), MW-10-W-20230801 (580-130190-2), MW-9-W-20230801 (580-130190-3), MW-7-W-20230801 (580-130190-4), BD-1-W-20230801 (580-130190-13), Trip Blank 1 (580-130190-14), Trip Blank 2 (580-130190-15) and (CCVIS 580-433662/4).
3. The continuing calibration verification (CCV) for analytical batch 580-433662 recovered outside control limits for the following analytes: Bromoform has been identified as a poor performing analyte when analyzed using this method; therefore, re-analysis was not performed. These results have been reported and qualified.
4. The continuing calibration verification (CCV) associated with batch 580-433673 recovered outside acceptance criteria, low biased, for Bromoform and Hexachlorobutadiene. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated sample were non-detect for the analyte(s), the data are reported.
5. The continuing calibration verification (CCV) associated with batch 580-433887 recovered above the upper control limit for Dichlorodifluoromethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: MW-3-W-20230801 (580-130190-9) and (CCVIS 580-433887/4)

Methods AK102 & 103:

6. The laboratory control sample/laboratory control sample duplicate/matrix spike/matrix spike duplicate (LCS/LCSD/MS/MSD) for preparation batch 580-433897 and analytical batch 580-433966 recovered outside acceptance limits for DRO (nC10-<nC25). There was insufficient sample to perform a re-extraction; therefore, the data have been reported.
 7. Surrogate recovery for the following samples was outside of acceptance limits: MW-1-W-20230801 (580-130190-11), (LCS 580-433897/2-A), (LCSD 580-433897/3-A) and (MB 580-433897/1-A). There was insufficient sample to perform a re-extraction; therefore, the data have been reported
 8. Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 580-433897 and analytical batch 580-433966.
- c. Were all corrective actions documented?

1. Elevated reporting limits are provided.
 - 2 – 8. Not required
6. QC Samples
- b. Laboratory Control Sample/Duplicate (LCS/LCSD)
 - iii. Accuracy – All percent recoveries (%R) reported and within method or laboratory limits? And project specified DQOs, if applicable. (AK Petroleum methods: AK101 60% - 120%, AK102 75% - 125%, AK103 60% - 120%; all other analyses see the laboratory QC pages)

Method AK 102 & 103

Batch:	433966			
Analyte	LCS %R	LCSD %R	Limits	Action
DRO (nC10-<nC25)	57	63	75 - 125	Results in Batch Detections: qualify J Non-detections: qualify UJ

- c. Surrogates – Organics Only
- ii. Accuracy – All percent recoveries (%R) reported and within method or laboratory limits? And project specified DQOs, if applicable. (AK Petroleum methods 50 – 150 %R; all other analyses see the laboratory report pages).

Sample ID:	MW-1W-20230801		
Analyte	%R	Limits	Action
o-Terphenyl	44	50 - 150	All sample results by AK102 & 103 Detections: qualify J Non-detections: no action required

2. Other Data Flags/Qualifiers (ACOE, AFCEE, Lab Specific, etc).
- a. Defined and appropriate

MS/MSD analysis performed on MW-3-W-20230801

- Batch 433887:
 - Many percent recoveries outside of limits, biased low (identified by laboratory qualifier F1).

Sample ID:	MW-3-W-20230801			
Batch:	433887			
Analyte	MS %R	MSD %R	Limits	Action
1,1-Dichloroethene	135	130	70 - 129	Sample MW-3-W-20230801
Trans-1,2-dichloroethene	122	AC	75 - 120	%R Above Limits: Detections: qualify J Non-detections: no qualification
1,1-Dichloropropene	121	AC	74 - 120	
Cis-1,3-Dichloropropene	50	49	77 - 120	
Toluene	AC	121	80 - 120	
Trans-1,3-Dichloropropene	39	38	76 - 122	%R Below Limits: Detections: qualify J Non-detections: qualify UJ
Chlorodibromomethane	59	59	73 - 125	
Bromoform	28	27	56 - 139	

Table 1

Comparison of LOQs to Cleanup Levels

Report Number: 580-130190-1

GE - Kenai

Analyte	CAS #	Cleanup Level (µg/L)	Minimum LOQ (µg/L)	Maximum LOQ (µg/L)	LOQ < Clean-up Level?
1,1,1,2-Tetrachloroethane	630-20-6	5.7	1	1	YES
1,1,1-Trichloroethane	71-55-6	8000	1	1	YES
1,1,2,2-Tetrachloroethane	79-34-5	0.76	1	1	No, all LOQ > CUL
1,1,2-Trichloroethane	79-00-5	0.41	1	1	No, all LOQ > CUL
1,1-Dichloroethane	75-34-3	28	1	1	YES
1,1-Dichloroethene	75-35-4	280	1	1	YES
1,1-Dichloropropene	563-58-6	NE	1	1	N/A
1,2,3-Trichlorobenzene	87-61-6	7	2	2	YES
1,2,3-Trichloropropane	96-18-4	0.0075	1	1	No, all LOQ > CUL
1,2,4-Trichlorobenzene	120-82-1	4	1	1	YES
1,2,4-Trimethylbenzene	95-63-6	56	3	3	YES
1,2-Dibromo-3-Chloropropane	96-12-8	NE	3	3	N/A
1,2-Dichlorobenzene	95-50-1	300	1	1	YES
1,2-Dichloroethane	107-06-2	1.7	1	1	YES
1,2-Dichloropropane	78-87-5	8.2	1	1	YES
1,3,5-Trimethylbenzene	108-67-8	60	1	1	YES
1,3-Dichlorobenzene	541-73-1	300	1	1	YES
1,3-Dichloropropane	142-28-9	NE	1	1	N/A
1,4-Dichlorobenzene	106-46-7	4.8	1	1	YES
2,2-Dichloropropane	594-20-7	NE	1	1	N/A
2-Chlorotoluene	95-49-8	NE	1	1	N/A
4-Chlorotoluene	106-43-4	NE	1	1	N/A
4-Isopropyltoluene	99-87-6	NE	1	1	N/A
Benzene	71-43-2	4.6	1	1	YES
Bromobenzene	108-86-1	62	1	1	YES
Bromoform	75-25-2	33	1	1	YES
Bromomethane	74-83-9	7.5	1	1	YES
Carbon tetrachloride	56-23-5	4.6	1	1	YES
Chlorobenzene	108-90-7	78	1	1	YES
Chlorobromomethane	74-97-5	NE	1	1	N/A
Chlorodibromomethane	124-48-1	8.7	1	1	YES
Chloroethane	75-00-3	21000	1	1	YES
Chloroform	67-66-3	2.2	1	1	YES
Chloromethane	74-87-3	190	1	1	YES
cis-1,2-Dichloroethene	156-59-2	36	1	1	YES
cis-1,3-Dichloropropene	10061-01-5 ⁽¹⁾	4.7	1	1	YES
Dibromomethane	74-95-3	8.3	1	1	YES
Dichlorobromomethane	75-27-4	1.3	1	1	YES
Dichlorodifluoromethane	75-71-8	200	1	1	YES
Ethylbenzene	100-41-4	15	1	10	YES
Ethylene Dibromide	106-93-4	0.075	1	1	No, all LOQ > CUL
Hexachlorobutadiene	87-68-3	1.4	3	3	No, all LOQ > CUL
Isopropylbenzene	98-82-8	450	1	1	YES
Methyl tert-butyl ether	1634-04-4	140	1	1	YES
Methylene Chloride	75-09-2	110	5	5	YES
m-Xylene & p-Xylene	179601-23-1 ⁽²⁾	190	2	20	YES
Naphthalene	91-20-3	1.7	3	3	No, all LOQ > CUL
n-Butylbenzene	104-51-8	1000	1	1	YES
N-Propylbenzene	103-65-1	660	1	1	YES
o-Xylene	95-47-6 ⁽²⁾	190	1	1	YES
sec-Butylbenzene	135-98-8	2000	1	1	YES
Styrene	100-42-5	1200	1	1	YES
tert-Butylbenzene	98-06-6	690	2	2	YES
Tetrachloroethene	127-18-4	41	1	1	YES
Toluene	108-88-3	1100	1	1	YES
trans-1,2-Dichloroethene	156-60-5	360	1	1	YES

Table 1
Comparison of LOQs to Cleanup Levels
Report Number: 580-130190-1
GE - Kenai

Analyte	CAS #	Cleanup Level ($\mu\text{g/L}$)	Minimum LOQ ($\mu\text{g/L}$)	Maximum LOQ ($\mu\text{g/L}$)	LOQ < Clean-up Level?
trans-1,3-Dichloropropene	10061-02-6 ⁽¹⁾	4.7	1	1	YES
Trichloroethene	79-01-6	2.8	1	1	YES
Trichlorofluoromethane	75-69-4	5200	1	1	YES
Vinyl chloride	75-01-4	0.19	1	1	No, all LOQ > CUL
Gasoline Range Organics (GRO)-C6-C10	8006-61-9	2200	0.08	0.08	YES
DRO (nC10-<nC25)	--	1500	0.11	0.15	YES

Notes:

At least one LOQ is greater than the applicable clean-up level.

¹ Clean-up level for 1,3-Dichloropropene provided.

² Clean-up level for total xylenes provided.

Acronyms and Abbreviations:

CUL: clean-up level

LOQ: limit of quantitation

N/A: not applicable

NE: not established

$\mu\text{g/L}$: micrograms per liter

--: not available

< : less than

> : greater than

Table 2**Relative Percent Difference for Parent and Field Duplicate Samples****Report Number: 580-130190-1****GE - Kenai**

Sample Identification		MW-5-W-20230801	BD-1-W-20230801	LOQ	5x LOQ	RPD ^a or Difference	Acceptable?
Analyte	Units	Result	Result				
cis-1,2-Dichloroethene	µg/L	10	10	1.0	5.0	0%	AC
Ethylbenzene	µg/L	14	13	1.0	5.0	7%	AC
m-Xylene & p-Xylene	µg/L	22	22	2.0	10	0%	AC
o-Xylene	µg/L	1.1	1.1	1.0	5.0	0	AC
1,3,5-Trimethylbenzene	µg/L	3.1	3	1.0	5.0	0.10	AC
1,2,4-Trimethylbenzene	µg/L	6.4	6.3	3.0	15.0	0.10	AC
4-Isopropyltoluene	µg/L	1.1	1	1.0	5.0	0.10	AC
1,4-Dichlorobenzene	µg/L	2	1.9	1.0	5.0	0.10	AC
Gasoline Range Organics (GRO)-C6-C10	µg/L	0.34	0.34	0.080	0.40	0	AC
DRO (nC10-<nC25)	mg/L	0.33	1	0.14	0.70	0.67	No

Notes:

^a Relative percent difference (RPD) calculated for detected results only.

AC: acceptable

µg/L: microgram per liter

mg/L: milligram per liter

ND: not detected